



Food and Agriculture  
Organization of the  
United Nations



World Health  
Organization



# 2019 REPORT

## Pesticide Residues in Food

**Extra** Joint FAO/WHO Meeting  
on Pesticide Residues



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## **Extra** Joint FAO/WHO Meeting on Pesticide Residues

Report of the extra Joint Meeting of the FAO Panel of Experts on Pesticide Residues in Food and the Environment and the WHO Core Assessment Group on Pesticide Residues Ottawa, Canada, 07–17 May 2019

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R, residue and analytical aspects; T, toxicological evaluation

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Gatineau/Ottawa, Canada, 7–17 May 2019

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## Abbreviations

5-OH-dicamba	2,5-dichloro-3-hydroxy-6-methoxybenzoic acid
ADI	acceptable daily intake
AMBA	2-amino-4-methylsulfonylbenzoic acid
AR	Applied Radioactivity
ARfD	acute reference dose
AUC	area under the concentration–time curve
BBCH	Biologische Bundesanstalt, Bundessortenamt Und Chemische Industrie
bw	body weight
CAS	Chemical Abstracts Service
CCPR	Codex Committee on Pesticide Residues
cGAP	Critical GAP
$C_{\max}$	maximum concentration
DALA	Days after Last Application
DAT	Days after Treatment
DCGA	3,6-dichlorogentisic acid
DCSA	3,6-dichlorosalicylic acid
DM	Dry Matter
DT <sub>50</sub>	Time Required For 50% Dissipation of the Initial Concentration
DT <sub>90</sub>	Time Required For 90% Dissipation of the Initial Concentration
EFSA	European Food Safety Authority
equiv	equivalent(s)
EU	European Union
FAO	Food and Agriculture Organization of the United Nations
GAP	Good Agricultural Practice
GC-ECD	Gas Chromatography – Electron Capture Detector
GECDE	Global Estimate of Chronic Dietary Exposure
GEMS	Global Environment Monitoring System – Food Contamination Monitoring and Assessment Programme
GLP	good laboratory practice
HPLC	High performance liquid chromatography
HR	Highest Residue Level in the Edible Portion of A Commodity
HR-P	Highest Residue Level in a Processed Commodity
IEDI	International Estimated Daily Intake
IESTI	International Estimate of Short-Term Dietary Intake
IUPAC	International Union of Pure and Applied Chemistry

ISO	International Organization for Standardization
IUPAC	International Union of Pure and Applied Chemistry
JECFA	Joint FAO/WHO Expert Committee on Food Additives
JMPR	Joint FAO/WHO Meeting on Pesticide Residues
LC-MS/MS	Liquid Chromatography–Tandem Mass Spectrometry
LD <sub>50</sub>	median lethal dose
LOAEL	lowest-observed-adverse-effect level
LOD	Limit of Detection
LOQ	Limit of Quantification
MNBA	2-nitro-4-methylsulfonylbenzoic acid
MRL	Maximum Residue Limit
NOAEL	no-observed-adverse-effect level
OECD	Organisation for Economic Co-operation and Development
PBI	Plant-Back Interval
PF	Processing Factor
PHI	Pre-Harvest Interval
Po	Post-harvest
ppm	parts per million
QSAR	quantitative structure–activity relationship
RAC	Raw Agricultural Commodity
RTI	Re-Treatment Interval
SC	suspension concentrate
STMR	Supervised Trials Median Residue
STMR-P	Supervised Trials Median Residue in a processed commodity
T <sub>4</sub>	thyroxine
T <sub>max</sub>	time to reach maximum concentration
TSH	thyroid stimulating hormone
TRR	Total Radioactive Residues
TTC	threshold of toxicological concern
UK	United Kingdom
USA	United States of America
WHO	World Health Organization

## **Use of JMPR reports and evaluations by registration authorities**

Most of the summaries and evaluations contained in this report are based on unpublished proprietary data submitted for use by JMPR in making its assessments. A registration authority should not grant a registration on the basis of an evaluation unless it has first received authorisation for such use from the owner of the data submitted for the JMPR review or has received the data on which the summaries are based, either from the owner of the data or from a second party that has obtained permission from the owner of the data for this purpose.



## **Pesticide residues in food**

### **Report of the 2019 Extra Joint FAO/WHO Meeting on Pesticide Residues**

#### **1. Introduction**

The 2019 Extra Joint FAO/WHO Meeting on Pesticide Residues (JMPR) was held in Gatineau/Ottawa, Canada from 7 to 17 May. The meeting was opened by Mr Brent Wilson, Deputy Director of Technical Trade Policy, Department of Agriculture and Agri-Food.

Mr Wilson welcomed the participants of the first Extra JMPR Meeting to Canada and indicated that Canada is a strong supporter of the system of international standards, including those established by Codex, because they help to facilitate the production and trade of safe foods. He highlighted the fact that international food trade relied heavily on a predictable trade environment, in which decisions taken are based on scientific justification. As a result he believed the scientific advice provided by the JMPR played an important role in facilitating trade, as well as being used by many governments in their pesticide registration process to set standards when managing imports.

However, due to resource limitations and increasing submissions the timeframes for the scheduling of compounds for JMPR evaluation have been extended.

From that perspective he considered the hosting of the 2019 Extra JMPR by the Canadian government to be an important initiative in expediting the international standard setting process. Mr Wilson also noted that Canada's proposal and funding of the Extra JMPR Meeting opens the door for other countries to contribute to such a meeting.

The JMPR Secretariats expressed their appreciation to the Canadian government for hosting this meeting and as well as the training for the new JMPR experts in 2017, noting that half of the FAO experts participating in the current Meeting were the result of a previous training organized jointly by the Canadian government and FAO.

During the meeting, the FAO Panel of Experts on Pesticide Residues in Food was responsible for reviewing residue and analytical aspects of the pesticides under consideration, including data on their metabolism, fate in the environment and use patterns, and for estimating the maximum levels of residues that might occur as a result of use of the pesticides according to good agricultural practice. The methodologies are described in detail in the FAO Manual on the submission and evaluation of pesticide residue data for the estimation of maximum residue levels in food and feed (2016) hereafter referred to as the FAO manual. The WHO Core Assessment Group on Pesticide Residues was responsible for reviewing toxicological and related data where necessary and possible.

The Meeting evaluated 19 pesticides for toxicity or residues, or both. The Meeting estimated maximum residue levels and recommended them for use by CCPR, and estimated supervised trials median residue (STMR) and highest residue (HR) levels as a basis for estimating dietary exposures.

The Meeting also estimated the dietary exposures (both acute and long-term) of the pesticides reviewed and, on this basis, performed a dietary risk assessment in relation to the relevant ADI and where necessary the ARfD. Cases in which ADIs or ARfDs may be exceeded, if they occur, are clearly indicated in order to facilitate the decision-making process by CCPR.



## **1.1 DECLARATION OF INTERESTS**

The Secretariat informed the Meeting that all experts participating in the 2019 Extra JMPR had completed declaration of interest forms and that no conflicts had been identified.





## 2. General considerations

### 2.1 EXTRA JMPR MEETINGS

It has been recognised that the amount of work required from JMPR to support CCPR is significant, and often greater than its capacity. Increasing the frequency of JMPR meetings was identified as one of the options to increase and accelerate the delivery of scientific advice to the CCPR. In this context, at the Forty-ninth Session of the CCPR, Canada proposed and made a voluntary fund contribution to hold an extra meeting of the JMPR.

The first Extra JMPR Meeting took place from 7 to 17 of May, 2019 in Gatineau/Ottawa, Canada. The meeting was attended by 12 FAO experts, including 6 new experts (from Brazil, China, Greece, Japan, Malaysia and the United Kingdom). In 2017, the new experts attended a training course on the JMPR procedures and methodologies for evaluation of pesticide residues data and estimation of maximum residue levels, which was jointly sponsored by the Canadian government and FAO. Three WHO experts also attended the meeting.

The Extra 2019 JMPR evaluated 19 compounds for new uses, of which 8 compounds were also evaluated for toxicology. Positive outcomes of the meeting included:

- Increased output of the JMPR in the year of 2019, with a number of recommended maximum residue levels and clarification of toxicological issues related to the compounds evaluated;
- Timely reconsideration of the residue definition for dicamba to cover tolerant crops through evaluation of new data;
- Valuable practical opportunities for the new experts to develop and be more closely mentored before and during the meeting.

The Meeting also noted that there are some aspects that should be considered before carrying out extra meetings in the future:

- Experienced experts should attend both the extra and annual meetings to maintain consistency in the evaluation process and decision making;
- Extra meetings are currently not suitable for complex evaluations (e.g. new evaluations or periodic reviews) because of the limited availability of experts;
- Extra meetings may reduce the capacity of the regular annual JMPR meeting to conduct complex evaluations, as experienced experts who worked in both the extra and annual sessions of the JMPR meetings may be overloaded.

In conclusion, the Meeting agreed that depending on the number of requests for new uses and the availability of appropriate data and resources, at least one additional extra JMPR meeting should be conducted. This would further the experience of the new experts and allow assessment of the value of additional extra meetings.



### **3. Responses to specific concerns raised by the Codex Committee on Pesticide Residues (CCPR)**

No specific concerns raised by the CCPR were considered by the 2019 Extra JMPR Meeting.



## 4. Dietary risk assessment for pesticide residues in food

### 4.1 LONG-TERM DIETARY EXPOSURE

At the present Meeting, an International Estimated Daily Intake (IEDI) was calculated for each compound for which an acceptable daily intake (ADI) was established. The IEDI was calculated by multiplying the median concentrations of residues (supervised trials median residues [STMRs] and/or supervised trials median residues in a processed commodity [STMR-Ps]) for each commodity, for which maximum residue levels were recommended, by the average daily per capita consumption, estimated on the basis of the 17 Global Environment Monitoring System – Food Contamination Monitoring and Assessment Programme (GEMS/Food) consumption cluster diets. A detailed description of the method is included in the Environmental Health Criteria 240 (EHC 240) monograph.<sup>1</sup>

These IEDIs are expressed as a percentage of the upper bound of the ADIs for a 55 kg or 60 kg person, depending on the cluster diet (Table 1). The spreadsheet application is available from the WHO website<sup>2</sup>.

The detailed calculations of the long-term dietary exposure assessments are given in Annex 3.

Table 1 Summary of long-term dietary exposure assessments (IEDI)

CCPR code	Compound name	ADI (mg/kg bw)	Range of IEDI, as % of the upper bound of the ADI
280	Acetochlor	0–0.01	0–4
229	Azoxystrobin	0–0.2	2–20
211	Boscalid	0–0.04	10–60
230	Chlorantraniliprole	0–2	0–1
081	Chlorothalonil	0–0.02	10–50
	SDS-3701 <sup>a</sup>	0–0.008	4–10
207	Cyprodinil	0–0.03	7–70
240	Dicamba	0–0.3	0–1
297	Fenazaquin	0–0.05	0
282	Flonicamid	0–0.07	1–10
285	Flupyradifurone	0–0.08	6–20
302	Fosetyl-Al	0–1 <sup>b</sup>	1–30
158	Glyphosate	0–1	1–4
277	Mesotrione	0–0.5	0
236	Metaflumizone	0–0.1	1–4
147	Methoprene	0–0.05 <sup>c</sup>	10–60
292	Pendimethalin	0–0.1	0
234	Spirotetramat	0–0.05	2–20
189	Tebuconazole	0–0.03	1–5
065	Thiabendazole	0–0.1	2–10

ADI: acceptable daily intake; bw: body weight; CCPR: Codex Committee on Pesticide Residues; IEDI: international

<sup>1</sup> FAO/WHO (2009). Principles and methods for the risk assessment of chemicals in food. A joint publication of the Food and Agriculture Organization of the United Nations and the World Health Organization. Geneva: World Health Organization (Environmental Health Criteria 240; <http://www.who.int/foodsafety/publications/chemical-food/en/>).

<sup>2</sup> [http://www.who.int/foodsafety/areas\\_work/chemical-risks/gems-food/en/](http://www.who.int/foodsafety/areas_work/chemical-risks/gems-food/en/)

estimated daily intake

<sup>a</sup> metabolite of chlorothalonil;

<sup>b</sup> Also applies to phosphonic acid

<sup>c</sup> ADI for S-methoprene

## 4.2 ACUTE DIETARY EXPOSURE

At the present Meeting, an international estimate of short-term intake (IESTI) was calculated for compounds for which an acute reference dose (ARfD) was established. For each relevant food commodity, the highest expected residue (highest residue in the edible portion of a commodity [HR] or highest residue in a processed commodity [HR-P]) and the highest large portion data for the general population (all ages) and children (6 years and under) were used for the calculation of the IESTI. In cases where a separate ARfD was established for women of childbearing age only, the IESTI was calculated for this population group. A detailed description of the method is included in EHC 240.

These IESTI results are expressed as a percentage of the ARfD (Table 2). The spreadsheet application is available from the WHO website<sup>3</sup>.

The present or previous Meetings agreed that ARfDs for azoxystrobin, boscalid, chlorantraniliprole, cyprodinil, flonicamid, fosetyl-Al, glyphosate, mesotrione, metaflumizone and methoprene were unnecessary. For these compounds, an acute dietary exposure assessment was not conducted.

The detailed calculations of acute dietary exposure are given in Annex 4.

Table 2 Summary of acute dietary exposure assessments (IESTI)

CCPR code	Compound name	ARfD (mg/kg bw)	Maximum % of ARfD	Exceeding the ARfD: population (country)
280	Acetochlor	1	0	-
081	Chlorothalonil	0.6	9	-
	SDS-3701 <sup>A</sup>	0.03	0	-
240	Dicamba	0.5	0	-
297	Fenazaquin	0.1	0	-
285	Flupyradifurone	0.2	20	-
292	Pendimethalin	1	0	-
234	Spirotetramat	1	0	-
189	Tebuconazole	0.3	1	-
065	Thiabendazole	1	20	-
		0.3 <sup>B</sup>	9	-

ARfD: acute reference dose; bw: body weight; CCPR: Codex Committee on Pesticide Residues; IESTI: international estimate of short-term intake;

<sup>A</sup> metabolite of chlorothalonil;

<sup>B</sup> for women of child bearing age

### **Possible refinement when the IESTI exceeds the ARfD**

None of the compounds evaluated at the meeting had acute dietary exposures that exceeded the relevant ARfD.

<sup>3</sup> [http://www.who.int/foodsafety/areas\\_work/chemical-risks/gems-food/en/](http://www.who.int/foodsafety/areas_work/chemical-risks/gems-food/en/)

## 5. Evaluation of data for acceptable daily intake and acute reference dose for humans, maximum residue levels and other values

### 5.1 ACETOCHLOR (280)

#### TOXICOLOGY

Acetochlor (2-chloro-*N*-(ethoxymethyl)-*N*-(2-ethyl-6-methylphenyl)acetamide) was evaluated by the Joint FAO/WHO Meeting on Pesticide Residues (JMPR) in 2015, when an acceptable daily intake (ADI) of 0–0.01 mg/kg body weight (bw) and an acute reference dose (ARfD) of 1 mg/kg bw were established (Annex 2, reference 136).

Following a request for additional maximum residue levels by the Codex Committee on Pesticide Residues (CCPR), acetochlor was placed on the agenda of the present Meeting, which assessed additional toxicological information available since the last review.

In order to predict the genotoxicity of metabolite A (acetochlor *tert*-sulfinyllactic acid) and metabolite B (acetochlor 1-hydroxyethyl *sec*-oxanilic acid), which are soybean metabolites, the sponsor provided in silico data on general toxicity and genotoxicity for acetochlor, metabolites A and B and related metabolites considered by the 2015 Meeting. The present Meeting applied this information to the “Plant and animal metabolite assessment scheme” of JMPR for metabolites A and B.

#### **Toxicological data on metabolites**

In silico predictions of the general toxicity and genotoxicity of metabolites A and B were submitted to the present Meeting. The predictions were prepared using Derek Nexus, Leadscape and the Organisation for Economic Co-operation and Development (OECD) Quantitative Structure–Activity Relationship (QSAR) Toolbox.

Based on their structural similarity to the metabolites of acetochlor evaluated by the 2015 JMPR, metabolites A and B were predicted to be less toxic than acetochlor on the basis of likely lower systemic absorption following oral exposure, rapid excretion, minimal metabolism and lack of tissue distribution or localization.

Metabolite A was predicted to be non-genotoxic on the basis of modelling using both Derek Nexus and Leadscape, a lack of genotoxicity alerts of potential concern identified by the OECD QSAR Toolbox and a literature search of substances containing the hydroxycarboxylic acid functional group, which found only non-genotoxic substances.

Metabolite B was predicted to be non-genotoxic on the basis of modelling using both Derek Nexus and Leadscape and the lack of genotoxicity alerts of potential concern identified by the OECD QSAR Toolbox.

#### **Toxicological evaluation**

On the basis of in silico data, the Meeting concluded that metabolites A (acetochlor *tert*-sulfinyllactic acid) and B (acetochlor 1-hydroxyethyl *sec*-oxanilic acid) are unlikely to be genotoxic. Following the “Plant and animal metabolite assessment scheme” of JMPR, the Meeting concluded that, for chronic toxicity, these two metabolites could be assessed using the threshold of toxicological concern (TTC) approach. Both metabolites are categorized in Cramer class III, and therefore a TTC of 1.5 µg/kg bw per day applies.

The Meeting concluded that the information provided was insufficient to conclude definitively on the general toxicity of metabolites A and B relative to that of acetochlor.

An addendum to the toxicological monograph was prepared.

## RESIDUE AND ANALYTICAL ASPECTS

Acetochlor is a selective herbicide belonging to the chloroacetanilide class that was first and last evaluated for residues and toxicological aspects by the 2015 JMPR, when an ADI of 0–0.01 mg/kg bw and an ARfD of 1 mg/kg bw were established. The residue definition for compliance with the MRL and for dietary risk assessment (for animal and plant commodities) is the sum of compounds hydrolysable with base to 2-ethyl-6-methylaniline (EMA) and 2-(1-hydroxyethyl)-6-methylaniline (HEMA), expressed in terms of acetochlor. The residue is not fat soluble.

Acetochlor was scheduled at the Fiftieth Session of the CCPR for the evaluation of additional uses by the 2019 Extra JMPR. The Meeting received new information on metabolism in soya bean, analytical method data, and residue trials on soya bean and alfalfa (forage and hay).

### ***Metabolism in plants***

The present Meeting received information on the identification of metabolites in soya bean seed extracts from a metabolism study on soya beans after pre-plant or post-emergence applications that had been previously evaluated by the Meeting. The identified acetochlor metabolites were its *tert*-sulfinylacetic acid, *tert*-sulfinyllactic acid and 1-hydroxyethyl *sec*-oxanilic acid, which were also previously identified in soya bean feed commodities. These metabolites are covered by the current definition of the residue based on the common moieties EMA and HEMA.

### ***Methods of analysis***

The methods developed to quantify residues of acetochlor in plant and animal matrices involve hydrolytic conversion of metabolites to the EMA or HEMA chemophores, which are quantified and expressed as total acetochlor residues. They involve extraction with methanol/water mixture, followed by hydrolysis of residues with aqueous hydroxide solution. The main differences between the previous and the new methods are the clean-up conditions, sample sizes and instrumentation for quantification (LC-MS/MS in more recent versions). LOQs are typically 0.025 mg/kg each for EMA and HEMA. Representative compounds that generate EMA (*tert*-sulfonic acid) and HEMA (1-hydroxyethyl-*tert*-oxanilic acid) on base hydrolysis are used as reference materials for fortification and method validation. The methods are suitable for analysis of acetochlor and related metabolites in plant and animal matrices.

### ***Stability of residues in stored analytical samples***

The stability of incurred residues analysed as EMA and HEMA in the soya bean samples after more than eight years of frozen storage was estimated based on the analysis conducted when the study was performed (2007/8) and when the samples were again analysed in 2016. The results were submitted to the present Meeting. On average (n=8), the percent remaining was 122% for EMA and 149% for HEMA, probably due to modifications in the LC-MS/MS analytical method used in the original study. The Meeting concluded that acetochlor residues in soya bean seeds are stable for at least 8 years.

In 2015, JMPR concluded that acetochlor residues were also stable in several plant matrices including alfalfa forage and clover hay for at least 330 days under freezer storage conditions (-20 °C).

### ***Results of supervised residue trials on crops***

#### ***Soya bean, dry***

The critical GAP for acetochlor on soya bean in the USA is pre-plant/pre-emergence, and post-emergence (before the R2 growth stage, full flowering) at up to 1.7 kg ai/ha and not exceeding a maximum rate per year of 3.4 kg ai/ha. Supervised trials were conducted in the USA in 2007. In 13 independent trials conducted according to GAP, total residues in soya bean seeds were < 0.05, 0.05, 0.10, 0.11, 0.12, 0.14, 0.15, 0.19, 0.20, 0.22, 0.23, 0.25 and 0.91 mg/kg.



The Meeting estimated a maximum residue level of 1.5 mg/kg and a STMR of 0.15 mg/kg for soya bean, dry.

### ***Alfalfa***

The critical GAP for acetochlor in alfalfa in the USA is pre-plant/at-planting/pre-emergence and post-emergence (up to or at the 4th-trifoliate stage - new stands - or following spring green-up - fall-planted or established stands - or between cuttings), with a maximum rate of 3.4 kg ai/ha per year and a PHI of at least 20 days. Supervised trials were conducted in the USA in 2013 and 2014. In eight trials conducted according to GAP, total residues in alfalfa forage were 0.82, 0.92, 1.1, 1.9, 2.5, 2.9, 4.0 and 5.8 mg/kg, and in alfalfa hay were 2.0, 2.8 (2), 4.4, 4.7, 5.0, 6.9 and 13.0 mg/kg (fresh weight basis).

The Meeting estimated a maximum residue level of 30 mg/kg (dry basis) for alfalfa hay.

The Meeting withdrew the previous recommendation for legume animal feed of 3 mg/kg and recommended a maximum residue level of 3 mg/kg for legume animal feed, except alfalfa hay.

The Meeting also estimated a median residue of 4.55 mg/kg and a highest residue of 13 mg/kg for alfalfa hay (fresh weight basis), a median residue of 2.2 mg/kg and a highest residue of 5.8 mg/kg for alfalfa forage.

### ***Fate of residues during processing***

The processing factors for soya bean oil, meal and hulls estimated by the 2015 JMPR are 0.11, 1.2 and 0.72, respectively. Therefore, considering a STMR of 0.15 mg/kg for soya bean seeds, the Meeting estimated a STMR-P of 0.016 mg/kg for soya bean oil, a median residue of 0.18 mg/kg for soya bean meal and of 0.108 mg/kg for soya bean hulls.

### ***Animal feedstuffs***

#### ***Estimation of livestock dietary burdens***

Dietary burden calculations for beef cattle, dairy cattle and poultry are provided below. The dietary burdens were estimated using the OECD diets listed in Appendix IX of the 3<sup>rd</sup> edition (2016) of the FAO Manual. Considering the items estimated by the 2015 and present JMPR, livestock dietary burdens were estimated for cattle and poultry.

Summary of livestock dietary burden (ppm acetochlor equivalents of dry matter diet)

Commodity	US-Canada		EU		Australia		Japan	
	Max	Mean	Max	Mean	Max	Mean	Max	Mean
Beef cattle	2.33	0.87	12.27	4.47	16.57 <sup>a</sup>	6.29 <sup>c</sup>	1.63	0.68
Dairy cattle	4.28	1.43	7.77	2.65	10.75 <sup>b</sup>	3.87 <sup>d</sup>	3.82	1.44
Poultry - broiler	0.11	0.11	0.16	0.16	0.10	0.10	0.08	0.08
Poultry - layer	0.11	0.11	0.61 <sup>e</sup>	0.18 <sup>f</sup>	0.10	0.10	0.07	0.07

<sup>a</sup> Highest maximum beef or dairy cattle dietary burden suitable for maximum residue level estimated for mammalian tissues

<sup>b</sup> Highest maximum dairy cattle dietary burden suitable for maximum residue level estimated for mammalian milk

<sup>c</sup> Highest mean beef or dairy cattle dietary burden suitable for STMR estimated for mammalian tissues.

<sup>d</sup> Highest mean dairy cattle dietary burden suitable for STMR estimated for milk.

<sup>e</sup> Highest maximum poultry dietary burden suitable for maximum residue level estimated for poultry tissues and eggs.

<sup>f</sup> Highest mean poultry dietary burden suitable for STMR estimated for poultry tissues and eggs.

### ***Animal commodity maximum residue levels***

Based on the estimated dietary burden and the results of farm animal feeding studies evaluated by the 2015 JMPR, the calculations used to estimate highest total residues for use in estimating maximum residue levels, STMR and HR values are shown below.

	Feed level	Residues	Feed level	Residues (mg/kg) in			
	(ppm) for milk residues	(mg/kg) in milk	(ppm) for tissue residues	Muscle	Liver	Kidney	Fat
MRL beef or dairy cattle							
Feeding study <sup>a</sup>	-		15	-	< 0.02	0.04	-
	50	< 0.02	50	< 0.02	0.02	0.09	<0.02
Dietary burden and high residue	10.75	< 0.0043	16.57	<0.0007	0.02	0.0418	<0.02
STMR beef or dairy cattle							
Feeding study <sup>b</sup>			5	-	-	<0.02	-
			15	-	<0.02	0.03	-
	50	< 0.02	50	<0.02	0.02	0.07	<0.02
Dietary burden and median residue estimate	3.87	< 0.0015	6.29	<0.0025	0.02	0.0213	<0.0025

<sup>a</sup> Highest residues for tissues and mean residues for milk

<sup>b</sup> Mean residues for tissues and mean residues for milk

The Meeting estimated a maximum residue level of 0.05 mg/kg, a STMR of 0.0213 mg/kg and a HR of 0.0418 mg/kg for edible offal (mammalian) to replace the previous recommendation.

The Meeting confirmed its previous recommendations for meat (mammalian except marine mammals), mammalian fat (except milk fat) and milks.

No residues were observed in eggs and poultry tissues on dosing laying hens at up to 50 ppm in the diet for 28 days. Considering the poultry dietary burden of 0.61 ppm (highest maximum) and 0.18 ppm (highest mean), the Meeting confirmed its previous recommendation for poultry commodities.

## RECOMMENDATIONS

On the basis of the data obtained from supervised trials the Meeting concluded that the residue levels listed in Annex 1 are suitable for establishing maximum residue limits and for IEDI and IESTI assessment.

Residue definition for compliance with the MRL and for dietary risk assessment for plant and animal commodities: *Sum of compounds hydrolysable with base to 2-ethyl-6-methylaniline (EMA) and 2-(1-hydroxyethyl)-6-methylaniline (HEMA), expressed in terms of acetochlor.*

The residue is not fat soluble

## DIETARY RISK ASSESSMENT

### Long-term dietary exposure

The ADI for acetochlor is 0–0.01 mg/kg bw. The International Estimated Daily Intakes (IEDIs) for acetochlor were estimated for the 17 GEMS/Food Consumption Cluster diets using the STMR or STMR-P values estimated by the JMPR. The results are shown in Annex 3 of the 2019 Extra JMPR Report.

The IEDIs accounted for 0 to 4% of the maximum ADI. The Meeting concluded that the long-term dietary exposure to residues of acetochlor from uses considered by the JMPR is unlikely to present a public health concern.

### Acute dietary exposure

The ARfD for acetochlor is 1 mg/kg bw. The International Estimate of Short Term Intakes (IESTIs) for acetochlor were calculated for the food commodities for which HRs/HR-Ps or STMRs/STMR-Ps were estimated by the present Meeting. The results are shown in Annex 4 of the 2019 Extra JMPR Report.

The IESTIs were 0% of the ARfD for the general population and for children. The Meeting concluded that the acute dietary exposure to residues of acetochlor from uses considered by the present Meeting is unlikely to present a public health concern.

***Threshold of toxicological concern (TTC) approach for metabolites***

Acetochlor *tert*-sulfinyllactic acid and acetochlor 1-hydroxyethyl *sec*-oxanilic acid are unlikely to be genotoxic, and could be assessed using the TTC Cramer Class III of 1.5 µg/kg bw per day.

The metabolites acetochlor *tert*-sulfinyllactic acid and acetochlor 1-hydroxyethyl *sec*-oxanilic acid were identified in metabolism studies, found in maize grain, soya bean seed and poultry commodities (<10% TRR). They belong to the group of metabolites that are hydrolysed in the analytical methods for plant and animal commodities to form EMA and HEMA.

The maximum IEDI calculated for acetochlor (based on total EMA and HEMA) from commodities considered by the JMPR (Annex 3) was 0.385 µg/kg bw. The Meeting concluded that dietary exposure to residues of acetochlor *tert*-sulfinyllactic acid and acetochlor 1-hydroxyethyl *sec*-oxanilic acid from the uses considered by the JMPR is unlikely to present a public health concern.



## 5.2 AZOXYSTROBIN (229)

### RESIDUE AND ANALYTICAL ASPECTS

Azoxystrobin was first evaluated for toxicology and residues by the JMPR in 2008. It was evaluated for residues by the JMPR in 2011, 2012, 2013 and 2017. An ADI of 0–0.2 mg/kg bw was established and an ARfD was unnecessary. The residue definition for plant and animal commodities for both compliance with MRLs and dietary risk assessment is azoxystrobin. The residue is fat soluble.

Azoxystrobin was scheduled at the Fiftieth Session of the CCPR for the evaluation of additional uses by the 2019 Extra JMPR. The Meeting received new GAP information on guava in Egypt and coffee in Brazil, analytical methods, supervised residue trials for guava and coffee, and processing studies on coffee.

#### ***Methods of analysis***

The Meeting received validation data on a new analytical method on coffee bean (green). Azoxystrobin residues were extracted with a solution of acetonitrile:water (9:1) and residues quantified by LC-MS/MS, with an LOQ of 0.01 mg/kg.

#### ***Stability of residues under storage***

Previous studies submitted to the Meeting showed that residues of azoxystrobin stored at  $\leq 20$  °C are stable for at least 24 months in a variety of crops, including grape, peanut, tomato, apple, banana, cucumber, peach, soya bean, corn, carrot, lettuce, wheat and orange.

#### ***Results of supervised residue trials on crops***

##### ***Guava***

The critical GAP for guava in Egypt is  $3 \times 0.01$  kg ai/hL, with a  $7 \pm 14$  day application interval and a PHI of 7 days. Residues in the six independent trials submitted to the 2017 JMPR according to this GAP were 0.03 (2), 0.05, 0.06 and 0.10 (2) mg/kg.

The Meeting estimated a maximum residue level of 0.2 mg/kg and a STMR of 0.055 mg/kg for azoxystrobin in guava.

##### ***Coffee***

The critical GAP for coffee in Brazil is  $3 \times 0.12$  kg ai/ha, with a 60 day application interval and a 21-day PHI. Residues from 13 independent trials conducted approximating this cGAP, and evaluated by the 2011 JMPR, were  $< 0.01$  (10), 0.01 and 0.02 (2) mg/kg. Two new trials conducted at four times the GAP rate gave residues  $< 0.01$  mg/kg.

The Meeting confirmed the previous recommendations for azoxystrobin in coffee bean.

#### ***Fate of residues during processing***

Two new processing studies on coffee conducted in Brazil at four times the GAP rate were submitted to the Meeting. Residues in unprocessed coffee beans and all processed commodities (roasted beans, concentrated coffee and instant coffee) were  $< 0.01$  mg/kg. Thus, the processing factors recommended by the 2013 JMPR for coffee remained unchanged.

### RECOMMENDATIONS

On the basis of the data obtained from supervised trials the Meeting concluded that the residue levels listed in Annex 1 are suitable for establishing maximum residue limits and for IEDI assessment.

Residue definition for compliance with the MRL and dietary risk assessment for plant and animal commodities: *azoxystrobin*.

The residue is fat soluble.

## DIETARY RISK ASSESSMENT

### ***Long-term dietary exposure***

The ADI for azoxystrobin is 0–0.2 mg/kg bw. The International Estimated Daily Intakes (IEDIs) for azoxystrobin were estimated for the 17 GEMS/Food Consumption Cluster diets using the STMR or STMR-P values estimated by the JMPR. The results are shown in Annex 3 of the 2019 Extra JMPR Report.

The IEDIs accounted for 2 to 20% of the maximum ADI. The Meeting concluded that the long-term dietary exposure to residues of azoxystrobin from uses considered by the JMPR is unlikely to present a public health concern.

### ***Acute dietary exposure***

The 2008 JMPR decided that an ARfD for azoxystrobin was unnecessary. The Meeting therefore concluded that the acute dietary exposure to residues of azoxystrobin is unlikely to present a public health concern.

### 5.3 BOSCALID (221)

#### TOXICOLOGY

Boscalid (2-chloro-*N*-[2-(4-chlorophenyl)phenyl]pyridine-3-carboxamide) was evaluated by JMPR in 2006, when an ADI of 0–0.04 mg/kg bw was established. The Meeting concluded that it was not necessary to establish an ARfD for boscalid (Annex 5, reference 109).

Following a request for additional maximum residue levels by CCPR, boscalid was placed on the agenda of the present Meeting, which assessed additional toxicological information available on boscalid and its metabolites since the last review. The Meeting also applied the “Plant and animal metabolite assessment scheme” of JMPR for the assessment of these metabolites.

The newly submitted studies investigated absorption, excretion and metabolism, dermal sensitization, mechanism of the thyroid effects and reversibility of toxicity of the parent compound and the toxicity of two metabolites that have been found in groundwater.

All critical studies contained statements of compliance with good laboratory practice (GLP) and were conducted in accordance with relevant national or international test guidelines, unless otherwise specified. No additional information from a literature search was identified that complemented the toxicological information submitted for the current assessment.

#### **Biochemical aspects**

The toxicokinetics of boscalid in rats following the administration of a single dose of <sup>14</sup>C-labelled boscalid at 500 mg/kg bw or multiple dosing of unlabelled boscalid at 500 mg/kg bw per day for 14 or 28 days followed by a single dose of <sup>14</sup>C-labelled boscalid at 500 mg/kg bw indicated no significant differences in the excretory (approximately 70% in the faeces) or metabolic patterns in urine and faeces, regardless of dosing regimen or sex (Fabian, Grosshans & Mellert, 2003).

In dermal penetration studies using human skin *in vitro*, the dermal penetration estimates were 0.07% and 1% for the formulation concentrate (50% boscalid) and the 1:1300 spray dilution, respectively.

In an *in vitro* study comparing the metabolism of boscalid in human, rat and dog hepatocytes, no human-specific metabolites of boscalid were identified, and the metabolic pathways were similar in the tested species.

#### **Toxicological data**

In rats, the acute oral median lethal dose (LD<sub>50</sub>) for boscalid was greater than 2000 mg/kg bw. Boscalid was not sensitizing to the skin of guinea-pigs.

In a study to investigate the induction of metabolizing enzymes in the liver and changes in thyroid hormone levels in rats, treatment with boscalid led to decreases in thyroxine (T<sub>4</sub>) levels, increases in thyroid stimulating hormone (TSH) levels, increased liver and thyroid weights and increased activities of phase I and phase II enzymes. It was concluded that the mild imbalance in thyroid hormone levels caused by boscalid was due to the induction of the hepatic microsomal enzyme system. The effects of boscalid on liver and thyroid were reversible, and the effect on the thyroid was considered indirect.

#### **Toxicological data on metabolites and/or degradates**

*M510F47 (Reg. No. 107371; 2-chloronicotinic acid; low-level rat metabolite, soil and potentially groundwater degradate)*

M510F47 had low acute toxicity (LD<sub>50</sub> > 2000 mg/kg bw) and showed no evidence of genotoxicity *in vitro*.

***M510F49 (Reg. No. 391572; N-(4'-chlorobiphenyl-2-yl)-2-hydroxynicotinamide; soil and potentially groundwater degradate)***

M510F49 had low acute toxicity ( $LD_{50} > 2000$  mg/kg bw) and showed no evidence of genotoxicity in vitro or in vivo.

The no-observed-adverse-effect level (NOAEL) for M510F49 identified in a 90-day feeding study in rats was 968 mg/kg bw per day, the highest dose tested. The Meeting noted that the NOAELs for boscalid in 90-day feeding studies were 34 mg/kg bw per day in rats, 29 mg/kg bw per day in mice and 7.6 mg/kg bw per day in dogs, as identified by the 2006 Meeting (Annex 5, reference 109).

***Human data***

No adverse effects of boscalid were reported in medical surveillance of manufacturing plant personnel. One case of slight skin irritation was registered in an employee accidentally exposed to boscalid in combination with another product. Therefore, it was not clear whether the effect was attributable to boscalid. No data on exposure of the general public or epidemiological studies are available for boscalid.

**Toxicological evaluation**

The Meeting concluded that no revision of the ADI for boscalid was necessary.

The Meeting concluded that metabolite M510F47 was unlikely to be genotoxic. Following JMPR's "Plant and animal metabolite assessment scheme", the Meeting concluded that for chronic toxicity, M510F47 could be assessed using the TTC approach. M510F47 is categorized in Cramer class III, and therefore a TTC of 1.5 µg/kg bw per day applies.

On the basis of a comparison of NOAELs in short-term studies of toxicity, the Meeting concluded that the toxicity of M510F49 was lower than that of the parent compound. Owing to the limited database on M510F49, the Meeting was unable to conclude that this metabolite was of no concern but concluded that M510F49 would be covered by the ADI of the parent compound.

The ADI of 0–0.04 mg/kg bw applies to boscalid plus metabolite M510F49, expressed as boscalid.

An addendum to the toxicological monograph was prepared.

***Acceptable daily intake (ADI) (applies to boscalid plus metabolite M510F49, expressed as boscalid)***

0–0.04 mg/kg bw

***Critical end-points for setting guidance values for exposure to boscalid and metabolites***

Acute toxicity	
Rat, $LD_{50}$ , oral	>2 000 mg/kg bw
Dermal sensitization (guinea-pig)	Not sensitizing (maximization test)
Short-term studies of toxicity	
Target/critical effect	None
Lowest relevant inhalation NOAEC	616.7 mg/m <sup>3</sup> , highest concentration tested (rat)
Studies on metabolites	
M510F47	Oral $LD_{50} > 2\ 000$ mg/kg bw No evidence of genotoxicity in vitro
M510F49	Oral $LD_{50} > 2\ 000$ mg/kg bw



No evidence of genotoxicity

Short-term study of toxicity: NOAEL 968 mg/kg bw per day, highest dose tested (rat)

## RESIDUE AND ANALYTICAL ASPECTS

Boscalid is a systemic fungicide first evaluated by JMPR in 2006 for residues and toxicology as a new active substance. An ADI of 0–0.04 mg/kg bw was established for boscalid, while no ARfD was considered necessary.

The 2006 JMPR recommended the following residue definition for boscalid:

Definition of the residue for compliance with the MRL in plant and animal commodities and for dietary risk assessment in plant commodities: *boscalid*

Definition of the residue for dietary risk assessment in animal commodities: *sum of*

*boscalid, 2-chloro-N-(4'-chloro-5-hydroxybiphenyl-2-yl)nicotinamide (M510F01) including its conjugate, expressed as boscalid*

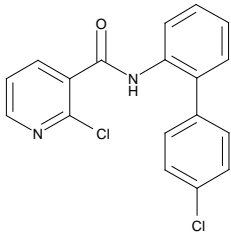
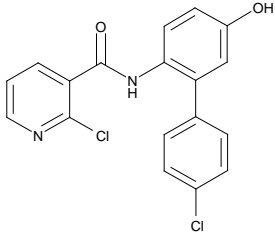
*The residue is fat-soluble.*

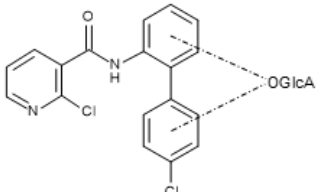
In 2008 and 2010 additional uses (and in 2009 residues in follow crops) were reviewed for residues by the Meeting. Boscalid was scheduled at the Fiftieth Session of the CCPR for the evaluation of additional uses for the Extra 2019 JMPR Meeting.

The current Meeting received new information on use patterns for boscalid in pome fruit, stone fruit, berry fruit, tropical fruit and tea supported by additional plant and animal metabolism studies, field rotational crop studies, analytical methods and recovery data, supervised field trials and studies simulating typical processing conditions.

The current Meeting also received additional data on environmental fate and on corresponding analytical methods in environmental matrices (see evaluation). The Meeting concluded that these data are not directly linked to the current consideration of additional uses on permanent crops and decided to postpone the assessment of the data until the next periodic review of boscalid.

The following abbreviations are used for the metabolites discussed below:

Code Names	Structure	Where found
Boscalid BAS510F		Rat, plants, animals, rotational crops, soil
M510F01		Rat, animals

Code Names	Structure	Where found
M510F65		Rat, animals

### Plant metabolism

The fate of boscalid in plants was evaluated by the 2006 Meeting following foliar spray application of  $^{14}\text{C}$ -diphenyl- or  $^{14}\text{C}$ -pyridine-radiolabelled substance to grapes, lettuce and green beans. A detailed assessment of these studies is presented in the 2006 JMPR Report. For the current Meeting, an additional plant metabolism study on green beans was submitted.

The metabolism of  $^{14}\text{C}$ -diphenyl-boscalid in common beans was investigated under enclosed conditions by application of three foliar sprays at 0.52 kg ai/ha each. The treatments were performed at the beginning of flowering (BBCH 61, 33 days before harvest), 11 days later (22 days before harvest) and 13 days before harvest (BBCH 75–79). Samples of plants and whole pods were collected 3 days before and 13 days after final treatment. Pods collected at harvest were additionally separated into hulls and green seeds.

In all samples except green seeds, the extraction of radioactivity with methanol, followed by water, was nearly complete (>98% TRR). In green seeds 70% of the TRR was extracted by the solvents used. TRR levels ranged from 29–52 mg eq/kg in plants, 0.79–1.2 mg eq/kg in whole pods, 0.80 mg eq/kg in hulls and 0.065 mg eq/kg in green seeds.

The identification of the radioactive residues revealed only unchanged boscalid in plants, pods and hulls, representing 97–102% of the TRR. In green seeds, only 17% of the TRR (0.011 mg eq/kg) was identified as boscalid. The majority of the extracted radioactivity (53% TRR) was characterised as five minor components, two of them present up to 0.011 mg eq/kg (up to 17% TRR) and three of them up to 0.006 mg eq/kg (up to 9% TRR).

Post-extraction solids were not investigated and represented 30% TRR in green seeds (0.019 mg eq/kg) and <2% TRR in all other matrices.

The Meeting concluded that parent boscalid is the predominant residue in all plant parts directly treated (plant, whole pods, hulls). In green seeds, it is also present as a major component by proportion, but absolute concentrations are much lower. No metabolites were identified in bean plants, pods or hulls. In green seeds, characterised metabolites were present in minor amounts.

### Animal metabolism

The fate of boscalid in lactating goats and laying hens was evaluated by the 2006 Meeting following administration of  $^{14}\text{C}$ -diphenyl-radiolabelled substance. A detailed assessment of these studies is presented in the 2006 JMPR Report. For the current Meeting, an additional metabolism study on laying hens was submitted.

For the investigation of the metabolism of boscalid in laying hens ten animals received a dose of  $^{14}\text{C}$ -pyridin-labelled boscalid equivalent to 12 ppm for 13 consecutive days via capsule administration. Animals were sacrificed approximately 6 hrs after the final dosing. During the whole dosing period eggs and excreta were collected and analysed with pooled tissue samples for each group at the end of the study.

TRR levels found were highest in liver (0.44 mg eq/kg), followed by egg yolk (0.12 mg eq/kg), fat (0.095 mg eq/kg), muscle (0.051 mg eq/kg) and egg white (0.03 mg eq/kg).

Solvent extraction using acetonitrile or methanol released the majority of the residue from all matrices (63–94% TRR). In addition, 2–10% TRR could be released from liver and eggs with water extraction while only 1.4% TRR was additionally released with dichloromethane from liver. Post extraction solids ranged from 6–32% TRR. Their characterisation by enzymatic hydrolysis released most of the radioactivity with protease treatment (22–35% TRR). The pepsin and pancreatin solubilizate contained only minor radioactivity ( $\leq 2\%$  TRR).

Parent boscalid was found as a major residue in the extracts of fat (85% TRR), egg white/yolk (34% TRR) and muscle (29% TRR). In liver, only 1.8% of the TRR (0.008 mg eq/kg) were identified as unchanged parent. The major residue in liver extracts was M510F01 representing 35% TRR (0.16 mg eq/kg), which was also present in major proportions in egg white/yolk (27–28% TRR, 0.008–0.034 mg eq/kg) but not in muscle or fat (5–11% TRR, 0.005 mg eq/kg). Additionally, M510F65 (glucuronides of M510F01) was found as a major metabolite, representing 16–32% TRR in egg white/yolk (0.005–0.039 mg eq/kg) and 20% TRR in liver (0.09 mg eq/kg). In egg yolk, the majority of the M510F65 was recovered after enzymatic hydrolysis of the post-extraction solids (24% TRR, 0.029 mg eq/kg).

The metabolic pathway of  $^{14}\text{C}$ -pyridin-labelled boscalid in laying hens was limited. In the first step, hydroxylation at the diphenyl-ring was observed forming M510F01. In a second step, glucuronidation occurs into M510F65. All metabolites identified in laying hens were also found in the rat.

### ***Environmental fate***

The current Meeting received one additional field rotational crop study involving application of 2.1 kg ai/ha to bare soil at four sites in Europe. Zucchini, cucumbers, tomatoes and lettuce were planted as rotational crops 30 days after treatment. In all fruiting vegetables (cucumber, zucchini and tomato), no residues above the LOQ of 0.01 mg/kg were found (66–140 days after treatment). Only lettuce contained quantifiable residues ranging from 0.014–0.12 mg/kg.

The Meeting noted that boscalid residues found in rotated lettuce (up to 0.12 mg/kg) surpass findings in rotated Brassica vegetables (up to 0.05 mg/kg). However, the Meeting confirmed its previous conclusion that residues taken up from soil add insignificantly compared to directly treated leafy vegetables (maximum residue level recommendation of the 2010 JMPR was 40 mg/kg for leafy vegetables).

### ***Methods of analysis***

The current Meeting received additional analytical methods for the determination of boscalid in plant commodities and additional concurrent recovery information for method 471/0 evaluated by the 2006 Meeting, measuring boscalid and M510F01 (incl. conjugates) in animal matrices.

For plant matrices, three new single residue analytical methods were provided involving initial extraction with methanol/water/hydrochloric acid (70:25:5) or acetonitrile, followed by partitioning against cyclohexane or hexane, respectively. The first solvent system does not require further clean-up while the acetonitrile/hexane system includes a  $\text{C}_{18}$ - and Silica Gel-solid-phase extraction step. All methods involve analysis by LC-MS/MS at LOQs of 0.01 mg/kg for high water, high starch and high acid content matrices as well as for hops, spices and herbal infusions. For high oil content matrices, a LOQ of 0.05 mg/kg was validated.

In addition, the QuEChERS-Multimethod was successfully tested in high water, high acid and high starch content matrices at a LOQ of 0.01 mg/kg for boscalid.

In animal matrices, additional concurrent recovery data were submitted for method 471/0. LOQs of 0.01 mg/kg were validated each for boscalid and M510F01 (incl. conjugates) in bovine tissues, milk, cream and eggs.

**Definition of the residue**

The current Meeting received new data on the metabolism of boscalid in green beans and laying hens.

Following foliar application to green beans, boscalid was the only residue identified. The Meeting therefore confirms its previous recommendation of boscalid for compliance with the MRL and for the estimation of the dietary exposure for plant commodities.

In laying hens parent boscalid was found as a major residue in fat (85% TRR), egg white/yolk (34% TRR) and muscle (29% TRR) and in lower proportions in the liver (1.8% TRR). The Meeting confirms its previous recommendation of boscalid for compliance with the MRL for animal commodities and also on the fat-solubility of the residue.

Besides boscalid, its hydroxylated metabolite M510F01 and glucoronides thereof (M510F65) were the only components identified in hen matrices. Therefore the Meeting confirmed its previous recommendation for the estimation of the dietary exposure to be the sum of boscalid and M510F01 (2-chloro-N-(4'-chloro-5-hydroxybiphenyl-2-yl)nicotinamide) including its conjugate, expressed as boscalid.

Based on new information submitted, the present Meeting assessed the toxicity of M510F49 and considered it to be covered by the ADI for the parent substance. Since this metabolite was exclusively found in hen liver hydrolysate representing 12% of the TRR, no inclusion into the residue definition for compliance with the MRL or for the estimation of the dietary exposure is required.

**Results of supervised residue trials on crops**

The Meeting received supervised trial data for applications of boscalid on pome fruit, stone fruit, bush berries, cane berries, avocado, mango, pomegranate and tea, respectively.

**Pome fruit**

For boscalid, the 2006 JMPR Meeting recommended a maximum residue level of 2 mg/kg and estimated an STMR value of 0.365 mg/kg for apples based on a GAP from the UK (4×0.2 kg ai/ha, 7 day PHI). The current Meeting received new GAP information with supporting supervised field trials on apples and pears.

Boscalid is registered in the USA for the use pome fruits with a critical GAP involving four foliar sprays of 0.33 kg ai/ha each (7 day interval) and a PHI of 0 days.

Supervised field trials conducted in the USA on apples and pears were submitted which matched the individual application rates, their interval and the PHI, but six instead of four treatments were conducted.

In absence of decline data from Northern America on pome fruits, the Meeting decided to use decline trials from Europe reported by the current and by the 2006 JMPR, which were conducted at growth stages comparable to the US GAP. In total, 31 trials on apples and eight trials on pears were identified with reported residues at 0 days and sampling intervals up to 29 days. Based on first-order kinetics, decline rates of  $k=-0.0197$  for apples and  $k=-0.0307$  for pears were estimated.

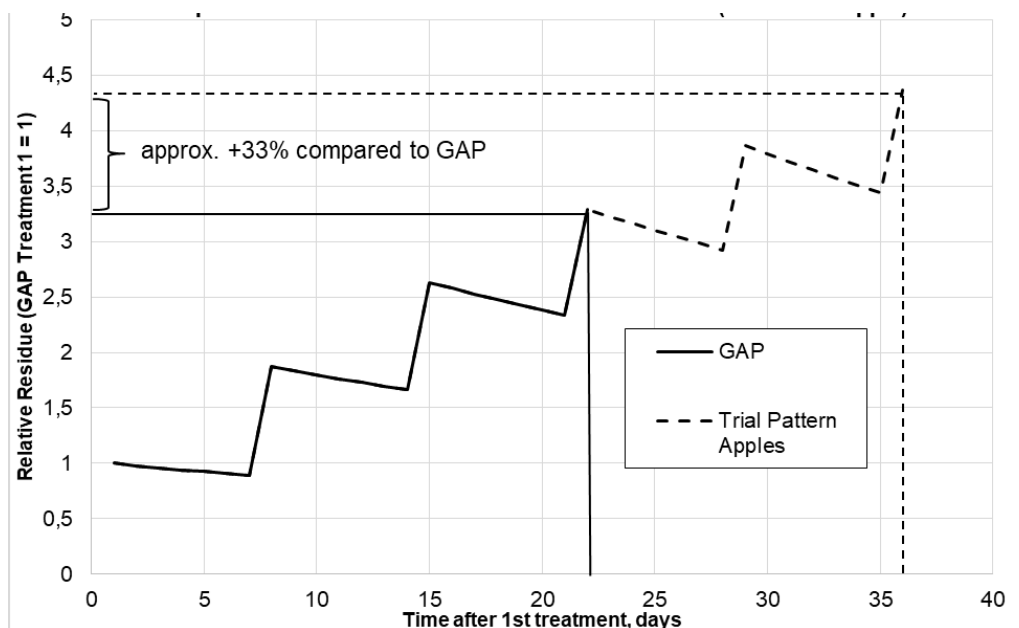


Figure 1 Anticipated residues at GAP vs Field trials (Boscalid – Apple)

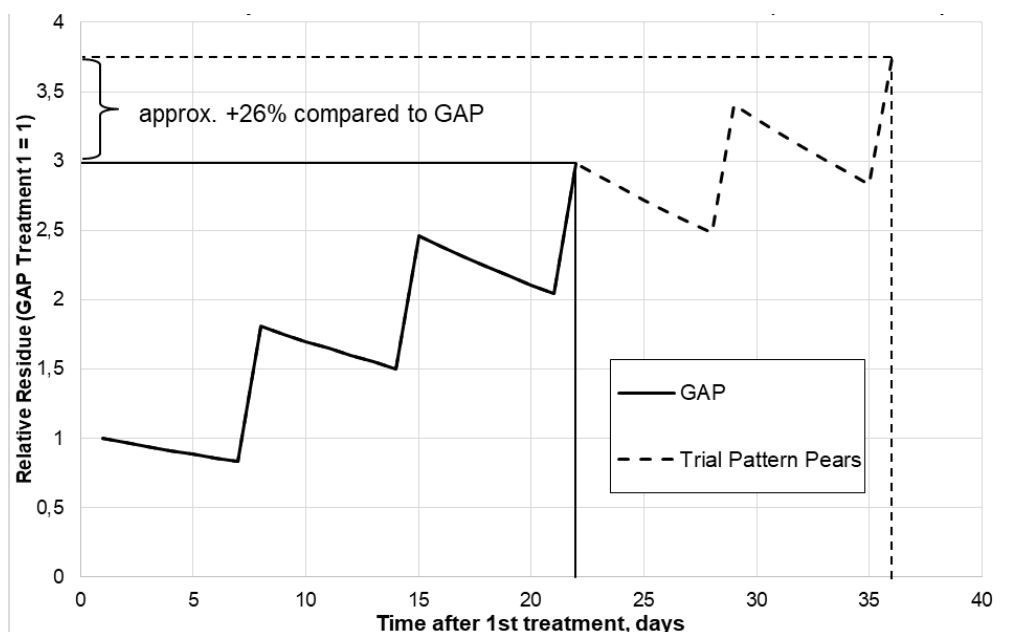


Figure 2 Anticipated residues at GAP vs Field trials (Boscalid – Pear)

The Meeting concluded that the supervised field trial data submitted for apples and pears from the USA overestimate the residue according to the US GAP by more than +25% and cannot be used to estimate maximum residue levels in pome fruits. The Meeting also concluded that proportional adjustment of these trials is inappropriate due to the deviating treatment regime compared to the critical GAP from the USA.

Boscalid is also registered in the Czech Republic for the use on pome fruits with a maximum GAP involving four foliar sprays of 0.2 kg ai/ha each (8 day interval) and a PHI of 7 days.

New supervised field trials conducted in Europe on pears approximating this GAP were submitted to the Meeting. In addition, residue data on apples assessed by the 2006 JMPR against a comparable GAP from the UK were considered.

Residues of boscalid in apples submitted to the 2006 JMPR were (n=22): 0.15, 0.19, 0.2, 0.24, 0.29, 0.29, 0.3, 0.32, 0.32, 0.34, 0.36, 0.37, 0.39, 0.42, 0.42, 0.43, 0.51, 0.53, 0.55, 0.65, 0.86, 1.2 mg/kg.

Residues of boscalid in pears were (n=8): 0.086, 0.11, 0.16, 0.29, 0.33, 0.39, 0.48, 1.3 mg/kg.

The Meeting noted that residues in apples and pears are not significantly different, which was confirmed by the Mann-Whitney-U Test, and decided to combine the datasets.

Residues of boscalid in apples and pears were (n=30): 0.086, 0.11, 0.15, 0.16, 0.19, 0.2, 0.24, 0.29, 0.29, 0.29, 0.3, 0.32, 0.32, 0.33, 0.34, 0.36, 0.37, 0.39, 0.39, 0.42, 0.42, 0.43, 0.48, 0.51, 0.53, 0.55, 0.65, 0.86, 1.2, 1.3 mg/kg (italic = pear residues).

Based on the combined dataset for apples and pears, the Meeting estimated a maximum residue level of 2 mg/kg and a STMR value of 0.35 mg/kg for boscalid in pome fruit.

The Meeting withdraws its previous recommendation of 2 mg/kg for boscalid in apples.

### Stone fruit

The 2006 JMPR Meeting estimated a maximum residue level of 3 mg/kg and a STMR value of 1.21 mg/kg for boscalid in stone fruit based on a GAP from the USA (5×0.26 kg ai/ha, 0 day PHI). The current Meeting received new GAP information for stone fruit with supporting supervised field trials on cherries, peaches and plums.

Boscalid is registered in Austria for use on stone fruits with a maximum GAP involving three foliar sprays of 0.19 kg ai/ha each (10 day interval) and a PHI of 7 days.

Supervised field trials conducted in Europe on cherries were newly submitted approximating the GAP from Austria. Although treated at intervals slightly longer than the cGAP, the Meeting considered this deviation as insignificant since boscalid residues remain stable on treated fruits.

For peaches and plums, new supervised field trials from Europe were submitted involving four or five instead of three sprays at 0.2 kg ai/ha. However, the Meeting noted that the first sprays were conducted at flowering and/or beginning of fruit development, not contributing to the final residue at harvest. Therefore, the Meeting concluded that the treatment regime used in the submitted trials approximates the Austrian GAP and that the data can be used for an assessment.

Residues of boscalid in cherries were (n=16): <0.05, < 0.05, 0.052, 0.088, 0.096, 0.14, 0.14, 0.16, 0.22, 0.36, 0.37, 0.39, 0.47, 0.66, 0.7, 1.3 mg/kg.

Residues of boscalid in peaches were (n=8): 0.05, 0.15, 0.17, 0.21, 0.21, 0.29, 0.35, 0.35 mg/kg.

Residues of boscalid in plums were (n=10): 0.057, 0.07, 0.08, 0.11, 0.13, 0.15, 0.18, 0.23, 0.27, 0.45 mg/kg.

Boscalid is registered in the USA for use on stone fruits with a critical GAP involving five foliar sprays of 0.26 kg ai/ha each (7 day interval) and a PHI of 0 days.

New supervised field trials conducted in Canada and in the USA on cherries, peaches and plums approximating the GAP from the USA were submitted. In addition, the current Meeting considered residue data on stone fruit evaluated by the 2006 JMPR against the GAP from the USA.

Residues of boscalid in cherries were (n=14): 0.055, 0.76, 1.0, 1.2, 1.2, 1.4, 1.5, 1.5, 1.5, 1.5, 1.6, 1.6, 2.6, 2.6 mg/kg.

Residues of boscalid in peaches were (n=19): 0.19, 0.32, 0.4, 0.42, 0.48, 0.49, 0.49, 0.52, 0.6, 0.60, 0.64, 0.71, 0.73, 0.75, 0.78, 0.79, 1.0, 1.2, 3.6 mg/kg.

Residues of boscalid in plums were (n=15): <0.05, 0.1, 0.11, 0.12, 0.13, 0.15, 0.17, 0.25, 0.32, 0.46, 0.54, 0.57, 0.6, 0.7, 0.76 mg/kg.

(italic = 2006 residue data)

The Meeting noted that the US GAP for stone fruit results in higher residues than the Austrian GAP and decided to explore the possibility for a group recommendation based on it. However, median

residues differ by more than a factor of 5, suggesting significant differences in residues between the three commodities investigated. Therefore, the Meeting decided to base its recommendation on the individual sub-groups of cherries, plums and peaches.

The Meeting estimated maximum residue levels and STMR values for boscalid of 5 mg/kg and 1.5 mg/kg for cherries (subgroup 003A) and of 4 mg/kg and 0.6 mg/kg for peaches (subgroup 003C), respectively.

The Meeting also estimated a maximum residue level of 1.5 mg/kg and a STMR value of 0.25 mg/kg for plums (subgroup 003B), because of the significantly lower residue population in plums compared to other members of the stone fruit group and due to the availability of a specific subgroup for plums.

The Meeting withdraws its previous recommendation of 3 mg/kg for boscalid in stone fruit.

#### ***Berries and other small fruits, except strawberries and grapes***

For boscalid, the 2006 JMPR Meeting recommended a maximum residue level of 10 mg/kg and estimated a STMR value of 2.53 mg/kg for berries and other small fruits, except strawberries and grapes based on a US GAP (4×0.4 kg ai/ha, PHI 0 days). The current Meeting received new GAP information for bush berries and cane berries with supporting supervised field trials.

Boscalid is registered in the USA for use on bush berries and cane berries with a maximum GAP identical to the one considered by the 2006 Meeting involving four foliar sprays of 0.4 kg ai/ha each (7 day interval) and a PHI of 0 days.

Two new supervised field trials conducted in Canada and the USA on blueberries were submitted to the Meeting approximating the GAP from the USA. In addition, supervised field trials on blueberries and caneberries were evaluated by the 2006 Meeting against the same GAP.

Residues of boscalid in blueberries were (n=12): 0.84, 1.2, 1.2, 1.3, 1.4, 2.0, 2.4, 2.6, 3.8, 4.4, 5.4, 6.8 mg/kg (*italic=new trial data*).

Residues of boscalid in raspberries were (n=6): 1.5, 2.0, 2.4, 2.7, 3.5, 3.7 mg/kg.

The Meeting noted that residues in blueberries and raspberries were not significantly different (confirmed by Whitney-Mann-U Test) and decided to combine the data for a group recommendation.

Combined residues of boscalid in blueberries and raspberries were (n=18): 0.84, 1.2, 1.2, 1.3, 1.4, 1.5, 2.0, 2.0, 2.4, 2.4, 2.6, 2.7, 3.5, 3.7, 3.8, 4.4, 5.4, 6.8 mg/kg.

The Meeting noted that the OECD MRL Calculator result for the combined dataset is 10 mg/kg, which is covered by the previous recommendation. The Meeting confirmed its previous recommendation for boscalid in small fruits and berries, except strawberry and grapes.

#### ***Avocado***

Boscalid is registered for use on tropical fruits (including avocado) in the USA with a maximum GAP involving two foliar sprays of 0.33 kg ai/ha each (7 day interval) and a PHI of 0 days.

Supervised field trials conducted in the USA on avocado were submitted involving four instead of two treatments (7 day interval) with higher individual rates per treatment than the GAP (0.41 kg ai/ha vs. 0.33 kg ai/ha).

The Meeting concluded that the supervised field trial data submitted was conducted at significantly more critical conditions (>+25%) than the US GAP and decided that the data is insufficient for a recommendation.

#### ***Mango***

The critical GAP for boscalid in mangoes is from Mexico, involving two foliar sprays at 0.3 kg ai/ha each (7 day interval) with a PHI of 0 days. Two supervised field trials from Brazil approximating this

GAP were submitted.

Residues of boscalid in mango (whole fruits, calculated) approximating the Mexican GAP were (n=2): 0.032 and 0.54 mg/kg.

The Meeting concluded that two trials are insufficient for a recommendation based on the Mexican GAP.

The critical GAP for boscalid on mango in Brazil is two foliar sprays of 0.024 kg ai/hl each (15 day interval) with a PHI of 7 days.

Supervised field trials conducted in Brazil were submitted approximating the GAP. In some trials, the stone was removed already in the field. Since metabolism information indicates that boscalid is stable both in primary plants and rotational crops, in freezer storage and during simulated hydrolysis, the Meeting decided that no significant impact on the residue in the remaining fruit has to be expected from the procedure in the field.

Residues of boscalid in mango (whole fruits, calculated) approximating Brazilian GAP were (n=8): 0.032, 0.1, 0.22, 0.25, 0.26, 0.55, 0.68, 1.0 mg/kg.

Based on the dataset for mango according to the Brazilian GAP, the Meeting estimated a maximum residue level of 2 mg/kg and a STMR value of 0.255 mg/kg for boscalid in mangoes.

### ***Pomegranate***

Boscalid is registered in Turkey for use on pomegranates with a maximum GAP involving three foliar sprays of 0.0126 kg ai/hl each (bud formation, end of flowering (loss of calix) and close to harvest) without specified PHI.

Supervised field trials on pomegranate from Europe were submitted, involving two applications directly before harvest at a 5 day interval.

The Meeting concluded that these trials do not match the GAP from Turkey.

### ***Tea, green, black (black, fermented and dried)***

Boscalid is registered in Japan for use on tea with a maximum GAP involving two foliar sprays of a factor 2000 diluted product (WG formulation, 13.6% boscalid, calculated: 0.0068 kg ai/hL) each corresponding to a maximum calculated rate of 0.27 kg ai/ha in combination with a PHI of 7 days.

The Meeting received eight supervised trials from China, India, Japan and Taiwan Province of China on tea approximating the highest calculated rate per hectare according to GAP.

Based on the calculated maximum treatment rate of 0.27 kg ai/ha the estimated residues in dried green tea were (n=8): 1.7, 4.1, 5.6, 6.2, 6.3, 7.3, 16, 19 mg/kg.

Based on the dataset for tea according to the Japanese GAP, the Meeting estimated a maximum residue level of 40 mg/kg and a STMR value of 6.25 mg/kg for tea, green, black (black, fermented and dried).

### ***Fate of residues during processing***

Processing factors for the commodities considered at this Meeting are summarised below based on the estimations of the 2006 JMPR.

Raw commodity	Processed commodity	Boscalid	
		Median or best estimate processing factor	STMR-P (mg/kg)
Apple (STMR:0.35 mg/kg)	Wet apple pomace	6.06	2.121
	Juice	0.08	0.028
Plums (STMR:0.25 mg/kg)	Dried prunes	2.8	0.7
	Puree	1.95	0.49



Raw commodity	Processed commodity	Boscalid	
		Median or best estimate processing factor	STMR-P (mg/kg)
Tea, black (STMR=6.25 mg/kg)	Infusion	<0.002, <u>0.002</u> , <0.02	0.0125
	Instant tea	0.005, <u>0.007</u> , <0.02	0.044

Based on a maximum residue level of 1.5 mg/kg for plums the Meeting estimated a maximum residue level of 5 mg/kg for boscalid in prunes, dried to replace its previous recommendation of 10 mg/kg.

### ***Residues in animal commodities***

The only feed commodity affected by the current recommendations is dry apple pomace, which was already considered by all previous Meetings for boscalid residues. Since the new recommendation for boscalid in pome fruit is slightly lower than the previous recommendation for apples (2006: STMR 0.365 mg/kg for apples, 2019: 0.35 mg/kg for pome fruit), no re-calculation of the livestock animal dietary burden is necessary.

## **RECOMMENDATIONS**

On the basis of the data obtained from supervised trials, the Meeting concluded that the residue levels listed in Annex 1 are suitable for establishing maximum residue limits and for IEDI assessment.

Definition of the residue for compliance with the MRL for plant and animal commodities and dietary risk assessment for plant commodities: *boscalid*.

Definition of the residue for dietary risk assessment for animal commodities: *sum of boscalid, 2-chloro-N-(4'-chloro-5-hydroxybiphenyl-2-yl)nicotinamide (M510F01) including its conjugate, expressed as boscalid*.

*The residue is fat-soluble.*

## **DIETARY RISK ASSESSMENT**

### ***Long-term dietary exposure***

The ADI for boscalid is 0–0.04 mg/kg bw. The International Estimated Daily Intakes (IEDIs) for boscalid were estimated for the 17 GEMS/Food Consumption Cluster Diets using the STMR or STMR-P values estimated by the JMPR. The results are shown in Annex 3 of the 2019 Extra JMPR Report.

The IEDIs ranged from 10–60% of the maximum ADI. The Meeting concluded that long-term dietary exposure to residues of boscalid from uses considered by the JMPR is unlikely to present a public health concern.

### ***Acute dietary exposure***

The 2006 JMPR decided that an ARfD for boscalid was unnecessary. The Meeting therefore concluded that the acute dietary exposure to residues of boscalid from the uses considered is unlikely to present a public health concern.

### ***Assessment of metabolites using the threshold of toxicological concern (TTC) approach***

The metabolite M510F47 could be assessed using the TTC approach (Cramer Class III threshold of 1.5 µg/kg bw per day). Since this metabolite was not identified in food or feed commodities, the Meeting concluded that it is unlikely to present a public health concern.



## 5.4 CHLORANTRANILIPROLE (230)

### RESIDUE AND ANALYTICAL ASPECTS

Chlorantraniliprole is an insecticide that operates by a highly specific biochemical mode of action. It was first evaluated for residues and toxicological aspects by the 2008 JMPR. The 2008 JMPR established an ADI for chlorantraniliprole of 0–2 mg/kg bw and concluded that an ARfD was unnecessary.

The 2008 JMPR also recommended the following residue definition for Chlorantraniliprole:

Definition of the residue for compliance with the MRL and dietary risk assessment in plant and animal commodities: *Chlorantraniliprole*

*The residue is fat-soluble.*

Chlorantraniliprole was last evaluated in 2016 for additional maximum residue levels. At the Fiftieth Session of the CCPR (2018), chlorantraniliprole was listed for consideration of additional uses by the 2019 Extra JMPR. The Meeting received information on registered use patterns, supervised residue trials on beans, peas and oil palm with product labels from Malaysia and the USA.

#### **Methods of analysis**

The current Meeting received additional concurrent recovery information for the analysis of chlorantraniliprole in plant matrices.

A minor modification of method 13261, which was previously evaluated by the 2008 JMPR, was additionally tested for dry peas, oil palm fruits, kernels and kernel oil as well as for the palm fruit mesocarp and mesocarp oil. The method involves analysis by LC-MS/MS techniques and was successfully validated at a LOQ of 0.01 mg/kg for all matrices investigated.

#### **Results of supervised residue trials on crops**

The Meeting received supervised trial data for applications of chlorantraniliprole on dry beans and peas as well as on oil palms conducted in the USA and Malaysia, respectively.

##### ***Dry beans (except dry soya beans) and dry peas***

Chlorantraniliprole is registered for use on legume vegetables (succulent and dried) in the USA with a maximum GAP involving two foliar sprays of 0.11 kg ai/ha each (3 day interval), a maximum seasonal rate of 0.23 kg ai/ha and a PHI of 1 day.

Corresponding supervised field trials conducted in the USA on dry beans and dry peas matching this GAP were submitted.

Residues of chlorantraniliprole in beans, dry were (n=5): 0.011, 0.013, 0.016, 0.025 and 0.051 mg/kg.

Residues of chlorantraniliprole in peas, dry were (n=5): 0.024, 0.036, 0.054, 0.056 and 0.18 mg/kg.

The Meeting noted that residues in both commodities are not significantly different, which was confirmed by the Mann-Whitney-U Test. Since dry beans and peas are both representative commodities for the sub-groups dry beans (VD 2065) and dry peas (VD 2066), the Meeting decided to combine the datasets for mutual support.

Combined residues of chlorantraniliprole in beans, dry and peas, dry were (n=10): 0.011, 0.013, 0.016, 0.024, 0.025, 0.036, 0.051, 0.054, 0.056 and 0.18 mg/kg.

The US GAP does not include treatment of soya beans, which are also covered in the Codex sub-groups dry beans (VD 2065). Therefore the Meeting decided to exclude soya beans from its recommendations.

The Meeting estimated a maximum residue level of 0.3 mg/kg and a STMR value of 0.0305 mg/kg for chlorantraniliprole in dry beans (VD 2065), except dry soya beans and in dry peas (VD 2066).

### ***Palm fruit***

Chlorantraniliprole is registered for use on oil palms in Malaysia with two foliar sprays of 0.03 kg ai/ha each (14 day interval) and a PHI of 1 day. Four corresponding supervised field trial conducted in Malaysia were submitted.

Residues of chlorantraniliprole in palm fruits were (n=4): 0.18, 0.19, 0.2, 0.38 mg/kg.

The Meeting estimated a maximum residue level of 0.8 mg/kg and a STMR value of 0.195 mg/kg for chlorantraniliprole in palm fruits.

### ***Fate of residues during processing***

The fate of chlorantraniliprole residues has been examined under conditions simulating commercial processing of oil palm fruits.

Estimated processing factors for the commodities considered at this Meeting are summarised below.

Raw commodity	Processed commodity	Chlorantraniliprole			
		Individual processing factors	Mean or best estimate processing factor	STMR-P in mg/kg	Maximum residue level in mg/kg
Oil palm fruit (STMR: 0.195 mg/kg, maximum residue level: 0.8 mg/kg)	Mesocarp oil (= Palm oil)	1.6, 1.9, 1.9, 3.1, 3.4, 3.8	2.6	0.507	2
	Kernel oil (=Palm kernel oil, crude)	<0.03, <0.04, <0.04, <0.05, <0.05, 0.11	<0.05	0.0098	Not necessary
	Kernel cake (=Palm, kernel meal)	<0.03, <0.04, <0.04, <0.05(3)	<0.04	0.0078	Not necessary

For palm oil, crude (=mesocarp oil) the Meeting estimated a maximum residue level of 2 mg/kg and a STMR-P of 0.507 mg/kg, based on a mean processing factor of 2.6.

For palm kernel oil and palm kernel cake the Meeting estimated STMR-P values of 0.0098 mg/kg and 0.0078 mg/kg, respectively. No specific maximum residue levels are required since no accumulation of residues was observed.

### ***Residues in animal commodities***

The Meeting recalculated the livestock dietary burden based on the uses considered by the current and previous Meetings on the basis of diets listed in the 2016 edition of the FAO Manual Appendix IX (OECD Feedstuff Table). The maximum and mean dietary burdens for cattle of up to 36 ppm and 18 ppm, respectively, calculated by the 2016 Meeting are not changed by the addition of dry beans, except soya bean and dry peas (Median: 0.0305 mg/kg); and palm kernel cake (Median-P: 0.0078 mg/kg). The Meeting confirms its previous recommendations for animal commodities.

## **RECOMMENDATIONS**

On the basis of the data obtained from supervised trials, the Meeting concluded that the residue levels listed in Annex 1 are suitable for establishing maximum residue limits and for IEDI assessment.

Definition of the residue for compliance with the MRL and dietary risk assessment for plant and animal commodities: *Chlorantraniliprole*

The residue is fat-soluble.

## DIETARY RISK ASSESSMENT

### ***Long-term dietary exposure***

The ADI for chlorantraniliprole is 0–2 mg/kg bw. The International Estimated Daily Intakes (IEDIs) for chlorantraniliprole were estimated for the 17 GEMS/Food Consumption Cluster Diets using the STMR or STMR-P values estimated by the JMPR. The results are shown in Annex 3 of the 2019 Extra JMPR Report.

The IEDIs ranged from 0–1% of the maximum ADI. The Meeting concluded that long-term dietary exposure to residues of chlorantraniliprole from uses considered by the JMPR is unlikely to present a public health concern.

### ***Acute dietary exposure***

The 2008 JMPR decided that an ARfD for chlorantraniliprole was unnecessary. The Meeting therefore concluded that the acute dietary exposure to residues of chlorantraniliprole from the uses considered is unlikely to present a public health concern.



## 5.5 CHLOROTHALONIL (081)

### TOXICOLOGY

Chlorothalonil (tetrachloroisophthalonitrile) was previously evaluated by JMPR in 2009, when an ADI of 0–0.02 mg/kg bw and an ARfD of 0.6 mg/kg bw were established. The 2009 Meeting also established an ADI of 0–0.008 mg/kg bw and an ARfD of 0.03 mg/kg bw for metabolite SDS-3701 (4-hydroxy-2,5,6-trichloroisophthalonitrile) (Annex 5, reference 118). In 2010, the Meeting evaluated metabolite R611965 (3-carbamyl-2,4,5-trichlorobenzoic acid; SDS-46851) and considered it unnecessary to establish a separate ADI and ARfD for R611965 because its toxicity was lower than that of the parent compound (Annex 5, reference 121).

Following a request for additional maximum residue levels by CCPR, chlorothalonil was placed on the agenda of the present Meeting, which assessed additional toxicological information available since the last review.

The new information on chlorothalonil included studies on absorption, distribution, metabolism and excretion, inhalation toxicity, acute and 90-day neurotoxicity, immunotoxicity, endocrine activity and phototoxicity. For six chlorothalonil metabolites and/or degradates, the new information included studies on acute toxicity, short-term toxicity and genotoxicity.

All critical studies contained statements of compliance with GLP and were conducted in accordance with relevant national or international test guidelines, unless otherwise specified. No additional information from a literature search was identified that complemented the toxicological information submitted for the current assessment.

#### **Biochemical aspects**

Following a single oral gavage administration of [<sup>14</sup>C]chlorothalonil at 5 mg/kg bw to rats, the major route of elimination was via the faeces, with 85–91% of the administered dose excreted by 168 hours post-dosing. Urinary excretion accounted for 5.5–7.0% of the administered dose. Following a single oral gavage administration of [<sup>14</sup>C]chlorothalonil at 200 mg/kg bw to rats, the major route of elimination was via the faeces, with 99–115% of the administered radioactivity recovered by 168 hours post-dosing. Urinary excretion accounted for less than 3.0% of the administered dose. Following a single oral gavage administration of [<sup>14</sup>C]chlorothalonil at 5 mg/kg bw to bile duct-cannulated rats, the major route of elimination was via the faeces, with 75–80% of the administered radioactivity recovered by 72 hours post-dosing. Biliary elimination accounted for 12% of the administered dose, and urinary excretion accounted for 5.8–10% of the administered dose. Following a single oral gavage administration of [<sup>14</sup>C]chlorothalonil at 200 mg/kg bw to bile duct-cannulated rats, the major route of elimination was via the faeces, with 81–95% of the administered radioactivity recovered by 72 hours post-dosing. Biliary elimination accounted for 4.9–7.5% and urinary excretion accounted for 2.9–4.3% of the administered dose.

Following administration of a single oral gavage dose of [<sup>14</sup>C]chlorothalonil at 5 mg/kg bw to rats, the maximum concentrations ( $C_{\max}$  values) of radioactivity in blood were 0.21 and 0.31 µg equivalents (equiv) per gram in male and females, respectively, with a time to reach  $C_{\max}$  ( $T_{\max}$ ) of 8 hours post-dosing in males and 4 hours post-dosing in females. Following administration of a single oral gavage dose of 200 mg/kg bw, the  $C_{\max}$ s of radioactivity in blood were 3.2 and 6.0 µg equiv/g in males and females, respectively, with a  $T_{\max}$  of 12 hours post-dosing in both males and females.

Chlorothalonil was metabolized in the rat, forming up to seven metabolites through oxidation, hydroxylation and conjugation. The majority of the dose was excreted as unabsorbed parent in faeces. The most abundant component excreted in urine was R613823 (≤3.3% of the dose). The most abundant metabolite in plasma (29–38% of the area under the concentration–time curve [AUC] for total radioactivity) was SDS-3701 (R188281). In an in vitro metabolism study using rat and human liver microsomes, no qualitative differences in the metabolite profiles of [<sup>14</sup>C]chlorothalonil were noted, and no unique or disproportionate human in vitro metabolites were formed.

***Toxicological data***

In a study of acute neurotoxicity, chlorothalonil was administered by gavage to groups of rats at a dose of 0, 100, 500 or 2000 mg/kg bw. The NOAEL for systemic toxicity and neurotoxicity was 2000 mg/kg bw, the highest dose tested.

In a 90-day neurotoxicity study, groups of rats were fed diets containing chlorothalonil at a concentration of 0, 30, 300 or 3000 ppm (equal to 0, 2.1, 22.0 and 232.1 mg/kg bw per day for males and 0, 2.4, 24.2 and 243.2 mg/kg bw per day for females, respectively). The NOAEL for systemic toxicity was 300 ppm (equal to 22.0 mg/kg bw per day), based on decreased body weights and reduced feed consumption at 3000 ppm (equal to 232.1 mg/kg bw per day). The NOAEL for neurotoxicity was 3000 ppm (equal to 232.1 mg/kg bw per day), the highest dose tested.

The Meeting concluded that chlorothalonil is not neurotoxic.

In an immunotoxicity study, groups of female mice were fed diets containing chlorothalonil at a concentration of 0, 50, 750 or 2000 ppm (equal to 0, 8.2, 120.9 and 345.1 mg/kg bw per day, respectively) for a period of 28 days. The NOAEL for immunotoxicity was 2000 ppm (equal to 345.1 mg/kg bw per day), the highest dose tested. The NOAEL for systemic toxicity was 50 ppm (equal to 8.2 mg/kg bw per day), based on increased kidney weights at 750 ppm (equal to 120.9 mg/kg bw per day).

The Meeting concluded that chlorothalonil is not immunotoxic.

No evidence of chlorothalonil-mediated estrogenic or androgenic activity was observed in a battery of in vivo and in vitro tests.

Chlorothalonil is considered to be non-phototoxic in vitro.

***Toxicological data on metabolites and/or degradates******SDS-3701 (2,5,6-trichloro-4-hydroxyisophthalonitrile; plant, ruminant and rat metabolite and soil and water degradation product)***

The oral LD<sub>50</sub> of SDS-3701 in rats was between 50 and 300 mg/kg bw. SDS-3701 was not irritating to rabbit skin.

In a 13-week dietary toxicity study, SDS-3701 was administered to rats at a concentration of 0, 15, 50 or 250 ppm (equal to 0, 1.0, 3.0 and 16 mg/kg bw per day for males and 0, 1.0, 4.0 and 17 mg/kg bw per day for females, respectively). The NOAEL was 50 ppm (equal to 3.0 mg/kg bw per day), based on reduced body weight, body weight gain and feed consumption in females and changes in haematological and clinical chemistry parameters in both sexes at 250 ppm (equal to 16 mg/kg bw per day).

In a 120-day dietary toxicity study (pre-GLP), SDS-3701 was administered to rats at a concentration of 0, 10, 50, 100 or 200 ppm (equivalent to 0, 1, 5, 10 and 20 mg/kg bw per day, respectively). The NOAEL was 100 ppm (equivalent to 10 mg/kg bw per day), based on decreased body weight gains in females at 200 ppm (equivalent to 20 mg/kg bw per day).

SDS-3701 was tested for genotoxicity in vitro in a bacterial gene mutation test, a forward mutation test in Chinese hamster lung cells and a mouse lymphoma assay, with and without metabolic activation. It gave a positive response in the in vitro mouse lymphoma assay only, with and without metabolic activation. It was negative for genotoxicity in vivo in the mouse micronucleus test and for unscheduled DNA synthesis. The Meeting confirmed the previous conclusion of the 2009 Meeting that SDS-3701 is unlikely to exhibit mutagenic activity in vivo.

***R417888 (2-carbamyl-3,5,6-trichloro-4-cyanobenzenesulfonic acid; crop and rat metabolite and soil degradation product)***

The acute oral LD<sub>50</sub> of R417888 in rats was greater than 2000 mg/kg bw.



In a 90-day dietary toxicity study, R417888 was administered to rats at a concentration of 0, 150, 600 or 2400 parts per million (ppm) (equal to 0, 13.0, 54.0 and 192 mg/kg bw per day for males and 0, 15.0, 56.0 and 218 mg/kg bw per day for females, respectively). The NOAEL was 2400 ppm (equal to 192 mg/kg bw per day), the highest dose tested.

R417888 was tested for genotoxicity in vitro in bacterial gene mutation tests, a chromosomal aberration test in human lymphocytes and mouse lymphoma assays, with and without metabolic activation. It gave a positive response in the chromosomal aberration assay without metabolic activation and one mouse lymphoma assay with metabolic activation, but it was negative in a repeat mouse lymphoma assay at higher concentrations. It was negative for genotoxicity in vivo in a mouse micronucleus test and for unscheduled DNA synthesis.

The Meeting concluded that R417888 is unlikely to be genotoxic in vivo.

***SYN548764 (4-carbamyl-2,3,5-trichloro-6-cyanobenzenesulfonic acid; crop and rat metabolite and soil degradation product)***

SYN548764 was tested for genotoxicity in vitro in a bacterial gene mutation test, a mouse lymphoma assay and a chromosomal aberration test in human lymphocytes, with and without metabolic activation. It gave an equivocal response in the chromosomal aberration test only, in the absence of metabolic activation. It was negative for genotoxicity in the in vivo mouse micronucleus test.

The Meeting concluded that SYN548764 is unlikely to be genotoxic in vivo.

***R611965 (3-carbamyl-2,4,5-trichlorobenzoic acid; crop and rat metabolite and soil degradation product)***

The acute oral LD<sub>50</sub> of R611965 in rats was greater than 2000 mg/kg bw. R611965 was not irritating to rabbit skin.

In a 90-day toxicity study, R611965 was administered to rats at a dietary concentration of 0, 150, 600 or 2400 ppm (equal to 0, 14.0, 57.0 and 197 mg/kg bw per day for males and 0, 14.0, 60.0 and 223 mg/kg bw per day for females, respectively). The NOAEL was 2400 ppm (equal to 197 mg/kg bw per day), the highest dose tested.

R611965 was negative in vitro in a bacterial gene mutation test and a mouse lymphoma assay, with and without metabolic activation. It was negative for genotoxicity in the in vivo mouse micronucleus test. The Meeting confirmed the conclusion of the 2010 Meeting that R611965 is unlikely to be genotoxic.

***R611968 (2,4,5-trichloro-3-cyano-6-hydroxybenzamide; rat metabolite and soil degradation product)***

R611968 was tested for genotoxicity in vitro in a bacterial gene mutation test, a chromosomal aberration test in human lymphocytes and a mouse lymphoma assay, with and without metabolic activation. It gave a positive response in the chromosomal aberration assay only, both with and without metabolic activation. It was negative for genotoxicity in an in vivo mouse micronucleus test.

The Meeting concluded that R611968 is unlikely to be genotoxic in vivo.

***R613636 (2,4,5,6-tetrachloro-3-cyanobenzamide; crop metabolite and soil and water degradation product)***

R613636 was tested for genotoxicity in vitro in a bacterial gene mutation test, a gene mutation test in Chinese hamster lung cells, a chromosomal aberration test in human lymphocytes and a mouse lymphoma assay, with and without metabolic activation. It gave a positive response in the chromosomal aberration test only, both with and without metabolic activation. It was negative for genotoxicity in an in vivo mouse micronucleus test.

The Meeting concluded that R613636 is unlikely to be genotoxic in vivo.

### Toxicological evaluation

The Meeting concluded that no revision of the ADI or ARfD for chlorothalonil was necessary.

The Meeting concluded that no revision of the ADI or ARfD for metabolite SDS-3701 was necessary.

For metabolite R611965, the Meeting concluded that it would be covered by the ADI and ARfD of chlorothalonil, but noted that it is at least 10 times less potent than chlorothalonil in a wide range of studies.

The Meeting concluded that metabolite R417888 would be covered by the ADI and ARfD of chlorothalonil because of its lower acute and repeated-dose toxicity in comparison with the parent compound.

The Meeting concluded that SYN548764, R611968 and R613636 are unlikely to be genotoxic *in vivo*. Following the “Plant and animal metabolite assessment scheme” of JMPR, the Meeting concluded that, for chronic toxicity, these three metabolites could be assessed using the TTC approach. All three metabolites are categorized in Cramer class III, and therefore a TTC of 1.5 µg/kg bw per day applies.

The ADI for chlorothalonil is 0–0.02 mg/kg bw. This ADI applies to chlorothalonil plus the metabolites R611965 and R417888, expressed as chlorothalonil.

The ARfD for chlorothalonil is 0.6 mg/kg bw. This ARfD applies to chlorothalonil plus the metabolites R611965 and R417888, expressed as chlorothalonil.

An addendum to the toxicological monograph was prepared.

***Acceptable daily intake (ADI) (applies to chlorothalonil plus R611965 and R417888, expressed as chlorothalonil)***

0–0.02 mg/kg bw

***Acute reference dose (ARfD) (applies to chlorothalonil plus R611965 and R417888, expressed as chlorothalonil)***

0.6 mg/kg bw

### ***Critical end-points for setting guidance values for exposure to chlorothalonil and metabolites***

<i>Short-term studies of toxicity</i>	
Target/critical effect	Body weight
Lowest relevant inhalation NOAEC	0.001 mg/L (rat)
<i>Neurotoxicity</i>	
Acute neurotoxicity NOAEL	2 000 mg/kg bw, highest dose tested (rat)
Subchronic neurotoxicity NOAEL	232.1 mg/kg bw per day, highest dose tested (rat)
<i>Other toxicological studies</i>	
Immunotoxicity NOAEL	345 mg/kg bw per day, highest dose tested (mouse)
Endocrine effects	No evidence in <i>in vitro</i> or <i>in vivo</i> tests
Phototoxicity	Not phototoxic <i>in vitro</i>
<i>Studies on metabolites</i>	
SDS-3701 (R182281)	

<i>Acute toxicity</i>	
Rat, LD <sub>50</sub> , oral	50 < LD <sub>50</sub> < 300 mg/kg bw
Rabbit, dermal irritation	Not irritating
Short-term studies of toxicity	
Target/critical effect	Body weight, body weight gain, changes in haematology and clinical chemistry parameters
Lowest relevant oral NOAEL	3 mg/kg bw per day (rat)
Genotoxicity	
	No evidence of genotoxicity in vivo
R417888	
Acute toxicity	
Rat, LD <sub>50</sub> , oral	>2 000 mg/kg bw (rat)
Short-term studies of toxicity	
Target/critical effect	None
Lowest relevant oral NOAEL	192 mg/kg bw per day, highest dose tested (rat)
Genotoxicity	
	No evidence of genotoxicity in vivo
SYN548764	
Genotoxicity	
	No evidence of genotoxicity in vivo
R611965	
Acute toxicity	
Rat, LD <sub>50</sub> , oral	>2 000 mg/kg bw
Rabbit, dermal irritation	Not irritating
Short-term studies of toxicity	
Target/critical effect	None
Lowest relevant oral NOAEL	197 mg/kg bw per day, highest dose tested (rat)
Genotoxicity	
	No evidence of genotoxicity
R611968	
Genotoxicity	
	No evidence of genotoxicity in vivo
R613636	
Genotoxicity	
	No evidence of genotoxicity in vivo

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### RESIDUE AND ANALYTICAL ASPECTS

Chlorothalonil was reviewed for toxicology by the 2009 and 2010 JMPR within the periodic review program of the CCPR. For the parent substance an ADI of 0–0.02 mg/kg bw and an ARfD of 0.6 mg/kg

bw were established. In addition to the parent substance, an ADI of 0–0.008 mg/kg bw and an ARfD of 0.03 mg/kg bw were established for the metabolite SDS-3701 (2,5,6-trichloro-4-hydroxyisophthalonitrile).

The 2010 JMPR recommended the following residue definitions for chlorothalonil:

Definition of the residue for compliance with the MRL for plant commodities: *chlorothalonil*;

Definition of the residue for dietary risk assessment for plant commodities: *chlorothalonil and SDS-3701, all considered separately*;

Definition of the residue for compliance with the MRL and dietary risk assessment for animal commodities: *SDS-3701*.

At the Fiftieth Session of the CCPR (2018), chlorothalonil was scheduled for evaluation of an additional use on cranberry by the 2019 Extra JMPR. The current Meeting received new information on use patterns for chlorothalonil on cranberry and additional analytical methods and supervised field trials.

### Methods of analysis

The Meeting received an analytical method for chlorothalonil not previously evaluated by the Meeting. The method was used in the new supervised field trials.

Method GRM005.03A is applicable to cranberries and involved homogenisation with acetone and 10 mol/L sulfuric acid solution (95:5, v/v, 100 mL). Following solid phase extraction (SPE) clean-up, chlorothalonil and SDS-3701 were analyzed by liquid chromatography-mass spectrometry/mass spectrometry (LC-MS/MS). The method was validated for both analytes in cranberries with a LOQ of 0.01 mg/kg.

### Stability of pesticides in stored analytical samples

The 2015 JMPR concluded that chlorothalonil and SDS-3701 might degrade in cranberries and no acceptable storage interval above one month could be identified. In the supervised trials received by the current Meeting, the samples were analysed within 22 days of sampling and kept frozen during the storage interval. The Meeting concluded that the residue trial data could be used for evaluation.

### Definition of the residue

Based on new information, the present Meeting reassessed the toxicity of the metabolites R611965 and R417888 and their relevance in dietary exposure.

The metabolite R611965 is covered by the ADI and ARfD of parent chlorothalonil, but it was noted that it is at least 10 times less potent. R611965 is the predominant residue in all rotational crops, representing 29–63% of the TRR in confined studies. Additionally, various field rotational crop studies were submitted to the 2010 JMPR, indicating potential residues of R611965 in succeeding crops:

Commodity group	Max. Residues of R611965 per trial <sup>a</sup> (mg/kg)	Field rotational crop median residue (mg/kg)	Field rotational crop highest residue (mg/kg)
Leafy and Brassica crops	<0.03, <0.05, <0.05, <u>0.18</u> , 0.24, 1.1, 2.2	0.18	2.2
Legume vegetables	0.03, <u>0.14</u> , <u>0.74</u> , 1.0	0.44	1.0
Root tops	0.03, 0.04, 0.07, <u>0.1</u> , <u>0.43</u> , 0.49, 0.65, 0.91	0.265	0.91
Root and tuberous vegetables, bulb vegetables	0.02, 0.02, <0.03, 0.03, <u>0.08</u> , <u>0.15</u> , 0.2, 0.56, 0.59, 0.89	0.115	0.89
Cereal grains	<0.03, 0.04, 0.05, <u>0.06</u> , 0.44, 0.56, 0.58	0.06	Not necessary
Oilseed and pulse crops	<0.03, < <u>0.03</u> , <u>0.04</u> , 0.13	0.035	Not necessary

Commodity group	Max. Residues of R611965 per trial <sup>a</sup> (mg/kg)	Field rotational crop median residue (mg/kg)	Field rotational crop highest residue (mg/kg)
Fruiting vegetables	<0.03, <0.03, 0.14, 1.5	0.085	1.5

<sup>a</sup> up scaled (unless <LOQ) to the highest annual rate reported by the 2010 JMPR (20 kg ai/ha eq.)

Taking into account the 10 times lower potency of R611965, the Meeting concluded that its contribution to the overall dietary risk arising from its presence in commodities obtained from rotational crops is insignificant compared to parent chlorothalonil. The IESTI based on the median or highest residues found in field rotational crop studies represents a very small proportion of the ARfD (up to 5%).

Based on the chemical structure of R611965, conversion into SDS-3701 does not occur. SDS-3701 is the only chlorothalonil related residue found in commodities of animal origin. Therefore, the Meeting concluded that R611965 is irrelevant for the consideration of chlorothalonil residues in animal commodities.

The Meeting concluded that the inclusion of R611965 in the residue definition of chlorothalonil for dietary exposure purposes is unnecessary at this time. The relevance of this metabolite should be revisited in the next periodic review.

The metabolite R417888 is covered by the ADI and ARfD of chlorothalonil. Since the compound was not found in food or feed commodities, the Meeting concluded that its inclusion in the residue definition of chlorothalonil for dietary exposure purposes is unnecessary.

The Meeting confirmed its previous residue definition recommendations for chlorothalonil.

### **Results of supervised residue trials on crops**

The Meeting received supervised trial data for applications of chlorothalonil on cranberries conducted in the USA.

#### **Cranberry**

The 2010 JMPR concluded that the overall information received was insufficient and recommended withdrawal of its previous recommendation for chlorothalonil in cranberries of 5 mg/kg.

The current Meeting received five new supervised field trials conducted in the USA and matching the GAP in the USA for cranberries at a rate of 3 × 5.5 kg ai/ha with a PHI of 50 days. In cranberries following treatment with chlorothalonil according to the US GAP, residues of chlorothalonil were (n=5): 0.41, 1.8, 3.0, 4.4 and 7.1 (highest individual value of 7.7) mg/kg.

In the same trials, the residues of SDS-3701 expressed as SDS-3701 were (n=5): ≤ 0.01 (4), 0.019 mg/kg.

The Meeting estimated maximum residue level, STMR and HR values of 15, 3.0, and 7.7 mg/kg for chlorothalonil in cranberries, respectively. The Meeting also estimated STMR and HR values of 0.01 and 0.019 mg/kg, respectively, for SDS-3701.

### **RECOMMENDATIONS**

On the basis of the data from supervised trials the Meeting concluded that the residue levels listed in Annex 1 are suitable for establishing maximum residue limits and for IEDI and IESTI assessment.

Definition of the residue for compliance with the MRL for plant commodities: *chlorothalonil*

Definition of the residue for dietary risk assessment for plant commodities: *chlorothalonil and SDS-3701 (2,5,6-trichloro-4-hydroxyisophthalonitrile), all considered separately.*

Definition of the residue for compliance with the MRL and dietary risk assessment for animal commodities: *SDS-3701 (2,5,6-trichloro-4-hydroxyisophthalonitrile).*

The residue is not fat-soluble.

## DIETARY RISK ASSESSMENT

### ***Long-term dietary exposure***

The ADI for chlorothalonil and its metabolite SDS-3701 are 0–0.02 and 0–0.008 mg/kg bw, respectively. The International Estimated Daily Intakes (IEDIs) for chlorothalonil and SDS-3701 were estimated for the 17 GEMS/Food Consumption Cluster Diets using the STMR or STMR-P values estimated by the JMPR. The results are shown in Annex 3 of the 2019 Extra JMPR Report.

The IEDIs ranged from 10–50% and 4–10% of the maximum ADI for chlorothalonil and SDS-3701, respectively. The Meeting concluded that long-term dietary exposure to residues of chlorothalonil and its SDS-3701 metabolite from uses considered by the JMPR is unlikely to present a public health concern.

### ***Acute dietary exposure***

The ARfD for chlorothalonil and SDS-3701 are 0.6 and 0.03 mg/kg bw, respectively. The International Estimate of Short Term Intakes (IESTIs) for chlorothalonil and SDS-3701 were calculated for the food commodities and their processed commodities for which HRs/HR-Ps or STMRs/STMR-Ps were estimated by the present Meeting and for which consumption data were available. The results are shown in Annex 4 of the 2019 Extra JMPR Report.

For chlorothalonil, the IESTIs varied from 0–9% (children) and 0–3% (general population) of the ARfD. For SDS-3701, the IESTIs were 0% (children) and 0% (general population) of the ARfD. The Meeting concluded that acute dietary exposure to residues of chlorothalonil and SDS-3701 from uses considered by the present Meeting is unlikely to present a public health concern.

### ***Threshold of toxicological concern (TTC) consideration for metabolites***

The metabolite R613636 could be assessed using the TTC approach (Cramer Class III threshold of 1.5 µg/kg bw per day). Formation of R613636 was only observed following simulated sterilization (120 °C, 20 min, pH 6) but not after simulated pasteurization or cooking, and represented up to 23% (mean of individual samples) of the recovered residue. R613636 was not found in unprocessed plant or animal commodities.

The Meeting applied a factor of 0.23 to the maximum IEDI of 9.33 µg/kg bw for parent chlorothalonil estimated by the current Meeting to address the formation of R613636 during sterilization resulting in an estimated exposure of 2.37 µg/kg bw per day.

The Meeting noted that the 17 Cluster diets model contains no information allowing refinement for sterilized foods. However, considering the small difference (less than two-fold) between the estimated exposure and the threshold of toxicological concern for a Cramer Class III compound of 1.5 µg/kg bw per day, it seems very unlikely that the daily diet contains a high percentage (>50%) of foods subject to high temperature treatment. Therefore, noting that the current IEDI model does not include details of food processing, the Meeting concluded that exposure to R613636 is likely to be below the TTC for Cramer Class III compounds and that based on the uses evaluated by the JMPR, residues of R613636 are unlikely to present a public health concern.

The metabolites SYN548764 and R611968 could be assessed using the TTC approach (Cramer Class III threshold of 1.5 µg/kg bw per day). Since these metabolites were not identified in food or feed commodities, they are unlikely to present a public health concern.

## 5.6 CYPRODINIL (207)

### TOXICOLOGY

Cyprodinil (4-cyclopropyl-6-methyl-*N*-phenylpyrimidin-2-amine) was evaluated by JMPR in 2003, when an ADI of 0–0.03 mg/kg bw was established. The Meeting concluded that it was not necessary to establish an ARfD for cyprodinil (Annex 5, reference 100).

The 2003 Meeting also assessed data on four metabolites of cyprodinil: CGA275535, CGA249287, CGA321915 and NOA422054. The 2003 Meeting concluded that the acute toxicity of these four metabolites was low, and no mutagenic potential was detected (Annex 5, reference 100).

Following a request for additional maximum residue levels by CCPR, cyprodinil was placed on the agenda of the present Meeting, which assessed additional toxicological information available since the last review. In addition, the Meeting applied JMPR's "Plant and animal metabolite assessment scheme" for the assessment of the metabolites of cyprodinil.

A number of new toxicological studies on cyprodinil were submitted to the present Meeting, including studies on metabolism, phototoxicity, dermal toxicity, genotoxicity and immunotoxicity, as well as genotoxicity studies on metabolites.

All critical studies contained statements of compliance with GLP and were conducted in accordance with relevant national or international test guidelines, unless otherwise specified. No additional information from a literature search was identified that complemented the toxicological information submitted for the current assessment.

#### ***Biochemical aspects***

Cyprodinil was extensively metabolized in human and rat liver microsomes *in vitro*. No human-specific metabolites were detected.

#### ***Toxicological data***

In three *in vitro* assays – a reverse mutation assay, a gene mutation assay and a micronucleus test in human lymphocytes – cyprodinil was not genotoxic. These results support the conclusion of the 2003 Meeting that cyprodinil is unlikely to be genotoxic.

In an immunotoxicity study using female mice given cyprodinil at a dietary concentration of 0, 500, 2000 or 5000 ppm (equal to 0, 104, 468 and 1245 mg/kg bw per day, respectively) for 28 days, the NOAEL for immunotoxicity was 5000 ppm (equal to 1245 mg/kg bw per day), the highest dose tested.

The Meeting concluded that cyprodinil is not immunotoxic.

In a study to support a previously evaluated *in vivo* micronucleus study, proof of bone marrow exposure in the mouse following a single oral (gavage) administration of cyprodinil at 2000 mg/kg bw was demonstrated by the detection of cyprodinil in blood.

Cyprodinil showed no phototoxic effects.

#### ***Toxicological data on metabolites***

##### ***NOA422054 (4-cyclopropyl-6-hydroxymethyl-pyrimidin-2-ylamine; rotational crop metabolite)***

NOA422054 was negative in a gene mutation assay using Chinese hamster lung cells and an *in vitro* micronucleus test using human lymphocytes.

The Meeting concluded that NOA422054 is unlikely to be genotoxic *in vitro*.

##### ***CGA321915 (4-cyclopropyl-6-methyl-pyrimidin-2-ol; rotational crop metabolite)***

CGA321915 was negative in a gene mutation assay using Chinese hamster lung cells and an *in vitro*

micronucleus test using human lymphocytes.

The Meeting concluded that CGA321915 is unlikely to be genotoxic in vitro.

***CGA263208 (N-phenyl-guanidine; rotational crop metabolite)***

CGA263208 was negative in a gene mutation assay using Chinese hamster lung cells and an in vivo micronucleus test in rats. Proof of bone marrow exposure was demonstrated.

The Meeting concluded that CGA263208 is unlikely to be genotoxic.

***CGA304075 (4-(4-cyclopropyl-6-methyl-pyrimidin-2-ylamino)-phenol; rat metabolite, animal commodities)***

CGA304075 was negative in a gene mutation assay using Chinese hamster lung cells and an in vitro micronucleus test using human lymphocytes.

The Meeting concluded that CGA304075 is unlikely to be genotoxic in vitro.

### **Toxicological evaluation**

The Meeting concluded that no revision of the ADI or ARfD established by the 2003 Meeting was necessary.

The Meeting concluded that metabolites NOA422054, CGA321915, CGA263208 and CGA304075, which were evaluated by the present Meeting, and metabolites CGA249287 and CGA275535, which were evaluated by the 2003 Meeting, were unlikely to be genotoxic. Following the “Plant and animal metabolite assessment scheme” of JMPR, the Meeting concluded that for chronic toxicity, these six metabolites could be assessed using the TTC approach. All six metabolites are categorized in Cramer class III, and therefore a TTC of 1.5 µg/kg bw per day applies.

An addendum to the toxicological monograph was prepared.

### ***Critical end-points for setting guidance values for exposure to cyprodinil and metabolites***

<i>Short-term studies of toxicity</i>	
Lowest relevant dermal NOAEL	1 000 mg/kg bw per day, highest dose tested (rat)
<i>Genotoxicity</i>	
	No evidence of genotoxicity in vitro
<i>Other toxicological studies</i>	
Immunotoxicity NOAEL	1 245 mg/kg bw per day, highest dose tested (mouse)
Phototoxicity	No phototoxicity
<i>Studies on metabolites</i>	
NOA422054	No evidence of genotoxicity in vitro
CGA321915	No evidence of genotoxicity in vitro
CGA263208	No evidence of genotoxicity
CGA304075	No evidence of genotoxicity in vitro

### **RESIDUE AND ANALYTICAL ASPECTS**

Cyprodinil is a fungicide belonging to the anilinopyridine group. When Cyprodinil was first evaluated by the JMPR in 2003, an ADI of 0–0.03 mg/kg bw was established. The 2003 JMPR decided that an



ARfD was unnecessary. The residue definition for both plants and animal commodities, for both compliance with MRLs and dietary risk assessment, is cyprodinil. The residue is fat soluble.

At the Fiftieth Session of the CCPR (2018), cyprodinil was scheduled for evaluation of an additional use on soya bean by the 2019 Extra JMPR. The Meeting received new information on a use pattern, analytical method and supervised trials.

### ***Methods of analysis***

The Meeting received an analytical method for cyprodinil not previously evaluated by the Meeting. The method was used in the newly submitted supervised field trials.

Method POPIT MET.071.Rev11 is applicable to soya beans. Cyprodinil is extracted with methanol/water (4:1, v/v) and analyzed by LC-MS/MS. The method was validated for cyprodinil in soya beans with a LOQ of 0.01 mg/kg.

### ***Stability of pesticides in stored analytical samples***

The stability of cyprodinil in rapeseed (commodity with high oil content) was evaluated by the 2015 JMPR, which confirmed that cyprodinil was stable for at least 9 months. In the supervised field trials, samples were stored at -18 °C for a maximum of 89 days. The Meeting concluded that the trials were suitable for evaluation.

### ***Results of supervised residue trials on crops***

The Meeting received supervised trial data for applications of cyprodinil on soya beans conducted in Brazil.

#### ***Soya beans***

Cyprodinil is registered in Brazil for use on soya beans at a rate of  $2 \times 1.05$  kg ai/ha with an interval of 7 days and a PHI of 30 days. Four supervised field trials from Brazil matched this GAP.

In soya beans following treatment with cyprodinil according to the Brazilian GAP, residues in ranked order were (n=4): 0.04, 0.09 (2), and 0.10 mg/kg.

Eight additional trials conducted in Brazil were at a lower application rate of  $2 \times 0.375$  kg ai/ha, four of which were with longer intervals (14 days). The Meeting noted that the retreatment interval used in the submitted studies (7 to 14 days) did not appear to have a significant impact on residues of cyprodinil. The residues from these trials in ranked order were (n=8): < 0.01 (2), 0.01 (2), 0.03 (2), 0.04, and 0.05 mg/kg.

The Meeting decided to scale the residues, except those from two trials with the analytical value of <LOQ, to the Brazilian GAP rate in accordance with the proportionality principle (scaling factor=2.8). Scaled residues in ranked order (n=6) were: 0.03, 0.03, 0.08, 0.08, 0.11 and 0.14 mg/kg.

Combined residues matching the Brazilian GAP are (n=10): 0.03, 0.03, 0.04, 0.08, 0.08, 0.09, 0.09, 0.10, 0.11, 0.14 mg/kg.

The Meeting estimated a maximum residue level and STMR of 0.3 and 0.085 mg/kg, respectively, for cyprodinil in soya beans.

### ***Animal feedstuffs***

#### ***Farm animal dietary burden***

Dietary burdens were calculated for beef cattle, dairy cattle, broilers and laying poultry based on feed items evaluated by the JMPR. The dietary burdens, estimated using the OECD diets listed in Appendix IX of the 2016 edition of the FAO manual, are presented in Annex 6 and summarised below.

Livestock Dietary Burdens (ppm of dry matter diet) for cyprodinil

	USA/Canada		EU		Australia		Japan	
	Max	Mean	Max	Mean	Max	Mean	Max	Mean
Beef cattle	0.91	0.37	13.9	1.8	5.8	1.4	0.48	0.48
Dairy cattle	1.7	0.88	13.5	1.4	23.3 <sup>a</sup>	1.8 <sup>b</sup>	0.27	0.27
Poultry, broiler	0.51	0.51	0.81	0.55	0.13	0.13	0.66	0.07
Poultry, layer	0.51	0.51	1.4 <sup>c</sup>	0.67 <sup>d</sup>	0.13	0.13	-	-

<sup>a</sup> Highest maximum dairy cattle dietary burden suitable for MRL estimates for mammalian meat and milk

<sup>b</sup> Highest mean dairy cattle dietary burden suitable for STMR estimates for mammalian meat and milk

<sup>c</sup> Highest maximum poultry dietary burden suitable for MRL estimates for poultry meat and eggs

<sup>d</sup> Highest mean poultry dietary burden suitable for STMR estimates for poultry meat and eggs

### ***Animal commodity maximum residue levels***

The animal dietary burdens for beef cattle and dairy cattle were the same as those calculated by the 2015 JMPR.

For poultry, based on the use patterns considered by the present and previous Meetings, the Meeting noted that the dietary burdens were lower than those calculated by the 2013 JMPR because the OECD Animal Feeding Table has been revised, removing kale leaves from the poultry diet.

Therefore, the Meeting confirmed the previous recommendations for animal commodities.

## **RECOMMENDATIONS**

On the basis of the data from supervised trials the Meeting concluded that the residue levels listed in Annex 1 are suitable for establishing maximum residue limits and for IEDI assessment.

Definition of the residue for compliance with the MRL and dietary risk assessment for plant commodities: cyprodinil

Definition of the residue for compliance with the MRL and dietary risk assessment for animal commodities: cyprodinil

The residue is fat-soluble.

## **DIETARY RISK ASSESSMENT**

### ***Long-term dietary exposure***

The ADI for cyprodinil is 0–0.03 mg/kg bw. The International Estimated Daily Intakes (IEDIs) for cyprodinil were estimated for the 17 GEMS/Food Consumption Cluster Diets using the STMR or STMR-P values estimated by the JMPR. The results are shown in Annex 3 of the 2019 Extra JMPR Report.

The IEDIs ranged from 7–70% of the maximum ADI. The Meeting concluded that long-term dietary exposure to residues of cyprodinil from uses considered by the JMPR is unlikely to present a public health concern.

### ***Acute dietary exposure***

The 2003 JMPR decided that an ARfD for cyprodinil was unnecessary. The Meeting therefore concluded that the acute dietary exposure to residues of cyprodinil from the uses considered is unlikely to present a public health concern.

***Consideration of threshold of toxicological concern (TTC) approach for metabolites***

The metabolites CGA249287 and CGA304075 could be assessed using the TTC approach (Cramer Class III threshold of 1.5 µg/kg bw per day). These metabolites were found in the animal, plant and soil metabolism. The Meeting estimated maximum IEDIs of 0.6 and 0.4 µg/kg bw for CGA249287 and CGA304075, respectively, and concluded that they are unlikely to present a public health concern.

The metabolites CGA263208, CGA321915 and NOA422054 could be assessed using the TTC approach (Cramer Class III threshold of 1.5 µg/kg bw per day). These metabolites were observed mainly in rotational crops. The Meeting estimated maximum IEDIs of 0.6, 0.4 and 1.3 µg/kg bw for CGA263208, CGA321915 and NOA422054, respectively, and concluded that they are unlikely to present a public health concern.



## 5.7 DICAMBA (240)

### TOXICOLOGY

Dicamba (3,6-dichloro-2-methoxybenzoic acid) was evaluated by JMPR in 2010, when an ADI of 0–0.3 mg/kg bw and an ARfD of 0.5 mg/kg bw were established (Annex 5, reference 121).

The 2010 Meeting also assessed data on three metabolites of dicamba: DCSA (3,6-dichlorosalicylic acid), DCGA (3,6-dichlorogentisic acid) and 5-OH-dicamba (2,5-dichloro-3-hydroxy-6-methoxybenzoic acid). The 2010 Meeting concluded that DCSA and DCGA have toxicities similar to or lower than that of dicamba. Based on available data, the 2010 Meeting concluded that 5-OH-dicamba appeared to be of lower toxicity than the parent compound.

Following a request for additional maximum residue levels by CCPR, dicamba was placed on the agenda of the present Meeting, which assessed additional toxicological information available since the last review.

The carcinogenicity phase of a previously evaluated chronic toxicity study of DCSA, which was conducted in compliance with GLP, was submitted to the present Meeting. In addition, the Meeting applied the “Plant and animal metabolite assessment scheme” of JMPR to the metabolites DCSA, DCGA and 5-OH-dicamba.

No additional information from a literature search was identified that complemented the toxicological information submitted for the current assessment.

#### ***Toxicological data on metabolites and/or degradates***

##### ***DCSA (rat, crop and livestock metabolite and environmental degradate)***

In a carcinogenicity study in rats treated with DCSA in the diet at a concentration of 0, 10, 100, 300, 1000 or 3000 ppm (equal to 0, 0.5, 5.0, 14.6, 48.8 and 150.1 mg/kg bw per day for males and 0, 0.6, 6.1, 18.4, 60.9 and 181.5 mg/kg bw per day for females, respectively) for 24 months, the NOAEL for toxicity was 3000 ppm (equal to 150.1 mg/kg bw per day), the highest dose tested. No carcinogenicity was observed.

The Meeting concluded that DCSA is not carcinogenic in rats.

In view of the lack of genotoxicity of DCSA in vivo (Annex 5, reference 121) and the absence of carcinogenicity in rats, the Meeting concluded that DCSA is unlikely to pose a carcinogenic risk to humans.

##### ***DCGA (crop metabolite and environmental degradate)***

The 2010 Meeting considered that the toxicity of DCGA was similar to or lower than that of dicamba. No new toxicological data were submitted on DCGA.

##### ***5-OH-Dicamba (rat metabolite)***

The 2010 Meeting considered that, on the basis of the available information, 5-OH-dicamba appears to be of lower toxicity than dicamba. No new toxicological data were submitted on 5-OH-dicamba.

### **Toxicological evaluation**

The Meeting concluded that no revision of the ADI or ARfD established by the 2010 Meeting for dicamba was necessary.

The Meeting concluded that DCSA and DCGA are toxicologically relevant and likely to be of similar or lower toxicity compared with the parent compound. Following the “Plant and animal metabolite assessment scheme” of JMPR, the Meeting concluded that these metabolites would be covered by the ADI and ARfD for dicamba.

The Meeting concluded that 5-OH-dicamba may be toxicologically relevant and appears to be of lower toxicity than the parent compound based on the limited database and the metabolite's structural relationship to the parent compound, likely leading to more rapid excretion. Following the "Plant and animal metabolite assessment scheme" of JMPR, the Meeting concluded that 5-OH-dicamba would be covered by the ADI and ARfD for dicamba. Owing to the limited database, the Meeting was unable to conclude that 5-OH-dicamba was of no concern.

The ADI of 0–0.3 mg/kg bw applies to dicamba, DCSA, DCGA and 5-OH-dicamba, expressed as dicamba.

The ARfD of 0.5 mg/kg bw applies to dicamba, DCSA, DCGA and 5-OH-dicamba, expressed as dicamba.

An addendum to the toxicological monograph was prepared.

**Acceptable daily intake (ADI) (applies to dicamba, DCSA, DCGA and 5-OH-dicamba, expressed as dicamba)**

0–0.3 mg/kg bw

**Acute reference dose (ARfD) (applies to dicamba, DCSA, DCGA and 5-OH-dicamba, expressed as dicamba)**

0.5 mg/kg bw

### **Critical end-points for setting guidance values for exposure to dicamba metabolites**

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#### *Studies on metabolites*

##### DCSA

Long-term studies of toxicity and carcinogenicity

Lowest relevant NOAEL 150.1 mg/kg bw per day, highest dose tested (rat)

Carcinogenicity No evidence of carcinogenicity<sup>a</sup> (rat)

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<sup>a</sup> In view of the lack of genotoxicity of DCSA in vivo and the absence of carcinogenicity in rats, DCSA is unlikely to pose a carcinogenic risk to humans.

## **RESIDUE AND ANALYTICAL ASPECTS**

Dicamba is a systemic broad-spectrum herbicide. It was first evaluated by the JMPR in 2010 (T, R). The latest residue evaluation was conducted in 2013 (R).

The 2010 JMPR established an ADI for dicamba of 0–0.3 mg/kg bw and an ARfD of 0.5 mg/kg bw. Also, the following residue definitions based on metabolism studies with conventional crops have been established:

Definition of the residue for compliance with the MRL for plant commodities: *dicamba*;

Definition of the residue for dietary risk assessment for plant commodities: *sum of dicamba and 5-OH dicamba, expressed as dicamba*;

Definition of the residue for compliance with the MRL and dietary risk assessment for animal commodities: *sum of dicamba and DCSA, expressed as dicamba*.

*The residue is not fat soluble.*

Dicamba was scheduled at the Fiftieth Session of the CCPR for the evaluation of additional uses by the 2019 Extra JMPR. Studies submitted by the sponsor include nature of the residue studies, field trials, and processing studies in dicamba-tolerant varieties of soya bean, maize, and cotton, and storage stability in soya bean and cotton.

All application rates are expressed as dicamba acid-equivalents.

### ***Plant metabolism***

Plant metabolism studies were conducted with dicamba uniformly labelled in the phenyl ring. Treatments were made to dicamba-tolerant varieties of soya bean, maize, and cotton each, either as pre-emergence applications (PRE) on the day of planting or post-emergence of the crop (POE). Tolerance is conveyed by expression of a dicamba mono-oxygenase protein system that oxidizes dicamba to DCSA. The major residue profiles between the two treatment regimens were very similar across all matrices. Since residues were considerably higher following POE treatment than PRE treatment, the Meeting has focused on the POE treatments in its consideration of the plant metabolism studies. Quantifiable levels of radioactivity were observed in the control samples from the metabolism studies. The Meeting is not concerned about this given the interspersing of control plants with treated plants and the metabolism of dicamba to volatile radiolabelled compounds (e.g.,  $^{14}\text{CO}_2$ ) that could be taken up by the control plants.

In a study illustrating the metabolism of dicamba in dicamba-tolerant soya bean, [phenyl- $^{14}\text{C}$ ]dicamba was applied to greenhouse-grown soya bean either on the day of planting (PRE) or 29 days after planting (DAP) (POE; BBCH 60 (first flowers opened)) at a target rate of 2.8 kg ai/ha.

PRE samples consisted of immature foliage collected 14 DAP (3.2 mg eq/kg TRR), forage harvested 36 DAP (1.4 mg eq/kg), hay harvested 56 DAP (1.1 mg eq/kg) and seed harvested 112 DAP (0.29 mg eq/kg). POE samples were collected as forage 36 DALA (134 mg eq/kg), hay 56 days after last application (DALA) (39 mg eq/kg), and seed 112 DALA (0.39 mg eq/kg).

Extractability of radioactivity into acetonitrile/water solvent was high (>91% TRR) for leafy matrices and lower (ca. 60% TRR) for seeds regardless of the treatment timing. Hexane extracted an additional 11–14% TRR from seeds.

Dicamba was a major predominant residue following POE treatment in forage (24% TRR, 32 mg/kg) and hay (12% TRR, 4.8 mg/kg), but a minor component in seed (0.64% TRR, 0.003 mg/kg). The principal residue in all matrices was DCSA, mostly present as glucoside conjugate. The sum of free DCSA and its conjugates in foliage/hay ranged from 65 to 72% TRR (28–88 mg eq/kg) and represented 25% TRR (0.098 mg eq/kg) in the seed following POE treatment. Other compounds identified in soya bean matrices were conjugated forms of DCGA (1.9–6.7% TRR). In the seeds, a major part of the radioactivity was incorporated into natural products and no dicamba-related compounds occurred at levels exceeding 9.2% TRR or 0.036 mg eq/kg) in the post-extraction solids.

Dicamba-tolerant maize plants grown outdoors were spray treated with [phenyl- $^{14}\text{C}$ ]dicamba at 2.24 kg ai/ha either PRE or POE (30 DAP).

From PRE treatments, immature foliage was harvested 19 DAP (4.5 mg eq/kg), forage 80 DAP (0.075 mg eq/kg), stover 114 DAP (0.24 mg eq/kg), and grain 114 DAP (0.043 mg eq/kg). POE samples consisted of forage 50 DALA (2.2 mg eq/kg) and stover (7.8 mg eq/kg) and grain (0.062 mg eq/kg), each 84 DALA.

Extractability of POE residues into methanol/water was relatively high (>83% TRR) for residues in foliage and low (13% TRR) for residues in grain; hexane extracted an additional 5.3% TRR from grain.

In forage and stover dicamba was a minor residue in all POE matrices, comprising 8.6% TRR (0.19 mg/kg) and 6.3% TRR (0.49 mg/kg), respectively. The principal residue was DCSA, mostly present as glucoside conjugate. The sum of free DCSA and its conjugates represented 42% TRR in foliage (0.94 mg eq/kg) and 40% TRR (3.1 mg eq/kg) in stover. The sum of free and conjugated 5-OH dicamba accounted for <4.5% TRR (0.34 mg/kg). Residues identified as specific DCGA conjugates totalled 3.8% TRR (0.084 mg eq/kg) in forage, 2.5% TRR (0.19 mg eq/kg) in stover, and 0.39% TRR (0.0002 mg eq/kg) in grain; additional DCGA conjugates, totalling 5.6% TRR in forage, 6.8% TRR in stover, and 0.23% TRR in grain, were observed but could not be resolved from DCSA conjugates. Other

residues occurred at minor individual levels of < 3.7% TRR (< 0.083 mg eq/kg) in forage and < 5.9% TRR (0.46 mg eq/kg) in stover.

In grain, no extracted residues occurred at >10% TRR or > 0.01 mg eq/kg. The most predominant radioactive residues in grain extracts were sugars (3.1% TRR, 0.0019 mg eq/kg) and natural organic acids (1.1% TRR, 0.0006 mg eq/kg); all other residues were  $\leq$  0.44% TRR.

Unextracted residues in the PES accounted for 14% TRR in forage, 16% TRR in stover, and 81% TRR in grain. In total, nearly 100% of these residues were comprised of starch, lignin, and phosphate compounds in the foliage and of cellulose, hemicellulose, and starch in the grain.

Following PRE or POE (76 DAP) spray applications of [phenyl- $U$ - $^{14}C$ ]dicamba to outdoor grown dicamba-tolerant cotton at 2.24 kg ai/ha., TRR in seed were 0.16 mg eq/kg (PRE) and 0.98 mg eq/kg (POE). TRR in surrogate gin trash (consisting of leaves and stems) were 0.85 mg eq/kg (PRE) and 60 mg eq/kg (POE).

Extractability of POE residues into acetonitrile/water was high for gin trash (71%), but low for seed (38%); an additional 8.8% TRR was extracted from POE cotton seed using hexane.

Dicamba was a minor residue in both seed (0.85% TRR, 0.008 mg/kg) and gin trash (4.5% TRR, 2.7 mg/kg). DCSA glucoside was the predominant residue in both matrices (3.4% TRR, 0.033 mg eq/kg seed; 17% TRR, 10 mg eq/kg gin trash), with free DCSA making up an additional 1.9% TRR (0.019 mg eq/kg) in seed and 13% TRR (8 mg eq/kg) in gin trash. Sugars accounted for 5.6% TRR in seed and 2.7% TRR in gin trash. All other residues, including DCGA (free and conjugated), were each < 5% TRR for both matrices. Of the 61% TRR in seed PES, approximately two-thirds of the radioactivity was associated with starch, protein, pectin, lignin, cellulose, and hemicellulose. In gin trash PES, approximately 98% of the radioactivity was associated with those natural plant constituents.

### ***Methods of analysis***

The analytical methods provided to the meeting were adequately validated for the analysis of dicamba, 5-hydroxydicamba (5-OH dicamba), DCSA, and DCGA in soya bean, maize and cotton matrices. The methods include a hydrolysis step (1 mol/L HCl, 95 °C, 1 or 1.5 hours) that is similar to that used in the metabolism studies (2 mol/L HCl, ca. 100 °C, 2 hours) and adequate to convert conjugated forms of DCSA and DCGA to their free equivalent, which are then determined as the free acid by LC-MS/MS. The LOQs are 0.01 mg/kg or lower in all tested matrices for all analytes except 5-OH dicamba in defatted soya flour (0.05 mg/kg), DCGA in refined soya oil (0.02 mg/kg), and all analytes in cotton hulls, meal, and refined oil (0.02 mg/kg), and gin trash (0.04 mg/kg).

### ***Stability of residues in stored analytical samples***

The Meeting received storage stability data for incurred dicamba, DCSA (incl. conjugates) and DCGA (incl. conjugates) in soya bean forage, hay, and seed, and cotton undelinted seed. Samples of soya bean matrices were stored frozen (-10 °C) for approximately 0, 2, 3, 6, 9, 12, 18, and 24 months. Residues of dicamba, DCSA (incl. conjugates) and DCGA (incl. conjugates) were shown to be stable for at least 24 months in all three soya bean matrices, except for DCGA (incl. conjugates) in forage, which was stable up to 3 months. Samples of cotton matrices were stored frozen (-10 °C) for approximately 0, 1, 2, 4, 6, and 9 months. Residues of dicamba, DCSA (incl. conjugates), and DCGA (incl. conjugates) were shown to be stable in cotton undelinted seed for at least 9 months.

### ***Definition of the residue***

The 2010 Meeting determined that the definition of the residue for enforcement of dicamba MRLs in conventional crops is dicamba only, noting that DCSA was found only at very low levels. For dietary risk assessment, the 2010 Meeting established a residue definition in plants of the sum of dicamba and 5-OH dicamba, expressed as dicamba.

In all three dicamba-tolerant crops evaluated by the current Meeting, dicamba was a major residue only in soya bean forage and hay and a minor residue in other matrices; in the seeds/grain,



dicamba amounted to less than 1% TRR ( $\leq 0.008$  mg/kg). 5-OH dicamba was observed only in maize matrices and only at low levels (free + conjugated  $< 3.4\%$  in forage,  $< 4.5\%$  TRR in stover, and  $< 0.15\%$  TRR in grain). The major residue in all matrices was DCSA glucoside, with lesser amounts of free DCSA and other sugar conjugates. In foliage, total DCSA (free + conjugated) accounted for 30 (gin trash) to 72% TRR (soya bean hay). In seeds/grain, total DCSA made up 25% TRR in soya bean, 0.79% TRR in maize grain, and 5.3% TRR in cotton. DCGA was observed only in a conjugated form. Although total DCGA occurred at low total levels ( $< 6.6\%$  TRR in all matrices), it was a significant portion (13–21%) of the identified residues, especially in seeds and grain.

In supervised field trials on tolerant crops, parent dicamba was generally not present at levels above the LOQ in seeds/grain and only at low levels in forages and hays. Thus, dicamba is not a good marker residue for enforcement in the crops considered by the Meeting. Total DCSA and total DCGA were consistently found at levels  $> \text{LOQ}$  in field trials, and there was a tendency for total DCSA to be greater than total DCGA. Therefore, the Meeting decided to revise the current residue definition for enforcement of MRLs in soya bean, maize, and cotton commodities to be the sum of dicamba and 3,6-dichloro-2-hydroxybenzoic acid (DCSA; free and conjugated), expressed as dicamba. The Meeting noted that this decision may need to be revisited if other dicamba-tolerant crops are considered by future Meetings.

In considering the residue definition for dietary risk assessment, the Meeting confirmed the conclusion from the 2010 Meeting that DCSA and DCGA were considered to have toxicity similar to or lower than the parent compound. Total residues of DCSA account for the majority of the residues observed in the dicamba-tolerant crops evaluated by the current Meeting. Consequently, the Meeting decided to include free and conjugated DCSA for dietary risk assessment of soya bean, maize, and cotton commodities. Residue data from field trials indicate that exposure to total DCGA may be similar to that of total DCSA and cannot be excluded from consideration of dietary risk assessment of soya bean, maize, and cotton commodities. Therefore, the Meeting decided that the residue definition for risk assessment in soya bean, maize, and cotton commodities should be revised to the sum of dicamba, 2,5-dichloro-3-hydroxy-6-methoxybenzoic acid (5-OH dicamba), 3,6-dichloro-2-hydroxybenzoic acid (DCSA; free and conjugated) and 2,5-dichloro-3,6-dihydroxybenzoic acid (DCGA; free and conjugated), expressed as dicamba.

Thus, the Meeting agreed to replace the previous definitions for dicamba in plant commodities as follows:

Definition of the residue for compliance with the MRL for soya bean, maize, and cotton commodities: *sum of dicamba and 3,6-dichloro-2-hydroxybenzoic acid (DCSA; free and conjugated), expressed as dicamba*; for other plant commodities: *dicamba*.

Definition of the residue for dietary risk assessment for soya bean, maize, and cotton commodities: *sum of dicamba, 2,5-dichloro-3-hydroxy-6-methoxybenzoic acid (5-OH dicamba), 3,6-dichloro-2-hydroxybenzoic acid (DCSA; free and conjugated) and 2,5-dichloro-3,6-dihydroxybenzoic acid (DCGA; free and conjugated), expressed as dicamba*; for other plant commodities: *sum of dicamba and 5-OH dicamba, expressed as dicamba*.

The residue is not fat-soluble.

The Meeting noted that because of the change to the residue definitions for soya bean, maize, and cotton commodities, all previous recommendations for these commodities needed to be withdrawn and replaced with new recommendations. The changes in definitions of the residue will not influence the numeric values of previous recommendations for conventional crops.

Since the animal dietary burdens are driven by residues arising from the use of dicamba on conventional crops, the definitions for dicamba in animal commodities do not need to be revised.

### ***Results of supervised residue trials on crops***

The Meeting received data from supervised residue trials conducted on dicamba-tolerant soya bean, maize, and cotton. All field trials were conducted in the USA, and the results are supported by adequate

method and storage stability data, except for DCGA in soya bean forage, for which all samples were stored for approximately 4 to 9 months, which is longer than the demonstrated period of stability of 3 months.

For maximum residue estimation, residues of dicamba or DCSA (free + conjugated) that are <LOQ are assumed to be at the LOQ, and the combined residues are expressed as less than the combined LOQ only when both residues are <LOQ.

For dietary risk estimation, the Meeting noted that in the metabolism studies with dicamba-tolerant crops, dicamba made up 1.9% of the residue definition in soya bean seed and 0.6% in maize grain; furthermore, dicamba residues were reported as <LOQ in all field trial samples of these commodities. Therefore, the Meeting decided that the contribution of dicamba to dietary risk assessment of dicamba-tolerant soya bean seed and maize grain is negligible and could be assumed to be zero. Similarly, 5-OH dicamba was not observed in metabolism studies or field trials in dicamba-tolerant soya bean and cotton commodities and was assumed to be zero; 5-OH dicamba could not be excluded for maize commodities. For the remaining raw commodities considered by the current Meeting, the contribution of dicamba to dietary exposure could not be excluded. Therefore, residues reported as <LOQ in those commodities were assumed to be at the LOQ when deriving total residues for dietary risk assessment.

Estimation of residues for compliance with the MRL and for dietary risk assessment in commodities from dicamba-tolerant varieties for <LOQ residue results

Commodity	Residue, mg/kg (reported [assumed])				Combined estimate	
	Dicamba	5-OH Dicamba	Total DCSA	Total DCGA	Dicamba + DCSA	Dicamba + 5-OH dicamba + DCSA + DCGA
Soya bean seed	<0.005 [0]	<0.02 [0]	<0.005 [0.005]	<0.005 [0.005]	0.005	0.01
Soya bean forage and hay	<0.005 [0.005]	<0.005 [0]	<0.005 [0.005]	<0.005 [0.005]	0.01	0.015
Maize grain	<0.01 [0]	<0.01 [0.01]	<0.01 [0.01]	<0.01 [0.01]	0.01	0.03
Maize forage & stover	<0.01 [0.01]	<0.01 [0.01]	<0.01 [0.01]	<0.01 [0.01]	0.02	0.04
Cotton seed	<0.02 [0.02]	<0.01 [0]	<0.005 [0.005]	<0.005 [0.005]	0.025	0.03
Cotton gin trash	<0.04 [0.04]	<0.04 [0]	<0.04 [0.04]	<0.04 [0.04]	0.08	0.12

### *Soya bean*

The critical GAP is from the registration in the USA (one pre-emergence application at 1.12 kg ai/ha and up to two post-emergence applications at least 7 days apart, each at 0.56 kg ai/ha; last application no later than BBCH 60).

Five field trials matching the critical GAP with respect to both application rate and retreatment interval are available. An additional 17 trials were provided that match the GAP for application rate but not for retreatment interval. The meeting noted that for soya bean seed, the retreatment interval used in the submitted studies (6 to 29 days) does not appear to have a significant impact on residues. Therefore, the Meeting decided to consider all trials approximating the critical GAP with respect to application rate. On that basis, there are 22 trials suitable for making residue estimates.

Residues of dicamba in soya bean seed from independent trials for estimation of maximum residues were (n=22): 0.016 (2), 0.018 (2), 0.019, 0.024, 0.026, 0.027, 0.028, 0.032, 0.036, 0.045, 0.048, 0.053, 0.054, 0.060, 0.063, 0.077, 0.082, 0.097, 0.12, and 0.44 mg/kg.

Residues of dicamba in soya bean seed from independent trials for estimation of dietary risk were (n=22): 0.021, 0.025, 0.028, 0.029, 0.030, 0.031, 0.032, 0.037, 0.046 (2), 0.051, 0.056, 0.058, 0.074, 0.087, 0.099, 0.11, 0.12, 0.14, 0.15, 0.17, and 0.56 mg/kg.

The previous recommendation for soya bean (dry) is 10 mg/kg and was derived from a pre-harvest desiccation GAP. As this value accommodates residues in dicamba-tolerant soya bean seeds, the Meeting withdrew the previous maximum residue level recommendation of 10 mg/kg and made a new recommendation of 10 mg/kg for soya bean seed (dry) according to the new residue definition. The Meeting estimated a STMR of 0.0535 mg/kg.

### ***Maize***

The critical GAP is from the registration in Canada (one pre-emergent application at 0.58 kg ai/ha and one post-emergent application at 0.6 kg ai/ha with a 30-day PHI). No trials available to the Meeting matched the Canadian GAP.

The Meeting withdrew the previous maximum residue level recommendation of 0.01(\*) mg/kg and made a new recommendation of 0.01(\*) mg/kg for maize according to the new residue definition. The Meeting confirmed the STMR of 0.02 mg/kg estimated by the 2010 JMPR.

### ***Cotton***

The critical GAP is from the registration in the USA (one pre-emergence application at 1.12 kg ai/ha and up to two post-emergence applications at least 7 days apart, each at 0.56 kg ai/ha; PHI of 7 days).

Two field trials matching the critical GAP with respect to application rate, retreatment interval, and PHI are available. An additional 11 trials are available that match the rate and PHI but not the retreatment interval. The meeting noted that for cotton seed, the retreatment interval used in the submitted studies (5 to 63 days) does not appear to have a significant impact on residues of dicamba for estimation of residues or for dietary risk assessment. Therefore, the Meeting decided to consider all trials approximating the critical GAP with respect to application rate and PHI. On that basis, there are 13 trials suitable for making residue estimates.

Residues of dicamba in cotton undelinted seed from independent trials for estimation of maximum residues were (n=13): 0.07, 0.13, 0.20, 0.34, 0.40, 0.43, 0.69, 0.98, 1.0, 1.1 (2), 1.2, and 1.6 mg/kg.

Residues of dicamba in cotton undelinted seed from independent trials for estimation of dietary risk were (n=13): 0.075, 0.15, 0.20, 0.38, 0.42, 0.43, 0.69, 1.0 (2), 1.1 (2), 1.3, and 1.6 mg/kg.

The Meeting withdrew the previous maximum residue level recommendation of 0.04 \* mg/kg and made a new recommendation of 3 mg/kg for cotton seed according to the new residue definition. The Meeting estimated a STMR of 0.69 mg/kg.

### ***Animal feedstuffs***

#### ***Soya bean forage and hay***

The critical GAP is from the registration in the USA (one pre-emergence application at 1.12 kg ai/ha and up to two post-emergence applications at least 7 days apart, each at 0.56 kg ai/ha; PHI = 7 days for forage and 14 days for hay).

The meeting noted that for soya bean forage, the samples were stored for 4 to 9.5 months, which is longer than the period of demonstrated stability (3 months). The Meeting decided that the soya bean forage data could not be used to estimate residues.

Four trials are available approximating the critical GAP for soya bean hay with respect to use pattern and harvest 14 DALA. Although specific residue decline data are not available for soya bean hay, the Meeting noted a tendency for higher residues from trials with harvest >14 DALA than those at

14 DALA. Therefore, the Meeting agreed to consider all trials that were harvested 14–24 DALA for estimating residues.

Residues of dicamba in soya bean hay (as received) from independent trials for estimation of maximum residues were (n=22): 13, 15, 21, 21, 22, 24, 27, 30, 30, 32 (3), 34 (2), 35, 36, 36, 38, 44, 47 (2), and 61 mg/kg (residues from at-GAP trials in italics).

Residues of dicamba in soya bean hay (as received) from independent trials for estimation of dietary burden were (n=22): 13, 16, 22, 23, 24, 30, 31, 32, 32, 34, 35 (2), 36, 37, 37, 38, 40, 42, 47, 48, 49, and 68 mg/kg.

The Meeting estimated a maximum residue level for soya bean fodder (dry) of 150 mg/kg (dw; based on a dry matter content of 85% from the OECD feed table), a median residue of 35 mg/kg in hay (as received), and a highest residue of 68 mg/kg (as received).

### *Maize forage and fodder*

The critical GAP is from the registration in Canada (one pre-emergent application at 0.58 kg ai/ha and one post-emergent application at 0.6 kg ai/ha with a 30-day PHI). As noted above under maize grain, no trials matching the critical GAP were available to the Meeting.

Meeting withdrew the previous maximum residue level recommendation of 0.6 mg/kg and made a new recommendation of 0.6 mg/kg (dry weight) for maize fodder (dry) according to the new residue definition. The Meeting confirmed the median residue of 0.06 mg/kg (as received) and highest residue of 0.33 mg/kg (as received) for maize fodder as well as the median residue of 0.16 mg/kg (as received) and highest residue of 0.31 mg/kg (as received) for maize forage estimated by the 2010 JMPR.

### *Cotton gin trash*

The critical GAP is from the registration in the USA (one pre-emergence application at 1.12 kg ai/ha and up to two post-emergence applications at least 7 days apart, each at 0.56 kg ai/ha; PHI of 7 days).

The meeting noted that for cotton gin trash, there appears to be a strong trend for lower residues at increased retreatment intervals used in the submitted studies (30 to 49 days). Therefore, the Meeting decided that the submitted trials for cotton gin trash were not suitable for estimating residues.

## ***Fate of residues during processing***

### *Residues after processing*

The Meeting received data depicting the concentration/dilution of residues during processing of soya bean seed, maize grain, and undelinted cotton seed from dicamba-tolerant crops. For all crops, processed commodities were derived using simulated commercial practices. The resulting processing factors and STMR-P estimates for dicamba-tolerant varieties of soya bean and cotton are summarized below; residues were <LOQ in all maize RAC and processed commodity samples.

Raw agricultural commodity	Processed commodity	Processing factors [median/best estimate]		MRL, mg/kg	STMR-P, mg/kg
		Dicamba + DCSA	Dicamba + DCSA + DCGA <sup>a)</sup>		
Soya bean seed MRL = 10 mg/kg STMR = 0.054 mg/kg	Hulls	1.26, 1.52 [1.39]	1.13, 1.29 [1.21]	15	0.065
	Meal	1.17, 1.50 [1.34]	1.21, 1.43 [1.32]	15	0.071
	RBD oil <sup>b)</sup>	<0.31, <0.12	<0.17, <0.06 [0.06]	--	0.0032
	Soya milk	<0.31, <0.12	<0.17, <0.06 [0.06]	--	0.0032
	Tofu	<3.08, <1.16	<1.67, <0.63 [0.63]	--	0.0034
Cotton undelinted seed MRL = 3 mg/kg STMR = 0.69 mg/kg	Hulls	0.999, 0.331 [0.665]	1.01, 0.433 [0.723]	--	0.50
	Meal	0.365, <0.062 [0.365]	0.372, <0.087 [0.372]	--	0.26

Raw agricultural commodity	Processed commodity	Processing factors [median/best estimate]		MRL, mg/kg	STMR-P, mg/kg
		Dicamba + DCSA	Dicamba + DCSA + DCGA <sup>a)</sup>		
	RBD oil <sup>b)</sup>	<0.055, <0.062	<0.079, <0.087 [0.079]	--	0.055

a) Residues of 5-OH dicamba were assumed to be zero based on results from metabolism, field trials, and processing studies.

b) Refined, bleached and deodorized

### Residues in animal commodities

#### Estimated maximum and mean dietary burdens of livestock

Dietary burden estimates from the 2010 Meeting have been recalculated to include contributions from commodities grown from dicamba-tolerant soya bean, maize, and cotton considered by the current Meeting. Estimated dietary burdens for Australia, the EU, Japan, and Canada/USA are summarized below. The livestock diets are listed in Annex 6.

Livestock Dietary Burdens (ppm of dry matter diet) for dicamba.

Livestock	Australia		EU		Japan		Canada/USA	
	Max	Mean	Max	Mean	Max	Mean	Max	Mean
Cattle (beef)	140 <sup>A)</sup>	45 <sup>C)</sup>	77	23	15	5.5	5.7	2.6
Cattle (dairy)	140 <sup>B)</sup>	45 <sup>D)</sup>	85	27	29	8.7	84	30
Poultry (broiler)	1.0	1.0	1.3	1.3	0.86	0.86	1.4	1.4
Poultry (layer)	1.0	1.0	13 <sup>E)</sup>	6.3 <sup>F)</sup>	0.74	0.74	1.4	1.4

A) Highest maximum dietary burden for beef or dairy cattle; suitable for estimating the maximum residue levels for mammalian meat, fat, and offal.

B) Highest maximum dietary burden for dairy cattle; suitable for estimating the maximum residue levels for milk.

C) Highest mean dietary burden for beef or dairy cattle; suitable for estimating STMRs for mammalian meat, fat, and offal.

D) Highest mean dietary burden for dairy cattle; suitable for estimating the STMR for milk.

E) Highest maximum dietary burden for broiler chickens or laying hens; suitable for estimating the maximum residue levels for poultry meat, fat, offal, and eggs.

F) Highest mean dietary burden for laying hens; suitable for estimating the STMRs for poultry meat, fat, offal, and eggs.

### Animal commodity maximum residue levels

The Meeting noted that the dietary burdens for cattle and poultry remain essentially unchanged compared to those derived in 2010 (maximum and mean burdens were 140 and 44 ppm for cattle and 15.6 and 6.0 ppm for poultry; poultry burdens are lower in this assessment due to the removal of some commodities from the current OECD poultry diets); therefore, the Meeting confirmed its previous recommendations for residues in animal commodities.

## RECOMMENDATIONS

On the basis of the data obtained from supervised trials, the Meeting concluded that the residue levels listed in Annex 1 are suitable for establishing maximum residue limits and for IEDI and IESTI assessments.

Definition of the residue for compliance with the MRL for soya bean, maize, and cotton: *sum of dicamba and 3,6-dichloro-2-hydroxybenzoic acid (DCSA; free and conjugated), expressed as dicamba*; for other plant commodities: *dicamba*.

Definition of the residue for dietary risk assessment for soya bean, maize, and cotton: *sum of dicamba, 2,5-dichloro-3-hydroxy-6-methoxybenzoic acid (5-OH dicamba), 3,6-dichloro-2-*

*hydroxybenzoic acid (DCSA; free and conjugated) and 2,5-dichloro-3,6-dihydroxybenzoic acid (DCGA; free and conjugated), expressed as dicamba; for other plant commodities: sum of dicamba and 5-OH dicamba, expressed as dicamba.*

Definition of the residue for compliance with the MRL and for estimation of dietary exposure for animal commodities: *sum of dicamba and DCSA, expressed as dicamba.*

The residue is not fat-soluble.

## DIETARY RISK ASSESSMENT

### ***Long-term dietary exposure***

The ADI for dicamba is 0–0.3 mg/kg bw. The International Estimated Daily Intakes (IEDIs) for dicamba were estimated for the 17 GEMS/Food Consumption Cluster Diets using the STMR or STMR-P values estimated by the JMPR. The results are shown in Annex 3 of the 2019 Extra JMPR Report.

The IEDIs ranged from 0–1% of the maximum ADI. The Meeting concluded that long-term dietary exposure to residues of dicamba from uses considered by the JMPR is unlikely to present a public health concern.

### ***Acute dietary exposure***

The ARfD for dicamba is 0.5 mg/kg bw. The International Estimate of Short-Term Intakes (IESTIs) for dicamba were calculated for the food commodities and their processed commodities for which HRs/HR-Ps or STMRs/STMR-Ps were estimated by the present Meeting and for which consumption data were available. The results are shown in Annex 4 of the 2019 Extra JMPR Report.

The IESTIs were 0% of the ARfD for both children and for the general population. The Meeting concluded that acute dietary exposure to residues of dicamba from uses considered by the present Meeting is unlikely to present a public health concern.

## 5.8 FENAZAQUIN (297)

### RESIDUE AND ANALYTICAL ASPECTS

Fenazaquin is a quinazoline insecticide/acaricide that exhibits contact and ovicidal activity against a broad spectrum of mites in grapes, pome fruit, citrus, peaches, cucurbits, tomatoes, cotton and ornamentals. It was first evaluated by JMPR in 2017 for toxicology and residues.

The 2017 JMPR established an ADI for fenazaquin of 0–0.05 mg/kg bw and an ARfD of 0.1 mg/kg bw. The residue definition for compliance with the MRL and dietary risk assessment for plant commodities is parent fenazaquin. The residue definition for compliance with the MRL and dietary risk assessment for animal commodities is the sum of fenazaquin and the metabolites 2-(4-{2-[(2-hydroxyquinazolin-4-yl)oxy]ethyl}phenyl)-2-methylpropanoic acid (2-hydroxy-fenazaquin acid) and quinazolin-4-ol and 3,4-dihydroquinazolin-4-one (4-hydroxyquinazoline), expressed as fenazaquin equivalents. The residue is fat soluble.

The 2017 Meeting determined that the submitted storage stability data were inadequate to support the recommendation of a maximum residue level for almonds. At the Fiftieth Session of the CCPR (2018), fenazaquin was scheduled for a follow-up evaluation of additional uses by the 2019 Extra JMPR Meeting. The Meeting received additional storage stability and residue trial data for almond nutmeat and shells (the fibrous material between the nutmeat and the hull), an analytical method for the analysis of fenazaquin, 2-hydroxyfenazaquin acid, and 2-hydroxyfenazaquin-N-oxide in bovine matrices, and a cattle-feeding study.

#### **Methods of analysis**

Residue analysis for all almond sample results submitted to the 2019 Extra Meeting was done using Method ANADIAG R A4167. This LC-MS/MS method was found acceptable by the 2017 JMPR for analysis of residues in multiple plant commodities. The current meeting received validation data for residues of fenazaquin in almond nutmeat and almond shells.

For both matrices, validation data generated concurrently with the analysis of field trial samples demonstrated adequate method performance for residues of fenazaquin. The LOQ was 0.01 mg/kg for all analytes and matrices.

The Meeting received information on an analytical method that was validated in conjunction with a cattle-feeding study. Average recoveries of fenazaquin at fortification levels of 0.01, 0.2, or 2 mg/kg ranged from 76–99%. The RSDs were <10% with the exception of kidney fortified at 0.2 mg/kg, for which the RSD was 24%. The Meeting considered this to be a minor deviation. The LOQs were 0.01 mg/kg for both fenazaquin and 2-OH fenazaquin acid in all matrices.

#### **Stability of residues in stored analytical samples**

The 2017 Meeting could not conclude that stability of fenazaquin in stored almonds was adequately demonstrated based on the inconsistent percent remaining residues with increasing storage time in the previously submitted study.

Stability of fenazaquin was investigated in parallel with the field trial study submitted to the current meeting. Samples of almond nutmeat and shells were fortified with each analyte separately at 0.5 mg/kg each, stored frozen (-25 to -10 °C), and analysed using the method cited above. Residues were stable for all analytes in both matrices for at least 17 months.

Based on the results of the new study, the Meeting concluded that the new data are sufficient to support the field trials conducted in 2008 and 2012.

#### **Definition of the residue**

The current Meeting noted that there are discrepancies in the residue definitions for animal commodities provided in the 2017 report.

In examining the 2017 report for clarification, the Meeting specifically noted the following points taken from the residue definition section pertaining to residues in animals:

“The Meeting concluded that fenazaquin and 2-hydroxy-fenazaquin acid are suitable markers for enforcement of MRLs for livestock commodities.”

“The metabolite 4-hydroxyquinazoline is predominantly found in milk accounting for 1.5-fold the fenazaquin residues. In tissues, 4-hydroxyquinazoline was either not detected or detected at lower levels than those of the metabolite 2-hydroxy-fenazaquin acid. The Meeting concluded that the 2-hydroxy-fenazaquin acid and 4-hydroxyquinazoline metabolites are not likely to be more toxic than the parent fenazaquin.”

The current Meeting recommended that the residue definitions for animal commodities be corrected as follows:

For compliance with the MRL: The sum of fenazaquin and the metabolite 2-(4-{2-[(2-hydroxyquinazolin-4-yl)oxy]ethyl}phenyl)-2-methylpropanoic acid (2-hydroxy-fenazaquin acid) expressed as fenazaquin equivalents.

For estimation of dietary risk: The sum of fenazaquin and the metabolites 2-(4-{2-[(2-hydroxyquinazolin-4-yl)oxy]ethyl}phenyl)-2-methylpropanoic acid (2-hydroxy-fenazaquin acid) and quinazolin-4-ol and 3,4-dihydroquinazolin-4-one (tautomeric forms of 4-hydroxyquinazoline), expressed as fenazaquin equivalents.

The residue is fat soluble.

As there were no recommendations made by the 2017 Meeting involving animal commodities, the previous recommendations are not affected by this correction.

### ***Results of supervised residue trials on crops***

The current Meeting received supervised trial data reflecting applications of fenazaquin to almond; these data are in addition to data reviewed by the 2017 Meeting for almond. The demonstrated period of stability of fenazaquin residues (17 months) covers the storage period for that analyte in nutmeats for the previously submitted trials (maximum storage period of 2 months) and the new trials (maximum storage period of 14 months).

A label for the end-use product containing fenazaquin was available from the USA describing the registered use of fenazaquin on the US tree nuts crop group.

### ***Tree nuts***

The cGAP for tree nuts in the USA is a single application at up to 0.504 kg ai/ha with a 7-day PHI.

Nine trials in almonds, approximating the cGAP, were conducted in the USA. Residues of fenazaquin were (n=9):  $\leq 0.01$ (7), 0.011, and 0.013 mg/kg.

Five independent trials in pecan, approximating the cGAP, were conducted in the USA. Residues of fenazaquin were (n=5):  $\leq 0.01$  (4), and 0.014 mg/kg.

Based on the observed similarity in residue levels for almond and pecan, the Meeting decided to use both data sets to mutually support a recommendation for tree nuts, except coconut. The combined dataset is (n=14):  $\leq 0.01$ (11), 0.011, 0.013 and 0.014 mg/kg.

The Meeting estimated a maximum residue level of 0.02 mg/kg, STMR of 0.01 mg/kg and HR of 0.016 mg/kg (based on highest individual value) for fenazaquin in Tree nuts (except coconut).

### ***Animal feeds***

#### ***Almond hulls***

Residue data for fenazaquin in almond hulls were reviewed by the 2017 Meeting; however, that Meeting



was unable to make residue estimates due to the lack of supporting storage stability data. The current Meeting decided to apply the new storage stability data for almond nutmeat and shells to the almond hull data reviewed previously.

Residues of fenazaquin in almond hulls from trials approximating cGAP were (n=5): 0.27, 0.39, 1.2, 1.4, and 1.5 mg/kg.

The Meeting estimated a maximum residue level of 4 mg/kg for almond hulls (dry; based on a dry matter content of 90% as per the OECD feed table), with a corresponding median residue of 1.2 mg/kg (as received).

### ***Residues in animal commodities***

Almond hulls are the only potential livestock feed item relevant to fenazaquin. Based on a median residue of 1.2 mg/kg, the maximum and mean dietary burdens are both 0.133 ppm. The burden is the same for beef and dairy cattle in both Australia and Canada/USA. In the feeding study, residues of fenazaquin were measured in milk and fenazaquin and 2-OH fenazaquin acid were measured in tissues. Measured residues of 2-OH fenazaquin acid were converted to fenazaquin-equivalents using the molecular weight factor of 0.869. The Meeting used results from the goat metabolism study to estimate unmeasured residues as follows:

Milk: 2-OH fenazaquin acid =  $0.25 \times \text{fenazaquin}$

4-OH quinazoline =  $1.5 \times \text{fenazaquin}$

Liver: 4-OH quinazoline =  $0.75 \times 2\text{-OH fenazaquin acid}$

Kidney: 4-OH quinazoline =  $0.25 \times 2\text{-OH fenazaquin acid}$

Muscle: 4-OH quinazoline not detected, assumed to be zero

Fat: 4-OH quinazoline not detected, assumed to be zero

Fenazaquin feeding study	Feed level (ppm) for milk residues	Residues (mg/kg) in milk	Feed level (ppm) for tissue residues	Residues (mg eq/kg)			
				Muscle	Liver	Kidney	Fat
MRL beef or dairy cattle							
Feeding study	12.5	<LOQ	12.5	<LOQ	0.027	<0.019	0.056
Dietary burden and high residue	0.133	<0.02	0.133	<0.02	<0.02	<0.02	<0.02
STMR beef or dairy cattle							
Feeding study	12.5	<0.01	12.5	<0.019	0.039	<0.019	0.045
Dietary burden and residue estimate	0.133	<0.0001	0.133	<0.0002	0.00041	<0.0002	0.00048
HR beef or dairy cattle							
Feeding study	12.5	<0.01	12.5	<0.019	0.045	<0.019	0.056
Dietary burden and residue estimate	0.133	<0.0001	0.133	<0.0002	0.00048	<0.0002	0.00060

Based on the anticipated residues, the Meeting estimated maximum residue levels of 0.02(\*) mg/kg for edible offal (mammalian), mammalian fats (except milk fats), meat (from mammals other than marine mammals; as fat), milks, and milk fats. Corresponding STMRs and HRs are 0 mg/kg.

## **RECOMMENDATIONS**

On the basis of the available data, the Meeting concluded that the residue levels listed in Annex 1 are suitable for establishing maximum residue levels and for IEDI and IESTI assessments.

The definition of the residue for compliance with the MRL and for dietary risk assessment for plant commodities is *fenazaquin*.

The definition of the residue for compliance with the MRL for animal commodities is *the sum of fenazaquin and the metabolite 2-(4-{2-[(2-hydroxyquinazolin-4-yl)oxy]ethyl}phenyl)-2-methylpropanoic acid (2-hydroxy-fenazaquin acid) expressed as fenazaquin equivalents*.

The definition of the residue for dietary risk assessment for animal commodities is *the sum of fenazaquin and the metabolites 2-(4-{2-[(2-hydroxyquinazolin-4-yl)oxy]ethyl}phenyl)-2-methylpropanoic acid (2-hydroxy-fenazaquin acid) and quinazolin-4-ol and 3,4-dihydroquinazolin-4-one (tautomeric forms of 4-hydroxyquinazoline), expressed as fenazaquin equivalents*.

The residue is fat soluble.

## DIETARY RISK ASSESSMENT

### ***Long-term dietary exposure***

The ADI for fenazaquin is 0–0.05 mg/kg bw. The International Estimated Daily Intakes (IEDIs) for fenazaquin were estimated for the 17 GEMS/Food Consumption Cluster Diets using the STMR or STMR-P values estimated by the JMPR. The results are shown in Annex 3 of the 2019 Extra JMPR Report.

The IEDIs were 0% of the maximum ADI. The Meeting concluded that long-term dietary exposure to residues of fenazaquin from uses considered by the JMPR is unlikely to present a public health concern.

### ***Acute dietary exposure***

The ARfD for fenazaquin is 0.1 mg/kg bw. The International Estimate of Short-Term Intakes (IESTIs) for fenazaquin were calculated for the food commodities and their processed commodities for which HRs/HR-Ps or STMRs/STMR-Ps were estimated by the present Meeting and for which consumption data were available. The results are shown in Annex 4 of the 2019 Extra JMPR Report.

The IESTIs were 0% of the ARfD for children and for the general population. The Meeting concluded that acute dietary exposure to residues of fenazaquin from uses considered by the present Meeting is unlikely to present a public health concern.

## 5.9 FLONICAMID (282)

### RESIDUE AND ANALYTICAL ASPECTS

Flonicamid is the ISO approved common name for N-cyanomethyl-4-(trifluoromethyl)nicotinamide (IUPAC). Flonicamid (CAS No. 158062-67-0) is systemic pyridine carboxamide insecticide with selective activity against Hemipterous pests.

Flonicamid was first evaluated for residues and toxicological aspects by the 2015 JMPR. The 2015 JMPR established an ADI for flonicamid of 0–0.07 mg/kg bw and concluded that an ARfD was unnecessary.

The 2015 JMPR also recommended the following residue definition for flonicamid:

Definition of the residue for compliance with the MRL and dietary risk assessment in plant commodities: *Flonicamid*

Definition of the residue for compliance with the MRL and dietary risk assessment in animal commodities: *Flonicamid and the metabolite TFNA-AM, expressed as parent*

*The residue is not fat-soluble.*

Flonicamid was last evaluated in 2017 for additional maximum residue levels. At the Fiftieth Session of the CCPR (2017), flonicamid was listed for consideration of additional uses by the 2019 Extra JMPR. The Meeting received information on registered use patterns, analytical method information, storage stability data and supervised residue trials on citrus fruits with product labels from the USA

#### **Methods of analysis**

The current Meeting received additional concurrent recovery information for the analysis of flonicamid in plant matrices.

Methods H13-87 and 09604 were used in the investigation of the storage stability in high acid matrices. In H13-87 method, methanol was used as extraction solvent. Residues were determined by GC-MS and individual LOQs of 0.01 mg/kg were validated for parent flonicamid and each of its metabolites TFNA, and TFNG in orange pulp. In orange peel, individual LOQs of 0.04 mg/kg were validated for parent flonicamid and each of its metabolites TFNA, and TFNG. The 09604 method involves extraction of the residue with acetonitrile:water (1:1). Determination was performed by LC-MS/MS. Based on concurrent recovery data, individual LOQs of 0.01 mg/kg were validated for parent flonicamid and each of its metabolites TFNA, TFNA-AM and TFNG.

Method IB-2014-JLW-002-01-01 was used for residue determination of field crop samples from the supervised trials. The method involves extraction of residues with acetonitrile:water (1:1; v/v). Determination was performed by LC-MS/MS and supported with concurrent recovery data suggesting individual LOQs of 0.01 mg/kg for parent flonicamid and each of its metabolites TFNA, TFNA-AM and TFNG.

#### **Stability of residues in stored analytical samples**

The Meeting received information on the storage stability of parent flonicamid and its metabolites TFNA, TFNA-AM and TFNG in high acidic matrices (citrus fruits and strawberries).

Flonicamid, TFNA and TFNG in orange peel and orange pulp were found to be stable in storage at -20 °C for at least 16 months (480–486 days). Flonicamid, TFNA, TFNA-AM and TFNG in strawberry were found to be stable in storage at -20 °C for at least 15 months (460 days).

Among all the samples from supervised trials in storage, the longest storage duration before analysis was 268 days. The Meeting concluded that all the residue results from supervised trials were analysed within acceptable storage intervals.

### ***Results of supervised residue trials on crops***

Flonicamid is registered for use on citrus fruits in the USA with a maximum GAP involving three foliar sprays of 0.1 kg ai/ha each (7 day interval), a maximum seasonal rate of 0.3 kg ai/ha and a PHI of 0 days. The Meeting received supervised trial data for applications of flonicamid on citrus fruits conducted in the USA.

#### ***Lemons and Limes***

Corresponding supervised field trials conducted in the USA on lemons matching the GAP were submitted.

Residues of flonicamid in lemon fruits were (n=5): 0.13(2), 0.22 0.25 and 0.71 mg/kg.

The Meeting estimated a maximum residue level of 1.5 mg/kg and a STMR value of 0.22 mg/kg for flonicamid in the subgroup lemons and limes.

#### ***Oranges, Sweet, Sour***

Corresponding supervised field trials conducted in the USA on oranges matching the GAP were submitted.

Residues of flonicamid in orange fruits were (n=14): 0.051, 0.061, 0.064, 0.083, 0.088, 0.10, 0.11, 0.12, 0.15, 0.18, 0.22(2), 0.23 and 0.24 mg/kg.

The Meeting noted that the US GAP involves treatment of all citrus fruit and decided to use oranges as representative commodity for the subgroup of oranges, sweet, sour.

The Meeting estimated a maximum residue level of 0.4 mg/kg and a STMR value of 0.115 mg/kg for flonicamid in the subgroup oranges, sweet, sour.

#### ***Pummelos and Grapefruits***

Corresponding supervised field trials conducted in the USA on grapefruits matching the GAP were submitted.

Residues of flonicamid in grapefruits were (n=6): 0.019, 0.034, 0.057, 0.070, 0.079 and 0.13 mg/kg.

The Meeting noted that the US GAP involves treatment of all citrus fruit and decided to use grapefruits as representative commodity for the subgroup of pummelos and grapefruit.

The Meeting estimated a maximum residue level of 0.3 mg/kg and a STMR value of 0.0635 mg/kg for flonicamid in the subgroup pummelos and grapefruit.

The Meeting noted that data from mandarins were not available therefore the Meeting did not consider a recommendation for the citrus group.

### ***Fate of residues during processing***

The fate of flonicamid residues has been examined simulating commercial processing of orange fruits.

Estimated processing factors for the commodities considered at this Meeting are summarised below.

Raw commodity	Processed commodity	Flonicamid			
		Individual processing factors	Mean or best estimate processing factor	STMR or STMR-P (mg/kg)	Maximum residue level (mg/kg)
Citrus fruits	Lemon (RAC)			0.22	1.5
	Juice	0.02 (from orange)	0.02	0.0044	-
	Dried pulp	1.8 (from orange)	1.8	0.396	3
	Oil	0.01 (from orange)	0.01	0.0022	-

The Meeting estimated a maximum residue level of 3 mg/kg for citrus pulp, dry on the basis of the processing factor of 1.8 for orange pulp, dry and the maximum residue level for lemon of 1.5 mg/kg.

### ***Residues in animal commodities***

The Meeting recalculated the livestock dietary burden based on the uses considered by the current and previous Meeting on the basis of diets listed in the 2016 edition of FAO Manual Appendix IX (OECD Feedstuff Table). The addition of citrus pulp, dry does not add significantly to the maximum and mean dietary burdens of up to 27.7 ppm and 15.3 ppm calculated by the 2016 JMPR. The Meeting confirmed its previous recommendations for flonicamid in animal commodities.

## **RECOMMENDATIONS**

On the basis of the data obtained from supervised trials, the Meeting concluded that the residue levels listed in Annex 1 are suitable for establishing maximum residue limits and for IEDI assessment.

Definition of the residue for compliance with the MRL and dietary risk assessment for plant commodities: *Flonicamid*

Definition of the residue for compliance with the MRL and dietary risk assessment for animal commodities: *Flonicamid and the metabolite TFNA-AM, expressed as parent*

*The residue is not fat-soluble.*

## **DIETARY RISK ASSESSMENT**

### ***Long-term dietary exposure***

The ADI for flonicamid is 0–0.07 mg/kg bw. The International Estimated Daily Intakes (IEDIs) for flonicamid were estimated for the 17 GEMS/Food Consumption Cluster Diets using the STMR or STMR-P values estimated by the JMPR. The results are shown in Annex 3 of the 2019 Extra JMPR Report.

The IEDIs ranged from 1–10% of the maximum ADI. The Meeting concluded that long-term dietary exposure to residues of flonicamid from uses considered by the JMPR is unlikely to present a public health concern.

### ***Acute dietary exposure***

The 2015 JMPR decided that an ARfD for flonicamid was unnecessary. The Meeting therefore concluded that the acute dietary exposure to residues of flonicamid from the uses considered is unlikely to present a public health concern.



## 5.10 FLUPYRADIFURONE (285)

### RESIDUE AND ANALYTICAL ASPECTS

Flupyradifurone, is an insecticide with the structure of butenolides. It acts as an agonist of the nicotinic acetylcholine receptor.

Flupyradifurone was first evaluated by the Meeting for toxicology in 2015 as a new compound. It was evaluated for residues in 2016 and 2017.

The 2015 Meeting established an ADI of 0–0.08 mg/kg bw and an ARfD of 0.2 mg/kg bw.

The 2016 and 2017 Meeting recommended the following residue definitions:

Definition of the residue (for compliance with the MRL) for plant commodities:  
*Flupyradifurone*

Definition of the residue (for dietary risk assessment) for plant commodities: *Sum of flupyradifurone, difluoroacetic acid (DFA) and 6-chloronicotinic acid (6-CNA), expressed as parent equivalents*

Definition of the residue (for compliance with the MRL and dietary risk assessment) for animal commodities: *Sum of flupyradifurone and difluoroacetic acid, expressed as parent equivalents*

The residue is not fat-soluble.

On a basis of the above residue definitions, the Meeting estimated maximum residue levels for a wide range of commodities.

Flupyradifurone was listed by the Forty-ninth CCPR for evaluation of additional uses by the current Meeting. The present Meeting received information on analytical methods, storage stability, use pattern, supervised residue trials and processing in support of estimation of maximum residue levels for blackberry, raspberry, avocado, pomegranate, cacao beans, coffee beans, and hops.

#### **Methods of analysis**

A number of analytical methods for plant and animal matrices were submitted to and evaluated by the 2016 Meeting. The current Meeting received information on new analytical methods (modified methods of those already reviewed) using HPLC-MS/MS together with validation data for residues of flupyradifurone. They were validated with the LOQs ranging from 0.01–0.5 mg eq/kg for flupyradifurone, DFA and 6-CNA in the plant commodities for which supervised trial or processing study data were submitted to this Meeting.

The Meeting evaluated in 2016 and 2017 storage stability data on flupyradifurone residues in various plant matrices stored frozen. The 2017 Meeting concluded that flupyradifurone, DFA and 6-CNA are stable for at least 52 months (1556 to 1572 days) in high water, high acid, high oil, high protein, and high starch content matrices, when stored frozen at approximately -18 °C. The frozen storage periods of samples in the trial studies submitted to the current Meeting were, at the longest, 841 days.

#### **Results of supervised residue trials on crops**

The current Meeting received information on supervised trials using foliar sprays of flupyradifurone conducted in support of estimating maximum residue levels for the following commodities: cane berries (blackberry and raspberry), avocado, pomegranate, cacao beans, coffee beans (drench and foliar applications) and hops, dry.

For the calculation of the sum of flupyradifurone, DFA and 6-CNA, expressed as parent equivalents (total residues), the Meeting used the approach agreed at the 2016 JMPR:

“Where parent or DFA residues were not detected or were less than the LOQ (*i.e.* < 0.01 mg/kg for parent or 0.05 mg/kg for DFA) the LOQ value was utilized for maximum residue estimation and

dietary exposure assessment. For 6-CNA, values less than the LOQ were not added for calculation of total residues of flupyradifurone.”

The table below on how the total residues were calculated for each trial was copied from the Evaluation of the 2016 JMPR for easy reference.

Parent	DFA	6-CNA	Total
<0.01	0.05	0.01	0.07
0.01	<0.05	0.01	0.07
<0.01	<0.05	<0.01	<0.06
0.01	0.05	<0.01	0.06
0.01	0.05	0.01	0.07

All expressed in parent equivalents (concentrations are described in mg eq/kg in this evaluation).

### *Cane berries (Blackberry and raspberry)*

Critical GAP in the USA for the cane berry crop sub-group allows two foliar applications at a maximum rate of 205 g ai/ha with an interval of 7 days, and PHI of 0 days.

Four field trials were conducted on blackberries in Canada and the USA in the 2012–2014 growing seasons.

Flupyradifurone residues from independent trials on blackberry following the above GAP were in rank order (n=2): 0.81 and 1.6 mg/kg.

In other two trials, application rates were 95–115 g ai/ha, lower than the critical GAP rate, and residues from these trials were in rank order (n=2): 0.49 and 2.1 mg/kg.

The Meeting decided to apply the proportionality principle to the residues from trials conducted with rates about half of the critical GAP rate.

The residues from the trials following the GAP and with the lower application rates, after scaling to the critical GAP rate of 205 g ai/ha, were in rank order (n=4): 0.81, 0.96, 1.6 and 3.9 mg/kg.

Corresponding total residues from the trials following the US GAP were (n=2): 0.84 and 1.7 mg/kg. Total residues from the trials using the application rates (95-115 g ai/ha) lower than the critical GAP rate were (n=2): 0.55 and 2.2 mg/kg.

The total residues from the trials following the GAP and with the lower application rates, after scaling to the GAP rate of 205 g ai/ha were: 0.84, 1.1, 1.7 and 4.1 mg/kg (highest individual residue: 4.3 mg/kg).

Seven field trials were conducted on raspberries in Canada and the USA in the 2012 growing seasons.

Flupyradifurone residues from independent trials on raspberry following the US GAP were in rank order (n=6): 0.84, 1.0, 1.1, 2.2, 2.5 and 2.5 mg/kg.

Corresponding total residues were: 0.86, 1.0, 1.1, 2.2, 2.5 and 2.5 mg/kg (highest individual residue: 2.8 mg/kg).

The US GAP is for the cane berry crop sub-group including blackberry and raspberry, and blackberry or raspberry is a representative commodity for the cane berries sub-group in the Codex classification. As the Mann-Whitney U-test on the residue populations of blackberry and raspberry indicated that these populations were not significantly different, the Meeting decided to combine these two populations to estimate a maximum residue level, STMR and HR for the subgroup of cane berries.

Combined flupyradifurone residues in rank order were (n=10): 0.81, 0.84, 0.96, 1.0, 1.1, 1.6, 2.2, 2.5, 2.5 and 3.9 mg/kg.

The Meeting estimated a maximum residue level of 6 mg/kg for the cane berries sub-group.



Corresponding combined total residues were in rank order (n=10): 0.84, 0.86, 1.0, 1.1, 1.1, 1.7, 2.2, 2.5, 2.5, and 4.1 mg/kg (highest individual residue: 4.3 mg/kg).

The Meeting estimated a STMR and HR of 1.4 mg/kg and 4.3 mg/kg, expressed in parent equivalents, respectively for the cane berries sub-group.

### *Avocado*

Critical GAP in the USA for avocado, in the group of “tropical and subtropical, medium to large fruit, smooth, inedible peel”, allows two foliar applications at a maximum individual rate of 205 g ai/ha with an interval of 14 days, and a PHI of 1 day. Four supervised trials were conducted on avocado in the USA in 2013.

Flupyradifurone residues from independent trials on avocado following the above GAP were in rank order (n=4): 0.026, 0.19, 0.22 and 0.24 mg/kg.

The Meeting estimated a maximum residue level of 0.6 mg/kg for avocado.

The Corresponding total residues were: 0.076, 0.27, 0.29 and 0.31 mg/kg (highest individual residue: 0.36 mg/kg).

The Meeting estimated a STMR and HR of 0.28 mg/kg and 0.36 mg/kg, expressed in parent equivalents, respectively for avocado.

### *Pomegranate*

Critical GAP in the USA for pomegranate, in the group of “tropical and subtropical, medium to large fruit, smooth, inedible peel”, allows two foliar applications at a maximum individual rate of 205 g ai/ha with an interval of 7 days, and a PHI of 0 days. Four supervised trials were conducted on pomegranate in the USA in 2012. Two trials were conducted in close proximity to each other with the application timing only a few days apart. Since other differences in the trial parameters would not affect the residue concentrations significantly, the Meeting considered that these trials were not independent.

Flupyradifurone residues from independent trials on pomegranate following the above GAP were in rank order (n=3): 0.18, 0.20 and 0.23 mg/kg.

The corresponding total residues were: 0.20, 0.22 and 0.25 mg/kg

According to the Codex document on minor crops, pomegranate requires 4 trials for estimating maximum residue level. The Meeting concluded that the data from 3 trials were insufficient to estimate a maximum residue level for pomegranate.

### *Cacao beans*

The critical GAP is from Ghana, which allows 4 foliar applications in August, September, October and December at a maximum rate of 15 g ai/ha each with a PHI of 7 days. A total of nine supervised trials were conducted on cacao in Côte d’Ivoire and Ghana in 2014 and 2015.

Flupyradifurone residues dried cacao bean from trials approximating the GAP in Ghana were (n=7) all < 0.01 mg/kg.

The Meeting estimated a maximum residue level of 0.01(\*) mg/kg for cacao beans.

Among nine decline trials, the total residue concentrations increased in two trials up to the longest days after the last application (DALA) interval, while in the others the total residue concentrations seemed to reach a peak or plateau. The Meeting considered that the dataset of total residues, regardless of DALA, would adequately cover the expected residues.

The total residues from trials approximating the GAP were (n=7): 0.051, 0.059, 0.070, 0.071, 0.087, 0.099 and 0.11 mg/kg.

The Meeting estimated a STMR of 0.071 mg/kg, expressed in parent equivalents, for cacao beans.

### *Coffee beans*

Critical GAP in Brazil for coffee allows one drench application at 600 g ai/ha and three foliar spray applications at an application rate of 200 g ai/ha each with an interval of 15 days between foliar applications, and a PHI of 21 days. The drench application should be approximately 90 days before the spray applications. The total annual application rate for drench or foliar applications is 600 g ai/ha. A total of 16 supervised trials were conducted on coffee in Brazil, Colombia, Guatemala and Mexico in 2011 and 2012 following the GAP in Brazil.

Flupyradifurone residues in dried coffee bean, green, from independent trials on coffee following the above GAP were in rank order (n=16): < 0.01 (2), 0.02, 0.05, 0.065, 0.08, 0.14, 0.14, 0.14, 0.16, 0.20, 0.21, 0.22, 0.35, 0.55 and 0.60 mg/kg.

The Meeting estimated a maximum residue level of 0.9 mg/kg for coffee beans.

Among the 12 decline trials, the total residue concentrations steadily increased in four trials up to the longest DALA, while in the others the total residue concentrations seemed to reach a peak or plateau. The Meeting considered that the dataset of total residues, regardless of DALA, would adequately cover the expected residues.

The total residues in these trials were (n=16): < 0.06, < 0.06, 0.10, 0.10, 0.19, 0.20, 0.24, 0.29, 0.30, 0.30, 0.41, 0.49, 0.56, 0.61, 0.77 and 0.87 mg/kg.

The Meeting estimated a STMR of 0.295 mg/kg, expressed in parent equivalents, for coffee beans.

### *Hops, dry*

A total of 12 trials were conducted on hops in Germany and the USA.

Critical GAP in the Netherlands allows one foliar application at a rate of 150 g ai/ha and a PHI of 21 days. Eight residue trials were conducted on hops in the 2010 (4) and 2011 (4) seasons in Germany.

In four trials, 6-CNA residues were detected above the LOQ in control samples of dried hop cone. Among them, in three trials, the levels were more than 25% of the total residues, and the Meeting did not use these trials in the evaluation.

Flupyradifurone residues from trials on hops in Germany approximating the GAP in the Netherlands were in rank order (n=5): 0.31, 0.43, 1.1, 1.8 and 2.0 mg/kg.

Corresponding total residues from the German trials were (n=5): 0.63, 0.73, 1.7, 2.3 and 2.4 mg/kg.

Critical GAP in the USA on hops allows one foliar application at an application rate of 154 g ai/ha and a PHI of 21 days. Four field trials were conducted on hops in the USA following the US GAP in 2011 (three trials) and 2015 (one trial).

Flupyradifurone residues in the dried hop cone from independent trials in the USA on hops following the above GAP were in rank order (n=4): 2.4, 2.7, 2.7 and 4.7 mg/kg.

In one trial in the USA, 6-CNA was not analysed in dried hop cone. Assuming that the LOQ for 6-CNA was the same as for flupyradifurone and DFA (0.5 mg eq/kg), the Meeting agreed to add 0.5 mg eq/kg as 6-CNA to the sum of flupyradifurone and DFA residues to make a conservative estimate of the total residue.

The Corresponding total residues from the USA trials were (n=4): 3.4, 3.4, 3.7, 8.1 mg/kg.

Since the data from the USA trials would lead to a higher maximum residue level, the Meeting used these trials for the estimation of the maximum residue level for hops, dry.

The Meeting estimated a maximum residue level of 10 mg/kg and a STMR of 3.55 mg/kg, expressed in parent equivalents, for hops, dry.

### ***Fate of residues during processing***

The effects of processing on the concentrations of flupyradifurone residues were evaluated by the 2016 and 2017 JMPR for a wide range of commodities for which maximum residue levels were recommended.

The current Meeting received information on the processing of cacao beans, coffee beans and dried hops to processed commodities, relevant to the current evaluation.

The calculated processing factors for these commodities together with calculated STMR-Ps are summarized below.

Total Residues			
Processed commodity	Individual processing factor	Median or best estimate	STMR/STMR-P
Cacao dry bean (RAC)			0.071
Roasted cacao bean	0.58, 0.96	0.77	0.0547
Cocoa powder	1.05, 2.22	1.64	0.116
Chocolate	0.53, 0.87	0.70	0.0497
Coffee green bean (RAC)			0.295
Roasted coffee bean	0.63, 0.68, 0.75, 0.81	0.72	0.21
Instant coffee	1.6, 3.1, 3.2, 3.4	3.2	0.94
Hops, dry (RAC)			3.55
Beer (hops)	0.01, 0.01	0.01	0.0355

### ***Animal commodity maximum residue levels***

As none of the commodities evaluated, or their by-products, for which supervised trial data were submitted to the current Meeting are fed to animals, the Meeting concluded that there was no need to revisit the previous recommendations for flupyradifurone in animal commodities.

## **RECOMMENDATIONS**

On the basis of the data from supervised trials, the Meeting concluded that the residue levels listed below are suitable for establishing maximum residue limits and for IEDI and IESTI assessment.

Definition of the residue for compliance with the MRL for plant commodities: *Flupyradifurone*.

Definition of the residue for dietary risk assessment for plant commodities: *Sum of flupyradifurone, difluoroacetic acid (DFA) and 6-chloronicotinic acid (6-CNA), expressed as parent equivalents.*

Definition of the residue for compliance with the MRL and for dietary risk assessment for animal commodities: *Sum of flupyradifurone and difluoroacetic acid, expressed as parent equivalents.*

The residue is not fat-soluble.

## **DIETARY RISK ASSESSMENT**

### ***Long-term dietary exposure***

The ADI for flupyradifurone is 0–0.08 mg/kg bw. The International Daily Intakes (IEDIs) for flupyradifurone were estimated for the 17 GEMS/Food Consumption Cluster Diets using the STMR and STMR-P values estimated by JMPR. The results are shown in Annex 3 of the 2019 Extra JMPR Report.

The IEDIs ranged from 6–20% of the maximum ADI. The Meeting concluded that long-term dietary exposure to residues of flupyradifurone from uses considered by JMPR is unlikely to present a public health concern.

***Acute dietary exposure***

The ARfD for flupyradifurone is 0.2 mg/kg bw. The international Estimate of Short-Term Intakes (IESTIs) for flupyradifurone were calculated for the food commodities and their processes commodities for which HRs/HR-Ps or STMRs/STMR-Ps were estimated by the present Meeting and for which consumption data were available. The results are shown in Annex 4 of the 2019 Extra JMPR report.

The IESTIs varied from 0–20% of the ARfD for the general population and for children. The Meeting concluded that acute dietary exposure to residues of flupyradifurone from uses considered by the present Meeting is unlikely to present a public health concern.

## 5.11 FOSETYL-AL (302)

### RESIDUE AND ANALYTICAL ASPECTS

Fosetyl-aluminium (fosetyl-Al), fosetyl and phosphonic acid are systemic protectant horticultural fungicides, rapidly absorbed through both leaves and roots and exhibit both acropetal and basipetal translocation. Their mode of action is by inhibiting germination of spores and by blocking development of mycelium, competing with phosphate as allosteric regulator of several enzymes.

Fosetyl-Al and phosphonic acid were first evaluated by the JMPR in 2017, when residue definitions and health-based guidance values were established and a number of maximum residue levels were recommended for a range of fruit, and vegetable commodities, hops and tree nuts.

The 2017 JMPR established an ADI of 0–1 mg/kg bw for fosetyl and for phosphonic acid and an ARfD was not considered necessary.

The 2017 JMPR established residue definitions for plant and animal commodities:

- For compliance with MRLs and dietary risk assessment for plant commodities: *sum of fosetyl, phosphonic acid and their salts, expressed as phosphonic acid*.
- For compliance with MRLs and dietary risk assessment for animal commodities: *Phosphonic acid*.

The residue is not fat-soluble.

The Fiftieth Session of the CCPR (2018) listed fosetyl-aluminium for evaluation of additional uses by the 2019 Extra JMPR. The current Meeting received new GAP information for fosetyl-Al and fosetyl on blackberries, brassica vegetables, coffee, kiwifruit, pineapples and new supporting residue information.

#### **Methods of analysis**

Analytical methods for the analysis of fosetyl-Al (and fosetyl) and for phosphonic acid in plant and animal commodities (based on either GC analysis after a derivatisation step (methylation) or LC-MS/MS analysis) and used in the new supporting residue trials were reviewed by the 2017 JMPR.

The Meeting also received information on an additional LC-MS/MS method, involving the use of diethyl phosphate (DEP) as an internal standard, reverse phase HPLC separation and MS/MS detection. This method was validated for blackberries, with an LOQ of 0.1 mg/kg for each analyte.

Additional validation information was also provided to the Meeting on the use of the ‘Quick Polar Pesticide’ (QuPPE) method for measuring fosetyl-Al and phosphonic acid in blackberries, with LOQs of 0.05 mg/kg (fosetyl-Al) and 0.1 mg/kg (phosphonic acid). This method was considered by the 2017 JMPR to be suitable for monitoring residues of fosetyl-Al, fosetyl and phosphonic acid in most plant commodities.

The Meeting concluded that the analytical methods used in the new supporting residue trials were suitable for measuring residues of fosetyl-Al, fosetyl and phosphonic acid in plant matrices.

#### **Stability of pesticide residues in stored analytical samples**

The 2017 JMPR concluded that while fosetyl-Al residues were not stable in high water content and high oil commodities and that residue stability was variable in high acid commodities (with residues hydrolysing to phosphonic acid), in the storage stability studies where both fosetyl-Al and phosphonic acid residue degradation was measured, the total residues of fosetyl-Al and phosphonic acid were stable over the storage intervals in the studies (6–25 months for high water content, high starch/protein content, high acid content and 29 months for high oil content).

The sample storage intervals in the new residue trials were generally less than 12 months (17 months in some of the kiwifruit trials).

### ***Results of supervised residue trials on crops***

The Meeting received GAP information and supporting residue information for fosetyl-Al on blackberries, kiwifruit, pineapple and coffee and for fosetyl on cabbage, cauliflower and curly kale.

In many trials, residues of phosphonic acid (and to a lesser extent fosetyl and fosetyl-Al) were measured in control samples. The Meeting agreed that where these residues in control samples were more than 20% of the concentrations reported in the treated samples, the values could not be used for maximum residue level estimation.

#### ***Blackberries - Fosetyl-Al***

The critical GAP for fosetyl-Al on blackberries is in Germany, with up to 2 foliar sprays of 1.78 kg ai/ha, 10–14 days apart, with a PHI of 14 days for protected crops.

The properties of Fosetyl-Al are such that the outdoor and greenhouse blackberry growing conditions are not expected to be a key determinant of the residues. The residue data sets were not significantly different (Mann-Whitney). The Meeting agreed to use the results of the outdoor and greenhouse trials matching the GAP for protected crops to estimate a maximum residue level for blackberries.

In six outdoor and greenhouse trials matching the cGAP for protected blackberries, total residues were: 2.6, 4.3, 5.5, 6.4, 21 and 37 mg/kg.

The Meeting estimated a maximum residue level of 70 mg/kg and an STMR of 5.95 mg/kg for blackberries.

#### ***Kiwifruit - Fosetyl-Al***

The critical GAP for fosetyl-Al on kiwifruit is in Italy, with up to 2 foliar sprays of 4.0 kg ai/ha from BBCH 69, at least 30 days apart, with a PHI of 40 days.

In trials conducted in Europe, matching this critical GAP, total residues in whole fruit were 4.0, 12, 32 and 34 mg/kg.

In these trials, total residues in flesh were 3.7, 14, 30 and 39 mg/kg. In two additional trials matching the critical GAP in Italy, total residues in kiwifruit flesh were 50 and 67 mg/kg.

Noting that total residues in kiwifruit appeared to be evenly distributed between the flesh and peel (flesh:whole fruit ratios of 0.925, 0.94, 1.15 and 1.17), the Meeting agreed that residue concentrations in flesh would also reflect concentrations in whole fruit and that the ‘flesh only’ results could be used to estimate a maximum residue level for kiwifruit.

For estimating a maximum residue level, the total residue data set matching the cGAP for kiwifruit is: 4.0, 12, 32, 34, 50 and 67 mg/kg.

Total residues in the flesh (edible portion) were: 3.7, 14, 30, 39, 50 and 67 mg/kg.

The Meeting estimated a maximum residue level of 150 mg/kg (whole fruit) and an STMR of 34.5 mg/kg (edible portion) for kiwifruit.

#### ***Pineapple – fosetyl-Al***

GAP for fosetyl-Al on pineapples in the USA is for a pre-plant dip (0.24 kg ai/hL) followed by up to 6 foliar applications of 0.36 kg ai/hL, 90-day PHI. In trials conducted in the USA matching this GAP but with lower foliar application rates of 0.24 kg ai/hL, total residues were: 1.0, 3.1 and 8.2 mg/kg.

GAP for pineapples in Brazil is for a pre-plant dip (0.08 kg ai/hL) and up to 3 foliar applications of 0.2 kg ai/hL, 20-day PHI. No trials matching this GAP were available.

The critical GAP for pineapples in Costa Rica is for a pre-plant dip (0.24 kg ai/hL) and up to 3 foliar applications of 3.6 kg ai/ha, with a 90 day retreatment interval and a PHI of 90 days.

In five trials conducted in Central America, matching this GAP, total residues in fruit were 2.2, 2.8, 3.6, 3.8 and 6.9 mg/kg. In four of these trials, total residues in flesh (edible portion) were 1.7, 2.0, 2.7 and 4.2 mg/kg.

The Meeting estimated a maximum residue level of 15 mg/kg (whole fruit) and an STMR of 2.35 mg/kg (edible portion) for pineapple.

#### ***Head Brassicas (sub-group)***

The critical GAP for fosetyl on Brussels sprouts, head cabbage and Chinese cabbage is in the UK, applying the equivalent of up to 9.3 kg ai/ha in 20,000–40,000 L/ha as a pre-emergence nursery soil drench and as a seedling drench, about 10–14 days later (before transplanting).

In nine trials conducted in Europe, matching this cGAP, total residues in cabbage heads at maturity (89–176 days after the last application) were ≤0.2 (9) mg/kg.

Noting that the GAP in UK covers all commodities in the Head cabbages sub-group, the Meeting estimated a maximum residue level of 0.2 (\*) mg/kg and an STMR of 0.2 mg/kg for the Subgroup of Head Brassicas.

#### ***Flowerhead Brassicas (sub-group)***

The critical GAP for broccoli and cauliflower is in the UK, applying the equivalent of up to 9.3 kg ai/ha in 20,000–40,000 L/ha as a pre-emergence nursery soil drench and as a seedling drench, about 10–14 days later (before transplanting).

In twelve trials conducted in Europe, matching this cGAP, total residues in cauliflower heads at maturity (84–216 days after the last application) were < 0.2 (12) mg/kg.

Noting that the GAP in UK covers all commodities in the Flowerhead brassicas sub-group, the Meeting estimated a maximum residue level of 0.2 (\*) mg/kg and an STMR of 0.2 mg/kg for the Subgroup of Flowerhead Brassicas.

#### ***Kale – fosetyl***

The critical GAP for kale is in UK, applying the equivalent of up to 9.3 kg ai/ha in 20,000–40,000 L/ha as a pre-emergence nursery soil drench and as a seedling drench, about 10–14 days later (before transplanting).

In four trials conducted in Europe, matching this cGAP, total residues in curly kale leaves at maturity (76–160 days after the last application) were < 0.2 (4) mg/kg.

The Meeting estimated a maximum residue level of 0.2 (\*) mg/kg and an STMR of 0.2 mg/kg for kale.

#### ***Coffee – fosetyl-Al***

The critical GAP for fosetyl-Al on coffee is in Brazil, up to 2 foliar applications of 1.6 kg ai/ha, applied about 30 days apart, with a PHI of 30 days.

In trials conducted in Brazil and matching this GAP, total residues in dry coffee beans were 8.2, 8.7, 8.8, 8.8 and 8.9 mg/kg.

The Meeting estimated a maximum residue level of 30 mg/kg and an STMR of 8.8 mg/kg for coffee beans.

#### ***Fate of residues during processing***

##### ***Pineapple bran – fosetyl-Al***

In supervised trials conducted in the USA with fosetyl-Al on pineapples and involving dip+foliar

applications, total residues were measured in whole pineapple fruit and in the dry bran remaining after processing. Processing factors derived from these trials were 2.2, 2.4, 2.8, 2.8, 3.0, 3.2, 3.2, 3.2, 3.7, 3.9 and 6.1. The median processing factor is 3.2.

Based on this processing factor (3.2) and the median residue in whole pineapple fruit (3.6 mg/kg), the Meeting estimated a median total residue of 11.5 mg/kg for dry bran (87% dry matter).

### ***Residues in animal commodities***

#### ***Estimated maximum and mean dietary burdens of livestock***

The Meeting revised the 2017 JMPR livestock dietary burden of fosetyl, phosphonic acid and their salts (expressed as phosphonic acid) in farm animals to include the additional feed items considered at this meeting (pineapple process waste – as dry bran, cabbage and kale leaves) on the basis of the diets (US/CAN, EU, Australia and Japan) listed in OECD Feed Table.

	Animal dietary burden, ppm of dry matter diet							
	US-Canada		EU		Australia		Japan	
	Max	Mean	Max	Mean	Max	Mean	Max	Mean
Beef cattle	1.6	1.6	7.8	7.8	35 <sup>①</sup>	35 <sup>②</sup>	-	-
Dairy cattle	3.8	3.8	5.7	5.7	32 <sup>③</sup>	32 <sup>④</sup>	-	-
Poultry – broiler	-	-	-	-	-	-	-	-
Poultry – layer	-	-	0.067	0.067	-	-	-	-

① Highest maximum beef or dairy cattle dietary burden suitable for MRL estimates for mammalian tissues

② Highest maximum dairy cattle dietary burden suitable for MRL estimates for mammalian milk

③ Highest mean beef or dairy cattle dietary burden suitable for STMR estimates for mammalian tissues.

④ Highest mean dairy cattle dietary burden suitable for STMR estimates for milk.

### ***Animal commodity maximum residue levels***

#### ***Cattle***

The Meeting noted that in the second cattle feeding study reviewed by the 2017 JMPR, animals in the 32 ppm dose group contained mean estimated total residues of 0.29 mg/kg (kidney), 0.22 mg/kg (liver), 0.12 mg/kg (fat), 0.07 mg/kg (muscle) and 0.05 mg/kg in milk and maximum residues were 0.3 mg/kg (kidney), 0.33 mg/kg (liver), 0.18 mg/kg (fat) and 0.089 mg/kg (muscle).

For maximum residue level estimation, the high total residues were calculated by extrapolating the maximum dietary burden (35 ppm) from the 32 ppm feeding level in the dairy cow feeding study and using the highest tissue concentrations of total residues in individual animals within the dose group.

The STMR values for the tissues were calculated by extrapolating the mean dietary burden (35 ppm) from the 32 ppm feeding level and using the mean tissue total residues from the dose group.

For milk, since both the mean and maximum dairy cow dietary burdens were 32 ppm, MRL and STMR estimations were obtained directly from the mean total residues in the milk from animals in the 32 ppm dose group.

	Feed level for milk (ppm)	Residues in milk (mg/kg)	Feed level for tissues (ppm)	Residues (mg/kg)			
				Muscle	Liver	Kidney	Fat
MRL beef or dairy cattle							
Feeding study	32	0.05	32	0.089	0.33	0.3	0.18



	Feed level for milk (ppm)	Residues in milk (mg/kg)	Feed level for tissues (ppm)	Residues (mg/kg)			
				Muscle	Liver	Kidney	Fat
Dietary burden/residue estimate	32 <sup>②</sup>	0.05	35 <sup>①</sup>	0.097	0.36	0.33	0.2
STMR beef or dairy cattle							
Feeding study	32	0.05	32	0.07	0.22	0.29	0.12
Dietary burden/residue estimate	32 <sup>④</sup>	0.05	35 <sup>③</sup>	0.077	0.24	0.32	0.13

The Meeting agreed that the maximum residue levels estimated by the 2017 JMPR for meat from mammals other than marine mammals (0.15 mg/kg), for edible offal, mammalian (0.5 mg/kg) and milks (0.1 mg/kg) were sufficient to accommodate the revised maximum cattle dietary burden, but estimated a higher maximum residue level of 0.3 mg/kg for mammalian fat to replace the previous recommendation of 0.2 mg/kg.

Estimated STMRs are 0.32 mg/kg (kidney), 0.24 mg/kg (liver), 0.13 mg/kg (fat), 0.077 mg/kg (muscle) and 0.05 mg/kg for milks.

### Poultry

The Meeting noted that the poultry (layer) dietary burden of 0.067 ppm was based on the consumption of cabbage or kale leaves containing residues <LOQ. Since this dietary burden was about 200-fold lower than the lowest feeding level in the poultry feeding study (14 ppm), where total residues were not detected in any tissues and present at trace levels in eggs, the Meeting estimated maximum residue levels of 0.05 (\*) mg/kg for poultry meat, poultry fat, poultry edible offal and eggs.

Estimated STMRs are 0 mg/kg for poultry meat, poultry fat, poultry edible offal and eggs.

## RECOMMENDATIONS

On the basis of the data obtained from supervised trials, the Meeting concluded that the residue levels listed in Annex 1 are suitable for establishing maximum residue limits and for IEDI assessment.

Definition of the residue for compliance with the MRL and dietary risk assessment for plant commodities: “*Sum of fosetyl, phosphonic acid and their salts, expressed as phosphonic acid*”

Definition of the residue for compliance with the MRL and dietary risk assessment for animal commodities: “*Phosphonic acid*”

The residue is not fat-soluble

## DIETARY RISK ASSESSMENT

### Long-term dietary exposure

The ADI for fosetyl-aluminium is 0–1 mg/kg bw and this ADI also applies directly to phosphonic acid. The International Estimated Daily Intakes (IEDIs) for fosetyl-aluminium plus phosphonic acid were estimated for the 17 GEMS/Food Consumption Cluster Diets using the STMR or STMR-P values estimated by the JMPR. The results are shown in Annex 3 of the 2019 Extra JMPR Report.

The IEDIs ranged from 1–30% of the maximum ADI. The Meeting concluded that long-term dietary exposure to residues of fosetyl-aluminium and phosphonic acid from uses considered by the JMPR is unlikely to present a public health concern.

***Acute dietary exposure***

The 2017 JMPR decided that an ARfD for fosetyl-aluminium and for phosphonic acid was unnecessary. The Meeting therefore concluded that the acute dietary exposure to residues of fosetyl-aluminium plus phosphonic acid from the uses considered, is unlikely to present a public health concern.

## 5.12 GLYPHOSATE (158)

### RESIDUE AND ANALYTICAL ASPECTS

Glyphosate is a widely used non-selective herbicide. Glyphosate was first evaluated for toxicology and residues by the JMPR in 1986. It was further evaluated for residues on multiple occasions by the JMPR including a periodic review of residues in 2005.

The 2011 JMPR established a group ADI of 0–1 mg/kg bw for the sum of glyphosate, N-acetyl glyphosate, AMPA and N-acetyl-AMPA. The same Meeting confirmed that an ARfD was unnecessary.

Definition of the residue for compliance with the MRL (for plant commodities): *for soya bean, maize and rape - sum of glyphosate and N-acetyl-glyphosate, expressed as glyphosate*; and for other crops - *glyphosate*.

Definition of the residue for compliance with the MRL (for animal commodities): *sum of glyphosate and N-acetyl-glyphosate, expressed as glyphosate*.

The residue definition for dietary risk assessment (for plant and animal commodities): *glyphosate, N-acetyl-glyphosate, AMPA and N-acetyl AMPA, expressed as glyphosate*.

The residue is not fat soluble.

Glyphosate was scheduled at the Fiftieth Session of the CCPR for the evaluation of additional uses at the Extra 2019 JMPR. The current Meeting received information on analytical method for lentil, storage stability, use pattern and supervised residue trials on conventional varieties of lentil, bean dry and tree nuts.

#### **Methods of analysis**

An HPLC-FLD analytical method used for determining residues of glyphosate and AMPA in pea dry, bean dry, and tree nuts was previously evaluated by the 2005 JMPR. A new analytical method for lentils along with validation data was received by the Meeting. The residues in lentil were extracted with a 0.1% formic acid solution, centrifuged and analysed by LC-MS/MS. The method was validated with LOQs of 0.05 mg/kg for both glyphosate and AMPA in lentils.

#### **Storage stability of residues**

In 2005, JMPR confirmed that glyphosate residues were stable under frozen storage conditions (-20 °C) in/on the following commodities (storage interval in parentheses): beans, rape and linseed (at least 18 months), and soya bean seed (at least 6 months).

All samples in new residue trials were stored frozen for less than 5 months before extraction and analysis.

#### **Results of supervised residue trials on crops**

The Meeting received supervised trial data for foliar applications of glyphosate on lentils, bean dry, almond, pecan and walnut.

To calculate the sum of glyphosate and AMPA, expressed as parent equivalents (total residues), the Meeting used the approach agreed at the 2005 JMPR.

“When glyphosate and AMPA were summed, AMPA was converted to glyphosate equivalents (AMPA mg/kg  $\times$  1.523). All numerical figures for glyphosate application rates (kg ae/ha) or residue levels (mg/kg) are expressed as glyphosate acid equivalents (molecular weight 169 atomic mass units (amu)), and do not include any mass amounts for the salt cation (e.g., isopropylamine).”

“If AMPA residues are < 0.05 mg/kg, they are not summed with glyphosate, because they are typically much less than glyphosate residues. If both glyphosate and AMPA are < LOQ, then sum is < LOQ of glyphosate. The exception is where there is evidence that AMPA residues are comparable to

glyphosate residues such as for soya beans in which case the residues are summed and if both glyphosate and AMPA residues are < LOQ, the sum is less than the combined LOQs for glyphosate and AMPA. “

The Meeting noted that soya bean is a representative crop for metabolism of pulses and decided to extend the above approach to pulses.

The table below describes how total residues were calculated for each trial.

Glyphosate (mg/kg)	AMPA (mg/kg)	Total (mg/kg)
<0.05	<0.05	<0.05
<0.05	<0.05	<0.1 (Pulses)
0.05	<0.05	0.05
0.05	0.05	0.13 (0.05+(0.05×1.523))

### *Dry peas, subgroup of*

The critical GAP for dry peas, lentils and chickpeas in the USA is 2 applications of 4.2 kg ai/ha pre-emergence and 2.5 kg ai/ha pre-harvest with a PHI of 7 days.

Trials received by the current Meeting were conducted on lentils (four from the USA and seven from Canada) approximating GAP in the USA.

Glyphosate residues were (n=11) 0.37, 0.41, 0.90, 1.3, 1.6, 1.8, 1.9, 2.0, 2.9, 5.3, and 6.3 mg/kg. Total residues from these 11 trials in ranked order were (n=11) 0.37, 0.41, 0.90, 1.3, 1.6, 1.8, 1.9, 2.0, 2.9, 5.3, and 6.4 mg/kg (express as glyphosate).

In 2011, JMPR received five additional field trials on conventional peas (dry) performed in the USA in 1998, matching the US GAP. Glyphosate residues (glyphosate only) in seeds in rank of order were (n=5): 0.70, 0.77, 1.1, 3.4, and 4.2 mg/kg at DALA 7 days. As the residue of AMPA was below 0.05 mg/kg even when glyphosate residue was 5.3 mg/kg, the Meeting concluded that the residue of AMPA in peas, dry were below 0.05 mg/kg.

As the US GAP covers the subgroup of dry peas, the Meeting decided to recommend a maximum residue level for the subgroup of dry peas. The data on lentils and peas, dry, were not significantly different according to the Mann-Whitney U test. The Meeting decided to combine the datasets.

Combined residues of glyphosate were: (n=16) 0.37, 0.41, 0.70, 0.77, 0.90, 1.1, 1.3, 1.6, 1.8, 1.9, 2.0, 2.9, 3.4, 4.2, 5.3 and 6.3 mg/kg. The total residues were: (n=16) 0.37, 0.41, 0.70, 0.77, 0.90, 1.1, 1.3, 1.6, 1.8, 1.9, 2.0, 2.9, 3.4, 4.2, 5.3 and 6.4 mg/kg.

The Meeting estimated a maximum residue level for the subgroup of dry peas at 10 mg/kg, and an STMR at 1.7 mg/kg, and withdrew the previous maximum residue level recommendations for pea dry and lentil of 5 mg/kg.

### *Dry beans, except soya bean*

The critical GAP for dry beans in the UK is one application at 1.44 kg ai/ha pre-harvest with a PHI of 7 days.

Thirteen trials in beans, dry were conducted in the USA at an application rate of 4.20 kg ai/ha pre-emergence and an application rate of 1.71 kg ai/ha pre-harvest with harvest 7 DALA. The Meeting considered that the pre-emergence applications would not contribute significantly to residue levels at harvest.

The glyphosate residues found in these trials were (n=13): < 0.05, 0.06, 0.19 (2), 0.20, 0.21, 0.32, 0.53, 0.63, 0.80, 1.8, 2.6 and 10 mg/kg. The total residues of glyphosate residues were (n=13): < 0.1, 0.06, 0.19(2), 0.20, 0.21, 0.32, 0.53, 0.63, 0.80, 1.8, 2.6 and 11 mg/kg.

The Meeting noted that dry bean is the representative commodity for the dry beans subgroup, and estimated a maximum residue level of 15 mg/kg and a STMR of 0.32 mg/kg for glyphosate for the

dry beans subgroup (except soya bean). The Meeting withdrew its previous recommendation of 2 mg/kg for beans, dry.

### ***Tree nuts***

The critical GAP for tree nuts in the USA is for one or more ground directed applications of 4.2 kg ai/ha up to a maximum seasonal rate of 8.8 kg ai/ha and a PHI of 3 days.

The 2005 JMPR received trial data for glyphosate on almond, pecan, and walnut from the USA, which included one directed application of 8.9 kg ai/ha with harvest 3 DALA. The residue trials submitted did not match the GAP.

The current Meeting did not receive new residue data. The Meeting concluded that the proportionality approach could not be applied to the available data, thus an estimate of a maximum residue level could not be performed.

### ***Animal feed commodities***

The maximum dietary burdens calculated by the 2005 JMPR for cattle and poultry were 381 ppm for cattle and 22.7 ppm for poultry. The current Meeting calculated the additional contribution to the dietary burdens for cattle and poultry from the residues in pea dry and bean dry represented a minor portion (up to 0.79 ppm) of the dietary burdens calculated by the 2005 JMPR. The Meeting confirmed its previous recommendations for animal commodities.

## **RECOMMENDATIONS**

On the basis of the data from supervised trials the Meeting concluded that the residue levels listed below are suitable for establishing maximum residue limits and for IEDI assessment.

Definition of the residue for compliance with the MRL (for plant commodities): for soya bean, maize and rape - sum of glyphosate and N-acetyl-glyphosate, expressed as glyphosate, and for other crops - glyphosate.

Definition of the residue for compliance with the MRL (for animal commodities): sum of glyphosate and N-acetyl-glyphosate, expressed as glyphosate.

Definition of the residue for dietary risk assessment (for plant and animal commodities): glyphosate, N-acetyl-glyphosate, AMPA and N-acetyl AMPA, expressed as glyphosate.

The residue is not fat soluble.

## **DIETARY RISK ASSESSMENT**

### ***Long-term dietary exposure***

The ADI for glyphosate is 0–1 mg/kg bw. The International Estimated Daily Intakes (IEDIs) for glyphosate were estimated for the 17 GEMS/Food Consumption Cluster Diets using the STMR or STMR-P values estimated by the JMPR. The results are shown in Annex 3 of the 2019 Extra JMPR Report.

The IEDIs ranged from 1–4% of the maximum ADI. The Meeting concluded that long-term dietary exposure to residues of glyphosate from uses considered by the JMPR is unlikely to present a public health concern.

### ***Acute dietary exposure***

The 2011 JMPR decided that an ARfD for glyphosate was unnecessary. The Meeting therefore concluded that the acute dietary exposure to residues of glyphosate from the uses considered is unlikely to present a public health concern.



### 5.13 MESOTRIONE (277)

#### TOXICOLOGY

Mesotrione (2-(4-mesyl-2-nitrobenzoyl)cyclohexane-1,3-dione) was evaluated by JMPR in 2014, when an ADI of 0–0.5 mg/kg bw was established. The Meeting concluded that it was not necessary to establish an ARfD for mesotrione (Annex 5, reference 133).

The 2014 Meeting also assessed data on two metabolites of mesotrione: AMBA (2-amino-4-methylsulfonylbenzoic acid) and MNBA (2-nitro-4-methylsulfonylbenzoic acid). On the basis of the “Plant and animal metabolite assessment scheme” of JMPR, the 2014 Meeting concluded that these two metabolites were unlikely to be a safety concern (Annex 5, reference 133).

Following a request for additional maximum residue levels by CCPR, mesotrione was placed on the agenda of the present Meeting, which assessed additional toxicological information available since the last review.

Several toxicological studies on the two metabolites of mesotrione, AMBA and MNBA, were submitted to the present Meeting, including a study on systemic exposure to AMBA from MNBA, two-generation reproductive toxicity and developmental toxicity studies with MNBA, and an in vivo micronucleus assay with AMBA. No new information on mesotrione, the parent compound, was submitted.

All critical studies contained statements of compliance with GLP and were conducted in accordance with relevant national or international test guidelines, unless otherwise specified. No additional information from a literature search was identified that complemented the toxicological information submitted for the current assessment.

#### ***Biochemical aspects of metabolites***

Systemic exposure to AMBA was confirmed following a single oral gavage administration of MNBA to rats at 75 mg/kg bw. Exposure to AMBA was 2- to 3-fold higher than exposure to MNBA based on blood AUC<sub>0–24 h</sub>. Both metabolites were detected in red blood cells and plasma.

#### ***Toxicological data on metabolites***

##### ***AMBA (plant, livestock and rat metabolite)***

AMBA was negative in an in vivo micronucleus assay in rats. Taken together with the results of the in vitro genotoxicity tests evaluated by the 2014 Meeting, the current Meeting concluded that AMBA is unlikely to be genotoxic in vivo.

##### ***MNBA (plant, livestock and rat metabolite)***

In a two-generation reproductive toxicity study in rats treated with MNBA at 0, 100, 300 or 1000 mg/kg bw per day via oral gavage, the NOAEL for parental, offspring and reproductive toxicity was 1000 mg/kg bw per day, the highest dose tested.

In a developmental toxicity study in rats treated with MNBA at 0, 100, 300 or 1000 mg/kg bw per day by gavage from day 6 to day 19 of gestation, the NOAEL for maternal and embryo/fetal toxicity was 1000 mg/kg bw per day, the highest dose tested.

#### **Toxicological evaluation**

The Meeting concluded that no revision of the ADI or the ARfD for mesotrione was necessary. In addition, the Meeting confirmed the previous conclusion by the 2014 JMPR that MNBA and AMBA are unlikely to be a safety concern.

An addendum to the toxicological monograph was prepared.

### ***Critical end-points for setting guidance values for exposure to mesotrione metabolites***

#### *Studies on metabolites*

##### **MNBA**

Systemic exposure to MNBA and AMBA following oral exposure to MNBA	Administration of MNBA to rats leads to systemic exposure to both MNBA and AMBA
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##### Reproductive toxicity

Lowest relevant parental NOAEL	1 000 mg/kg bw per day, highest dose tested (rat)
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Lowest relevant offspring NOAEL	1 000 mg/kg bw per day, highest dose tested (rat)
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Lowest relevant reproductive NOAEL	1 000 mg/kg bw per day, highest dose tested (rat)
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##### Developmental toxicity

Lowest relevant maternal NOAEL	1 000 mg/kg bw per day, highest dose tested (rat)
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Lowest relevant embryo/fetal NOAEL	1 000 mg/kg bw per day, highest dose tested (rat)
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##### **AMBA**

In vivo rat micronucleus assay	No evidence of genotoxicity in vivo
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## **RESIDUE AND ANALYTICAL ASPECTS**

Mesotrione, a herbicide, was firstly evaluated by the JMPR in 2014, when an ADI of 0–0.5 mg/kg bw was established, and an ARfD was unnecessary. The residue definition for plant and animal commodities, for both compliance with MRLs and dietary risk assessment is: *mesotrione*. The residue is not fat soluble.

At the Fiftieth Session of the CCPR (2018), mesotrione was scheduled for evaluation of additional uses by the 2019 Extra JMPR. The current Meeting received GAP information, residue data and processing studies for citrus fruit, pome fruit, stone fruit and tree nuts.

### ***Methods of analysis***

Residues were determined in the crops with a method involving extraction with acetonitrile/water containing sodium chloride, with a final determination, following dilution with methanol/water, using HPLC-MS/MS. The Meeting concluded that suitable methods are available for the determination of residues of mesotrione with a LOQ of 0.01 mg/kg in the commodities under consideration.

### ***Stability of residues in stored analytical samples***

The stability of residues has been assessed previously by the JMPR for a range of crop matrices. In this meeting stability data were provided for lettuce leaf, orange (fruit and juice) and almond nutmeat indicating that residues of mesotrione were stable in these commodities for at least 24 months of frozen storage. The maximum length of storage of commodities considered by the current meeting was up to 277 days. All trial samples and processed commodities were analysed within acceptable storage intervals.

### ***Results of supervised residue trials on crops***

#### ***Citrus fruits***

The critical GAP in the USA for citrus is two applications at 210 g ai/ha with a PHI of 1 day. Eleven residue trials in orange, six in grapefruit, and five in lemon, approximating the GAP but with a shorter



application interval were received.

Residues in citrus fruits (oranges, grapefruits and lemons) were all < 0.01 mg/kg (n=22).

Whilst trial data are not available for the subgroup mandarins, the other various citrus crop data that are available show that residues would not be expected in mandarins following the GAP for citrus fruits. The Meeting agreed to include mandarins in the recommendation.

Six trials across various fruit tree crops including citrus fruits conducted at an exaggerated rate (3×) for the purpose of studying processing showed residues < 0.01 mg/kg. Furthermore, mesotrione is applied to the ground at the base of the trees and not directed to the crop.

The Meeting estimated a maximum residue level of 0.01(\*) mg/kg and a STMR of 0 mg/kg for the citrus fruits group.

### ***Pome fruits***

The critical GAP in the USA for pome fruit is two applications at 210 g ai/ha with a PHI of 30 days. Twelve residue trials in apples and six in pears, approximating the GAP but with a shorter application interval were received.

Residues in pome fruits (apples and pears) were all < 0.01 mg/kg (n=18).

Six trials across various fruit tree crops including pome fruits conducted at an exaggerated rate (3×) for the purpose of studying processing showed residues < 0.01 mg/kg. Furthermore, mesotrione is applied to the ground at the base of the trees and not directed to the crop.

The Meeting estimated a maximum residue level of 0.01(\*) mg/kg and a STMR of 0 mg/kg for the pome fruits group.

### ***Stone fruits***

The critical GAP in the USA for stone fruits is two applications at 210 g ai/ha with a PHI of 30 days. Six residue trials in cherries, nine in peaches and six in plums, approximating the GAP but with a shorter application interval, were received.

Residues in stone fruits (cherries, peaches and plums) were all < 0.01 mg/kg (n=21).

Six trials across various fruit tree crops including stone fruits conducted at an exaggerated rate (3×) for the purpose of studying processing showed residues < 0.01 mg/kg. Furthermore, mesotrione is applied to the ground at the base of the trees and not directed to the crop.

The Meeting estimated a maximum residue level of 0.01(\*) mg/kg and a STMR of 0 mg/kg for stone fruits group.

### ***Tree nuts***

The critical GAP in the USA for tree nuts is two applications at 210 g ai/ha with a PHI of 30 days. Five residue trials in almonds and five in pecans, approximating the GAP but with a shorter application interval were received.

Residues in tree nuts (almonds and pecans) were all < 0.01 mg/kg (n=10).

The Meeting estimated a maximum residue level of 0.01(\*) mg/kg and a STMR of 0.01 mg/kg for tree nuts group.

## ***Animal feed commodities***

### ***Almond hulls***

The critical GAP is for the USA which is two applications at 210 g ai/ha with a PHI of 30 days. Five residue trials in almonds, approximating the GAP but with a shorter retreatment interval were available.

Residues in almond hulls were  $< 0.01$  (4) and 0.025 mg/kg.

The Meeting estimated a maximum residue level of 0.04 mg/kg (dry weight basis) and a median of 0.01 mg/kg for almond hulls.

### ***Residues in processed commodities***

The current meeting received residue data on the magnitude of residues over processing for mesotrione on citrus fruits (orange), pome fruits (apple), and stone fruits (plums). Two trials for each commodity were conducted at an exaggerated rate (3×); residues were below the LOQ ( $< 0.01$  mg/kg) in both raw and processed fractions and it was not possible to derive processing factors.

### ***Residues in animal commodities***

Dietary burden calculations, incorporating almond hulls and the other feed items considered by the JMPR in 2014, have been undertaken. Estimation by the present meeting does not impact on the previous (2014) level of the dietary burden. The Meeting confirmed the previous recommendations for mesotrione for animal commodities.

## **RECOMMENDATIONS**

On the basis of the data obtained from supervised trials, the Meeting concluded that the residue levels listed in Annex 1 are suitable for establishing maximum residue limits and for IEDI assessment.

Definition of the residue for compliance with the MRL and dietary risk assessment for plant commodities: mesotrione.

Definition of the residue for compliance with the MRL and dietary risk assessment for animal commodities: mesotrione.

*The residue is not fat-soluble.*

## **DIETARY RISK ASSESSMENT**

### ***Long-term dietary exposure***

The ADI for mesotrione is 0–0.5 mg/kg bw. The International Estimated Daily Intakes (IEDIs) for mesotrione were estimated for the 17 GEMS/Food Consumption Cluster Diets using the STMR or STMR-P values estimated by the JMPR. The results are shown in Annex 3 of the 2019 Extra JMPR Report.

The IEDIs were 0% of the maximum ADI. The Meeting concluded that long-term dietary exposure to residues of mesotrione from uses considered by the JMPR is unlikely to present a public health concern.

### ***Acute dietary exposure***

The 2014 JMPR decided that an ARfD for mesotrione was unnecessary. The Meeting therefore concluded that the acute dietary exposure to residues of mesotrione from the uses considered is unlikely to present a public health concern.

## 5.14 METAFLUMIZONE (236)

### TOXICOLOGY

Metaflumizone ((*EZ*)-2'-[2-(4-cyanophenyl)-1-( $\alpha,\alpha,\alpha$ -trifluoro-*m*-tolyl)ethylidene]-4-(trifluoromethoxy)carbanilohydrazide) was evaluated by JMPR in 2009, when an ADI of 0–0.1 mg/kg bw was established. The 2009 Meeting concluded that it was not necessary to establish an ARfD for metaflumizone (Annex 5, reference 118).

The 2009 Meeting also assessed data on two metabolites of metaflumizone: M320I23 (4-{5-hydroxy-3-oxo-4-[4-(trifluoromethoxy)phenyl]-6-[3-(trifluoromethyl)phenyl]-2,3,4,5-tetrahydro-1,2,4-triazin-5-yl}benzonitrile) and M320I29 (*m*-trifluoromethyl benzoic acid) (Annex 5, reference 118).

Following a request for additional maximum residue levels by CCPR, metaflumizone was placed on the agenda of the present Meeting, which assessed additional toxicological information available since the last review. The Meeting also applied the “Plant and animal metabolite assessment scheme” of JMPR to previously evaluated metabolites as well as those considered by the present Meeting.

Several toxicological studies on metaflumizone were submitted to the present Meeting, including further information on previously evaluated short-term and developmental toxicity studies, in vitro genotoxicity studies, two immunotoxicity studies and studies to assess androgenic and estrogenic effects of metaflumizone. In addition, studies on acute toxicity, dermal and eye irritation and in vitro genotoxicity for metabolite M320I04 (4-{2-oxo-2-[3-(trifluoromethyl)phenyl]ethyl}benzonitrile) and on in vitro and in vivo genotoxicity for metabolite M320I06 (4-cyanobenzoic acid) were submitted.

All critical studies contained statements of compliance with GLP and were conducted in accordance with relevant national or international test guidelines, unless otherwise specified. No additional information from a literature search was identified that complemented the toxicological information submitted for the current assessment.

#### **Toxicological data**

Further investigation of the brown pigment in the tubular epithelium of the kidney seen in the previously evaluated 1-year dog study confirmed that it was cytoplasmic lipofuscin.

Metaflumizone was negative in an Ames test.

The Meeting concluded that the additional information provided on absent subclavian artery in the previously evaluated developmental toxicity study in rabbits supported the conclusion of the 2009 Meeting that metaflumizone is not teratogenic.

In an immunotoxicity study, female rats were administered metaflumizone by gavage at a dose of 0, 15, 40 or 75 mg/kg bw per day for 28 days. The NOAEL for systemic toxicity was 40 mg/kg bw per day, based on decreased body weight gain and feed consumption at 75 mg/kg bw per day. The NOAEL for immunotoxicity was 75 mg/kg bw per day, the highest dose tested.

In a second immunotoxicity study, female rats were administered metaflumizone by gavage at 0, 15, 40 or 75 mg/kg bw per day for 28 days. The NOAEL for systemic toxicity was 40 mg/kg bw per day, based on suppressed body weight and lower feed consumption at 75 mg/kg bw per day. The NOAEL for immunotoxicity was 75 mg/kg bw per day, the highest dose tested.

The Meeting concluded that metaflumizone is not immunotoxic.

The androgenic/anti-androgenic and estrogenic/anti-estrogenic activities of metaflumizone were investigated using two yeast screening assays. Metaflumizone showed no androgenic/anti-androgenic or estrogenic/anti-estrogenic activity.

***Toxicological data on metabolites and/or degradates******M320I04 (4-{2-oxo-2-[3-(trifluoromethyl)phenyl]ethyl}benzonitrile; plant metabolite)***

M320I04 has low acute toxicity ( $LD_{50} > 2000$  mg/kg bw) and was not irritating to the skin or eyes of rabbits. It was negative for genotoxicity in a reverse mutation assay.

***M320I06 (4-cyanobenzoic acid; plant and livestock metabolite and soil degradate)***

M320I06 was not genotoxic in an adequate range of vitro and in vivo studies.

The Meeting concluded that M320I06 is not genotoxic.

***Human data***

A case-report of a poisoning incident did not provide any conclusive evidence regarding the toxicity of metaflumizone to humans.

**Toxicological evaluation**

The Meeting concluded that it was not necessary to revise the ADI or establish an ARfD for metaflumizone.

The Meeting concluded that M320I23 (plant metabolite/soil degradate), evaluated by the 2009 Meeting, was of similar or lower toxicity relative to the parent compound and of similar chemical structure and therefore would be covered by the ADI for metaflumizone.

The Meeting concluded that M320I04 (plant metabolite) and M320I06 (plant and livestock metabolite/soil degradate), evaluated by the present Meeting, and M320I29 (soil degradate), evaluated by the 2009 Meeting, were unlikely to be genotoxic. Following the “Plant and animal metabolite assessment scheme” of JMPR, the Meeting concluded that for chronic toxicity, these three metabolites could be assessed using the TTC approach. All three metabolites are categorized in Cramer class III, and therefore a TTC of 1.5 µg/kg bw per day applies.

The ADI applies to metaflumizone and M320I23, expressed as metaflumizone.

An addendum to the toxicological monograph was prepared.

***Acceptable daily intake (ADI) (applies to metaflumizone and M320I23, expressed as metaflumizone)***

0–0.1 mg/kg bw

***Critical end-points for setting guidance values for exposure to metaflumizone metabolites******Studies on metabolites***


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M320I04 (plant metabolite)	Oral $LD_{50} > 2\,000$ mg/kg bw
	No dermal irritation
	No ocular irritation
	No evidence of genotoxicity in vitro
M320I06 (plant and livestock metabolite; soil degradate)	No evidence of genotoxicity

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## RESIDUE AND ANALYTICAL ASPECTS

### ***Metabolism in plants***

Metaflumizone is a broad-spectrum semicarbazone insecticide composed of two optical isomers in the ratio E: Z of 90: 10. Metaflumizone was first evaluated for residues and toxicology in JMPR 2009, when an ADI of 0–0.1mg/kg bw was established and the Meeting concluded that an ARfD was unnecessary.

The 2009 JMPR also recommended the following residue definition for compliance with MRLs and estimation of dietary intake for plants and animals: *metaflumizone, sum of E-isomer and Z-isomer*. The residue is fat-soluble.

Metaflumizone was scheduled at the 50<sup>th</sup> Session of the CCPR for additional uses for residues by the 2019 JMPR extra meeting. The Meeting received information on environmental fate in soil, storage stability, use patterns, supervised residue trials and fate of residue during processing.

### ***Environmental fate***

The Meeting received one study of metaflumizone on degradation under aerobic condition in Brazilian soil. The half-lives of Metaflumizone applied at rate of 240 g ai/ha in four different soils were 61–205 days, the M320I04 was the major degradation product up to 21% of total applied radioactivity (61 days after application). The study confirmed the conclusion of previous evaluation.

### ***Stability of residues in stored analytical samples***

The Meeting received one storage stability study. The incurred residues of metaflumizone were found to be stable at <-5 °C for at least 729 to 971 days (24–32 months) in cucumber, sunflower seed, snap bean (succulent seed), potato, and strawberry.

### ***Results of supervised residue trials on crops***

The Meeting received supervised trial data for metaflumizone on citrus fruits, apple, grape, melon, soya bean, maize, sugarcane and coffee bean.

#### ***Citrus fruits***

The critical GAP for citrus fruits in Brazil is for 3 foliar applications at rate of 0.48 kg ai/ha, with a retreatment interval of 7 days and a PHI of 7 days. The Meeting received supervised residue trial data for metaflumizone on oranges and lemon conducted in Brazil.

##### ***Oranges***

In 11 trials conducted approximating the Brazilian GAP, the residues of metaflumizone in orange fruits were: 0.22(2), 0.34, 0.42(2), 0.66, 0.71, 0.84, 1.01, 1.21 and 1.35 mg/kg (n=11).

The Meeting estimated a maximum residue level of 3 mg/kg, and an STMR of 0.66 mg/kg for oranges, and agreed to extrapolate to the Oranges, Sweet, Sour sub group (including Orange-like hybrids, FC 0004).

##### ***Lemons***

In five trials conducted approximating the Brazilian GAP, residues of metaflumizone in lemon fruits were: 0.27, 0.3, 0.52, 0.91 and 1.06 mg/kg (n=5).

The Meeting estimated a maximum residue level of 2 mg/kg, and an STMR of 0.52 mg/kg for lemons, and agreed to extrapolate to the Lemons and limes subgroup (including citron, FC 0002).

### *Apples*

The critical GAP for apples in Brazil is 4 foliar applications at a rate of 0.24 kg ai/ha, with retreatment interval of 7 days and a PHI of 3 days. The Meeting received supervised residue trial data for metaflumizone on apples conducted in Brazil.

In 12 trials conducted approximating critical GAP in Brazil, the residues of metaflumizone in apples were: 0.16, 0.17, 0.19, 0.22, 0.24, 0.25, 0.3, 0.33, 0.43, 0.48, 0.52 and 0.54 mg/kg (n=12).

The Meeting estimated a maximum residue level of 0.9 mg/kg and an STMR of 0.275 mg/kg for apples.

### *Grapes*

The critical GAP for grapes in Brazil is 3 foliar applications at rate of 0.24 kg ai/ha, with a retreatment interval of 7 days and a PHI of 3 days. The Meeting received supervised residue trial data for metaflumizone on grapes conducted in Brazil.

In trials conducted approximating Brazilian GAP, the residues of metaflumizone in grapes were: 0.15, 0.27, 0.51, 0.63, 0.64, 0.75, 1.21, 1.39, 1.4, 1.84, 1.72 and 2.71 mg/kg (n=12).

The Meeting estimated a maximum residue level of 5 mg/kg and an STMR of 0.98 mg/kg for grapes.

### *Melons, except Watermelons*

The critical GAP for melons in Brazil is 5 foliar applications at rate of 0.192 kg ai/ha, with a retreatment interval of 7 days and a PHI of 3 days. The Meeting received supervised residue trial data for metaflumizone on melons conducted in Brazil.

In trials conducted approximating GAP, the residues of metaflumizone in melons were: < 0.02(2), 0.07, 0.1, 0.14, 0.2, 0.29 and 0.61 mg/kg (n=8), the residues of metaflumizone in pulp were < 0.02 (n=3).

The Meeting estimated a maximum residue level of 1 mg/kg and an STMR of 0.02 mg/kg for melons, except watermelon.

### *Soya bean*

The critical GAP for soya bean in Brazil is 3 foliar applications at rate of 0.24 kg ai/ha, with a retreatment interval of 7 days and a PHI of 14 days. The Meeting received supervised residue trial data for metaflumizone on soya beans conducted in Brazil.

In trials conducted approximating Brazilian GAP, the residues of metaflumizone in soya beans were: < 0.02(3), 0.02(2), 0.03, 0.07 and 0.11 mg/kg (n=8).

The Meeting estimated a maximum residue level of 0.2 mg/kg and an STMR of 0.02 mg/kg for soya beans.

### *Maize*

The critical GAP for maize in Brazil is 5 foliar applications at rate of 0.24 kg ai/ha, with a retreatment interval of 7 days and a PHI of 14 days. The Meeting received supervised residue trial data for metaflumizone on maize conducted in Brazil.

In trials conducted approximating Brazilian GAP, the residues of metaflumizone in maize grains were: < 0.02(7), 0.02 mg/kg (n=8).

The Meeting estimated a maximum residue level of 0.04 mg/kg and an STMR of 0.02 mg/kg for maize grains.

**Sugarcane**

The critical GAP for sugarcane in Brazil is one application at rate of 0.48 kg ai/ha as an in-furrow treatment at planting. The Meeting received supervised residue trial data for metaflumizone on sugarcane conducted in Brazil.

In trials conducted at an exaggerated rate of 1.2 kg ai/ha, the residues of metaflumizone in sugarcane were: < 0.02(6) mg/kg.

The Meeting estimated a maximum residue level of 0.02(\*) mg/kg and an STMR of 0 mg/kg for sugarcane considering all residues were less than LOQ after application at 3 times the GAP rate as an in-furrow at planting treatment.

**Coffee bean**

The critical GAP for coffee in Brazil is 2 foliar applications at rate of 0.48 kg ai/ha, with a retreatment interval of 30 days and a PHI of 45 days. The Meeting received supervised residue trial data for metaflumizone on coffee conducted in Brazil.

In trials conducted approximating Brazilian GAP, the residues of metaflumizone in coffee beans were: < 0.02(6), 0.02(2), 0.05(2), 0.06(2), 0.09 mg/kg (n=13).

The Meeting estimated a maximum residue level of 0.15 mg/kg and an STMR of 0.02 mg/kg for coffee beans

**Fate of residues during processing**

The Meeting received processing studies on orange, apple, grape and coffee. A summary of the processing factors is provided below.

Commodity	Processed Fraction	Processing Factor	Best estimate PF	RAC STMR or STMR-P or median residues
Orange	Fruits (RAC)			0.66
	Juice	0.01, <u>0.01</u> , 0.02	0.01	0.0066
	Dry pulp	0.01, <u>0.01</u> , 0.01	0.01	0.0066
	Oil	20.14, <u>34.86</u> , 35.15	34.86	23
Coffee	Roasted and ground beans	<u>0.23</u>	0.23	0.02
	Instant coffee	<u>0.23</u>	0.23	0.046
Apple	Juice	0.06, <u>0.08</u> , 0.42	0.08	0.275
	Apple sauce	<0.03, < <u>0.03</u> , <0.05	<0.03	0.022
	Canned apples	<0.03, < <u>0.03</u> , <0.05,	<0.03	<0.00825
	Dried apples	0.04, <u>0.04</u> , 0.06	0.04	<0.00825
	Dried pomace	13.00, <u>16.38</u> , 17.22	16.38	0.011
	Wet pomace	3.29, <u>3.46</u> , 4.54	3.46	4.5
Grapes	Must separated	0.01, 0.02, <u>0.16</u> , <u>0.17</u> , 0.26, 1.78	0.165	0.98
	Must naturally cloudy	0.02, 0.11, <u>1.06</u> , <u>1.78</u> , 1.82, 1.92	1.42	0.16
	Pasteurized juice	0.14, 0.21, <u>0.88</u> , <u>1.25</u> , 1.44, 2.74	1.065	1.39
	Pomace	1.18, 2.14, <u>2.45</u> , <u>2.55</u> , 2.91, 3.30	2.5	1.04
	Raisins	1.26, <u>2.60</u> , 2.84	2.60	2.45
	Wine	<0.01, <0.1, < <u>0.08</u> , < <u>0.08</u> , <0.11, <0.11	<0.08	2.55
				0.078

The residues of Metaflumizone concentrated in orange oil, and raisins, the Meeting estimated a maximum residue level of 100 mg/kg (3 × 35) for orange oil, 13 mg/kg (5 × 2.6) for Dried grapes (=currants, Raisins and Sultanas).

## Residues in animal commodities

### Estimation of livestock dietary burdens

Dietary burdens were calculated for beef cattle, dairy cattle, broilers and laying poultry based on feed items evaluated by the JMPR. Potential cattle feed items include: citrus pulp, apple pomace, grape pomace, tomato pomace, maize grain and soya bean seed. The dietary burdens, estimated using the OECD diets listed in Appendix IX of the 2016 edition of the FAO manual, are presented in Annex 6 and summarised below.

Summary of livestock dietary burden (ppm Metaflumizone equivalents of dry matter diet)

	US-Canada		EU		Australia		Japan	
	Max	Mean	Max	mean	max	Mean	max	Mean
Beef cattle	0.02	0.02	0.503	0.503	3.28	3.28	0.02	0.02
Dairy cattle	0.255	0.255	0.252	0.252	3.28 <sup>A B</sup>	3.28 <sup>C D</sup>	0.02	0.02
Broilers	0.022	0.02	0.02	0.02	0.003	0.003	0.016	0.016
Layers	0.022 <sup>E</sup>	0.022 <sup>F</sup>	0.019	0.019	0.0034	0.0034	0.0182	0.0182

<sup>A</sup> Highest maximum beef or dairy cattle dietary burden suitable for maximum residue level estimates for mammalian meat.

<sup>B</sup> Highest maximum dairy cattle dietary burden suitable for maximum residue level estimates for mammalian milk.

<sup>C</sup> Highest mean beef or dairy cattle dietary burden suitable for STMR estimates for mammalian meat.

<sup>D</sup> Highest mean dairy cattle dietary burden suitable for STMR estimates for milk.

<sup>E</sup> Highest maximum poultry dietary burden suitable for maximum residue level estimates for poultry meat and eggs.

<sup>F</sup> Highest mean poultry dietary burden suitable for STMR estimates for poultry meat and eggs.

### Animal commodity maximum residue levels

The calculations used to estimate maximum residue levels, STMR values for cattle matrices are shown below.

	Feed level (ppm) for milk residues	Residues (mg/kg) in milk	Residues (mg/kg) in cream	Feed level (ppm) for tissue residues	Residues of metaflumizone (mg/kg)			
					Muscle	liver	Kidney	Fat
MRL (mg/kg), beef or dairy cattle								
Feeding study	1.0	<0.01	0.0519	1.0	<0.02	<0.02	<0.02	0.0429
	5.5	0.0286	0.242	5.5	<0.02	<0.02	<0.02	0.182
Dietary burden and high residue estimation	3.28	0.019	0.148	3.28	<0.02	<0.02	<0.02	0.115
STMR (mg/kg), beef or dairy cattle								
Feeding study	1.0	<0.01	0.0473	1.0	<0.02	<0.02	<0.02	0.0191
Dietary burden and median residue estimated	5.5	<0.01	0.117	5.5	<0.02	<0.02	<0.02	0.163
Dietary burden and median residue estimation	3.28	<0.01	0.083	3.28	<0.02	<0.02	<0.02	0.092

The maximum dietary burden calculated for cattle is 3.35 ppm for beef cattle and 3.34 ppm for dairy cattle. The mean dietary burden calculated for cattle is 3.35 ppm for beef cattle and 3.34 ppm for dairy cattle.

The Meeting estimated a maximum residue level of 0.02 mg/kg for milk, 0.6 mg/kg for milk fat (0.131×4, cream containing 25% fat) and 0.02(\*) (fat) mg/kg for meat from mammals other than marine mammals, 0.02(\*) mg/kg for edible offal (mammalian), and 0.15 mg/kg for mammalian fat except milk fat. The Meeting estimated STMRs of 0.01 mg/kg for milk, 0.33 mg/kg for milk fat, 0.02



mg/kg for meat from mammals other than marine mammals and edible offal (mammalian), and 0.092 mg/kg for mammalian fat. The Meeting decided to withdraw the previous recommendation.

The calculations used to estimate maximum residue levels, STMR values for poultry matrices are shown below.

	Feed level (ppm) for egg residues	Residues (mg/kg) in egg	Feed level (ppm) for tissue residues	Residues of metaflumizone (mg/kg)		
				Muscle	liver	Fat
MRL (mg/kg), broiler or layer poultry						
Feeding study	0.1	0.061	0.1	0.021	0.033	0.338
Dietary burden and high residue estimation	0.022	0.013	0.022	0.0046	0.0073	0.074
STMR (mg/kg), broiler or layer poultry						
Feeding study	0.1	0.035	0.1	0.01	0.031	0.315
Dietary burden and median residue estimation	0.022	0.0077	0.022	0.0022	0.00688	0.0693

The maximum and mean dietary burdens calculated for poultry (layers and broiler) are 0.022 ppm.

The Meeting estimated maximum residue levels of 0.02 mg/kg for egg, 0.02(\*) (fat) mg/kg for poultry meat, 0.08 mg/kg for poultry fat and 0.02(\*) mg/kg for poultry edible offal. The Meeting estimated STMRs of 0.0077 mg/kg for eggs, 0.0022 mg/kg for poultry meat, 0.0068 mg/kg for poultry edible offal, and 0.069 mg/kg for poultry fat.

## RECOMMENDATIONS

On the basis of the data from supervised trials the Meeting concluded that the residue levels listed in Annex 1 are suitable for establishing maximum residue limits and for IEDI and IESTI assessment (to be added).

The residue definition for compliance with MRLs and estimation of dietary intake for plants and animals: *metaflumizone, sum of E-isomer and Z-isomer*.

The residue is fat-soluble.

## DIETARY RISK ASSESSMENT

### Long-term dietary exposure

The ADI for metaflumizone is 0–0.1 mg/kg bw. The International Estimated Daily Intakes (IEDIs) for metaflumizone were estimated for the 17 GEMS/Food Consumption Cluster Diets using the STMR or STMR-P values estimated by the JMPR. The results are shown in Annex 3 of the 2019 Extra JMPR Report. The IEDIs ranged 1–4% of the maximum ADI. The Meeting concluded that long-term dietary exposure to residues of metaflumizone from uses considered by the JMPR is unlikely to present a public health concern.

### Acute dietary exposure

The 2009 JMPR decided that an ARfD for Metaflumizone was unnecessary. The Meeting therefore concluded that the acute dietary exposure to residues of metaflumizone from the uses considered is unlikely to present a public health concern.

### Threshold of toxicological concern (TTC) approach for metabolites

The metabolites M320I04, M320I06 and M320I29 are unlikely to be genotoxic and could be assessed using the TTC approach (Cramer Class III threshold of 1.5 µg/kg bw per day).

The metabolite M320I04 was found in plant metabolism studies, present at 11–22% of the metaflumizone (E+Z) residues in cabbage and tomato; and 45% in cotton seed but at a low level (0.059 mg/kg). In all field trials, the residues of M320I04 did not exceed 20% of the metaflumizone (E+Z) residues. M320I04 was the major degradation product under baking, brewing, boiling simulation and represented up to 26% of applied radioactivity. The maximum IEDI (Annex 3) calculated for metaflumizone is 3.83 µg/kg bw. Based on the highest ratio between the metabolite and parent of 0.26 (simulated hydrolysis), the estimated maximum IEDI is 1.0 µg/kg bw.

The residues of M320I06 in the plant metabolism studies were much lower than M320I04. M320I06 was not found in either processing studies or supervised trials. M320I029 was only found in soil and not expected in plant commodities.

Therefore, the Meeting concluded that dietary exposure to residues of M320I04, M320I06 and M320I29 from uses considered by the JMPR would not be expected to be a safety concern.

## 5.15 METHOPRENE (147)

### RESIDUE AND ANALYTICAL ASPECTS

Methoprene, an insect growth regulator, was first evaluated by the JMPR in 1984 and evaluated for residues several times. The most recent residues evaluation was conducted in 2016. The ADI of 0–0.09 mg/kg bw was established for racemic methoprene (R and S enantiomers in ratio 1:1); a separate ADI of 0–0.05 mg/kg bw was established for S-methoprene (2001). An ARfD was unnecessary. The residue definition for methoprene and for S-methoprene for plant and animal commodities, for both compliance with MRLs and dietary risk assessment, is methoprene. The residue is fat soluble.

At the Fiftieth Session of the CCPR (2018), methoprene was scheduled for evaluation of additional use patterns by the 2019 Extra JMPR. The current Meeting received residue data for post-harvest use on stored peanuts.

#### ***Methods of analysis***

Residues of methoprene were determined in peanuts using an HPLC-UV analytical method that was previously evaluated by the 2016 JMPR. New data validating the method for peanuts was received by the Meeting with the lower and upper levels of fortification validated being 1.3 and 2.7 mg/kg. Based on the residue levels found in the trials, the Meeting concluded that the available validation data are adequate to ensure the validity of the results.

#### ***Stability of residues in stored analytical samples***

The 2005 Meeting concluded that “numerous laboratory and field trials have shown long term stability of methoprene in stored grain, not only at -20°C but even at room temperature”. Noting that residues of methoprene in wheat grain trials evaluated by the JMPR in 2005 remained stable over 180 days of ambient storage, the Meeting concluded that residues of methoprene in samples from the peanut supervised trials would be stable over the periods of frozen storage of up to 149 days.

#### ***Results of supervised residue trials on crops***

##### ***Peanut***

The critical GAP in the USA is application of S-methoprene at up to 36.4 g ai/1000 bushels (corresponding to up to 4.5 g ai/t) with no withholding period specified. Five residue trials from the USA at dose rates (2.4 g ai/t; 64, 66, 69, 76 and 76% of GAP rate in g ai/1000 bushels) below the critical GAP were provided to the Meeting.

Residues in peanuts in rank order (n=5) were: 1.8, 2.0 (3), and 2.1 mg/kg.

As in the trials, where S-methoprene was applied separately to different peanut lots simulating commercial application practice, the results reflected a high recovery of applied methoprene (75 to 88% of the 2.4 g ai/t applied in all the trials), the Meeting decided that the application rate determined the level of residue expected at the zero day withholding period of the GAP.

Based on the GAP, and with an anticipated variation in weights of different peanut varieties per 1000 bushels (the label expression reflecting amount of S-methoprene applied to 1000 bushels of peanuts), the Meeting considered that residues of up to about 4.5 mg/kg can be anticipated.

The Meeting estimated a maximum residue level of 5 (Po) mg/kg and a STMR of 5 mg/kg.

#### ***Residues in animal commodities***

Peanut meal can be fed to livestock. The 2016 JMPR evaluated residues of methoprene in cereal grains and oilseeds (except for peanuts). Estimation by the present Meeting, now including peanuts, does not significantly increase the previously estimated (2016) maximum dietary burdens of 13.46 ppm in the diet of cattle and 10.62 ppm for poultry. The Meeting confirmed its previous conclusions for animal

commodities.

### RECOMMENDATIONS

On the basis of the data obtained from supervised trials, the Meeting concluded that the residue levels listed in Annex 1 are suitable for establishing maximum residue limits and for IEDI assessment.

Definition of the residue for compliance with the MRL and dietary risk assessment for plant commodities: methoprene

Definition of the residue for compliance with the MRL and dietary risk assessment for animal commodities: methoprene

*The residue is fat-soluble.*

### DIETARY RISK ASSESSMENT

#### ***Long-term dietary exposure***

The ADI for S-methoprene is 0–0.05 mg/kg bw. The International Estimated Daily Intakes (IEDIs) for methoprene were estimated for the 17 GEMS/Food Consumption Cluster Diets using the STMR or STMR-P values estimated by the JMPR. The results are shown in Annex 3 of the 2019 Extra JMPR Report.

Assuming the residues are S-methoprene, the IEDIs ranged from 10–60% of the maximum ADI. The Meeting concluded that long-term dietary exposure to residues of methoprene from uses considered by the JMPR is unlikely to present a public health concern.

#### ***Acute dietary exposure***

The 2001 JMPR decided that an ARfD for methoprene was unnecessary. The Meeting therefore concluded that the acute dietary exposure to residues of methoprene from the uses considered is unlikely to present a public health concern.

## 5.16 PENDIMETHALIN (292)

### RESIDUE AND ANALYTICAL ASPECTS

Pendimethalin is a meristematic inhibitor herbicide that interferes with plant cellular division or mitosis. Pendimethalin was first evaluated for toxicology and residues by the JMPR in 2016. The compound has an ADI of 0–0.1 mg/kg bw and an ARfD of 1 mg/kg bw. The residue definition for both plant and animal commodities for compliance with the MRL and dietary risk assessment is pendimethalin. The residue is fat soluble.

It was scheduled at the Fiftieth Session of the CCPR for the evaluation of additional uses by the 2019 Extra JMPR. The current Meeting received information on storage stability, use patterns and supervised residue trials for berries and herbs.

#### ***Storage stability of residues***

The 2016 JMPR confirmed that pendimethalin residues in high water, high starch and high acid content matrices were stable for at least 24 months. In soya bean and almond nutmeat, pendimethalin was stable for up to 18 and 12 months, respectively. The frozen storage periods of samples in the trials submitted to the current Meeting were less than 18 and 24 months after sampling for berries and herbs, respectively.

#### ***Results of supervised residue trials on crops***

The Meeting received supervised residue trial data for soil applications of pendimethalin on cane berries, blue berries, strawberries and mint.

##### ***Cane berries, subgroup of***

The critical GAP for pendimethalin on cane berries in the USA is one soil application at a rate of 6.7 kg ai/ha and a PHI of 30 days.

Six supervised field trials were conducted on cane berries in the USA matching the critical GAP for soil application.

Residues of pendimethalin in blackberry were (n=4): < 0.05 (4) mg/kg.

Residues of pendimethalin in raspberry were (n=2): < 0.05 (2) mg/kg.

Noting that the US GAP covers the cane berries subgroup, the Meeting decided to estimate a maximum residue level of 0.05(\*) mg/kg, STMR of 0.05 mg/kg and HR of 0.05 mg/kg for the cane berries subgroup.

##### ***Bush berries, subgroup of***

The critical GAP for pendimethalin on bush berry in the USA is one soil application at a rate of 6.7 kg ai/ha and a PHI of 30 days.

Seven trials on blueberries were conducted in the USA matching the GAP.

In blueberries, residues of pendimethalin in these trials were (n=7): < 0.05 (7) mg/kg.

The Meeting noted that the US GAP is for bush berries, and decided to estimate a maximum residue level of 0.05(\*) mg/kg, STMR of 0.05 mg/kg and HR of 0.05 mg/kg for the bush berries subgroup.

##### ***Strawberry***

The critical GAP in Ireland and UK is one soil application at 1.3 kg ai/ha after flower initiation but before flower truss emergence. In six European trials at 1 kg ai/ha, residues of pendimethalin were

< 0.01 (6) mg/kg. In four other trials, with higher application rates of 1.6 kg ai/ha, residues were found from < 0.01 to 0.016 mg/kg.

The critical GAP for pendimethalin in low growing berries including strawberry in the USA is 1 soil application at 3.2 kg ai/ha and a PHI of 35 days. In eight trials approximating the US GAP conducted in the USA, residues of pendimethalin were < 0.05 (8) mg/kg.

The Meeting decided to estimate a maximum residue level of 0.05(\*) mg/kg, an STMR of 0.05 mg/kg, and an HR of 0.05 mg/kg for strawberry on basis of the trial data from the USA.

### ***Mint***

The critical GAP for pendimethalin on mint in the USA is 1 soil application of 2.24 kg ai/ha and a PHI of 90 days.

In four independent trials conducted in the USA on mint approximating the US GAP, residues of pendimethalin were (n=4): < 0.05, 0.054, < 0.1 and < 0.1 mg/kg.

The Meeting decided to estimate a maximum residue level of 0.2 mg/kg, STMR of 0.077 mg/kg and HR of 0.1 mg/kg for mint.

### ***Fate of residues during processing***

Four studies were submitted on processing of mint to mint oil. In two trials with finite residue in mint leaves, residues in mint leaves were 0.076 and 0.219 mg/kg, and the residues in mint oil were 1.88 and 7.84 mg/kg. Processing factors were calculated to be 24.7 and 35.8. The best estimation of processing factor was 30.

The Meeting estimated a maximum residue level of 6 mg/kg and an STMR-P of 2.3 mg/kg for mint oil.

### ***Residues in animal commodities***

None of the commodities or their by-products for which supervised trial data were submitted to the current Meeting are fed to animals. The Meeting confirmed its previous recommendations for animal commodities.

## **RECOMMENDATIONS**

On the basis of the data from supervised trials the Meeting concluded that the residue levels listed below are suitable for establishing maximum residue limits and for IEDI and IESTI assessment.

Definition of the residue for compliance with the MRL and dietary risk assessment for plant and animal commodities: *pendimethalin*.

*The residue is fat soluble.*

## **DIETARY RISK ASSESSMENT**

### ***Long-term dietary exposure***

The ADI for pendimethalin is 0–0.1 mg/kg bw. The International Estimated Daily Intakes (IEDIs) for pendimethalin were estimated for the 17 GEMS/Food Consumption Cluster Diets using the STMR or STMR-P values estimated by the JMPR. The results are shown in Annex 3 of the 2019 Extra JMPR Report.

The IEDIs were 0% of the maximum ADI. The Meeting concluded that long-term dietary exposure to residues of pendimethalin from uses considered by the JMPR is unlikely to present a public health concern.

***Acute dietary exposure***

The ARfD for pendimethalin is 1 mg/kg bw. The International Estimate of Short Term Intakes (IESTIs) for pendimethalin were calculated for the food commodities and their processed commodities for which HRs/HR-Ps or STMRs/STMR-Ps were estimated by the present Meeting and for which consumption data were available. The results are shown in Annex 4 of the 2019 Extra JMPR Report.

The IESTIs were 0% of the ARfD for children and the general population. The Meeting concluded that acute dietary exposure to residues of pendimethalin from uses considered by the present Meeting is unlikely to present a public health concern.

***Dietary risk of metabolites previously evaluated by the Meeting against their threshold of toxicological concern***

The 2016 JMPR concluded that the dietary exposure to the metabolites M455H025, M455H029 and M455H030 are below the threshold of toxicological concern (TTC) of 1.5 µg/kg bw per day for a Cramer Class III compound.

Based on the uses evaluated by the current Meeting, the estimated dietary exposure to M455H025 increased from 1.30 to 1.32 µg/kg bw per day while the estimated dietary exposures to M455H029 (found in animal commodities) and M455H030 (found in rotated root crops only) remained unchanged.

The Meeting confirmed its previous conclusion that dietary exposure to the metabolites M455H025, M455H029 and M455H030 are unlikely to present a public health concern.





## 5.17 SPIROTETRAMAT (234)

### RESIDUE AND ANALYTICAL ASPECTS

Spirotetramat is a systemic insecticide for the control of a broad spectrum of sucking insects. It was first evaluated by JMPR in 2008 (T,R). The latest residue evaluation was conducted in 2015 (R).

The 2008 JMPR established an ADI for spirotetramat of 0–0.05 mg/kg bw and an ARfD of 1 mg/kg bw.

The residue definition for compliance with the MRL for plant commodities is *spirotetramat plus spirotetramat enol, expressed as spirotetramat*.

The residue definition for estimation of dietary exposure for plant commodities is *spirotetramat plus the metabolites enol, ketohydroxy, enol glucoside, and monohydroxy, expressed as spirotetramat*.

The residue definition for compliance with the MRL and dietary exposure for animal commodities is *spirotetramat enol, expressed as spirotetramat*.

The residue is not fat soluble.

It was scheduled at the Fiftieth Session of the CCPR for the evaluation of additional uses by the 2019 Extra JMPR. New supervised trial data in three commodities (strawberries, carrot and sugar beet), new data on storage stability and processing studies in sugar beets were provided to the present meeting.

#### Methods of analysis

Analytical methods used in raw agricultural commodities from field trials were suitable for quantifying spirotetramat residues including the metabolites spirotetramat enol, spirotetramat ketohydroxy, spirotetramat monohydroxy and spirotetramat enol glucoside in the various plant commodities. The methods were based on LC-MS/MS and the reference method used was evaluated by the Meeting in 2008 and 2013. The limits of quantitation (LOQ) for the raw commodities are 0.01 mg/kg (expressed as parent equivalents) for each analyte and 0.05 mg/kg for total spirotetramat equivalents.

For the determination of residues in dry beans and kiwi fruit a modification M005 of the analytical method 00857 was applied. The limit of quantification was 0.01 mg/kg for individual residues. The residues of individual analytes were expressed as spirotetramat equivalents and summed up to yield the total residue of spirotetramat plus enol (LOQ 0.02 mg/kg) and spirotetramat plus 4 metabolites (LOQ 0.05 mg/kg). The recoveries for individual residue components were tested at 0.01 and 0.1 mg/kg for dry beans and kiwi fruit, and their relative standard deviations were within an acceptable range.

In addition, the analytical method FN-007- P08-01 which is a modification 00857, was applied to determination of residues in sugar beet leaves and roots. The residues of individual analytes were expressed as spirotetramat equivalents and summed up to yield the total residue of spirotetramat plus enol (LOQ 0.02 mg/kg) and spirotetramat plus 4 metabolites (LOQ 0.05 mg/kg). The recoveries for individual residue components were tested at 0.01, 0.1 and 2 mg/kg for both leaves and roots and their relative standard deviations were within an acceptable range.

#### Stability of pesticides in stored analytical samples

Individual data on storage stability of spirotetramat and its metabolites were evaluated by the JMPR in 2008. The Meeting concluded that spirotetramat including its enol metabolite was stable ( $\geq 80\%$  remaining) for up to 2 years in tomato, lettuce, climbing French beans, tomato paste (*high water*), potato (*high starch*) and almond nutmeat (*high oil*) stored frozen for intervals typical of storage prior to analysis.

An additional storage stability study on dry beans (*high protein*) and kiwi fruit (*high acid*) was submitted (M-610814-01-1). Spirotetramat and its metabolites STM-enol, STM-ketohydroxy, STM-

mono-hydroxy and STM-enol-Glc are stable for at least 18 months (kiwi fruit 545 days, bean dry 548 days) when stored at  $\leq -18^{\circ}\text{C}$ .

### **Results of supervised residue trials on crops**

The Meeting received supervised residue trial data for the foliar application of spirotetramat as a suspension concentrate (SC) or oil dispersion (OD) formulation to carrots, sugar beets and strawberries.

In the discussions below, spirotetramat plus enol residues are considered first for the estimation of maximum residue levels followed by total residues (spirotetramat plus the metabolites enol, ketohydroxy, monohydroxy, and enol glucoside, expressed as spirotetramat) for estimation of STMR and HR values for the dietary risk assessments.

All residues presented for the metabolites are expressed as parent equivalents. Where a component is reported as <'value', the <'value' is added into the calculation of the total equivalents.

#### **Strawberry**

In Spain, spirotetramat is registered for indoor use on strawberries at a rate of  $2 \times 0.1 \text{ kg ai/ha}$ , with a 14-day retreatment interval. No explicit PHI was indicated as the last application is growth stage specific, i.e., up to BBCH 56 (inflorescence elongating). Eight residue trials were conducted in the EU approximating the Spanish GAP.

Residues of the *sum of spirotetramat and spirotetramat -enol* from the trials were (n=8): 0.02, 0.03, 0.04, 0.05(3) and 0.15(2) mg/kg.

Total residues of spirotetramat from the trials were (n=8): 0.05, 0.06, 0.07, 0.08(2), 0.09 and 0.19(2) mg/kg.

The Meeting estimated a maximum residue level of 0.3 mg/kg and an STMR of 0.08 mg/kg and an HR of 0.19 mg/kg for strawberries.

#### **Carrot**

The critical GAP is from the registration in USA on carrots, at a rate of  $2 \times 0.09 \text{ kg ai/ha}$ , a 7-day retreatment interval and a 1-day PHI. Eight residue trials were conducted in the USA approximating the critical GAP.

Residues of the sum of spirotetramat and spirotetramat -enol from the trials were (n=8): < 0.02(6), 0.029 and 0.030 mg/kg in roots.

Total residues of spirotetramat from the trials were (n=8): < 0.05(4), 0.059, 0.060, 0.07, and 0.1 (highest individual residue of 0.114) mg/kg in roots.

The Meeting estimated a maximum residue level of 0.04 mg/kg and an STMR of 0.0545 mg/kg and an HR of 0.114 mg/kg for carrots.

#### **Sugar beet, roots**

In Canada and the USA, spirotetramat is registered for the use on sugar beets at a rate of  $2 \times 0.16 \text{ kg ai/ha}$ , a 14-day retreatment interval with a 28 day PHI. Seventeen residue trials were conducted in Canada (six trials) and the USA (11 trials) approximating the Canadian and US GAPs. From these only fifteen trials were considered independent.

Residues of the sum of spirotetramat and spirotetramat -enol from the trials were (n=15): < 0.02(5), 0.02, 0.021, 0.022, 0.023, 0.024, 0.025, 0.027(2), 0.030 and 0.042 mg/kg.

Total residues of spirotetramat from the trials were (n=15): <0.05(5), 0.05, 0.051, 0.052, 0.053, 0.054, 0.055, 0.057(2), 0.06 and 0.072 mg/kg.

The Meeting estimated a maximum residue level of 0.06 mg/kg, an STMR of 0.052 mg/kg and a highest residue of 0.072 mg/kg for sugar beet roots

## Animal feedstuffs

### Sugar beet, leaves and tops

In the USA and Canada, spirotetramat is registered for the use on sugar beets at a rate of  $2 \times 0.16$  kg ai/ha, a 14-day retreatment interval with a 28 day PHI. Seventeen residue trials were conducted in Canada (six trials) and the USA (11 trials) approximating the Canadian and US GAPs. From the above only fifteen trials were considered independent.

Residues of sum of spirotetramat and spirotetramat -enol from the trials were (n=15): < 0.02, 0.023, 0.033, 0.057, 0.068, 0.13, 0.14, 0.22 (2), 0.24, 0.37, 0.49, 0.53, 0.64 and 1.45 mg/kg in sugar beet leaves or tops (as received).

Total residues of spirotetramat from the trials were (n=15): 0.072, 0.081, 0.10, 0.13, 0.21, 0.23 (2), 0.25, 0.3, 0.31, 0.48, 0.69, 0.75, 0.8 and 1.7 mg/kg in sugar beet leaves or tops (as received).

The Meeting estimated a maximum residue level of 8 mg/kg [expressed on dry weight basis (23% DM content)] and a median residue of 0.25 mg/kg and an highest residue of 1.7 mg/kg for sugar beet leaves or tops (as received)

### Fate of residues during processing

The processing factors derived from the processing studies and the resulting recommendations for STMR-Ps, HR-Ps, and/or maximum residue levels are summarized in the table below.

RAC	Processed Commodity	Processing Factor (mean)	RAC MRL	Processed Commodity MRL	RAC STMR	Processed Commodity STMR-P
Sugar beet (roots)	dried pulp	<u>Risk assessment:</u> 0.7, 1.1 (0.9) <u>Enforcement:</u> 0.8, 1.3 (1.05)	0.06	-	0.052	0.047
	molasses	<u>Risk assessment:</u> 1.3, 2.6 (1.95) <u>Enforcement:</u> 2.7, 5 (3.85)	0.06	0.3	0.052	0.1
	refined sugar	<u>Risk assessment/</u> <u>Enforcement:</u> <0.3, <1 (<0.65)	0.06	-	0.052	0.034

Each value represents a separate study. The factor is the ratio of the total residue in the processed item divided by the total residue in the RAC. The total residue is the parent spirotetramat plus four metabolites, calculated as spirotetramat.

In cases where residues in the processing item was <LOQ, the LOQ value (in this case was 0.02 for sum of spirotetramat and spirotetramat -enol and 0.05 mg/kg for total residues of spirotetramat) was used and the PF included the "<" symbol.

## Residues in animal commodities

### Estimated maximum and mean dietary burdens of livestock

Dietary burdens were calculated for beef cattle, dairy cattle, broilers and laying poultry based on the feed items evaluated by the current (carrots, sugar beet tops, pulp, and molasses) and previous Meetings. The calculations were made according to the animal diets listed in Appendix IX of the 2016 edition of the FAO manual.

Animal dietary burden, spirotetramat total residue, mg/kg of dry matter diet					
		US-Canada	EU	Australia	Japan
Beef cattle	max	1.4	6.53	40 <sup>a</sup>	0.52
	mean	0.65	3.37	19.0 <sup>b</sup>	0.52
Dairy cattle	max	10.2	7.2	22.3	0.47
	mean	5.1	3.37	10.8	0.47
Poultry Broiler	max	0.27	0.63	0.39	0.24
	mean	0.27	0.46	0.39	0.24
Poultry Layer	max	0.27	4.9	0.39	0.24
	mean	0.27	2.3	0.39	0.24

<sup>a</sup> Highest maximum beef or dairy cattle dietary burden suitable for maximum residue level estimates for mammalian meat and milk.

<sup>b</sup> Highest mean beef or dairy cattle dietary burden suitable for STMR estimates for mammalian meat and milk.

The spirotetramat dietary burden reached a level of 40 ppm for cattle and 4.9 ppm for poultry. These results are similar or only slightly higher than the previous livestock dietary burden calculations performed in the 2011 JMPR (highest maximum beef or dairy cattle dietary burden was 40 ppm of dry matter diet). The meeting confirmed its previous recommendations for animal commodities.

## RECOMMENDATIONS

On the basis of the data from supervised trials, the Meeting concluded that the residue levels listed below are suitable for establishing maximum residue limits and for IEDI and IESTI assessments.

The residue definition for compliance with the MRL for plant commodities is spirotetramat plus spirotetramat enol, expressed as spirotetramat.

The residue definition for estimation of dietary exposure for plant commodities is spirotetramat plus the metabolites enol, ketohydroxy, enol glucoside, and monohydroxy, expressed as spirotetramat.

The residue definition for compliance with the MRL and dietary exposure for animal commodities is spirotetramat enol, expressed as spirotetramat.

The residue is not fat soluble

## DIETARY RISK ASSESSMENT

### *Long-term dietary exposure*

The ADI for spirotetramat is 0–0.05 mg/kg bw. The International Estimated Daily Intakes (IEDIs) for spirotetramat were estimated for the 17 GEMS/Food Consumption Cluster Diets using the STMR or STMR-P values estimated by the JMPR. The results are shown in Annex 3 of the 2019 Extra JMPR Report.

The IEDIs ranged from 2–20% of the maximum ADI. The Meeting concluded that long-term dietary exposure to residues of spirotetramat from uses considered by the JMPR is unlikely to present a public health concern.

### *Acute dietary exposure*

The ARfD for spirotetramat is 1 mg/kg bw. The International Estimate of Short Term Intakes (IESTIs) for spirotetramat were calculated for the food commodities and their processed commodities for which HRs/HR-Ps or STMRs/STMR-Ps were estimated by the present Meeting and for which consumption data were available. The results are shown in Annex 4 of the 2019 Extra JMPR Report.

The IESTIs were 0% of the ARfD for children and for the general population. The Meeting concluded that acute dietary exposure to residues of spirotetramat from uses considered by the present Meeting is unlikely to present a public health concern.



## 5.18 TEBUCONAZOLE (189)

### RESIDUE AND ANALYTICAL ASPECTS

Tebuconazole is a triazole fungicide in the DMI (demethylation inhibitor) class. Tebuconazole was first evaluated by JMPR in 1994 (T, R). The latest residue evaluation was conducted in 2017 (R).

The 2010 JMPR review of tebuconazole reaffirmed an ADI of 0–0.03 mg/kg bw and established an ARfD of 0.3 mg/kg bw. The residue definition for compliance with the MRL and for estimation of dietary exposure for plant and animal commodities is parent tebuconazole. The residue is not fat soluble.

It was scheduled at the Fiftieth Session of the CCPR for the evaluation of additional uses by the 2019 Extra JMPR. The Meeting received additional residue studies to support the additional uses in citrus fruits.

#### ***Methods of analysis***

One new analytical method (HW-002-P09-01) was submitted that was used in the processing studies and is considered suitable for the determination of tebuconazole residues in orange fruits, dried pulp, oil and juice. The method is based on a simple extraction with 3:1 v/v acetone:water followed by determination with LC-MS/MS. The LOQ of the method is set at 0.01 mg/kg.

#### ***Stability of residues in stored analytical samples***

Storage stability studies were not provided to the current Meeting. The 2011 Meeting concluded that residues of tebuconazole are stable in high-acid commodities for at least 30 months in frozen storage. Samples considered by the current meeting were stored for up to 273 days (ca. 9 months).

#### ***Results of supervised residue trials on crops***

In Spain, tebuconazole is registered for post-harvest use on citrus fruits as a drench spray with a concentration of 0.1 kg ai/hL; no withholding period is specified. Four trials each for mandarins and oranges were conducted approximating the Spanish GAP. For post-harvest treatment the variability is expected to be significantly less than that of field trials thus four trials can be considered sufficient.

#### ***Mandarins (Subgroup of)***

In mandarins (whole fruit), residues of tebuconazole were (n=4): 0.38, 0.40, 0.46 and 0.48 mg/kg. Residues in pulp were < 0.05 (4) mg/kg.

The Meeting estimated a maximum residue level of 0.7 mg/kg (mean + 4SD) in mandarin subgroup. Based on residues in pulp, the Meeting estimated a STMR of 0.05 mg/kg and HR of 0.05 mg/kg in mandarin subgroup.

#### ***Oranges, Sweet, Sour (subgroup)***

In oranges (whole fruit), residues of tebuconazole were (n=4): 0.25, 0.27 (2), and 0.28 mg/kg. Residues in pulp were < 0.05 (4) mg/kg, and residues in peel were (n=4): 0.83, 0.91, 0.92, and 1.2 mg/kg.

The Meeting estimated a maximum residue level of 0.4 mg/kg (mean + 4SD) in orange, sweet, sour (subgroup). Based on residues in pulp and peel, the Meeting estimated a STMR of 0.05 mg/kg and HR of 0.05 mg/kg in orange, sweet, sour (subgroup) pulp and a STMR of 0.915 mg/kg and HR of 1.2 mg/kg in orange peel.

#### ***Fate of residues during processing***

The Meeting received processing studied for oranges. In one study (RA-3076/96), fruits were peeled prior to processing, which is not reflective of commercial processing, where whole fruits are pressed to obtain juice. Since residues of tebuconazole are on the surface of the fruits, peeling removed a

significant amount of the residue that otherwise could have been transferred to the juice. In a second study (RAHWN001), oranges were scarified prior to juicing. This also removed a significant amount of the surface residue that could otherwise be transferred to juice. Therefore, the Meeting decided not to use either study to estimate a processing factor for citrus juice. The processing factors derived from the processing studies and the resulting recommendations for STMR-Ps, HR-Ps, and/or maximum residue levels are summarized in the table below.

Processing (Transfer) Factors from the Processing of Raw Agricultural Commodities (RACs) with Field-Incurred Residues from Foliar Treatment with tebuconazole

RAC	Processed Commodity	Processing Factors [best estimate]	RAC MRL	Processed Commodity MRL	RAC STMR	Processed Commodity STMR-P
Oranges	marmalade	<0.22, 0.63 [0.63]	0.4	--	0.27	0.17
	oil	24.5	0.4	10	0.27	6.6
	pomace, dried	7.2	0.4	3	0.27	1.9

### ***Estimated maximum and mean dietary burdens of farm animals***

The Meeting estimated the contribution from citrus pulp (dry) to the livestock dietary burden and based on the small increase by 0.8 ppm of dry matter diet, in relation to the maximum dietary burden estimate from the 2011 JMPR (54 ppm of dry matter diet), no change to the residue situation in animal commodities is expected. The Meeting confirms its previous recommendations for animal commodities.

## **RECOMMENDATIONS**

On the basis of the data obtained from supervised trials, the Meeting concluded that the residue levels listed in Annex 1 are suitable for establishing maximum residue limits and for IEDI and IESTI assessments.

The residue definition for compliance with the MRL and for dietary risk assessment for plant and animal commodities is parent tebuconazole.

The residue is not fat soluble.

## **DIETARY RISK ASSESSMENT**

### ***Long-term dietary exposure***

The ADI for tebuconazole is 0–0.03 mg/kg bw. The International Estimated Daily Intakes (IEDI) for tebuconazole was estimated for the 17 GEMS/Food Consumption Cluster Diets using the STMR or STMR-P values estimated by the JMPR. The results are shown in Annex 3 of the 2019 Extra JMPR Report.

The IEDIs ranged from 1–5% of the maximum ADI. The Meeting concluded that long-term dietary exposure to residues of tebuconazole from uses considered by the JMPR is unlikely to present a public health concern.

### ***Acute dietary exposure***

The ARfD for tebuconazole is 0.3 mg/kg bw. The International Estimate of Short Term Intakes (IESTIs) for tebuconazole were calculated for the food commodities and their processed commodities for which HRs/HR-Ps or STMRs/STMR-Ps were estimated by the present Meeting and for which consumption data were available. The results are shown in Annex 4 of the 2019 Extra JMPR Report.



The IESTIs were 0–1% (children) and 0% (general population) of the ARfD. The Meeting concluded that acute dietary exposure to residues of tebuconazole from uses considered by the present Meeting is unlikely to present a public health concern.



## 5.19 THIABENDAZOLE (065)

### TOXICOLOGY

Thiabendazole (2-(4-thiazolyl)-1*H*-benzimidazole) was evaluated by JMPR in 2006, when an ADI of 0–0.1 mg/kg bw was established. The 2006 Meeting also established an ARfD of 1 mg/kg bw for the general population and an ARfD of 0.3 mg/kg bw for women of childbearing age (Annex 5, reference 109).

Following a request for additional maximum residue levels by CCPR, thiabendazole was placed on the agenda of the present Meeting, which assessed additional toxicological information available since the last review.

Several toxicological studies on thiabendazole were submitted to the present Meeting, including an acute neurotoxicity study, a 90-day neurotoxicity study and an immunotoxicity study.

All critical studies contained statements of compliance with GLP and were conducted in accordance with relevant national or international test guidelines, unless otherwise specified. One additional study that complemented the toxicological information submitted for the current assessment was identified from a literature search and was included in the evaluation.

#### ***Toxicological data***

In a chronic toxicity and carcinogenicity study, mice were administered thiabendazole in the diet at 0, 310, 1250 or 5000 ppm (equal to 0, 33.2, 146 and 605 mg/kg bw per day for males and 0, 40.0, 179 and 615 mg/kg bw per day for females, respectively) for 78 weeks. The NOAEL for long-term toxicity in mice was 310 ppm (equal to 33.2 mg/kg bw per day), based on body weight suppression and an increased incidence of nephrosis at 1250 ppm (equal to 146 mg/kg bw per day). No carcinogenicity was observed.

In an acute neurotoxicity study in rats treated with thiabendazole as a single dose of 0, 50, 200 or 2000 mg/kg bw by gavage, the NOAEL for systemic toxicity was 50 mg/kg bw, based on decreases in mean rearing counts in females, body weight loss secondary to reduced feed consumption, and lower ambulatory locomotor activity counts at time of peak effect on study day 0 in both sexes at 200 mg/kg bw. There was no clear evidence that thiabendazole was acutely neurotoxic.

In a 90-day neurotoxicity study in rats treated with thiabendazole in the diet at 0, 200, 750 or 1500 ppm (equal to 0, 13, 47 and 95 mg/kg bw per day for males and 0, 15, 54 and 108 mg/kg bw per day for females, respectively), the NOAEL for systemic toxicity was 750 ppm (equal to 47 mg/kg bw per day), based on findings of decreased body weight gain, depressed body weights and lower feed consumption at 1500 ppm (equal to 95 mg/kg bw per day). The NOAEL for neurotoxicity was 1500 ppm (equal to 95 mg/kg bw per day), the highest dose tested.

The Meeting concluded that thiabendazole is not neurotoxic.

In an immunotoxicity study in female mice treated with thiabendazole in the diet at a concentration of 0, 100, 1000 or 5000 ppm (equal to 0, 20.9, 205.6 and 1027.0 mg/kg bw per day, respectively) for 28 days, the NOAEL for immunotoxicity was 1000 ppm (equal to 205.6 mg/kg bw per day), on the basis of lower total spleen activity measured as immunoglobulin M antibody-forming cells per spleen at 5000 ppm (equal to 1027.0 mg/kg bw per day). The NOAEL for systemic toxicity was 1000 ppm (equal to 205.6 mg/kg bw per day), based on reduced body weight and marked increases in liver weights at 5000 ppm (equal to 1027.0 mg/kg bw per day).

The Meeting concluded that thiabendazole is not immunotoxic in the absence of systemic toxicity.

#### **Toxicological evaluation**

The Meeting concluded that no revision of the ADI or ARfDs was necessary. The Meeting noted that the NOAEL for systemic toxicity from the acute neurotoxicity study (50 mg/kg bw) is lower than the

NOAEL from the study currently used in the derivation of the ARfD for the general population (100 mg/kg bw). However, as the lowest-observed-adverse-effect level (LOAEL) for both studies was 200 mg/kg bw, and as the findings in both studies were similar, the Meeting concluded that there was no reason to revise the ARfD for the general population.

An addendum to the toxicological monograph was prepared.

### ***Critical end-points for setting guidance values for exposure to thiabendazole***

<i>Long-term studies of toxicity and carcinogenicity</i>	
Target/critical effect	Body weight suppression, nephrosis
Lowest relevant NOAEL	33.2 mg/kg bw per day (mouse)
Carcinogenicity	No evidence of carcinogenicity
<i>Neurotoxicity</i>	
Acute neurotoxicity NOAEL	2000 mg/kg bw, highest dose tested (rat) (systemic toxicity NOAEL 50 mg/kg bw)
Subchronic neurotoxicity NOAEL	95 mg/kg bw per day, highest dose tested (rat)
<i>Other toxicological studies</i>	
Immunotoxicity NOAEL	205.6 mg/kg bw per day (mouse); not immunotoxic in the absence of systemic toxicity

## **RESIDUE AND ANALYTICAL ASPECTS**

Thiabendazole, a benzimidazole fungicide, was first evaluated by JMPR in 1970, and the latest residue evaluation was conducted in 2006 (T, R).

The Joint FAO/WHO Expert Committee on Food Additives (JECFA) established an ADI of 0–0.1 mg/kg and the 2006 JMPR established an ARfD of 0.3 mg/kg bw for women of childbearing age and of 1 mg/kg bw for the general population.

The residue definitions for thiabendazole are:

Compliance with the MRL and dietary risk assessment for plant commodities: *thiabendazole*

Compliance with the MRL for animal commodities: *sum of thiabendazole and 5-hydroxythiabendazole*

Dietary risk assessment for animal commodities: *sum of thiabendazole, 5-hydroxythiabendazole and its sulfate conjugate*.

The compound was scheduled at the Fiftieth Session of the CCPR for the evaluation of additional uses by the 2019 Extra JMPR. Plant metabolism studies on orange (post-harvest) and maize (seed treatment), analytical methods and residue studies on mango, beans, peas and sweet potato, and processing studies were submitted to the Meeting.

### ***Plant metabolism***

[Phenyl-<sup>14</sup>C]-thiabendazole was applied post-harvest to orange fruits in a single dose at 0.2 kg ai/hL prior to storage in the dark at 5°C, and samples were analysed just after application, 8 and 16 weeks later. Radioactivity was extracted from the fruit surface with acetonitrile, and oranges separated into peel and flesh. Radioactivity in orange flesh was < 0.01 mg/kg eq. (0.002-0.007 mg/kg eq) and was not

further investigated. From 94 (day 0) to 73% (16 weeks) of TRR were recovered from the fruit surface. About 98% TRR in the orange peel on day 0 was thiabendazole (5.2 mg/kg), with residues dropping to 90% TRR after 16 weeks (3.7 mg/kg). Only minor metabolites of thiabendazole were observed in orange peel, arising via hydroxylation of the phenyl ring to produce 5-hydroxy-thiabendazole (~0.02 mg/kg eq.), and elimination of the thiazole ring to produce benzimidazole (0.002 mg/kg at 8 weeks) and carboxylated benzimidazole (0.02 mg/kg eq. at 8 weeks).

[Phenyl- $U$ - $^{14}C$ ]-thiabendazole was applied to maize seed at 0.09 mg/seed. Treated maize was grown under glasshouse and plants were harvested at stages representing commercial forage, sweet corn and maturity. No residues were found in cobs and kernels. The TRRs of foliage from the sweet corn stage and maturity were 0.005 and 0.002 mg/kg eq., respectively. Only the foliage from the forage stage had TRR > 0.01 mg/kg eq. (0.014 mg/kg eq.), from which 55.5% remained unextracted (0.008 mg/kg eq.). Extracted residues in forage were composed of multiple minor metabolites without the presence of thiabendazole. No further attempt was made to characterise the unextracted residue.

In summary, thiabendazole was the only relevant residue found in orange after post-harvest treatment and no thiabendazole related residues were found in maize commodities after seed treatment.

### ***Methods of analysis***

Additional methods of analysis and validation data for crop commodities were submitted to the Meeting. In general, samples are extracted with ethyl acetate, cleaned-up with cation exchange SPE and analysed by LC-MS/MS with a LOQ of 0.01 mg/kg. In another LC-MS/MS method, conjugates of thiabendazole or benzimidazole are extracted with ethyl acetate following addition of glucosidase enzyme to the aqueous phase (LOQ of 0.01 mg/kg). The efficiency of ethyl acetate extraction was confirmed with orange (whole fruit)

treated post-harvest from the metabolism study. Additionally, the QuEChERS method was validated for thiabendazole in crop commodities and for thiabendazole and 5-hydroxy thiabendazole in animal commodities, with a LOQ of 0.01 mg/kg in all cases.

#### ***Storage stability of residues under frozen conditions***

Stability studies conducted with beans (dry seed), soya beans, spinach, barley and oranges showed that residues were stable under frozen conditions (-20 °C) for at least 24 months.

### ***Results of supervised residue trials on crops***

#### ***Mango***

Thiabendazole is registered for post-harvest use in a dip solution at a concentration of 0.24 kg ai/hL in Central American countries and 0.19 kg ai/hL in Brazil. In four trials conducted in Brazil according to central American GAP, residues were 2.4, 2.6, 3.4 and 4.5 mg/kg in the whole fruit and 0.01, 0.012, 0.023, and 0.027 (highest individual level of 0.030) mg/kg in the pulp.

The Meeting agreed that four trials were enough to make a recommendation for mango due to the lower variability of the residues in post-harvest treatment, using the mean + 4×SD approach.

The Meeting estimated a maximum residue level of 7 mg/kg (Po), a STMR of 0.0175 mg/kg and a HR of 0.030 mg/kg for thiabendazole in mango.

#### ***Succulent beans and peas subgroups***

Thiabendazole is registered in the USA as a seed treatment in beans (succulent and dry, except soya bean) at 0.55 kg ai/tonne seed. The GAP for soya bean is 0.20 kg ai/tonne seed. In seven bean trials conducted in the USA approximating the GAP, residues in beans with pods were < 0.01 (6) mg/kg and residues in bean without the pods in one trial were < 0.01 mg/kg.

The GAP rate for peas (succulent and dry) in the USA is 0.33 kg ai/tonne seed. In nine trials conducted in peas at about 3–4 times the GAP rate, residues in the peas without the pods were < 0.01 (9) mg/kg.

As the trials conducted with beans at GAP and the trials conducted with peas at a rate higher than the GAP gave no quantified residues, and the GAP for soya bean is lower, the Meeting agreed that the residue data provided support a recommendation for the subgroups of succulent beans and peas.

The Meeting estimated a maximum residue level of 0.01(\*) mg/kg, a STMR and HR of 0 mg/kg for thiabendazole for the subgroups of Beans with pods, Peas with pods, Succulent beans without pods and Succulent peas without pods

#### ***Dry beans and peas, subgroups***

Thiabendazole is registered in the USA as a seed treatment in beans (succulent and dry, except soya bean) at 0.55 kg ai/tonne seed. The GAP for soya bean is 0.20 kg ai/tonne seed. In nine trials conducted approximating the GAP of the USA, residues in dry beans were < 0.01 (9) mg/kg.

The GAP rate for peas (succulent and dry) in the USA is 0.33 kg ai/tonne seed. In 10 trials conducted with peas using at least 2.4 times the GAP rate, residues in dry peas were < 0.01 (5) and < 0.05 (5) mg/kg.

As the trials conducted with beans at GAP and the trials conducted with peas at a higher rate than the GAP gave no quantified residues, and the GAP for soya bean is lower, the Meeting agreed that the residue data provided support a recommendation for the subgroups of dry beans and peas.

The Meeting estimated a maximum residue level of 0.01(\*) mg/kg and a STMR of 0 mg/kg for thiabendazole for the subgroups of Dry beans and Dry peas.

#### ***Sweet potato***

Thiabendazole is registered in the USA as a post-harvest treatment as a 0.16 kg ai/hL dip solution or spray (on a conveyor belt) at 0.006 kg ai/tonne.

In seven trials conducted according to the spray GAP, residues were 0.21, 0.26, 0.38, 0.46, 0.51, 0.54 and 1.2 mg/kg.

In eight trials conducted according to the dip GAP, residues were 2.7, 4.4, 4.5, 4.6, 4.8, 5.4, 5.5, and 6.3 (highest individual level of 6.97) mg/kg.

Based on the dip trials, which gives the highest residues, and on the mean + (4×SD) approach, the Meeting estimated a maximum residue level of 9 mg/kg (Po), a STMR of 4.7 mg/kg and a HR of 6.97 mg/kg for thiabendazole in sweet potato.

#### ***Animal feedstuffs***

The GAP rate for peas (succulent and dry) in USA is 0.33 kg ai/tonne seed. In the trials conducted with pea in the USA at 2.4 times the GAP, residues ranged from < 0.01 to 0.02 mg/kg in the vines and from < 0.01 to 0.08 mg/kg in the hay. In three trials conducted with cowpea beans at 1.4 times the USA GAP rate for beans, residues in vines and hay were < 0.01 mg/kg.

As no trials were conducted according to GAP, no recommendations were made for thiabendazole in legume animal feeds.

#### ***Fate of residues during processing***

In a study to simulate the hydrolysis of thiabendazole under different temperature/time and pH conditions, 99–103% of the applied radioactivity was recovered.

Sweet potatoes treated post-harvest with a dipping solution were processed to flake, chip, baked and fries. The processing factors and estimated STMRs for the processed commodities are shown below.

Crop	PF	STMR/STMR-P, mg/kg	HR/HR-P, mg/kg
Raw sweet potato	-	4.7	6.97
Baked washed with peel	0.28	1.3	1.95
Chips	0.02	0.094	0.139
Puree	0.02	0.094	0.139
Fries	0.12	0.564	0.836
Flakes	0.08	0.376	0.558

### ***Residues in animal commodities***

The estimations conducted by the present Meeting do not impact the previous calculated dietary burden of thiabendazole and do not affect the recommendations made by the JMPR for animal commodities

## **RECOMMENDATIONS**

On the basis of the data obtained from supervised trials the Meeting concluded that the residue levels listed in Annex 1 are suitable for establishing maximum residue limits and for IEDI and IESTI assessment.

Definition of the residue for compliance with the MRL and dietary risk assessment for plant commodities: *thiabendazole*

Definition of the residue for compliance with the MRL for animal commodities: *sum of thiabendazole and 5-hydroxythiabendazole*

Definition of the residue for dietary risk assessment for animal commodities: *sum of thiabendazole, 5-hydroxythiabendazole and its sulfate conjugate.*

## **DIETARY RISK ASSESSMENT**

### ***Long-term dietary exposure***

The ADI for thiabendazole is 0–0.1 mg/kg bw. The International Estimated Daily Intakes (IEDIs) for thiabendazole were estimated for the 17 GEMS/Food Consumption Cluster diets using the STMR or STMR-P values estimated by the JMPR. The results are shown in Annex 3 of the 2019 Extra JMPR Report.

The IEDIs accounted for 2 to 10% of the maximum ADI. The Meeting concluded that the long-term dietary exposure to residues of thiabendazole from uses considered by the JMPR is unlikely to present a public health concern.

### ***Acute dietary exposure***

The ARfDs for thiabendazole is 1 mg/kg bw for the general population and 0.3 mg/kg bw for women of child-bearing age. The International Estimate of Short Term Intakes (IESTIs) for thiabendazole were calculated for the food commodities for which HRs/HR-Ps or STMRs/STMR-Ps were estimated by the present Meeting and for which consumption data were available. The results are shown in Annex 4 of the 2019 Extra JMPR Report.

The IESTIs were 0–20% (children) and 0–7% (general population) of the ARfD for the general population; and from 0–9% of the ARfD for women of child bearing age. The Meeting concluded that the acute dietary exposure to residues of thiabendazole from uses considered by the present Meeting is unlikely to present a public health concern.





## 6. Future Work

The items listed below are tentatively scheduled to be considered by the Meeting in 2019. The compounds listed include those recommended as priorities by the CCPR at its Fiftieth and earlier Sessions and compounds scheduled for re-evaluation within the CCPR periodic review programme.

Updated calls for data are available at least ten months before each JMPR meeting from the web pages of the Joint Secretariat<sup>4</sup>.

### NEW COMPOUNDS

TOXICOLOGY EVALUATIONS	RESIDUE EVALUATIONS
Afidopyropen (Insecticide) USA	Afidopyropen
Metaconazole (Fungicide) Japan	Metaconazole
Pyflubumide (Insecticide) Japan	Pyflubumide
Pyrasulfutole (Herbicide) Canada	Pyrasulfutole
Pyridate (Herbicide) Belgium	Pyridate
Pyriproxyfen (Insecticide) Japan	Pyriproxyfen
Trifluralin (Insecticide) Germany	Trifluralin
Valifenalate (Fungicide) Belgium	Valifenalate

PERIODIC RE-EVALUATIONS	
TOXICOLOGY	RESIDUE
Carbaryl (008)	
Carbosulfan (145) / Carbofuran (96)	Carbosulfan (145) / Carbofuran (96)
Clethodim (187)	Clethodim (187)
Dimethoate (027)	Dimethoate (027)
Terbufos (167)	
Tolclofos-methyl (191)	Tolclofos-methyl (191)
Support for the following scheduled compounds is uncertain	
Amitraz (122)	Amitraz (122)
Azinphos-methyl (002)	Azinphos-methyl (002)
Bromopropylate (070)	Bromopropylate (070)
Dicloran (083)	Dicloran (083)
Fenarimol (192)	Fenarimol (192)
Phosalone (060)	Phosalone (060)

NEW USES AND OTHER EVALUATIONS	
TOXICOLOGY EVALUATIONS	RESIDUE EVALUATIONS
	Acetamiprid (246)
	Benzovindiflupyr (261)
	Bifenthrin (178)
	Buprofezin (173)
	Cyfluthrin (296)
	Cypermethrin (118)
	Fluazifop-p-butyl (283)
	Fluensulfone (265)
	Imidacloprid (206)
	Lambda-cyhalothrin (146)
	Penthiopyrad (253)

<sup>4</sup> <http://www.fao.org/agriculture/crops/core-themes/theme/pests/jmpr/en/>

NEW USES AND OTHER EVALUATIONS	
TOXICOLOGY EVALUATIONS	RESIDUE EVALUATIONS
	Picoxystrobin (258)
	Pydiflumetofen (309)
	Pyriofenone (310)
	Thiamethoxam(245)
	Tolfenpyrad (269)
	Carbendazim (72) <sup>2</sup>
	Chlorfenapyr (254) <sup>2</sup>
	Clothianidin (238) <sup>2</sup>
	Cypermethrin (118) <sup>2</sup>
	Deltamethrin (035) <sup>2</sup>
	Dicofol (026) <sup>2</sup>
	Fenpropathrin (185) <sup>2</sup>
	Metalaxyl (138) <sup>2</sup>
	Parathion (059) <sup>2</sup>
	Phosalone (060) <sup>2</sup>
	Phorate (112) <sup>2</sup>
	Propiconazole (160) <sup>2</sup>
	Thiamethoxam (245) <sup>2</sup>

## Annex 1: Acceptable daily intakes, acute reference doses, acute and long-term dietary exposures, recommended maximum residue levels, supervised trials median residue values and other values recorded by the 2019 Extra JMPR Meeting.

The following abbreviations are used in Annex 1.

* (following a recommended maximum residue level)	At or about the limit of quantification
as	The median or highest residue is reported at the moisture content of the feed commodity "as received"
dw	The value is reported in the dry weight of the feed commodity
HR-P	Highest residue in a processed commodity, in mg/kg, calculated by multiplying the HR in the raw commodity by the processing factor
Po	The recommendation accommodates post-harvest treatment of the commodity.
STMR-P	An STMR for a processed commodity calculated by applying the concentration or reduction factor for the process to the STMR calculated for the raw agricultural commodity.
W (in place of previous recommendations)	The previous recommendation is withdrawn, or withdrawal of the recommended Maximum residue level or existing Codex or draft MRL is recommended.

Pesticide (Codex reference number)	CCN	Commodity	Recommended Maximum residue level (mg/kg)		STMR or STMR-P mg/kg	HR or HR-P mg/kg
			New	Previous		
<b>Acetochlor (280)</b> ADI: 0–0.01 mg/kg bw ARfD: 1 mg/kg bw	AL 1020	Alfalfa hay	30 (dw)	-	Median: 4.55 (as)	Highest: 13 (as)
	AL 0157	Legume animal feed	W	3 (dw)		
	AL 0157	Legume animal feed, except alfalfa hay	3 (dw)	-		
	VD 0541	Soya bean (dry)	1.5	-	0.15	
	MO 0105	Edible offal (mammalian)	0.05	0.02*	0.0213	0.0418
	OR 0541	Soya bean oil, Refined			0.016	
Definition of the residue for compliance with the MRL and dietary risk assessment for animal and plant commodities: Sum of compounds hydrolysable with base to 2-ethyl-6-methylaniline (EMA) and 2-(1-hydroxyethyl)-6-methylaniline (HEMA), expressed in terms of acetochlor. The residue is not fat-soluble.						
<b>Azoxystrobin (229)</b> ADI: 0–0.2 mg/kg bw ARfD: Unnecessary	FT 0336	Guava	0.2		0.055	
Definition of the residue for compliance with the MRL and dietary risk assessment for plant and animal commodities: Azoxystrobin. The residue is fat-soluble.						
<b>Boscalid (221)</b> ADI: 0–0.04 mg/kg bw ARfD: Unnecessary	FP 0226	Apple	W	2		
	FS 0013	Cherries, subgroup of (includes all commodities in this subgroup)	5		1.5	
	FI 0345	Mango	2		0.255	
	FS 2001	Peaches, subgroup of (including Nectarine and Apricots)(includes all	4		0.6	



Pesticide (Codex reference number)	CCN	Commodity	Recommended Maximum residue level (mg/kg)		STMR or STMR-P mg/kg	HR or HR-P mg/kg
			New	Previous		
The residue is not fat-soluble.						
<b>Cyprodinil (207)</b> ADI: 0-0.03 mg/kg bw ARfD: Unnecessary	VD 0541	Soya bean (dry)	0.3		0.085	
Definition of the residue for compliance with the MRL and dietary risk assessment for plant and animal commodities: Cyprodinil.						
The residue is fat-soluble						
<b>Dicamba (240)</b> ADI: 0-0.3 mg/kg bw ARfD: 0.5 mg/kg bw	SO 0691	Cotton seed	W <sup>A)</sup>	0.04*		
	SO 0691	Cotton seed	3	--	0.69	--
	GC 0645	Maize	W <sup>A)</sup>	0.01*		
	GC 0645	Maize	0.01* <sup>A)</sup>	--	0.02 <sup>B)</sup>	--
	AS 0645	Maize fodder (dry)	W <sup>A)</sup>	0.6 (dw)		
	AS 0645	Maize fodder (dry)	0.6 (dw) <sup>A)</sup>	--	0.06 (dw) <sup>B)</sup>	0.33 (dw) <sup>B)</sup>
	VD 0541	Soya bean (dry)	W <sup>A)</sup>	10		
	VD 0541	Soya bean (dry)	10 <sup>A)</sup>	---	0.0535	--
	AL 0541	Soya bean fodder (dry)	150 (dw)	--	35 (as)	68 (as)
	AB 0541	Soya bean hulls	15	--	0.065	--
	AB 1265	Soya bean meal	15	--	0.071	--
		Cotton seed oil	--		0.055	
		Maize oil, crude			0.00058 <sup>B)</sup>	
		Soya bean oil	--		0.0032	
		Soya milk	--		0.0032	
		Tofu	--		0.0034	
Definition of the residue for compliance with the MRL for soya bean, maize, and cotton: <i>sum of dicamba and 3,6-dichloro-2-hydroxybenzoic acid (DCSA; free and conjugated), expressed as dicamba</i> ; for other plant commodities: <i>dicamba</i> .						
Definition of the residue for dietary risk assessment for soya bean, maize, and cotton: <i>sum of dicamba, 2,5-dichloro-3-hydroxy-6-methoxybenzoic acid (5-OH dicamba), 3,6-dichloro-2-hydroxybenzoic acid (DCSA; free and conjugated) and 2,5-dichloro-3,6-dihydroxybenzoic acid (DCGA; free and conjugated), expressed as dicamba</i> ; for other plant commodities: <i>sum of dicamba and 5-OH dicamba, expressed as dicamba</i> .						
Definition of the residue for compliance with the MRL and dietary risk assessment for animal commodities: <i>sum of dicamba and DCSA, expressed as dicamba</i> .						
The residue is not fat-soluble.						
<sup>A)</sup> To withdraw the previous recommendation and replace it with a new one at the same level based on a new residue definition for compliance with the MRL.						
<sup>B)</sup> Recommended by 2010 JMPR based on conventional maize						
<b>Fenazaquin (297)</b> ADI: 0-0.05 mg/kg bw ARfD: 0.1 mg/kg bw	AM 0660	Almond hulls	4 (dw)		Median: 1.2 (as)	
	MO 0105	Edible offal (Mammalian)	0.02*		0	0
	MF 0100	Mammalian fats (except milk fats)	0.02*		0	0
	MM 0095	Meat (from mammals other than marine mammals)	0.02* (fat)		Muscle: 0 Fat: 0	Muscle: 0 Fat: 0
	ML 0106	Milks	0.02*		0	0
	FM 0183	Milk fats	0.02*		0	0
	TN 0085	Tree nuts, Group of (except coconut)	0.02		0.01	0.016
Definition of the residue for compliance with the MRL and dietary risk assessment for plant commodities: Fenazaquin.						

Pesticide (Codex reference number)	CCN	Commodity	Recommended Maximum residue level (mg/kg)		STMR or STMR-P mg/kg	HR or HR-P mg/kg
			New	Previous		
			Definition of the residue for compliance with the MRL for animal commodities: the sum of fenazaquin and the metabolite 2-hydroxy-fenazaquin acid expressed as fenazaquin.			
Definition of the residue for dietary risk assessment for animal commodities is <i>the sum of fenazaquin and the metabolites 2-(4-{2-[(2-hydroxyquinazolin-4-yl)oxy]ethyl}phenyl)-2-methylpropanoic acid (2-hydroxy-fenazaquin acid) and quinazolin-4-ol and 3,4-dihydroquinazolin-4-one (tautomeric forms of 4-hydroxyquinazoline), expressed as fenazaquin equivalents.</i>						
The residue is fat soluble.						
<b>Flonicamid (282)</b>  ADI: 0-0.07 mg/kg bw ARfD: Unnecessary	FC 0002	Lemons and Limes, subgroup of (includes all commodities in this subgroup)	1.5	-	0.22	
	FC 0004	Oranges, Sweet, Sour, subgroup of (includes all commodities in this subgroup)	0.4	-	0.115	
	FC 0005	Pumelo and grapefruit (including Shaddock-like hybrids)Subgroup of (including all commodities in this subgroup)	0.3	-	0.0635	
	AB0001	Citrus pulp, Dry	3 (dw)	-	Median: 0.396	
	JF 0001	Citrus juice			0.0044	
	OR 0001	Citrus oil, edible			0.0022	
	Definition of the residue for compliance with the MRL and dietary risk assessment for plant commodities: Flonicamid.					
Definition of the residue for compliance with the MRL and dietary risk assessment for animal commodities: Flonicamid and the metabolite TFNA-AM, expressed as flonicamid.						
The residue is not fat-soluble.						
<b>Flupyradifurone (285)</b> ADI: 0-0.08 mg/kg bw ARfD: 0.2 mg/kg bw	FI 0326	Avocado	0.6	-	0.28	0.36
	SB 0715	Cacao beans	0.01 *	-	0.071	-
	FB 2005	Cane berries, subgroup of (includes all commodities in this subgroup)	6	-	1.4	4.3
	SB 0716	Coffee beans	0.9	-	0.295	-
	DH 1100	Hops, dry	10	-	3.55	-
		Beer (hops)			0.0355	
		Cacao beans, roasted			0.0547	-
	DM 0715	Cocoa powder			0.116	-
		Chocolate			0.0497	-
	SM 0716	Coffee beans, roasted			0.21	-
		Instant coffee			0.94	-
Definition of the residue for compliance with the MRL for plant commodities: Flupyradifurone.						
Definition of the residue for dietary risk assessment for plant commodities: Sum of flupyradifurone, difluoroacetic acid and 6-chloronicotinic acid, expressed as parent equivalents.						
Definition of the residue for compliance with the MRL and dietary risk assessment for animal commodities: Sum of flupyradifurone and difluoroacetic acid, expressed as parent equivalents.						
The residue is not fat-soluble.						
<b>Fosetyl-Al (302)</b>	FB 0264	Blackberries	70 <sup>(FA)</sup>		5.95	
	SB 0716	Coffee beans	30 <sup>(FA)</sup>		8.8	

Pesticide (Codex reference number)	CCN	Commodity	Recommended Maximum residue level (mg/kg)		STMR or STMR-P mg/kg	HR or HR-P mg/kg
			New	Previous		
ADI: 0-1 mg/kg bw (Applies to fosetyl- aluminium and phosphonic acid, expressed as fosetyl- aluminium) ARfD: Unnecessary	PE 0112	Eggs	0.05 (*)		0	
	VB 0042	Flowerhead Brassicas (sub-group)	0.2 (*) <sup>(F)</sup>		0.2	
	VB 2036	Head Brassicas (sub-group)	0.2 (*) <sup>(F)</sup>		0.2	
	VL 0480	Kale	0.2 (*) <sup>(F)</sup>		0.2	
	FI 0341	Kiwifruit	150 <sup>(FA)</sup>		34.5	
	MF 0100	Mammalian fat (except milk fats)	0.3	0.2	0.13	
	FI 0353	Pineapple	15 <sup>(FA)</sup>		2.35	
	PF 0111	Poultry fat	0.05 (*)		0	
	PM 0110	Poultry meat	0.05 (*)		0	
	PO 0111	Poultry, Edible offal of	0.05 (*)		0	
	MM 0105	Edible offal (mammalian)			kidney: 0.32 liver: 0.24	
	MM 0095	Meat (from mammals other than marine mammals)			fat: 0.13 muscle: 0.077	
<p>Definition of the residue for compliance with the MRL and dietary risk assessment for plant commodities: Sum of fosetyl, phosphonic acid and their salts, expressed as phosphonic acid.</p> <p>Definition of the residue for compliance with the MRL and dietary risk assessment for animal commodities: Phosphonic acid.</p> <p>The residue is not fat-soluble</p> <p><sup>(FA)</sup>- based on Fosetyl-Al use;</p> <p><sup>(F)</sup> based on Fosetyl use.</p>						
<b>Glyphosate (158)</b>  ADI: 0-1 mg/kg bw ARfD: Unnecessary	VD 2065	Dry beans, Subgroup of (includes all commodities in this subgroup) (except soya beans)	15		0.32	
	VD 0071	Beans (dry)	W	2		
	VD 2066	Dry peas, Subgroup of (includes all commodities in this subgroup)	10		1.7	
	VD 0533	Lentil (dry)	W	5		
	VD 0072	Peas (dry)	W	5		
<p>Definition of the residue for compliance with the MRL for plant commodities - for soya bean, maize and rape: sum of glyphosate and N-acetylglyphosate, expressed as glyphosate, for other crops: Glyphosate.</p> <p>Definition of the residue for compliance with the MRL for animal commodities: Sum of glyphosate and N-acetylglyphosate, expressed as glyphosate.</p> <p>Definition of the residue for dietary risk assessment for plant and animal commodities: Glyphosate, N-acetylglyphosate, AMPA and N-acetyl AMPA, expressed as glyphosate.</p> <p>The residue is not fat-soluble.</p>						
<b>Mesotrione (277)</b>  ADI: 0-0.5 mg/kg bw ARfD: Unnecessary	FC 0001	Citrus fruit, Group of (includes all commodities in this group)	0.01 *		0	
	FP 0009	Pome fruits, group of (includes all commodities in this group)	0.01 *		0	
	FS 0012	Stone fruits, Group of (includes all commodities in this group)	0.01 *		0	

Pesticide (Codex reference number)	CCN	Commodity	Recommended Maximum residue level (mg/kg)		STMR or STMR-P mg/kg	HR or HR-P mg/kg
			New	Previous		
	TN 0085	Tree nuts Group of (includes all commodities in this group)	0.01 *		0.01	
	AM 0660	Almond hulls	0.04 (dw)		Median 0.01 (as)	
Definition of the residue for compliance with the MRL and dietary risk assessment for animal and plant commodities: Mesotrione.						
The residue is not fat-soluble.						
<b>Metaflumizone (236)</b>						
ADI: 0-0.1 mg/kg bw						
ARfD: Unnecessary						
	FP 0226	Apple	0.9		0.275	
	SB 0716	Coffee bean	0.15		0.02	
	DF 0269	Dried grapes (=currants, Raisins and Sultanias)	13		2.55	
	MO 0105	Edible offal (mammalian)	0.02*	0.02*(w)	0.02	0.013(w)
	PE 0112	Eggs	0.02		0.0077	
	FB 0269	Grape	5		0.98	
	FC 0002	Lemons and limes, Sub group of	2		0.52	
	GC 0645	Maize	0.04		0.02	
	MF 0100	Mammalian fats (except milk fats)	0.6	0.02*(w)	0.092	0.013(w)
	MM 0095	Meat (from mammals other than marine mammals)	0.02*(fat)	0.02*(w)	0.02	0.013(w)
	VC 0046	Melon	1		0.02	
		Milk fat	0.7	0.02(w)	0.33	0.013(w)
	ML 0106	Milks	0.02	0.01(w)	0.01	0.007(w)
		Orange oil	100		23	
	FC 0004	Orange, sweet, sour, Sub group of	3		0.66	
	PO 0111	Poultry edible offal	0.02*		0.0068	
	PF 0111	Poultry fat	0.08		0.069	
	PM 0110	Poultry meat	0.02*(fat)		0.0022	
	VD 0541	Soya bean	0.2		0.02	
	GS 0659	Sugar cane	0.02*		0	
	FP 0226	Apple	0.9		0.275	
	JF 0226	Apple juice			0.022	
		Apple sauce			0.00825	
		Canned apples			0.00825	
		Dried apples			0.011	
		Grape, must, naturally cloudy			1.39	
		Grape, must, separated			0.16	
		Grape, pasteurized juice			1.04	
		Grape, wine			0.078	
		Instant coffee			0.046	
	JF 0004	Orange juice			0.0066	
		Roasted and ground beans			0.046	
Definition of the residue for compliance with the MRL and dietary risk assessment for plant and animal commodities: Metaflumizone, sum of metaflumizone E-isomer and metaflumizone Z-isomer.						
The residue is fat-soluble.						
<b>Methoprene (147)</b>						
ADI: 0-0.09 mg/kg bw						
for the R,S racemate; 0-						
	SO 0703	Peanut, whole	5 (Po)		5	



Pesticide (Codex reference number)	CCN	Commodity	Recommended Maximum residue level (mg/kg)		STMR or STMR-P mg/kg	HR or HR-P mg/kg
			New	Previous		
0.05 mg/kg bw for S-methoprene ARfD: Unnecessary						
Definition of the residue for compliance with the MRL and for dietary risk assessment for plant and animal commodities: Methoprene. The residue is fat-soluble.						
<b>Pendimethalin (292)</b>  ADI: 0-0.1 mg/kg bw ARfD: 1 mg/kg bw	FB 2005	Cane berries, subgroup of (includes all commodities in this subgroup)	0.05*		0.05	0.05
	FB 2006	Bush berries, Subgroup of (includes all commodities in this subgroup)	0.05*		0.05	0.05
	HH 0738	Mints	0.2	-	0.077	0.1
	OR 0738	Peppermint Oil, edible	6	-	2.3	
	FB 0275	Strawberries	0.05*		0.05	0.05
Definition of the residue for compliance with the MRL and for dietary risk assessment for plant and animal commodities: Pendimethalin. The residue is fat-soluble.						
<b>Spirotetramat (234)</b> ADI: 0-0.05 mg/kg bw ARfD: 1 mg/kg bw	VR 0577	Carrot	0.04		0.0545	0.114
	FB 0275	Strawberry	0.3		0.08	0.19
	VR 0596	Sugar beet	0.06		0.052	Highest: 0.072
	AV 0596	Sugar beet leaves or tops (dry)	8 (dw)		Median: 0.25 (as)	Highest: 1.7 (as)
	DM 0596	Sugar beet molasses	0.3		0.1	
	DM 3517	Sugar beet, sugar refined			0.034	
Definition of the residue for compliance with MRL for plant commodities: Spirotetramat and its enol metabolite, 3-(2,5-dimethylphenyl)-4-hydroxy-8-methoxy-1-azaspiro[4.5]dec-3-en-2-one, expressed as spirotetramat.  Definition of the residue for dietary risk assessment for plant commodities: Spirotetramat, enol metabolite 3-(2,5-dimethylphenyl)-4-hydroxy-8-methoxy-1-azaspiro[4.5]dec-3-en-2-one, ketohydroxy metabolite 3-(2,5-dimethylphenyl)-3-hydroxy-8-methoxy-1-azaspiro[4.5]decane-2,4-dione, monohydroxy metabolite cis-3-(2,5-dimethylphenyl)-4-hydroxy-8-methoxy-1-azaspiro[4.5]decan-2-one, and enol glucoside metabolite glucoside of 3-(2,5-dimethylphenyl)-4-hydroxy-8-methoxy-1-azaspiro[4.5]dec-3-en-2-one, expressed as spirotetramat.  Definition of the residue for compliance with MRL and dietary risk assessment for animal commodities: Spirotetramat, enol metabolite, 3-(2,5-dimethylphenyl)-4-hydroxy-8-methoxy-1-azaspiro[4.5]dec-3-en-2-one, expressed as spirotetramat. The residue is not fat-soluble.						
<b>Tebuconazole (189)</b> ADI: 0-0.03 mg/kg bw ARfD: 0.3 mg/kg bw	AB 0001	Citrus pulp, Dry	3 (dw)		Median: 1.9	
	FC0003	Mandarins (including Mandarin-like hybrids)	0.7 (Po)		0.05	0.05
		Subgroup of (including all commodities in this subgroup)				
	OR 0004	Orange oil, edible	10		6.6	
	FC0004	Oranges, Sweet, Sour, subgroup of (includes all commodities in this subgroup)	0.4 (Po)		0.05	0.05
		Orange marmalade			0.17	



## Annex 2: Index of reports and evaluations of pesticides by the JMPR

Numbers in parentheses after the names of pesticides are Codex classification numbers. The abbreviations used are:

T, evaluation of toxicology

R, evaluation of residue and analytical aspects

E, evaluation of effects on the environment

Abamectin (177)	1992 (T,R), 1994 (T,R), 1995 (T), 1997 (T,R), 2000 (R), 2015 (R), 2017 (T), 2018 (R)
Acephate (095)	1976 (T,R), 1979 (R), 1981 (R), 1982 (T), 1984 (T,R), 1987 (T), 1988 (T), 1990 (T,R), 1991 (corr. to 1990 R evaluation), 1994 (R), 1996 (R), 2002 (T), 2003 (R), 2004 (corr. to 2003 report), 2005 (T), 2006 (R), 2011 (R)
Acetamiprid (246)	2011 (T, R), 2012 (R), 2015 (R), 2017 (R)
Acetochlor (280)	2015 (T, R), 2019 (T, R)
Acibenzolar-S-methyl (288)	2016 (T, R)
Acrylonitrile	1965 (T, R)
Aldicarb (117)	1979 (T, R), 1982 (T,R), 1985 (R), 1988 (R), 1990 (R), 1991 (corr. to 1990 evaluation), 1992 (T), 1993 (R), 1994 (R), 1996 (R), 2001 (R), 2002 (R), 2006 (R)
Aldrin (001)	1965 (T), 1966 (T, R), 1967 (R), 1974 (R), 1975 (R), 1977 (T), 1990 (R), 1992 (R)
Allethrin	1965 (T, R)
Ametoctradin (253)	2012 (T, R)
Aminocarb (134)	1978 (T, R), 1979 (T, R)
Aminocyclopyrachlor (272)	2014 (T, R)
Aminomethylphosphonic acid (AMPA, 198)	1997 (T, R)
Aminopyralid (220)	2006 (T, R), 2007 (T,R)
Amitraz (122)	1980 (T, R), 1983 (R), 1984 (T,R), 1985 (R), 1986 (R), 1989 (R), 1990 (T,R), 1991 (R & corr. to 1990 R evaluation), 1998 (T)
Amitrole (079)	1974 (T, R), 1977 (T), 1993 (T, R), 1997 (T), 1998 (R)
Anilazine (163)	1989 (T, R), 1992 (R)
Atrazine	2007 (T)
Azinphos-ethyl (068)	1973 (T, R), 1983 (R)
Azinphos-methyl (002)	1965 (T), 1968 (T, R), 1972 (R), 1973 (T), 1974 (R), 1991 (T, R), 1992 (corr. to 1991 report), 1993 (R), 1995 (R), 2007 (T)
Azocyclotin (129)	1979 (R), 1981 (T), 1982 (R), 1983 (R), 1985 (R), 1989 (T,R), 1991 (R), 1994 (T), 2005 (T,R)

Azoxystrobin (229)	2008 (T,R), 2011 (R), 2012 (R), 2013 (R), 2017 (R), 2019 (R)
Benalaxyl (155)	1986 (R), 1987 (T), 1988 (R), 1992 (R), 1993 (R), 2005 (T), 2009 (R)
Bendiocarb (137)	1982 (T,R), 1984 (T,R), 1989 (R), 1990 (R)
Benomyl (069)	1973 (T,R), 1975 (T,R), 1978 (T,R), 1983 (T,R), 1988 (R), 1990 (R), 1994 (R), 1995 (T,E), 1998 (R)
Bentazone (172)	1991 (T,R), 1992 (corr. to 1991 report, Annex I), 1994 (R), 1995 (R), 1998 (T,R), 1999 (corr. to 1998 report), 2004 (T), 2012 (T), 2013 (R), 2016 (T), 2018 (R)
Benzovindiflupyr (261)	2013 (T), 2014 (R), 2016 (R)
BHC (technical-grade)	1965 (T), 1968 (T,R), 1973 (T,R) (see also Lindane)
Bicyclopyrone (295)	2017 (T, R)
Bifenazate (219)	2006 (T,R), 2008 (R), 2010 (R)
Bifenthrin (178)	1992 (T,R), 1995 (R), 1996 (R), 1997 (R), 2009 (T), 2010 (R), 2015 (R)
Binapacryl (003)	1969 (T,R), 1974 (R), 1982 (T), 1984 (R), 1985 (T,R)
Bioresmethrin (093)	1975 (R), 1976 (T,R), 1991 (T,R)
Biphenyl	See Diphenyl
Bitertanol (144)	1983 (T), 1984 (R), 1986 (R), 1987 (T), 1988 (R), 1989 (R), 1991 (R), 1998 (T), 1999 (R), 2002 (R)
Bixafen (262)	2013 (T,R), 2016 (R)
Boscalid (221)	2006 (T,R), 2008 (R), 2010 (R), 2019 (T, R)
Bromide ion (047)	1968 (R), 1969 (T, R), 1971 (R), 1979 (R), 1981 (R), 1983 (R), 1988 (T, R), 1989 (R), 1992 (R)
Bromomethane (052)	1965 (T, R), 1966 (T,R), 1967 (R), 1968 (T,R), 1971 (R), 1979 (R), 1985 (R), 1992 (R)
Bromophos (004)	1972 (T,R), 1975 (R), 1977 (T,R), 1982 (R), 1984 (R), 1985 (R)
Bromophos-ethyl (005)	1972 (T,R), 1975 (T,R), 1977 (R)
Bromopropylate (070)	1973 (T,R), 1993 (T,R)
Butocarboxim (139)	1983 (R), 1984 (T), 1985 (T), 1986 (R)
Buprofezin (173)	1991 (T,R), 1995 (R), 1996 (corr. to 1995 report.), 1999 (R), 2008 (T,R), 2009 (R), 2012 (R), 2014 (R), 2016 (R)
<i>sec</i> -Butylamine (089)	1975 (T,R), 1977 (R), 1978 (T,R), 1979 (R), 1980 (R), 1981 (T), 1984 (T,R: withdrawal of temporary ADI, but no evaluation)
Cadusafos (174)	1991 (T,R), 1992 (R), 1992 (R), 2009 (R), 2010 (R)
Camphector (071)	1968 (T,R), 1973 (T,R)

Captafol (006)	1969 (T,R), 1973 (T,R), 1974 (R), 1976 (R), 1977 (T,R), 1982 (T), 1985 (T,R), 1986 (corr. to 1985 report), 1990 (R), 1999 (ARfD)
Captan (007)	1965 (T), 1969 (T,R), 1973 (T), 1974 (R), 1977 (T,R), 1978 (T,R), 1980 (R), 1982 (T), 1984 (T,R), 1986 (R), 1987 (R and corr. to 1986 R evaluation), 1990 (T,R), 1991 (corr. to 1990 R evaluation), 1994 (R), 1995 (T), 1997 (R), 2000 (R), 2004 (T), 2007 (T), 2017 (R)
Carbaryl (008)	1965 (T), 1966 (T,R), 1967 (T,R), 1968 (R), 1969 (T,R), 1970 (R), 1973 (T,R), 1975 (R), 1976 (R), 1977 (R), 1979 (R), 1984 (R), 1996 (T), 2001 (T), 2002 (R), 2007 (R)
Carbendazim (072)	1973 (T,R), 1976 (R), 1977 (T), 1978 (R), 1983 (T,R), 1985 (T,R), 1987 (R), 1988 (R), 1990 (R), 1994 (R), 1995 (T,E), 1998 (T,R), 2003 (R), 2005 (T), 2012 (R)
Carbofuran (096)	1976 (T,R), 1979 (T,R), 1980 (T), 1982 (T), 1991 (R), 1993 (R), 1996 (T), 1997 (R), 1999 (corr. to 1997 report), 2002 (T,R), 2003 (R) (See also carbosulfan), 2004 (R), 2008 (T), 2009 (R)
Carbon disulfide (009)	1965 (T,R), 1967 (R), 1968 (R), 1971 (R), 1985 (R)
Carbon tetrachloride (010)	1965 (T,R), 1967 (R), 1968 (T,R), 1971 (R), 1979 (R), 1985 (R)
Carbophenothion (011)	1972 (T,R), 1976 (T,R), 1977 (T,R), 1979 (T,R), 1980 (T,R), 1983 (R)
Carbosulfan (145)	1984 (T,R), 1986 (T), 1991 (R), 1992 (corr. to 1991 report), 1993 (R), 1997 (R), 1999 (R), 2002 (R), 2003 (T,R), 2004 (R, corr. to 2003 report)
Cartap (097)	1976 (T,R), 1978 (T,R), 1995 (T,R)
Chinomethionat (080)	1968 (T,R) (as oxythioquinox), 1974 (T,R), 1977 (T,R), 1981 (T,R), 1983 (R), 1984 (T,R), 1987 (T)
Chlorantraniliprole (230)	2008 (T,R), 2010 (R), 2013 (R), 2014 (R), 2016 (R), 2019 (R)
Chlorbenside	1965 (T)
Chlordane (012)	1965 (T), 1967 (T,R), 1969 (R), 1970 (T,R), 1972 (R), 1974 (R), 1977 (T,R), 1982 (T), 1984 (T,R), 1986 (T)
Chlordimeform (013)	1971 (T,R), 1975 (T,R), 1977 (T), 1978 (T,R), 1979 (T), 1980 (T), 1985 (T), 1986 (R), 1987 (T)
Chlorfenapyr (254)	2013 (T), 2018 (T,R)
Chlorfenson	1965 (T)
Chlorfenvinphos (014)	1971 (T,R), 1984 (R), 1994 (T), 1996 (R)

Chlormequat (015)	1970 (T,R), 1972 (T,R), 1976 (R), 1985 (R), 1994 (T,R), 1997 (T), 1999 (ARfD), 2000 (R), 2017 (T, R)
Chlorobenzilate (016)	1965 (T), 1968 (T,R), 1972 (R), 1975 (R), 1977 (R), 1980 (T)
Chloropicrin	1965 (T,R)
Chloropropylate	1968 (T,R), 1972 (R)
Chlorothalonil (081)	1974 (T,R), 1977 (T,R), 1978 (R), 1979 (T,R), 1981 (T,R), 1983 (T,R), 1984 (corr. to 1983 report and T evaluation), 1985 (T,R), 1987 (T), 1988 (R), 1990 (T,R), 1991 (corr. to 1990 evaluation), 1992 (T), 1993 (R), 1997 (R), 2009 (T), 2010 (R), 2012 (R), 2015 (R), 2019 (T, R)
Chlorpropham (201)	1965 (T), 2000 (T), 2001 (R), 2005 (T), 2008 (R)
Chlorpyrifos (017)	1972 (T,R), 1974 (R), 1975 (R), 1977 (T,R), 1981 (R), 1982 (T,R), 1983 (R), 1989 (R), 1995 (R), 1999 (T), 2000 (R), 2004 (R), 2006 (R)
Chlorpyrifos-methyl (090)	1975 (T,R), 1976 (R, Annex I only), 1979 (R), 1990 (R), 1991 (T,R), 1992 (T and corr. to 1991 report), 1993 (R), 1994 (R), 2001 (T), 2009 (R)
Chlorthion	1965 (T)
Clethodim (187)	1994 (T,R), 1997 (R), 1999 (R), 2002 (R)
Clofentezine (156)	1986 (T,R), 1987 (R), 1989 (R), 1990 (R), 1992 (R), 2005 (T), 2007 (R)
Clothianidin (238)	2010 (T,R), 2011 (R), 2014 (R)
Coumaphos (018)	1968 (T,R), 1972 (R), 1975 (R), 1978 (R), 1980 (T,R), 1983 (R), 1987 (T), 1990 (T,R)
Crufomate (019)	1968 (T,R), 1972 (R)
Cyanophenfos (091)	1975 (T,R), 1978 (T: ADI extended, but no evaluation), 1980 (T), 1982 (R), 1983 (T)
Cyantraniliprole (263)	2013 (T,R), 2015 (R), 2018 (R)
Cyazofamid (281)	2015 (T, R), 2018 (R)
Cyclaniliprole (296)	2017 (T, R)
Cycloxydim (179)	1992 (T,R), 1993 (R), 2009 (T), 2012 (R)
Cyflumetofen (273)	2014 (T,R)
Cyfluthrin (157)	1986 (R), 1987 (T and corr. to 1986 report), 1989 (R), 1990 (R), 1992 (R), 2006 (T), 2007 (R)
Cyhalothrin (including lambda-cyhalothrin(146)	1984 (T,R), 1986 (R), 1988 (R), 2007 (T), 2008 (R), 2015 (R), 2018 (T)
Cyhexatin (067)	1970 (T,R), 1973 (T,R), 1974 (R), 1975 (R), 1977 (T), 1978 (T,R), 1980 (T), 1981 (T), 1982 (R), 1983 (R), 1985 (R), 1988 (T), 1989 (T), 1991 (T,R), 1992 (R), 1994 (T), 2005 (T,R)

Cypermethrin (118)	1979 (T,R), 1981 (T,R), 1982 (R), 1983 (R), 1984 (R), 1985 (R), 1986 (R), 1987 (corr. to 1986 evaluation), 1988 (R), 1990 (R), 2006 (T), 2008 (R), 2009 (R), 2011 (R)
Cyproconazole (239)	2010 (T,R), 2013 (R)
Cyprodinil (207)	2003 (T,R), 2004 (corr. to 2003 report), 2013 (R), 2015 (R), 2017 (R), 2018 (R), 2019 (T, R)
Cyromazine (169)	1990 (T,R), 1991 (corr. to 1990 R evaluation), 1992 (R), 2006 (T), 2007 (R), 2012 (R)
2,4-D (020)	1970 (T,R), 1971 (T,R), 1974 (T,R), 1975 (T,R), 1980 (R), 1985 (R), 1986 (R), 1987 (corr. to 1986 report, Annex I), 1996 (T), 1997 (E), 1998 (R), 2001 (R), 2017 (R)
Daminozide (104)	1977 (T,R), 1983 (T), 1989 (T,R), 1991 (T)
DDT (021)	1965 (T), 1966 (T,R), 1967 (T,R), 1968 (T,R), 1969 (T,R), 1978 (R), 1979 (T), 1980 (T), 1983 (T), 1984 (T), 1993 (R), 1994 (R), 1996 (R)
Deltamethrin (135)	1980 (T,R), 1981 (T,R), 1982 (T,R), 1984 (R), 1985 (R), 1986 (R), 1987 (R), 1988 (R), 1990 (R), 1992 (R), 2000 (T), 2002 (R), 2016 (R)
Demeton (092)	1965 (T), 1967 (R), 1975 (R), 1982 (T)
Demeton-S-methyl (073)	1973 (T,R), 1979 (R), 1982 (T), 1984 (T,R), 1989 (T,R), 1992 (R), 1998 (R)
Demeton-S-methylsulfon (164)	1973 (T,R), 1982 (T), 1984 (T,R), 1989 (T,R), 1992 (R)
Dialifos (098)	1976 (T,R), 1982 (T), 1985 (R)
Diazinon (022)	1965 (T), 1966 (T), 1967 (R), 1968 (T,R), 1970 (T,R), 1975 (R), 1979 (R), 1993 (T,R), 1994 (R), 1996 (R), 1999 (R), 2001 (T), 2006 (T,R), 2016 (T)
1,2-Dibromoethane (023)	1965 (T,R), 1966 (T,R), 1967 (R), 1968 (R), 1971 (R), 1979 (R), 1985 (R)
Dicamba (240)	2010 (T,R), 2011 (R), 2012 (R), 2013 (R), 2019 (T, R)
Dichlobenil (274)	2014 (T,R)
Dicloran (083)	2003 (R)
Dichlorfluanid (082)	1969 (T,R), 1974 (T,R), 1977 (T,R), 1979 (T,R), 1981 (R), 1982 (R), 1983 (T,R), 1985 (R)
1,2-Dichloroethane (024)	1965 (T,R), 1967 (R), 1971 (R), 1979 (R), 1985 (R)
Dichlorvos (025)	1965 (T,R), 1966 (T,R), 1967 (T,R), 1969 (R), 1970 (T,R), 1974 (R), 1977 (T), 1993 (T,R), 2011 (T), 2012 (R)
Dicloran (083)	1974 (T,R), 1977 (T,R), 1998 (T,R)
Dicofol (026)	1968 (T,R), 1970 (R), 1974 (R), 1992 (T,R), 1994 (R), 2011 (T), 2012 (R)

Dieldrin (001)	1965 (T), 1966 (T,R), 1967 (T,R), 1968 (R), 1969 (R), 1970 (T,R), 1974 (R), 1975 (R), 1977 (T), 1990 (R), 1992 (R)
Difenoconazole (224)	2007 (T,R), 2010 (R), 2013 (R), 2015 (R), 2017 (R)
Diiflubenzuron (130)	1981 (T,R), 1983 (R), 1984 (T,R), 1985 (T,R), 1988 (R), 2001 (T), 2002 (R), 2011 (R)
Dimethenamid-P (214)	2005 (T,R)
Dimethipin (151)	1985 (T,R), 1987 (T,R), 1988 (T,R), 1999 (T), 2001 (R), 2004 (T)
Dimethoate (027)	1965 (T), 1966 (T), 1967 (T,R), 1970 (R), 1973 (R in evaluation of formothion), 1977 (R), 1978 (R), 1983 (R) 1984 (T,R), 1986 (R), 1987 (T,R), 1988 (R), 1990 (R), 1991 (corr. to 1990 evaluation), 1994 (R), 1996 (T), 1998 (R), 2003 (T,R), 2004 (corr. to 2003 report), 2006 (R), 2008 (R)
Dimethomorph (225)	2007 (T,R), 2014 (R), 2016 (R)
Dimethrin	1965 (T)
Dinocap (087)	1969 (T,R), 1974 (T,R), 1989 (T,R), 1992 (R), 1998 (R), 1999 (R), 2000 (T), 2001 (R)
Dinotefuran (255)	2012 (T,R)
Dioxathion (028)	1968 (T,R), 1972 (R)
Diphenyl (029)	1966 (T,R), 1967 (T)
Diphenylamine (030)	1969 (T,R), 1976 (T,R), 1979 (R), 1982 (T), 1984 (T,R), 1998 (T), 2001 (R), 2003 (R), 2008 (R)
Diquat (031)	1970 (T,R), 1972 (T,R), 1976 (R), 1977 (T,R), 1978 (R), 1994 (R), 2013 (T,R), 2018 (R)
Disulfoton (074)	1973 (T,R), 1975 (T,R), 1979 (R), 1981 (R), 1984 (R), 1991 (T,R), 1992 (corr. to 1991 report, Annex I), 1994 (R), 1996 (T), 1998 (R), 2006 (R)
Dithianon (180)	1992 (T,R), 1995 (R), 1996 (corr. to 1995 report), 2010 (T), 2013 (T,R)
Dithiocarbamates (105)	1965 (T), 1967 (T,R), 1970 (T,R), 1983 (R propineb, thiram), 1984 (R propineb), 1985 (R), 1987 (T thiram), 1988 (R thiram), 1990 (R), 1991 (corr. to 1990 evaluation), 1992 (T thiram), 1993 (T,R), 1995 (R), 1996 (T,R ferbam, ziram; R thiram), 2004 (R), 2012 (R), 2014 (R)
4,6-Dinitro- <i>ortho</i> -cresol (DNOC)	1965 (T)
Dodine (084)	1974 (T,R), 1976 (T,R), 1977 (R), 2000 (T), 2003 (R), 2004 (corr. to 2003 report)
Edifenphos (099)	1976 (T,R), 1979 (T,R), 1981 (T,R)
Eamectin benzoate (247)	2011 (T,R), 2014 (R)
Endosulfan (032)	1965 (T), 1967 (T,R), 1968 (T,R), 1971 (R), 1974 (R), 1975 (R), 1982 (T), 1985 (T,R), 1989 (T,R), 1993 (R), 1998 (T), 2006 (R), 2010 (R)



Endrin (033)	1965 (T), 1970 (T,R), 1974 (R), 1975 (R), 1990 (R), 1992 (R)
Esfenvalerate (204)	2002 (T,R)
Ethephon (106)	1977 (T,R), 1978 (T,R), 1983 (R), 1985 (R), 1993 (T), 1994 (R), 1995 (T), 1997 (T), 2002 (T), 2015 (T, R)
Ethiofencarb (107)	1977 (T,R), 1978 (R), 1981 (R), 1982 (T,R), 1983 (R)
Ethion (034)	1968 (T,R), 1969 (R), 1970 (R), 1972 (T,R), 1975 (R), 1982 (T), 1983 (R), 1985 (T), 1986 (T), 1989 (T), 1990 (T), 1994 (R)
Ethiprole (304)	2018 (T, R)
Ethoprophos (149)	1983 (T), 1984 (R), 1987 (T), 1999 (T), 2004 (R)
Ethoxyquin (035)	1969 (T,R), 1998 (T), 1999 (R), 2005 (T), 2008 (R)
Ethylene dibromide	See 1,2-Dibromoethane
Ethylene dichloride	See 1,2-Dichloroethane
Ethylene oxide	1965 (T,R), 1968 (T,R), 1971 (R)
Ethylenethiourea (ETU) (108)	1974 (R), 1977 (T,R), 1986 (T,R), 1987 (R), 1988 (T,R), 1990 (R), 1993 (T,R)
Etofenprox (184)	1993 (T,R), 2011 (T,R)
Etoxazole (241)	2010 (T,R), 2011 (R)
Etrimfos (123)	1980 (T,R), 1982 (T,R), 1986 (T,R), 1987 (R), 1988 (R), 1989 (R), 1990 (R)
Famoxadone (208)	2003 (T,R)
Fenamidone (264)	2013 (T), 2014 (T,R)
Fenamiphos (085)	1974 (T,R), 1977 (R), 1978 (R), 1980 (R), 1985 (T), 1987 (T), 1997 (T), 1999 (R), 2002 (T), 2006 (R)
Fenarimol (192)	1995 (T,R,E), 1996 (R and corr. to 1995 report)
Fenazaquin (297)	2017 (T, R), 2019 (R)
Fenbuconazole (197)	1997 (T,R), 2009 (R), 2012 (T), 2013 (R)
Fenbutatin oxide (109)	1977 (T,R), 1979 (R), 1992 (T), 1993 (R)
Fenchlorfos (036)	1968 (T,R), 1972 (R), 1983 (R)
Fenhexamid (215)	2005 (T,R)
Fenitrothion (037)	1969 (T,R), 1974 (T,R), 1976 (R), 1977 (T,R), 1979 (R), 1982 (T), 1983 (R), 1984 (T,R), 1986 (T,R), 1987 (R and corr. to 1986 R evaluation), 1988 (T), 1989 (R), 2000 (T), 2003 (R), 2004 (R, corr. to 2003 report), 2007 (T,R)
Fenpicoxamid (305)	2018 (T,R)
Fenpropathrin (185)	1993 (T,R), 2006 (R), 2012 (T), 2014 (R)
Fenpropimorph (188)	1994 (T), 1995 (R), 1999 (R), 2001 (T), 2004 (T), 2016 (T), 2017 (T, R)

Fenpyrazamine (298)	2017 (R, T)
Fenpyroximate (193)	1995 (T,R), 1996 (corr. to 1995 report), 1999 (R), 2004 (T), 2007 (T), 2010 (R), 2013 (R), 2017 (T, R), 2018 (R)
Fensulfothion (038)	1972 (T,R), 1982 (T), 1983 (R)
Fenthion (039)	1971 (T,R), 1975 (T,R), 1977 (R), 1978 (T,R), 1979 (T), 1980 (T), 1983 (R), 1989 (R), 1995 (T,R,E), 1996 (corr. to 1995 report), 1997 (T), 2000 (R)
Fentin compounds (040)	1965 (T), 1970 (T,R), 1972 (R), 1986 (R), 1991 (T,R), 1993 (R), 1994 (R)
Fenvalerate (119)	1979 (T,R), 1981 (T,R), 1982 (T), 1984 (T,R), 1985 (R), 1986 (T,R), 1987 (R and corr. to 1986 report), 1988 (R), 1990 (R), 1991 (corr. to 1990 R evaluation), 2012 (T,R)
Ferbam	See Dithiocarbamates, 1965 (T), 1967 (T,R), 1996 (T,R)
Fipronil (202)	1997 (T), 2000 (T), 2001 (R), 2016 (R)
Fipronil-desulfinyl	1997 (T)
Flonicamid (282)	2015 (T,R), 2016 (R), 2017 (R), 2019 (R)
Fluazifop-P-butyl	2016 (T,R)
Flubendiamide (242)	2010 (T,R)
Flucythrinate (152)	1985 (T,R), 1987 (R), 1988 (R), 1989 (R), 1990 (R), 1993 (R)
Fludioxonil (211)	2004 (T,R), 2006 (R), 2010 (R), 2012 (R), 2013 (R), 2018 (R)
Fluensulfone (265)	2013 (T), 2014 (T,R), 2016 (T,R), 2017 (R)
Flufenoxuron (275)	2014 (T,R)
Flumethrin (195)	1996 (T,R)
Fluazinam (306)	2018 (T,R)
Fluopicolide (235)	2009 (T,R), 2014 (R)
Fluopyram (243)	2010 (T,R), 2012 (R), 2014 (R), 2015 (R), 2017 (R)
Flupyradifurone (285)	2015 (T), 2016 (R), 2017 (R), 2019 (R)
Flusilazole (165)	1989 (T,R), 1990 (R), 1991 (R), 1993 (R), 1995 (T), 2007 (T,R)
Flutolanil (205)	2002 (T,R), 2013 (R)
Flutriafol (248)	2011 (T,R), 2015 (R)
Fluxapyroxad (256)	2012 (T,R), 2015 (R), 2018 (T,R)
Folpet (041)	1969 (T,R), 1973 (T), 1974 (R), 1982 (T), 1984 (T,R), 1986 (T), 1987 (R), 1990 (T,R), 1991 (corr. to 1990 R evaluation), 1993 (T,R), 1994 (R), 1995 (T), 1997 (R), 1998 (R), 1999 (R), 2002 (T), 2004 (T), 2007 (T)

Formothion (042)	1969 (T,R), 1972 (R), 1973 (T,R), 1978 (R), 1998 (R)
Fosetyl Aluminium (302)	2017 (T, R), 2019 (R)
Glufosinate-ammonium (175)	1991 (T,R), 1992 (corr. to 1991 report, Annex I), 1994 (R), 1998 (R), 1999 (T,R), 2012 (T,R), 2014 (R)
Glyphosate (158)	1986 (T,R), 1987 (R and corr. to 1986 report), 1988 (R), 1994 (R), 1997 (T,R), 2004 (T), 2005 (R), 2011 (T,R), 2013 (R), 2016 (T), 2019 (R)
Guazatine (114)	1978 (T,R), 1980 (R), 1997 (T,R)
Haloxypop (194)	1995 (T,R), 1996 (R and corr. to 1995 report), 2001 (R), 2006 (T), 2009 (R)
Heptachlor (043)	1965 (T), 1966 (T,R), 1967 (R), 1968 (R), 1969 (R), 1970 (T,R), 1974 (R), 1975 (R), 1977 (R), 1987 (R), 1991 (T,R), 1992 (corr. to 1991 report, Annex I), 1993 (R), 1994 (R)
Hexachlorobenzene (044)	1969 (T,R), 1973 (T,R), 1974 (T,R), 1978 (T), 1985 (R)
Hexaconazole (170)	1990 (T,R), 1991 (R and corr. to 1990 R evaluation), 1993 (R)
Hexythiazox (176)	1991 (T,R), 1994 (R), 1998 (R), 2008 (T), 2009 (R)
Hydrogen cyanide (045)	1965 (T,R)
Hydrogen phosphide (046)	1965 (T,R), 1966 (T,R), 1967 (R), 1969 (R), 1971 (R)
Imazalil (110)	1977 (T,R), 1980 (T,R), 1984 (T,R), 1985 (T,R), 1986 (T), 1988 (R), 1989 (R), 1991 (T), 1994 (R), 2000 (T), 2001 (T), 2005 (T), 2018 (T,R)
Imazamox (276)	2014 (T,R), 2017 (R)
Imazapic (266)	2013 (T,R), 2015 (R)
Imazapyr (267)	2013 (T,R), 2015 (R), 2017 (R)
Imazethapyr (289)	2016 (T,R)
Imidacloprid (206)	2001 (T), 2002 (R), 2006 (R), 2008 (R), 2012 (R), 2015 (R), 2017 (R)
Indoxacarb (216)	2005 (T,R), 2007 (R), 2009 (R), 2012 (R), 2013 (R)
Iprodione (111)	1977 (T,R), 1980 (R), 1992 (T), 1994 (R), 1995 (T), 2001 (R)
Isofenphos (131)	1981 (T,R), 1982 (T,R), 1984 (R), 1985 (R), 1986 (T,R), 1988 (R), 1992 (R)
Isofetamid (290)	2016 (T,R), 2018 (R)
Isoprothiolane (299)	2017 (T, R)
Isopyrazam (249)	2011 (T,R), 2017 (R)
Isoxaflutole (268)	2013 (T,R)
Kresoxim-methyl (199)	1998 (T,R), 2001 (R), 2018 (T,R)
Lead arsenate	1965 (T), 1968 (T,R)
Leptophos (088)	1974 (T,R), 1975 (T,R), 1978 (T,R)

Lindane (048)	1965 (T), 1966 (T,R), 1967 (R), 1968 (R), 1969 (R), 1970 (T,R, published as Annex VI to 1971 evaluations), 1973 (T,R), 1974 (R), 1975 (R), 1977 (T,R), 1978 (R), 1979 (R), 1989 (T,R), 1997 (T), 2002 (T), 2003 (R), 2004 (corr. to 2003 report), 2015 (R)
Lufenuron (286)	2015 (T, R), 2018 (R)
Malathion (049)	1965 (T), 1966 (T,R), 1967 (corr. to 1966 R evaluation), 1968 (R), 1969 (R), 1970 (R), 1973 (R), 1975 (R), 1977 (R), 1984 (R), 1997 (T), 1999 (R), 2000 (R), 2003 (T), 2004 (R), 2005 (R), 2008 (R), 2013 (R), 2016 (T)
Maleic hydrazide (102)	1976 (T,R), 1977 (T,R), 1980 (T), 1984 (T,R), 1996 (T), 1998 (R)
Mancozeb (050)	1967 (T,R), 1970 (T,R), 1974 (R), 1977 (R), 1980 (T,R), 1993 (T,R)
Mandestrobin (307)	2018 (T,R)
Mandipropamid (231)	2008 (T,R), 2013 (R), 2018 (R)
Maneb	See Dithiocarbamates, 1965 (T), 1967 (T,R), 1987 (T), 1993 (T,R)
MCPA (257)	2012 (T,R)
Mecarbam (124)	1980 (T,R), 1983 (T,R), 1985 (T,R), 1986 (T,R), 1987 (R)
Meptyldinocap (244)	2010 (T, R)
Mesotrione (277)	2014 (T, R), 2019 (T, R)
Metaflumizone (236)	2009 (T, R), 2019 (T, R)
Metalaxyl (138)	1982 (T, R), 1984 (R), 1985 (R), 1986 (R), 1987 (R), 1989 (R), 1990 (R), 1992 (R), 1995 (R)
Metalaxyl –M (212)	2002 (T), 2004 (R)
Methacrifos (125)	1980 (T,R), 1982 (T), 1986 (T), 1988 (T), 1990 (T,R), 1992 (R)
Methamidophos (100)	1976 (T,R), 1979 (R), 1981 (R), 1982 (T,R), 1984 (R), 1985 (T), 1989 (R), 1990 (T,R), 1994 (R), 1996 (R), 1997 (R), 2002 (T), 2003 (R), 2004 (R, corr. to 2003 report)
Methidathion (051)	1972 (T,R), 1975 (T,R), 1979 (R), 1992 (T,R), 1994 (R), 1997 (T)
Methiocarb (132)	1981 (T,R), 1983 (T,R), 1984 (T), 1985 (T), 1986 (R), 1987 (T,R), 1988 (R), 1998 (T), 1999 (R), 2005 (R)
Methomyl (094)	1975 (R), 1976 (R), 1977 (R), 1978 (R), 1986 (T,R), 1987 (R), 1988 (R), 1989 (T,R), 1990 (R), 1991 (R), 2001 (T,R), 2004 (R), 2008 (R)

Methoprene (147)	1984 (T,R), 1986 (R), 1987 (T and corr. to 1986 report), 1988 (R), 1989 (R), 2001 (T), 2005 (R), 2016 (R), 2019 (R)
Methoxychlor	1965 (T), 1977 (T)
Methoxyfenozide (209)	2003 (T,R), 2004 (corr. to 2003 report), 2006 (R), 2009 (R), 2012 (R)
Methyl bromide (052)	See Bromomethane
Metrafenone (278)	2014 (T,R), 2016 (R)
Metiram (186)	1993 (T), 1995 (R)
Mevinphos (053)	1965 (T), 1972 (T,R), 1996 (T), 1997 (E,R), 2000 (R)
MGK (264)	1967 (T,R)
Monocrotophos (054)	1972 (T,R), 1975 (T,R), 1991 (T,R), 1993 (T), 1994 (R)
Myclobutanil (181)	1992 (T,R), 1997 (R), 1998 (R), (2001 (R)), 2014 (T,R)
Nabam	See Dithiocarbamates, 1965 (T), 1976 (T,R)
Natamycin (300)	2017 (T, R)
Nitrofen (140)	1983 (T,R)
Norflurazon (308)	2018 (T,R)
Novaluron (217)	2005 (T,R), 2010 (R)
Omethoate (055)	1971 (T,R), 1975 (T,R), 1978 (T,R), 1979 (T), 1981 (T,R), 1984 (R), 1985 (T), 1986 (R), 1987 (R), 1988 (R), 1990 (R), 1998 (R)
Organomercury compounds	1965 (T), 1966 (T,R), 1967 (T,R)
Oxamyl (126)	1980 (T,R), 1983 (R), 1984 (T), 1985 (T,R), 1986 (R), 2002 (T,R), 2017 (T, R)
Oxathiapiprolin (291)	2016 (T,R), 2018 (R)
Oxydemeton-methyl (166)	1965 (T, as demeton-S-methyl sulfoxide), 1967 (T), 1968 (R), 1973 (T,R), 1982 (T), 1984 (T,R), 1989 (T,R), 1992 (R), 1998 (R), 1999 (corr. to 1992 report), 2002 (T), 2004 (R)
Oxythioquinox	See Chinomethionat
Paclobutrazol (161)	1988 (T,R), 1989 (R)
Paraquat (057)	1970 (T,R), 1972 (T,R), 1976 (T,R), 1978 (R), 1981 (R), 1982 (T), 1985 (T), 1986 (T), 2003 (T), 2004 (R), 2009 (R)
Parathion (058)	1965 (T), 1967 (T,R), 1969 (R), 1970 (R), 1984 (R), 1991 (R), 1995 (T,R), 1997 (R), 2000 (R)
Parathion-methyl (059)	1965 (T), 1968 (T, R), 1972 (R), 1975 (T,R), 1978 (T,R), 1979 (T), 1980 (T), 1982 (T), 1984 (T,R), 1991 (R), 1992 (R), 1994 (R), 1995 (T), 2000 (R), 2003 (R)
Penconazole (182)	1992 (T, R), 1995 (R), 2015 (T), 2016 (R)

Pendimethalin (292)	2016 (T, R), 2019 (R)
Penthiopyrad (253)	2011 (T), 2012 (R), 2013 (R)
Permethrin (120)	1979 (T, R), 1980 (R), 1981 (T,R), 1982 (R), 1983 (R), 1984 (R), 1985 (R), 1986 (T,R), 1987 (T), 1988 (R), 1989 (R), 1991 (R), 1992 (corr. to 1991 report), 1999 (T)
2-Phenylphenol (056)	1969 (T,R), 1975 (R), 1983 (T), 1985 (T,R), 1989 (T), 1990 (T,R), 1999 (T,R), 2002 (R)
Phenothrin (127)	1979 (R), 1980 (T,R), 1982 (T), 1984 (T), 1987 (R), 1988 (T,R)
Phenthoate (128)	1980 (T,R), 1981 (R), 1984 (T)
Phorate (112)	1977 (T,R), 1982 (T), 1983 (T), 1984 (R), 1985 (T), 1990 (R), 1991 (R), 1992 (R), 1993 (T), 1994 (T), 1996 (T), 2004 (T), 2005 (R), 2012 (R), 2014 (R)
Phosalone (060)	1972 (T,R), 1975 (R), 1976 (R), 1993 (T), 1994 (R), 1997 (T), 1999 (R), 2001 (T)
Phosmet (103)	1976 (R), 1977 (corr. to 1976 R evaluation), 1978 (T,R), 1979 (T,R), 1981 (R), 1984 (R), 1985 (R), 1986 (R), 1987 (R and corr. to 1986 R evaluation), 1988 (R), 1994 (T), 1997 (R), 1998 (T), 2002 (R), 2003 (R), 2007 (R)
Phosphine	See Hydrogen phosphide
Phosphamidon (061)	1965 (T), 1966 (T), 1968 (T,R), 1969 (R), 1972 (R), 1974 (R), 1982 (T), 1985 (T), 1986 (T)
Phosphonic acid (301)	2017 (T, R)
Phoxim (141)	1982 (T), 1983 (R), 1984 (T,R), 1986 (R), 1987 (R), 1988 (R)
Picoxystrobin (258)	2012 (T,R), 2013 (R), 2016 (R), 2017 (R)
Pinoxaden (293)	2016 (T,R)
Piperonyl butoxide (062)	1965 (T,R), 1966 (T,R), 1967 (R), 1969 (R), 1972 (T,R), 1992 (T,R), 1995 (T), 2001 (R), 2002 (R)
Pirimicarb (101)	1976 (T,R), 1978 (T,R), 1979 (R), 1981 (T,R), 1982 (T), 1985 (R), 2004 (T), 2006 (R)
Pirimiphos-methyl (086)	1974 (T,R), 1976 (T,R), 1977 (R), 1979 (R), 1983 (R), 1985 (R), 1992 (T), 1994 (R), 2003 (R), 2004 (R, corr. to 2003 report), 2006 (T)
Prochloraz (142)	1983 (T,R), 1985 (R), 1987 (R), 1988 (R), 1989 (R), 1990 (R), 1991 (corr. to 1990 report, Annex I, and R evaluation), 1992 (R), 2001 (T), 2004 (R), 2009 (R)
Procymidone(136)	1981 (R), 1982 (T), 1989 (T,R), 1990 (R), 1991 (corr. to 1990 Annex I), 1993 (R), 1998 (R), 2007 (T)
Profenofos (171)	1990 (T,R), 1992 (R), 1994 (R), 1995 (R), 2007 (T), 2008 (R), 2011 (R), 2018 (R)
Propamocarb (148)	1984 (T,R), 1986 (T,R), 1987 (R), 2005 (T), 2006 (R), 2014 (R), 2018 (R)

Propargite (113)	1977 (T,R), 1978 (R), 1979 (R), 1980 (T,R), 1982 (T,R), 1999 (T), 2002 (R), 2006 (R)
Propham (183)	1965 (T), 1992 (T,R)
Propiconazole (160)	1987 (T, R), 1991 (R), 1994 (R), 2004 (T), 2006 (R), 2007 (R), 2013 (R), 2014 (R), 2015 (R), 2017 (R), 2018 (R)
Propineb	1977 (T, R), 1980 (T), 1983 (T), 1984 (R), 1985 (T, R), 1993 (T, R), 2004 (R)
Propoxur (075)	1973 (T, R), 1977 (R), 1981 (R), 1983 (R), 1989 (T), 1991 (R), 1996 (R)
Propylene oxide (250)	2011 (T, R), 2017 (T, R)
Propylenethiourea (PTU, 150)	1993 (T, R), 1994 (R), 1999 (T)
Prothioconazole (232)	2008 (T, R), 2009 (R), 2014 (R), 2017 (R)
Pydiflumetofen (309)	2018 (T, R)
Pymetrozine (279)	2014 (T, R)
Pyraclostrobin (210)	2003 (T), 2004 (R), 2006 (R), 2011 (R), 2012 (R), 2014 (R), 2018 (T, R)
Pyrazophos (153)	1985 (T, R), 1987 (R), 1992 (T,R), 1993 (R)
Pyrethrins (063)	1965 (T), 1966 (T, R), 1967 (R), 1968 (R), 1969 (R), 1970 (T), 1972 (T,R), 1974 (R), 1999 (T), 2000 (R), 2003 (T,R), 2005 (R)
Pyrimethanil (226)	2007 (T, R), 2013 (R)
Pyriofenone (310)	2018 (T, R)
Pyriproxyfen (200)	1999 (R, T), 2000 (R), 2001 (T), 2018 (R)
Quinclorac (287)	2015 (T, R), 2017 (R)
Quinoxifen (223)	2006 (T, R)
Quintozene (064)	1969 (T, R), 1973 (T,R), 1974 (R), 1975 (T,R), 1976 (Annex I, corr. to 1975 R evaluation), 1977 (T,R), 1995 (T,R), 1998 (R)
Saflufenacil (251)	2011 (T, R), 2016 (R), 2017 (R)
Sedaxane (259)	2012 (T, R), 2014 (R)
Spices	2004 (R), 2005 (R), 2007 (R), 2010 (R), 2015 (R)
Spinetoram (233)	2008 (T, R), 2012 (R), 2017 (R)
Spinosad (203)	2001 (T, R), 2004 (R), 2008 (R), 2011 (R)
Spirodiclofen (237)	2009 (T, R)
Spiromesifen (294)	2016 (T, R)
Spirotetramat (234)	2008 (T, R), 2011 (R), 2012 (R), 2013 (R), 2015 (R), 2019 (R)
Sulfoxaflor (252)	2011 (T, R), 2013 (R), 2014 (R), 2016 (R), 2018 (R)
Sulfuryl fluoride (218)	2005 (T, R)
2,4,5-T (121)	1970 (T,R), 1979 (T,R), 1981 (T)

Tebuconazole (189)	1994 (T, R), 1996 (corr. to Annex II of 1995 report), 1997 (R), 2008 (R), 2010 (T), 2011 (R), 2015 (R), 2017 (R), 2019 (R)
Tebufenozide (196)	1996 (T, R), 1997 (R), 1999 (R), 2001 (T, R), 2003 (T)
Tecnazine (115)	1974 (T, R), 1978 (T, R), 1981 (R), 1983 (T), 1987 (R), 1989 (R), 1994 (T, R)
Teflubenzuron (190)	1994 (T), 1996 (R), 2016 (T, R)
Temephos	2006 (T)
Terbufos (167)	1989 (T, R), 1990 (T,R), 2003 (T), 2005 (R)
Thiabendazole (065)	1970 (T, R), 1971 (R), 1972 (R), 1975 (R), 1977 (T,R), 1979 (R), 1981 (R), 1997 (R), 2000 (R), 2006 (T,R), 2019 (T, R)
Thiacloprid (223)	2006 (T, R)
Thiamethoxam (245)	2010 (T, R), 2011 (R), 2012 (R), 2014 (R)
Thiodicarb (154)	1985 (T, R), 1986 (T), 1987 (R), 1988 (R), 2000 (T), 2001 (R)
Thiometon (076)	1969 (T, R), 1973 (T,R), 1976 (R), 1979 (T,R), 1988 (R)
Thiophanate-methyl (077)	1973 (T, R), 1975 (T, R), 1977 (T), 1978 (R), 1988 (R), 2002 (R), 1990 (R), 1994 (R), 1995 (T,E), 1998 (T,R), 2006 (T), 2017 (T)
Thiram (105)	See Dithiocarbamates, 1965 (T), 1967 (T, R), 1970 (T,R), 1974 (T), 1977 (T), 1983 (R), 1984 (R), 1985 (T,R), 1987 (T), 1988 (R), 1989 (R), 1992 (T), 1996 (R)
Tioxazafen (211)	2018 (T, R)
Tolclofos-methyl (191)	1994 (T, R), 1996 (corr. to Annex II of 1995 report)
Tolfenpyrad (269)	2013 (T), 2016 (R)
Tolylfluanid (162)	1988 (T, R), 1990 (R), 1991 (corr. to 1990 report), 2002 (T, R), 2003 (R)
Toxaphene	See Camphechlor
Triadimefon (133)	1979 (R), 1981 (T, R), 1983 (T,R), 1984 (R), 1985 (T,R), 1986 (R), 1987 (R and corr. to 1986 R evaluation), 1988 (R), 1989 (R), 1992 (R), 1995 (R), 2004 (T), 2007 (R)
Triadimenol (168)	1989 (T, R), 1992 (R), 1995 (R), 2004 (T), 2007 (R), 2014 (R)
Triazolylalanine	1989 (T, R)
Triazophos (143)	1982 (T), 1983 (R), 1984 (corr. to 1983 report, Annex I), 1986 (T, R), 1990 (R), 1991 (T and corr. to 1990 R evaluation), 1992 (R), 1993 (T, R), 2002 (T), 2007 (R), 2010 (R), 2013 (R)
Trichlorfon (066)	1971 (T,R), 1975 (T,R), 1978 (T,R), 1987 (R)



Trichloronat	1971 (T,R)
Trichloroethylene	1968 (R)
Tricyclohexyltin hydroxide	See Cyhexatin
Trifloxystrobin (213)	2004 (T, R), 2012 (R), 2015 (R), 2017 (R)
Triflumezopyrim (303)	2017 (T, R)
Triflumizole (270)	2013 (T, R)
Triforine (116)	1977 (T), 1978 (T, R), 1997 (T), 2004 (R), 2014 (T,R)
Trinexapac-ethyl (271)	2013 (T,R)
Triphenyltin compounds	See Fentin compounds
Vamidothion (078)	1973 (T, R), 1982 (T), 1985 (T, R), 1987 (R), 1988 (T), 1990 (R), 1992 (R)
Vinclozolin (159)	1986 (T, R), 1987 (R and corr. to 1986 report and R evaluation), 1988 (T, R), 1989 (R), 1990 (R), 1992 (R), 1995 (T)
Zineb (105)	See Dithiocarbamates, 1965 (T), 1967 (T, R), 1993 (T)
Ziram (105)	See Dithiocarbamates, 1965 (T), 1967 (T, R), 1996 (T,R)
Zoxamide (227)	2007 (T, R), 2009 (R)



### Annex 3: International estimated daily intakes (IEDIs) of pesticide residues

ACETOCHLOR (280)				International Estimated Daily Intake (IEDI)				ADI = 0 - 0.01 mg/kg bw							
Codex Code	Commodity description	Expr as	STMR mg/kg	Diets as g/person/day				Intake as ug/person/day							
				G01 diet	G01 intake	G02 diet	G02 intake	G03 diet	G03 intake	G04 diet	G04 intake	G05 diet	G05 intake	G06 diet	G06 intake
VD 0523	Broad bean, dry, raw (incl horse-bean, field bean) ( <i>Vicia faba</i> )	RAC	0.02	1.27	0.03	0.10	0.00	0.12	0.00	2.49	0.05	0.23	0.00	5.54	0.11
VD 0541	Soya bean, dry, raw (incl flour, incl paste, incl curd, incl sauce, excl oil)	RAC	0.15	0.63	0.09	1.09	0.16	0.40	0.06	1.40	0.21	1.68	0.25	0.48	0.07
OR 0541	Soya oil, refined	PP	0.016	12.99	0.21	10.43	0.17	3.63	0.06	13.10	0.21	10.70	0.17	13.10	0.21
VD 0072	Peas (dry) ( <i>Pisum spp</i> ), raw	RAC	0.02	1.62	0.03	3.22	0.06	0.92	0.02	1.50	0.03	2.90	0.06	0.17	0.00
VD 0524	Chick-pea (dry) ( <i>Cicer spp</i> ), raw	RAC	0.02	5.34	0.11	0.13	0.00	0.10	0.00	4.69	0.09	7.24	0.14	5.52	0.11
VD 0533	Lentil (dry) ( <i>Lens spp</i> ), raw	RAC	0.02	2.12	0.04	0.10	0.00	0.10	0.00	3.21	0.06	1.60	0.03	4.90	0.10
VD 0537	Pigeon pea (dry) ( <i>Cajanus spp</i> ), raw	RAC	0.02	NC	-	NC	-	0.10	0.00	0.10	0.00	3.38	0.07	NC	-
VR 0596	Sugar beet, raw (incl sugar)	RAC	0.018	0.13	0.00	NC	-	0.10	0.00	0.66	0.01	0.47	0.01	88.94	1.60
-	Sugar beet, sugar	PP	0.0068	0.10	0.00	NC	-	0.10	0.00	0.10	0.00	0.10	0.00	12.63	0.09
VR 0589	Potato, raw (incl flour, incl frozen, incl starch, incl tapioca)	RAC	0.04	59.74	2.39	316.14	12.65	9.78	0.39	60.26	2.41	54.12	2.16	119.82	4.79
GC 0650	Rye, raw (incl flour)	RAC	0.035	0.13	0.00	19.38	0.68	0.10	0.00	0.12	0.00	0.10	0.00	2.15	0.08
GC 0653	Triticale, raw (incl flour)	RAC	0.035	NC	-	NC	-	NC	-	0.10	0.00	0.39	0.01	NC	-
GC 0654	Wheat, raw (incl bulgur, incl fermented beverages, incl germ, incl wholemeal bread, incl white flour products, incl white bread)	RAC	0.02	381.15	7.62	341.55	6.83	38.35	0.77	281.89	5.64	172.83	3.46	434.07	8.68
GC 0640	Barley, raw (incl malt extract, incl pot&pearled, incl flour & grits, incl beer, incl malt)	RAC	0.035	19.91	0.70	31.16	1.09	5.04	0.18	3.10	0.11	9.77	0.34	4.31	0.15
GC 0641	Buckwheat, raw (incl flour)	RAC	0.035	NC	-	0.40	0.01	0.10	0.00	0.10	0.00	0.10	0.00	0.10	0.00
GC 0647	Oats, raw (incl rolled)	RAC	0.035	0.10	0.00	7.05	0.25	0.10	0.00	1.71	0.06	0.96	0.03	0.10	0.00
GC 0646	Millet, raw (incl flour, incl beer)	RAC	0.035	1.46	0.05	2.32	0.08	5.84	0.20	0.89	0.03	16.17	0.57	0.10	0.00
GC 0645	Maize, raw (incl glucose & dextrose & isoglucose, incl flour, incl oil, incl beer, incl germ, incl starch)	RAC	0.002	29.81	0.06	44.77	0.09	108.95	0.22	52.37	0.10	60.28	0.12	75.69	0.15
GC 0447	Sweet corn on the cob, raw (incl frozen kernels, incl canned kernels)	RAC	0.04	0.14	0.01	0.94	0.04	5.70	0.23	2.61	0.10	1.94	0.08	0.22	0.01
SO 0702	Sunflower seed, raw	RAC	0.04	0.10	0.00	0.33	0.01	0.10	0.00	0.24	0.01	0.10	0.00	0.10	0.00
OR 0702	Sunflower seed oil, edible	PP	0.0088	2.97	0.03	14.42	0.13	0.43	0.00	3.46	0.03	2.20	0.02	5.53	0.05
MM 0095	MEAT FROM MAMMALS other than marine mammals, raw (incl prepared meat) -80% as muscle	RAC	0.0004	24.96	0.01	57.95	0.02	16.70	0.01	38.38	0.02	26.46	0.01	29.00	0.01
MM 0095	MEAT FROM MAMMALS other than marine mammals, raw (incl prepared meat) - 20% as fat	RAC	0.0004	6.24	0.00	14.49	0.01	4.18	0.00	9.60	0.00	6.62	0.00	7.25	0.00

**ACETOCHLOR (280)**

## International Estimated Daily Intake (IEDI)

ADI = 0 - 0.01 mg/kg bw

Codex Code	Commodity description	Expr as	STMR mg/kg	Diets as g/person/day				Intake as ug/person/day							
				G01 diet	G01 intake	G02 diet	G02 intake	G03 diet	G03 intake	G04 diet	G04 intake	G05 diet	G05 intake	G06 diet	G06 intake
MF 0100	Mammalian fats, raw, excl milk fats (incl rendered fats)	RAC	0.0004	3.29	0.00	6.14	0.00	0.82	0.00	1.57	0.00	2.23	0.00	1.07	0.00
MO 0105	Edible offal (mammalian), raw	RAC	0.0213	4.79	0.10	9.68	0.21	2.97	0.06	5.49	0.12	3.84	0.08	5.03	0.11
ML 0106	Milks, raw or skimmed (incl dairy products)	RAC	0.0012	289.65	0.35	485.88	0.58	26.92	0.03	239.03	0.29	199.91	0.24	180.53	0.22
PM 0110	Poultry meat, raw (incl prepared) - 90% as muscle	RAC	0	13.17	0.00	26.78	0.00	7.24	0.00	116.71	0.00	22.54	0.00	32.09	0.00
PM 0110	Poultry meat, raw (incl prepared) - 10% as fat	RAC	0	1.46	0.00	2.98	0.00	0.80	0.00	12.97	0.00	2.50	0.00	3.57	0.00
PF 0111	Poultry fat, raw (incl rendered)	RAC	0	0.10	0.00	0.10	0.00	NC	-	0.10	0.00	0.10	0.00	0.10	0.00
PO 0111	Poultry edible offal, raw (incl prepared)	RAC	0	0.12	0.00	0.12	0.00	0.11	0.00	5.37	0.00	0.24	0.00	0.10	0.00
PE 0112	Eggs, raw, (incl dried)	RAC	0	7.84	0.00	23.08	0.00	2.88	0.00	14.89	0.00	9.81	0.00	14.83	0.00
Total intake (ug/person)=				11.8		23.1		2.3		9.6		7.9		16.6	
Bodyweight per region (kg bw) =				60		60		60		60		60		60	
ADI (ug/person)=				600		600		600		600		600		600	
% ADI=				2.0%		3.8%		0.4%		1.6%		1.3%		2.8%	
Rounded % ADI=				2%		4%		0%		2%		1%		3%	

**ACETOCHLOR (280)**

## International Estimated Daily Intake (IEDI)

ADI = 0 - 0.01 mg/kg bw

Codex Code	Commodity description	Expr as	STMR mg/kg	Diets as g/person/day				Intake as ug/person/day							
				G07 diet	G07 intake	G08 diet	G08 intake	G09 diet	G09 intake	G10 diet	G10 intake	G11 diet	G11 intake	G12 diet	G12 intake
VD 0523	Broad bean, dry, raw (incl horse-bean, field bean) (Vicia faba)	RAC	0.02	0.10	0.00	0.10	0.00	1.16	0.02	0.40	0.01	NC	-	0.10	0.00
VD 0541	Soya bean, dry, raw (incl flour, incl paste, incl curd, incl sauce, excl oil)	RAC	0.15	0.47	0.07	0.77	0.12	9.12	1.37	8.05	1.21	0.10	0.02	6.06	0.91
OR 0541	Soya oil, refined	PP	0.016	19.06	0.30	21.06	0.34	5.94	0.10	33.78	0.54	40.05	0.64	13.39	0.21
VD 0072	Peas (dry) (Pisum spp), raw	RAC	0.02	3.80	0.08	1.25	0.03	0.90	0.02	2.33	0.05	2.70	0.05	3.83	0.08
VD 0524	Chick-pea (dry) (Cicer spp), raw	RAC	0.02	0.27	0.01	1.33	0.03	0.32	0.01	0.15	0.00	0.10	0.00	0.10	0.00
VD 0533	Lentil (dry) (Lens spp), raw	RAC	0.02	0.95	0.02	1.18	0.02	0.40	0.01	0.96	0.02	0.71	0.01	1.28	0.03
VD 0537	Pigeon pea (dry) (Cajanus spp), raw	RAC	0.02	NC	-	NC	-	0.20	0.00	NC	-	NC	-	NC	-

## ACETOCHLOR (280)

## International Estimated Daily Intake (IEDI)

ADI = 0 - 0.01 mg/kg bw

Codex Code	Commodity description	Expr as	STMR mg/kg	Diets as g/person/day				Intake as ug/person/day							
				G07 diet	G07 intake	G08 diet	G08 intake	G09 diet	G09 intake	G10 diet	G10 intake	G11 diet	G11 intake	G12 diet	G12 intake
VR 0596	Sugar beet, raw (incl sugar)	RAC	0.018	0.10	0.00	NC	-	0.10	0.00	0.10	0.00	NC	-	NC	-
-	Sugar beet, sugar	PP	0.0068	0.10	0.00	NC	-	0.10	0.00	NC	-	NC	-	NC	-
VR 0589	Potato, raw (incl flour, incl frozen, incl starch, incl tapioca)	RAC	0.04	225.03	9.00	234.24	9.37	71.48	2.86	177.55	7.10	234.55	9.38	37.71	1.51
GC 0650	Rye, raw (incl flour)	RAC	0.035	3.21	0.11	35.38	1.24	0.21	0.01	6.50	0.23	1.49	0.05	NC	-
GC 0653	Triticale, raw (incl flour)	RAC	0.035	0.10	0.00	0.17	0.01	0.29	0.01	0.10	0.00	NC	-	NC	-
GC 0654	Wheat, raw (incl bulgur, incl fermented beverages, incl germ, incl wholemeal bread, incl white flour products, incl white bread)	RAC	0.02	253.07	5.06	244.73	4.89	134.44	2.69	235.10	4.70	216.39	4.33	167.40	3.35
GC 0640	Barley, raw (incl malt extract, incl pot&pearled, incl flour & grits, incl beer, incl malt)	RAC	0.035	36.18	1.27	53.45	1.87	9.39	0.33	35.25	1.23	46.68	1.63	15.92	0.56
GC 0641	Buckwheat, raw (incl flour)	RAC	0.035	0.10	0.00	0.79	0.03	0.18	0.01	0.35	0.01	NC	-	NC	-
GC 0647	Oats, raw (incl rolled)	RAC	0.035	7.50	0.26	6.26	0.22	0.15	0.01	4.87	0.17	3.16	0.11	2.98	0.10
GC 0646	Millet, raw (incl flour, incl beer)	RAC	0.035	0.10	0.00	0.16	0.01	1.75	0.06	0.69	0.02	NC	-	NC	-
GC 0645	Maize, raw (incl glucose & dextrose & isoglucose, incl flour, incl oil, incl beer, incl germ, incl starch)	RAC	0.002	18.51	0.04	26.18	0.05	26.04	0.05	39.99	0.08	7.36	0.01	64.58	0.13
GC 0447	Sweet corn on the cob, raw (incl frozen kernels, incl canned kernels)	RAC	0.04	11.43	0.46	3.71	0.15	0.74	0.03	13.63	0.55	3.07	0.12	1.50	0.06
SO 0702	Sunflower seed, raw	RAC	0.04	0.10	0.00	1.32	0.05	0.10	0.00	1.17	0.05	NC	-	0.10	0.00
OR 0702	Sunflower seed oil, edible	PP	0.0088	9.50	0.08	11.37	0.10	0.49	0.00	5.15	0.05	2.63	0.02	2.80	0.02
MM 0095	MEAT FROM MAMMALS other than marine mammals, raw (incl prepared meat) -80% as muscle	RAC	0.0004	112.02	0.04	120.71	0.05	63.46	0.03	88.99	0.04	96.24	0.04	41.02	0.02
MM 0095	MEAT FROM MAMMALS other than marine mammals, raw (incl prepared meat) - 20% as fat	RAC	0.0004	28.01	0.01	30.18	0.01	15.86	0.01	22.25	0.01	24.06	0.01	10.25	0.00
MF 0100	Mammalian fats, raw, excl milk fats (incl rendered fats)	RAC	0.0004	6.44	0.00	15.51	0.01	3.79	0.00	8.29	0.00	18.44	0.01	8.00	0.00
MO 0105	Edible offal (mammalian), raw	RAC	0.0213	15.17	0.32	5.19	0.11	6.30	0.13	6.78	0.14	3.32	0.07	3.17	0.07
ML 0106	Milks, raw or skimmed (incl dairy products)	RAC	0.0012	388.92	0.47	335.88	0.40	49.15	0.06	331.25	0.40	468.56	0.56	245.45	0.29
PM 0110	Poultry meat, raw (incl prepared) - 90% as muscle	RAC	0	66.38	0.00	48.47	0.00	21.58	0.00	78.41	0.00	48.04	0.00	76.01	0.00

## ACETOCHLOR (280)

## International Estimated Daily Intake (IEDI)

ADI = 0 - 0.01 mg/kg bw

Codex Code	Commodity description	Expr as	STMR mg/kg	Diets as g/person/day				Intake as ug/person/day							
				G07 diet	G07 intake	G08 diet	G08 intake	G09 diet	G09 intake	G10 diet	G10 intake	G11 diet	G11 intake	G12 diet	G12 intake
PM 0110	Poultry meat, raw (incl prepared) - 10% as fat	RAC	0	7.38	0.00	5.39	0.00	2.40	0.00	8.71	0.00	5.34	0.00	8.45	0.00
PF 0111	Poultry fat, raw (incl rendered)	RAC	0	0.10	0.00	0.10	0.00	NC	-	0.10	0.00	0.71	0.00	NC	-
PO 0111	Poultry edible offal, raw (incl prepared)	RAC	0	0.33	0.00	0.72	0.00	0.27	0.00	0.35	0.00	0.80	0.00	NC	-
PE 0112	Eggs, raw, (incl dried)	RAC	0	25.84	0.00	29.53	0.00	28.05	0.00	33.19	0.00	36.44	0.00	8.89	0.00
Total intake (ug/person)=				17.6		19.1		7.8		16.6		17.1		7.4	
Bodyweight per region (kg bw) =				60		60		55		60		60		60	
ADI (ug/person)=				600		600		550		600		600		600	
%ADI=				2.9%		3.2%		1.4%		2.8%		2.8%		1.2%	
Rounded %ADI=				3%		3%		1%		3%		3%		1%	

## ACETOCHLOR (280)

## International Estimated Daily Intake (IEDI)

ADI = 0 - 0.01 mg/kg bw

Codex Code	Commodity description	Expr as	STMR mg/kg	Diets: g/person/day				Intake = daily intake: ug/person					
				G13 diet	G13 intake	G14 diet	G14 intake	G15 diet	G15 intake	G16 diet	G16 intake	G17 diet	G17 intake
VD 0523	Broad bean, dry, raw (incl horse-bean, field bean) (Vicia faba)	RAC	0.02	3.70	0.07	0.10	0.00	0.17	0.00	0.10	0.00	NC	-
VD 0541	Soya bean, dry, raw (incl flour, incl paste, incl curd, incl sauce, excl oil)	RAC	0.15	2.89	0.43	0.21	0.03	0.48	0.07	3.16	0.47	0.26	0.04
OR 0541	Soya oil, refined	PP	0.016	2.32	0.04	2.54	0.04	18.70	0.30	2.51	0.04	6.29	0.10
VD 0072	Peas (dry) (Pisum spp), raw	RAC	0.02	1.53	0.03	2.52	0.05	3.52	0.07	3.56	0.07	0.74	0.01
VD 0524	Chick-pea (dry) (Cicer spp), raw	RAC	0.02	1.09	0.02	1.56	0.03	0.33	0.01	0.18	0.00	0.47	0.01
VD 0533	Lentil (dry) (Lens spp), raw	RAC	0.02	0.67	0.01	7.26	0.15	0.37	0.01	0.10	0.00	NC	-
VD 0537	Pigeon pea (dry) (Cajanus spp), raw	RAC	0.02	1.14	0.02	0.10	0.00	NC	-	5.53	0.11	NC	-
VR 0596	Sugar beet, raw (incl sugar)	RAC	0.018	3.93	0.07	1.68	0.03	NC	-	NC	-	36.12	0.65
-	Sugar beet, sugar	PP	0.0068	0.56	0.00	0.24	0.00	NC	-	NC	-	5.13	0.03
VR 0589	Potato, raw (incl flour, incl frozen, incl starch, incl tapioca)	RAC	0.04	23.96	0.96	13.56	0.54	213.41	8.54	104.35	4.17	8.56	0.34
GC 0650	Rye, raw (incl flour)	RAC	0.035	0.10	0.00	0.10	0.00	13.95	0.49	0.10	0.00	0.88	0.03
GC 0653	Triticale, raw (incl flour)	RAC	0.035	0.10	0.00	NC	-	NC	-	NC	-	NC	-
GC 0654	Wheat, raw (incl bulgur, incl fermented beverages, incl germ, incl wholemeal bread, incl white flour products, incl white bread)	RAC	0.02	57.20	1.14	110.47	2.21	272.62	5.45	25.82	0.52	132.04	2.64
GC 0640	Barley, raw (incl malt extract, incl pot&pearled, incl flour & grits, incl beer, incl malt)	RAC	0.035	11.58	0.41	2.33	0.08	46.71	1.63	3.72	0.13	16.26	0.57
GC 0641	Buckwheat, raw (incl flour)	RAC	0.035	0.10	0.00	2.82	0.10	0.10	0.00	0.10	0.00	NC	-

## ACETOCHLOR (280)

## International Estimated Daily Intake (IEDI)

ADI = 0 - 0.01 mg/kg bw

Codex Code	Commodity description	Expr as	STMR mg/kg	Diets: g/person/day				Intake = daily intake: ug/person					
				G13 diet	G13 intake	G14 diet	G14 intake	G15 diet	G15 intake	G16 diet	G16 intake	G17 diet	G17 intake
GC 0647	Oats, raw (incl rolled)	RAC	0.035	0.37	0.01	0.10	0.00	2.79	0.10	0.10	0.00	NC	-
GC 0646	Millet, raw (incl flour, incl beer)	RAC	0.035	61.13	2.14	0.78	0.03	NC	-	33.55	1.17	NC	-
GC 0645	Maize, raw (incl glucose & dextrose & isoglucose, incl flour, incl oil, incl beer, incl germ, incl starch)	RAC	0.002	116.66	0.23	10.52	0.02	38.46	0.08	76.60	0.15	34.44	0.07
GC 0447	Sweet corn on the cob, raw (incl frozen kernels, incl canned kernels)	RAC	0.04	3.63	0.15	20.50	0.82	8.78	0.35	0.10	0.00	0.17	0.01
SO 0702	Sunflower seed, raw	RAC	0.04	0.10	0.00	0.10	0.00	0.10	0.00	2.23	0.09	NC	-
OR 0702	Sunflower seed oil, edible	PP	0.0088	0.37	0.00	0.10	0.00	12.98	0.11	4.01	0.04	0.20	0.00
MM 0095	MEAT FROM MAMMALS other than marine mammals, raw (incl prepared meat) -80% as muscle	RAC	0.0004	23.34	0.01	40.71	0.02	97.15	0.04	18.06	0.01	57.71	0.02
MM 0095	MEAT FROM MAMMALS other than marine mammals, raw (incl prepared meat) - 20% as fat	RAC	0.0004	5.84	0.00	10.18	0.00	24.29	0.01	4.52	0.00	14.43	0.01
MF 0100	Mammalian fats, raw, excl milk fats (incl rendered fats)	RAC	0.0004	1.05	0.00	1.14	0.00	18.69	0.01	0.94	0.00	3.12	0.00
MO 0105	Edible offal (mammalian), raw	RAC	0.0213	4.64	0.10	1.97	0.04	10.01	0.21	3.27	0.07	3.98	0.08
ML 0106	Milks, raw or skimmed (incl dairy products)	RAC	0.0012	108.75	0.13	70.31	0.08	436.11	0.52	61.55	0.07	79.09	0.09
PM 0110	Poultry meat, raw (incl prepared) - 90% as muscle	RAC	0	3.53	0.00	10.83	0.00	51.36	0.00	4.53	0.00	50.00	0.00
PM 0110	Poultry meat, raw (incl prepared) - 10% as fat	RAC	0	0.39	0.00	1.20	0.00	5.71	0.00	0.50	0.00	5.56	0.00
PF 0111	Poultry fat, raw (incl rendered)	RAC	0	NC	-	NC	-	0.32	0.00	NC	-	NC	-
PO 0111	Poultry edible offal, raw (incl prepared)	RAC	0	0.10	0.00	0.70	0.00	0.97	0.00	0.10	0.00	NC	-
PE 0112	Eggs, raw, (incl dried)	RAC	0	3.84	0.00	4.41	0.00	27.25	0.00	1.13	0.00	7.39	0.00
Total intake (ug/person)=				6.0				4.3				18.0	
Bodyweight per region (kg bw) =				60				60				60	
ADI (ug/person)=				600				600				600	
%ADI=				1.0%				0.7%				3.0%	
Rounded %ADI=				1%				1%				1%	

AZOXYSTROBIN (229)				International Estimated Daily Intake (IEDI)				ADI = 0 - 00 mg/kg bw							
Codex Code	Commodity description	Expr as	STMR mg/kg	Diets as g/person/day				Intake as ug/person/day							
				G01 diet	G01 intake	G02 diet	G02 intake	G03 diet	G03 intake	G04 diet	G04 intake	G05 diet	G05 intake	G06 diet	G06 intake
FC 0001	Citrus fruit, raw (incl kumquat commodities)	RAC	4.9	32.25	158.03	11.67	57.18	16.70	81.83	76.01	372.45	33.90	166.11	92.97	455.55
JF 0001	Citrus fruit, juice	PP	0.39	1.30	0.51	2.37	0.92	0.22	0.09	13.88	5.41	0.75	0.29	2.63	1.03
FS 0012	Stone fruits, raw (incl dried apricots, excl dried plums)	RAC	0.74	11.33	8.38	23.62	17.48	0.24	0.18	11.32	8.38	2.28	1.69	33.26	24.61
DF 0014	Plum, dried (prunes)	PP	0.14	0.10	0.01	0.10	0.01	0.10	0.01	0.18	0.03	0.10	0.01	0.10	0.01
FB 0264	Blackberries, raw	RAC	1	0.35	0.35	0.11	0.11	0.10	0.10	0.10	0.10	0.10	0.10	1.23	1.23
FB 0266	Dewberries, incl boysen- & loganberry, raw	RAC	1	0.10	0.10	0.10	0.10	0.10	0.10	0.10	0.10	0.10	0.10	0.10	0.10
FB 0272	Raspberries, red, black, raw	RAC	1	0.10	0.10	0.93	0.93	0.10	0.10	0.10	0.10	0.10	0.10	0.10	0.10
FB 0020	Blueberries, raw	RAC	1	0.10	0.10	0.10	0.10	0.10	0.10	0.10	0.10	0.10	0.10	0.10	0.10
FB 0021	Currants, red, black, white, raw	RAC	1	0.10	0.10	0.74	0.74	0.10	0.10	0.10	0.10	0.10	0.10	0.10	0.10
FB 0268	Gooseberries, raw	RAC	1	0.10	0.10	0.24	0.24	NC	-	0.10	0.10	0.10	0.10	NC	-
FB 0267	Elderberries, raw (incl processed)	RAC	1	0.44	0.44	0.27	0.27	0.34	0.34	1.41	1.41	NC	-	0.87	0.87
FB 0269	Grape, raw (incl must, excl dried, excl juice, excl wine)	RAC	0.53	13.02	6.90	9.25	4.90	0.10	0.05	16.91	8.96	3.70	1.96	54.44	28.85
DF 0269	Grape, dried (= currants, raisins and sultanas)	PP	0.24	0.51	0.12	0.51	0.12	0.10	0.02	1.27	0.30	0.12	0.03	2.07	0.50
JF 0269	Grape juice	PP	0.19	0.14	0.03	0.29	0.06	0.10	0.02	0.30	0.06	0.24	0.05	0.10	0.02
-	Grape wine (incl vermouths)	PP	0.36	0.67	0.24	12.53	4.51	2.01	0.72	1.21	0.44	3.53	1.27	4.01	1.44
FB 0265	Cranberries, raw	RAC	0.23	0.10	0.02	0.10	0.02	NC	-	0.10	0.02	0.10	0.02	0.10	0.02
FB 0275	Strawberry, raw	RAC	1.3	0.70	0.91	2.01	2.61	0.10	0.13	1.36	1.77	0.37	0.48	2.53	3.29
FT 0289	Carambola, raw (i.e. star fruit)	RAC	0.023	0.10	0.00	0.10	0.00	0.10	0.00	0.10	0.00	NC	-	0.10	0.00
FT 0336	Guava, raw	RAC	0.055	0.47	0.03	0.10	0.01	0.48	0.03	0.49	0.03	4.42	0.24	0.10	0.01
FI 0327	Banana, raw (incl plantains) (incl dried)	RAC	0.03	5.06	0.15	6.91	0.21	37.17	1.12	31.16	0.93	40.21	1.21	18.96	0.57
FI 0345	Mango, raw (incl canned mango, incl mango juice)	RAC	0.05	10.48	0.52	0.10	0.01	7.24	0.36	6.87	0.34	19.98	1.00	6.25	0.31
FI 0350	Papaya, raw	RAC	0.02	0.35	0.01	0.10	0.00	3.05	0.06	0.80	0.02	7.28	0.15	1.00	0.02
FI 2540	Pitaya, raw (i.e dragon fruit or pitahaya)	RAC	0.041	0.10	0.00	0.10	0.00	0.10	0.00	0.10	0.00	NC	-	0.10	0.00
VA 0035	Bulb vegetables, raw	RAC	2.2	34.29	75.44	46.37	102.01	4.73	10.41	41.36	90.99	21.08	46.38	52.54	115.59
VB 0041	Cabbages, head, raw	RAC	1.2	2.73	3.28	27.92	33.50	0.55	0.66	4.47	5.36	4.27	5.12	10.25	12.30
VB 0042	Flowerhead brassicas, raw	RAC	1.2	2.96	3.55	0.57	0.68	0.10	0.12	4.17	5.00	7.79	9.35	3.64	4.37
VB 0402	Brussels sprouts, raw	RAC	1.2	0.63	0.76	6.41	7.69	0.13	0.16	1.03	1.24	NC	-	2.35	2.82
VB 0405	Kohlrabi, raw	RAC	1.2	0.10	0.12	0.89	1.07	0.10	0.12	0.14	0.17	NC	-	0.33	0.40
VC 0046	Melons, raw (excl watermelons)	RAC	0.02	8.90	0.18	8.64	0.17	0.80	0.02	17.90	0.36	2.80	0.06	29.17	0.58
VC 0423	Chayote (Christophine)	RAC	0.17	NC	-	NC	-	NC	-	NC	-	NC	-	NC	-
VC 0424	Cucumber, raw	RAC	0.17	8.01	1.36	30.66	5.21	1.45	0.25	19.84	3.37	0.27	0.05	34.92	5.94
VC 0425	Gherkin, raw	RAC	0.17	1.73	0.29	6.64	1.13	0.31	0.05	4.29	0.73	0.29	0.05	7.56	1.29



**AZOXYSTROBIN (229)**

International Estimated Daily Intake (IEDI)

ADI = 0 - 00 mg/kg bw

Codex Code	Commodity description	Expr as	STMR mg/kg	Diets as g/person/day				Intake as ug/person/day							
				G01 diet	G01 intake	G02 diet	G02 intake	G03 diet	G03 intake	G04 diet	G04 intake	G05 diet	G05 intake	G06 diet	G06 intake
VC 0431	Squash, summer, raw (= courgette, zucchini)	RAC	0.17	0.78	0.13	2.06	0.35	0.30	0.05	1.61	0.27	2.25	0.38	2.36	0.40
VC 0432	Watermelon, raw	RAC	0.02	28.96	0.58	25.65	0.51	1.56	0.03	39.26	0.79	4.94	0.10	66.90	1.34
VC 0433	Winter squash, raw (= pumpkin)	RAC	0.02	4.76	0.10	12.56	0.25	1.85	0.04	9.86	0.20	5.11	0.10	14.39	0.29
VO 0050	Fruiting vegetables other than cucurbits, raw, (incl processed commodities), excl tomato commodities, excl sweet corn commodities, excl mushroom commodities	RAC	0.35	18.97	6.64	21.73	7.61	20.61	7.21	27.35	9.57	35.54	12.44	50.62	17.72
-	Peppers, chili, dried	PP	3.5	0.42	1.47	0.53	1.86	0.84	2.94	0.50	1.75	0.95	3.33	0.37	1.30
VO 0448	Tomato, raw (incl canned, excl juice, excl paste)	RAC	0.35	42.04	14.71	76.13	26.65	10.69	3.74	84.59	29.61	24.92	8.72	203.27	71.14
-	Tomato, paste (i.e. concentrated tomato sauce/puree)	PP	1.1	2.34	2.57	1.33	1.46	1.57	1.73	4.24	4.66	0.34	0.37	2.83	3.11
JF 0448	Tomato, juice (single strength, incl concentrated)	PP	0.16	0.29	0.05	0.29	0.05	0.10	0.02	0.38	0.06	0.10	0.02	0.14	0.02
VL 0463	Cassava leaves, raw	RAC	0.23	NC	-	NC	-	0.65	0.15	0.10	0.02	NC	-	NC	-
VL 0469	Chicory leaves (sugar loaf), raw	RAC	0.23	NC	-	NC	-	NC	-	NC	-	NC	-	NC	-
VL 0482	Lettuce, head, raw	RAC	0.28	NC	-	NC	-	NC	-	NC	-	NC	-	NC	-
VL 0483	Lettuce, leaf, raw	RAC	0.28	0.53	0.15	0.36	0.10	0.16	0.04	6.21	1.74	1.90	0.53	6.05	1.69
VL 0506	Turnip greens, raw (i.e. Namentia, Tendergreen)	RAC	0.23	NC	-	NC	-	NC	-	NC	-	NC	-	NC	-
VP 0060	Legume vegetables, raw	RAC	1	7.73	7.73	1.53	1.53	0.51	0.51	2.95	2.95	5.08	5.08	12.86	12.86
VD 0070	Pulses, raw (incl processed), excl soya bean commodities	RAC	0.01	12.80	0.13	4.97	0.05	13.60	0.14	13.82	0.14	28.25	0.28	23.64	0.24
VD 0541	Soya bean, dry, raw (incl flour, incl paste, incl curd, incl sauce, excl oil)	RAC	0.06	0.63	0.04	1.09	0.07	0.40	0.02	1.40	0.08	1.68	0.10	0.48	0.03
OR 0541	Soya oil, refined	PP	0.05	12.99	0.65	10.43	0.52	3.63	0.18	13.10	0.66	10.70	0.54	13.10	0.66
VR 0469	Chicory, roots, raw	RAC	0.05	0.10	0.01	0.20	0.01	0.10	0.01	0.10	0.01	0.10	0.01	0.10	0.01
VR 0494	Radish roots, raw	RAC	0.23	2.31	0.53	4.09	0.94	2.53	0.58	6.15	1.41	5.88	1.35	2.97	0.68
VR 0497	Swede, raw (i.e. rutabaga)	RAC	0.23	1.58	0.36	2.80	0.64	1.74	0.40	4.21	0.97	NC	-	2.03	0.47
VR 0498	Salsify, raw (i.e. oysterplant)	RAC	0.23	0.21	0.05	0.37	0.09	0.23	0.05	0.55	0.13	NC	-	0.27	0.06
VR 0504	Tannia, raw (i.e. yautia)	RAC	0.23	NC	-	NC	-	NC	-	0.10	0.02	0.26	0.06	1.27	0.29
VR 0505	Taro, raw	RAC	0.23	0.10	0.02	NC	-	25.12	5.78	0.10	0.02	0.10	0.02	0.97	0.22
VR 0508	Sweet potato, raw (incl dried)	RAC	0.23	0.18	0.04	0.18	0.04	42.16	9.70	1.61	0.37	3.06	0.70	6.67	1.53
VR 0574	Beetroot, raw	RAC	0.23	3.42	0.79	6.06	1.39	3.75	0.86	9.11	2.10	NC	-	4.39	1.01
VR 0577	Carrots, raw	RAC	0.23	9.51	2.19	30.78	7.08	0.37	0.09	8.75	2.01	2.80	0.64	6.10	1.40
VR 0578	Celeriac, raw	RAC	0.23	1.70	0.39	3.01	0.69	1.87	0.43	4.53	1.04	NC	-	2.19	0.50
VR 0583	Horseradish, raw	RAC	0.23	0.51	0.12	0.91	0.21	0.56	0.13	1.37	0.32	NC	-	0.66	0.15
VR 0585	Jerusalem artichoke, raw (i.e. topinambur)	RAC	0.23	1.57	0.36	0.10	0.02	0.96	0.22	1.36	0.31	0.48	0.11	0.10	0.02
VR 0588	Parsnip, raw	RAC	0.23	0.59	0.14	1.05	0.24	0.65	0.15	1.58	0.36	NC	-	0.76	0.17



**AZOXYSTROBIN (229)**

International Estimated Daily Intake (IEDI)

ADI = 0 - 00 mg/kg bw

Codex Code	Commodity description	Expr as	STMR mg/kg	Diets as g/person/day				Intake as ug/person/day							
				G01 diet	G01 intake	G02 diet	G02 intake	G03 diet	G03 intake	G04 diet	G04 intake	G05 diet	G05 intake	G06 diet	G06 intake
CP 1211	Wheat, white bread	PP	0.001	0.25	0.00	0.63	0.00	0.12	0.00	0.43	0.00	1.39	0.00	0.22	0.00
-	Wheat, Fermented Beverages (Korean jakju and takju)	PP	0.01	NC	-	NC	-	NC	-	NC	-	NC	-	NC	-
CF 1211	Wheat, white flour (incl white flour products: starch, gluten, macaroni, pastry)	PP	0.003	301.49	0.90	269.27	0.81	30.33	0.09	222.94	0.67	136.12	0.41	343.34	1.03
GS 0659	Sugar cane, raw	RAC	0.02	38.16	0.76	NC	-	12.58	0.25	0.34	0.01	17.79	0.36	42.78	0.86
-	Sugar cane, molasses	PP	0.005	NC	-	NC	-	NC	-	NC	-	0.10	0.00	NC	-
-	Sugar cane, sugar (incl non-centrifugal sugar, incl refined sugar and maltose)	PP	0.0066	61.52	0.41	86.27	0.57	18.80	0.12	80.02	0.53	66.39	0.44	56.32	0.37
TN 0295	Cashew nuts, nutmeat	RAC	0.01	0.10	0.00	0.10	0.00	0.24	0.00	0.47	0.00	0.32	0.00	0.10	0.00
TN 0660	Almonds, nutmeat	RAC	0.01	1.38	0.01	0.10	0.00	0.10	0.00	1.00	0.01	0.10	0.00	0.81	0.01
TN 0662	Brazil nuts, nutmeat	RAC	0.01	0.10	0.00	0.10	0.00	0.10	0.00	0.10	0.00	0.10	0.00	0.10	0.00
TN 0664	Chestnut, raw	RAC	0.01	0.10	0.00	0.10	0.00	0.10	0.00	0.31	0.00	0.10	0.00	0.67	0.01
TN 0665	Coconut, nutmeat (incl. copra, incl desiccated, incl oil)	RAC	0.01	1.73	0.02	1.20	0.01	6.63	0.07	10.18	0.10	13.07	0.13	2.98	0.03
TN 0666	Hazelnuts, nutmeat	RAC	0.01	0.10	0.00	0.13	0.00	0.10	0.00	0.11	0.00	0.10	0.00	1.11	0.01
TN 0669	Macadamia nuts, nutmeat (i.e. Queensland nuts)	RAC	0.01	0.10	0.00	0.10	0.00	0.10	0.00	0.10	0.00	NC	-	0.10	0.00
TN 0672	Pecan nuts, nutmeat	RAC	0.01	0.10	0.00	0.10	0.00	0.10	0.00	0.14	0.00	0.10	0.00	0.13	0.00
TN 0673	Pine nuts, nutmeat (i.e. pignolia nuts)	RAC	0.01	0.18	0.00	0.18	0.00	0.10	0.00	0.49	0.00	0.25	0.00	0.43	0.00
TN 0675	Pistachio nut, nutmeat	RAC	0.44	0.41	0.18	0.10	0.04	0.10	0.04	0.85	0.37	0.10	0.04	1.08	0.48
TN 0678	Walnuts, nutmeat	RAC	0.01	0.23	0.00	1.49	0.01	0.10	0.00	0.33	0.00	0.10	0.00	2.06	0.02
SO 0495	Rape seed, raw (incl oil)	RAC	0.02	0.93	0.02	1.16	0.02	0.49	0.01	2.53	0.05	9.32	0.19	2.02	0.04
SO 0691	Cotton seed, raw (incl oil)	RAC	0.01	20.53	0.21	9.80	0.10	6.42	0.06	4.73	0.05	7.14	0.07	18.68	0.19
SO 0697	Peanuts, nutmeat, raw (incl roasted, incl butter, excl oil)	RAC	0.01	0.46	0.00	1.21	0.01	6.64	0.07	2.71	0.03	1.26	0.01	1.84	0.02
OR 0697	Peanut oil, edible	PP	0.03	0.36	0.01	0.10	0.00	2.57	0.08	0.10	0.00	2.29	0.07	0.36	0.01
SO 0702	Sunflower seed, raw	RAC	0.04	0.10	0.00	0.33	0.01	0.10	0.00	0.24	0.01	0.10	0.00	0.10	0.00
OR 0702	Sunflower seed oil, edible	PP	0.01	2.97	0.03	14.42	0.14	0.43	0.00	3.46	0.03	2.20	0.02	5.53	0.06
SB 0716	Coffee beans, raw (i.e. green coffee)	RAC	0.01	0.96	0.01	0.16	0.00	0.91	0.01	0.27	0.00	1.37	0.01	0.46	0.00
SM 0716	Coffee beans, roasted	PP	0.006	0.19	0.00	0.91	0.01	0.16	0.00	2.50	0.02	0.39	0.00	0.40	0.00
-	Coffee beans, instant coffee (incl essences and concentrates)	PP	0.01	0.10	0.00	0.94	0.01	0.10	0.00	0.70	0.01	0.10	0.00	0.29	0.00
-	Coffee beans, substitutes, containing coffee	PP	0.01	0.10	0.00	0.10	0.00	0.16	0.00	0.17	0.00	0.10	0.00	0.10	0.00
HH 0720	Herbs, raw (incl dried)	RAC	23	1.69	38.87	1.91	43.93	1.18	27.14	3.35	77.05	0.55	12.65	1.64	37.72
DH 1100	Hops, dry	RAC	11	0.10	1.10	0.10	1.10	0.10	1.10	0.10	1.10	NC	-	0.10	1.10

## AZOXYSTROBIN (229)

## International Estimated Daily Intake (IEDI)

ADI = 0 - 00 mg/kg bw

Codex Code	Commodity description	Expr as	STMR mg/kg	Diets as g/person/day				Intake as ug/person/day							
				G01 diet	G01 intake	G02 diet	G02 intake	G03 diet	G03 intake	G04 diet	G04 intake	G05 diet	G05 intake	G06 diet	G06 intake
MM 0095	MEAT FROM MAMMALS other than marine mammals, raw (incl prepared meat) -80% as muscle	RAC	0.01	24.96	0.25	57.95	0.58	16.70	0.17	38.38	0.38	26.46	0.26	29.00	0.29
MM 0095	MEAT FROM MAMMALS other than marine mammals, raw (incl prepared meat) - 20% as fat	RAC	0.015	6.24	0.09	14.49	0.22	4.18	0.06	9.60	0.14	6.62	0.10	7.25	0.11
MF 0100	Mammalian fats, raw, excl milk fats (incl rendered fats)	RAC	0.015	3.29	0.05	6.14	0.09	0.82	0.01	1.57	0.02	2.23	0.03	1.07	0.02
MO 0105	Edible offal (mammalian), raw	RAC	0.02	4.79	0.10	9.68	0.19	2.97	0.06	5.49	0.11	3.84	0.08	5.03	0.10
ML 0106	Milks, raw or skimmed (incl dairy products)	RAC	0.01	289.65	2.90	485.88	4.86	26.92	0.27	239.03	2.39	199.91	2.00	180.53	1.81
PM 0110	Poultry meat, raw (incl prepared)	RAC	0	14.63	0.00	29.76	0.00	8.04	0.00	129.68	0.00	25.04	0.00	35.66	0.00
PF 0111	Poultry fat, raw (incl rendered)	RAC	0	0.10	0.00	0.10	0.00	NC	-	0.10	0.00	0.10	0.00	0.10	0.00
PE 0112	Eggs, raw, (incl dried)	RAC	0	7.84	0.00	23.08	0.00	2.88	0.00	14.89	0.00	9.81	0.00	14.83	0.00
Total intake (ug/person)=				500.3				1080.3				261.7			
Bodyweight per region (kg bw) =				60				60				60			
ADI (ug/person)=				12000				12000				12000			
% ADI=				4.2%				9.0%				2.2%			
Rounded % ADI=				4%				9%				2%			

## AZOXYSTROBIN (229)

## International Estimated Daily Intake (IEDI)

ADI = 0 - 00 mg/kg bw

Codex Code	Commodity description	Expr as	STMR mg/kg	Diets as g/person/day				Intake as ug/person/day							
				G07 diet	G07 intake	G08 diet	G08 intake	G09 diet	G09 intake	G10 diet	G10 intake	G11 diet	G11 intake	G12 diet	G12 intake
FC 0001	Citrus fruit, raw (incl kumquat commodities)	RAC	4.9	38.66	189.43	54.93	269.16	26.36	129.16	51.46	252.15	51.06	250.19	466.36	2285.16
JF 0001	Citrus fruit, juice	PP	0.39	36.84	14.37	3.75	1.46	0.30	0.12	21.62	8.43	21.82	8.51	46.67	18.20
FS 0012	Stone fruits, raw (incl dried apricots, excl dried plums)	RAC	0.74	18.18	13.45	23.83	17.63	14.27	10.56	18.52	13.70	9.35	6.92	0.11	0.08
DF 0014	Plum, dried (prunes)	PP	0.14	0.61	0.09	0.35	0.05	0.10	0.01	0.35	0.05	0.49	0.07	0.13	0.02
FB 0264	Blackberries, raw	RAC	1	0.10	0.10	0.52	0.52	0.14	0.14	0.24	0.24	NC	-	0.10	0.10
FB 0266	Dewberries, incl boysen- & loganberry, raw	RAC	1	0.10	0.10	NC	-	0.10	0.10	0.10	0.10	NC	-	0.10	0.10
FB 0272	Raspberries, red, black, raw	RAC	1	0.47	0.47	0.91	0.91	0.10	0.10	0.99	0.99	1.14	1.14	NC	-
FB 0020	Blueberries, raw	RAC	1	0.10	0.10	0.23	0.23	0.10	0.10	0.83	0.83	0.33	0.33	NC	-

## AZOXYSTROBIN (229)

## International Estimated Daily Intake (IEDI)

ADI = 0 - 00 mg/kg bw

Codex Code	Commodity description	Expr as	STMR mg/kg	Diets as g/person/day				Intake as ug/person/day							
				G07 diet	G07 intake	G08 diet	G08 intake	G09 diet	G09 intake	G10 diet	G10 intake	G11 diet	G11 intake	G12 diet	G12 intake
FB 0021	Currants, red, black, white, raw	RAC	1	0.48	0.48	4.23	4.23	NC	-	1.51	1.51	0.49	0.49	NC	-
FB 0268	Gooseberries, raw	RAC	1	0.10	0.10	1.04	1.04	0.10	0.10	0.23	0.23	NC	-	NC	-
FB 0267	Elderberries, raw (incl processed)	RAC	1	8.20	8.20	0.14	0.14	NC	-	NC	-	NC	-	1.87	1.87
FB 0269	Grape, raw (incl must, excl dried, excl juice, excl wine)	RAC	0.53	6.48	3.43	11.31	5.99	5.21	2.76	9.50	5.04	4.66	2.47	0.78	0.41
DF 0269	Grape, dried (= currants, raisins and sultanas)	PP	0.24	3.09	0.74	1.51	0.36	0.10	0.02	1.38	0.33	4.26	1.02	0.42	0.10
JF 0269	Grape juice	PP	0.19	0.56	0.11	1.96	0.37	0.10	0.02	2.24	0.43	2.27	0.43	0.34	0.06
-	Grape wine (incl vermouths)	PP	0.36	88.93	32.01	62.41	22.47	1.84	0.66	25.07	9.03	61.17	22.02	5.84	2.10
FB 0265	Cranberries, raw	RAC	0.23	0.10	0.02	0.10	0.02	0.10	0.02	1.22	0.28	0.11	0.03	NC	-
FB 0275	Strawberry, raw	RAC	1.3	4.49	5.84	5.66	7.36	0.10	0.13	6.63	8.62	5.75	7.48	0.10	0.13
FT 0289	Carambola, raw (i.e. star fruit)	RAC	0.023	NC	-	0.10	0.00	0.10	0.00	NC	-	NC	-	NC	-
FT 0336	Guava, raw	RAC	0.055	0.10	0.01	NC	-	0.42	0.02	NC	-	NC	-	NC	-
FI 0327	Banana, raw (incl plantains) (incl dried)	RAC	0.03	25.14	0.75	23.37	0.70	23.06	0.69	23.40	0.70	18.44	0.55	39.29	1.18
FI 0345	Mango, raw (incl canned mango, incl mango juice)	RAC	0.05	1.80	0.09	0.63	0.03	10.05	0.50	1.07	0.05	3.52	0.18	16.44	0.82
FI 0350	Papaya, raw	RAC	0.02	0.31	0.01	0.18	0.00	1.50	0.03	0.51	0.01	0.54	0.01	1.08	0.02
FI 2540	Pitaya, raw (i.e dragon fruit or pitahaya)	RAC	0.041	NC	-	NC	-	0.10	0.00	NC	-	NC	-	NC	-
VA 0035	Bulb vegetables, raw	RAC	2.2	26.24	57.73	36.47	80.23	39.29	86.44	39.37	86.61	29.12	64.06	20.21	44.46
VB 0041	Cabbages, head, raw	RAC	1.2	8.97	10.76	27.12	32.54	1.44	1.73	24.96	29.95	4.55	5.46	11.23	13.48
VB 0042	Flowerhead brassicas, raw	RAC	1.2	9.50	11.40	6.77	8.12	9.03	10.84	3.21	3.85	9.36	11.23	0.87	1.04
VB 0402	Brussels sprouts, raw	RAC	1.2	2.24	2.69	2.67	3.20	6.23	7.48	0.32	0.38	4.19	5.03	2.58	3.10
VB 0405	Kohlrabi, raw	RAC	1.2	NC	-	3.25	3.90	NC	-	NC	-	0.10	0.12	0.36	0.43
VC 0046	Melons, raw (excl watermelons)	RAC	0.02	9.20	0.18	11.95	0.24	14.63	0.29	8.99	0.18	7.86	0.16	2.46	0.05
VC 0423	Chayote (Christophine)	RAC	0.17	NC	-	NC	-	NC	-	NC	-	NC	-	NC	-
VC 0424	Cucumber, raw	RAC	0.17	6.72	1.14	11.03	1.88	32.10	5.46	15.10	2.57	4.05	0.69	9.57	1.63
VC 0425	Gherkin, raw	RAC	0.17	0.41	0.07	5.89	1.00	NC	-	0.10	0.02	0.37	0.06	2.07	0.35

AZOXYSTROBIN (229)				International Estimated Daily Intake (IEDI)				ADI = 0 - 00 mg/kg bw							
Codex Code	Commodity description	Expr as	STMR mg/kg	Diets as g/person/day				Intake as ug/person/day							
				G07 diet	G07 intake	G08 diet	G08 intake	G09 diet	G09 intake	G10 diet	G10 intake	G11 diet	G11 intake	G12 diet	G12 intake
VC 0431	Squash, summer, raw (= courgette, zucchini)	RAC	0.17	NC	-	NC	-	5.48	0.93	NC	-	NC	-	1.03	0.18
VC 0432	Watermelon, raw	RAC	0.02	4.60	0.09	9.82	0.20	68.50	1.37	13.19	0.26	1.99	0.04	14.56	0.29
VC 0433	Winter squash, raw (= pumpkin)	RAC	0.02	6.88	0.14	3.23	0.06	2.59	0.05	12.12	0.24	1.68	0.03	6.30	0.13
VO 0050	Fruiting vegetables other than cucurbits, raw, (incl processed commodities), excl tomato commodities, excl sweet corn commodities, excl mushroom commodities	RAC	0.35	8.19	2.87	18.68	6.54	42.99	15.05	15.04	5.26	11.46	4.01	6.30	2.21
-	Peppers, chili, dried	PP	3.5	0.11	0.39	0.21	0.74	0.36	1.26	0.21	0.74	0.25	0.88	0.15	0.53
VO 0448	Tomato, raw (incl canned, excl juice, excl paste)	RAC	0.35	43.88	15.36	55.41	19.39	35.38	12.38	74.88	26.21	26.50	9.28	9.51	3.33
-	Tomato, paste (i.e. concentrated tomato sauce/puree)	PP	1.1	4.96	5.46	3.20	3.52	0.15	0.17	1.61	1.77	6.88	7.57	0.52	0.57
JF 0448	Tomato, juice (single strength, incl concentrated)	PP	0.16	0.80	0.13	0.10	0.02	0.10	0.02	0.61	0.10	0.40	0.06	0.10	0.02
VL 0463	Cassava leaves, raw	RAC	0.23	NC	-	NC	-	NC	-	NC	-	NC	-	NC	-
VL 0469	Chicory leaves (sugar loaf), raw	RAC	0.23	NC	-	NC	-	NC	-	NC	-	NC	-	NC	-
VL 0482	Lettuce, head, raw	RAC	0.28	NC	-	NC	-	NC	-	NC	-	NC	-	NC	-
VL 0483	Lettuce, leaf, raw	RAC	0.28	14.50	4.06	11.76	3.29	13.14	3.68	19.50	5.46	4.81	1.35	2.23	0.62
VL 0506	Turnip greens, raw (i.e. Namentia, Tendergreen)	RAC	0.23	NC	-	NC	-	NC	-	NC	-	NC	-	NC	-
VP 0060	Legume vegetables, raw	RAC	1	18.21	18.21	8.91	8.91	7.22	7.22	10.04	10.04	23.22	23.22	0.17	0.17
VD 0070	Pulses, raw (incl processed), excl soya bean commodities	RAC	0.01	6.54	0.07	5.27	0.05	5.03	0.05	8.94	0.09	4.84	0.05	28.65	0.29
VD 0541	Soya bean, dry, raw (incl flour, incl paste, incl curd, incl sauce, excl oil)	RAC	0.06	0.47	0.03	0.77	0.05	9.12	0.55	8.05	0.48	0.10	0.01	6.06	0.36
OR 0541	Soya oil, refined	PP	0.05	19.06	0.95	21.06	1.05	5.94	0.30	33.78	1.69	40.05	2.00	13.39	0.67
VR 0469	Chicory, roots, raw	RAC	0.05	0.10	0.01	0.51	0.03	0.10	0.01	0.10	0.01	21.12	1.06	NC	-
VR 0494	Radish roots, raw	RAC	0.23	3.83	0.88	11.99	2.76	NC	-	5.26	1.21	2.19	0.50	4.37	1.01
VR 0497	Swede, raw (i.e. rutabaga)	RAC	0.23	10.01	2.30	1.66	0.38	NC	-	NC	-	3.06	0.70	2.99	0.69
VR 0498	Salsify, raw (i.e. oysterplant)	RAC	0.23	1.02	0.23	0.52	0.12	NC	-	NC	-	2.08	0.48	0.39	0.09

## AZOXYSTROBIN (229)

## International Estimated Daily Intake (IEDI)

ADI = 0 - 00 mg/kg bw

Codex Code	Commodity description	Expr as	STMR mg/kg	Diets as g/person/day				Intake as ug/person/day							
				G07 diet	G07 intake	G08 diet	G08 intake	G09 diet	G09 intake	G10 diet	G10 intake	G11 diet	G11 intake	G12 diet	G12 intake
VR 0504	Tannia, raw (i.e. yautia)	RAC	0.23	NC	-	NC	-	NC	-	0.10	0.02	NC	-	10.74	2.47
VR 0505	Taro, raw	RAC	0.23	NC	-	NC	-	1.93	0.44	0.84	0.19	NC	-	19.94	4.59
VR 0508	Sweet potato, raw (incl dried)	RAC	0.23	0.93	0.21	0.32	0.07	64.65	14.87	5.37	1.24	0.30	0.07	3.13	0.72
VR 0574	Beetroot, raw	RAC	0.23	9.91	2.28	6.34	1.46	NC	-	9.65	2.22	19.11	4.40	6.47	1.49
VR 0577	Carrots, raw	RAC	0.23	26.26	6.04	27.13	6.24	10.07	2.32	16.49	3.79	44.69	10.28	8.75	2.01
VR 0578	Celeriac, raw	RAC	0.23	2.97	0.68	1.79	0.41	NC	-	0.10	0.02	16.91	3.89	3.22	0.74
VR 0583	Horseradish, raw	RAC	0.23	0.10	0.02	0.42	0.10	13.01	2.99	0.26	0.06	2.70	0.62	0.97	0.22
VR 0585	Jerusalem artichoke, raw (i.e. topinambur)	RAC	0.23	0.11	0.03	0.10	0.02	NC	-	0.22	0.05	NC	-	0.78	0.18
VR 0588	Parsnip, raw	RAC	0.23	4.42	1.02	0.10	0.02	NC	-	NC	-	NC	-	1.12	0.26
VR 0589	Potato, raw (incl flour, incl frozen, incl starch, incl tapioca)	RAC	2.3	225.03	517.57	234.24	538.75	71.48	164.40	177.55	408.37	234.55	539.47	37.71	86.73
VR 0590	Black radish, raw	RAC	0.23	NC	-	NC	-	NC	-	NC	-	NC	-	NC	-
VR 0591	Japanese radish, raw (i.e. daikon)	RAC	0.23	NC	-	NC	-	26.64	6.13	18.92	4.35	NC	-	3.59	0.83
VR 0596	Sugar beet, raw (incl sugar)	RAC	0.08	0.10	0.01	NC	-	0.10	0.01	0.10	0.01	NC	-	NC	-
VR 0600	Yams, raw (incl dried)	RAC	0.23	NC	-	NC	-	0.10	0.02	0.71	0.16	NC	-	17.57	4.04
VS 0620	Artichoke globe	RAC	1.8	0.98	1.76	3.65	6.57	0.10	0.18	1.67	3.01	0.26	0.47	NC	-
VS 0621	Asparagus	RAC	0.01	0.84	0.01	2.08	0.02	7.11	0.07	1.01	0.01	1.69	0.02	0.10	0.00
VS 0624	Celery	RAC	0.43	7.68	3.30	2.85	1.23	NC	-	3.34	1.44	16.83	7.24	4.04	1.74
GC 0640	Barley, raw (incl malt extract, incl pot&pearled, incl flour & grits, incl malt, excl beer)	RAC	0.05	1.94	0.10	4.15	0.21	0.66	0.03	2.50	0.13	2.14	0.11	3.52	0.18
-	Barley beer	PP	0.0015	180.21	0.27	259.46	0.39	45.91	0.07	172.36	0.26	234.42	0.35	65.30	0.10
GC 0645	Maize, raw (incl glucose & dextrose & isoglucose, incl germ, incl starch, excl flour, excl oil, excl beer)	RAC	0.01	0.10	0.00	9.93	0.10	1.71	0.02	21.20	0.21	0.33	0.00	0.10	0.00
CF 1255	Maize, flour (white flour and wholemeal flour)	PP	0.01	14.27	0.14	12.86	0.13	19.71	0.20	12.55	0.13	4.21	0.04	52.30	0.52

## AZOXYSTROBIN (229)

## International Estimated Daily Intake (IEDI)

ADI = 0 - 00 mg/kg bw

Codex Code	Commodity description	Expr as	STMR mg/kg	Diets as g/person/day				Intake as ug/person/day							
				G07 diet	G07 intake	G08 diet	G08 intake	G09 diet	G09 intake	G10 diet	G10 intake	G11 diet	G11 intake	G12 diet	G12 intake
-	Maize beer	PP	0.01	NC	-	NC	-	NC	-	1.99	0.02	NC	-	NC	-
OR 0645	Maize oil	PP	0.06	0.90	0.05	0.47	0.03	0.15	0.01	3.01	0.18	1.86	0.11	0.36	0.02
GC 0647	Oats, raw (incl rolled)	RAC	0.05	7.50	0.38	6.26	0.31	0.15	0.01	4.87	0.24	3.16	0.16	2.98	0.15
CM 0649 (GC 0649)	Rice, husked, dry (incl paddy rice)	REP	0.68	2.43	1.65	1.62	1.10	0.42	0.29	1.06	0.72	NC	-	5.02	3.41
CM 1205	Rice polished, dry	PP	0.06	13.38	0.80	10.80	0.65	262.08	15.72	57.16	3.43	12.83	0.77	62.78	3.77
-	Rice flour	PP	0.06	0.98	0.06	0.38	0.02	0.72	0.04	0.10	0.01	0.23	0.01	0.10	0.01
-	Rice, starch	PP	0.06	NC	-	NC	-	0.10	0.01	NC	-	NC	-	0.10	0.01
-	Rice bran oil	PP	0.68	NC	-	NC	-	0.15	0.10	0.10	0.07	NC	-	NC	-
-	Rice, Fermented Beverages (rice wine, sake)	PP	0.68	NC	-	NC	-	0.10	0.07	2.77	1.88	NC	-	NC	-
GC 0650	Rye, raw (incl flour)	RAC	0.01	3.21	0.03	35.38	0.35	0.21	0.00	6.50	0.07	1.49	0.01	NC	-
GC 0651	Sorghum, raw (incl flour, incl beer)	RAC	1.85	NC	-	NC	-	1.44	2.66	1.15	2.13	NC	-	7.12	13.17
GC 0653	Triticale, raw (incl flour)	RAC	0.01	0.10	0.00	0.17	0.00	0.29	0.00	0.10	0.00	NC	-	NC	-
GC 0654	Wheat, raw (incl meslin)	RAC	0.01	NC	-	NC	-	NC	-	0.10	0.00	NC	-	NC	-
-	Wheat, bulgur	PP	0.01	NC	-	NC	-	0.10	0.00	NC	-	NC	-	NC	-
CF 1210	Wheat, germ	PP	0.01	0.97	0.01	0.10	0.00	0.10	0.00	0.10	0.00	NC	-	0.10	0.00
CF 0654	Wheat, bran	PP	0.004	NC	-	NC	-	NC	-	NC	-	NC	-	NC	-
CF 1212	Wheat, wholemeal flour	PP	0.01	NC	-	NC	-	NC	-	NC	-	NC	-	NC	-
CP 1212	Wheat, wholemeal bread	PP	0.001	0.10	0.00	0.10	0.00	0.10	0.00	0.10	0.00	0.10	0.00	0.10	0.00
CP 1211	Wheat, white bread	PP	0.001	1.30	0.00	0.46	0.00	0.10	0.00	0.22	0.00	2.44	0.00	0.77	0.00
-	Wheat, Fermented Beverages (Korean jakju and takju)	PP	0.01	NC	-	NC	-	NC	-	4.36	0.04	NC	-	NC	-
CF 1211	Wheat, white flour (incl white flour products: starch, gluten, macaroni, pastry)	PP	0.003	199.38	0.60	193.50	0.58	106.30	0.32	185.31	0.56	171.11	0.51	132.37	0.40
GS 0659	Sugar cane, raw	RAC	0.02	NC	-	NC	-	4.27	0.09	0.10	0.00	NC	-	3.24	0.06
-	Sugar cane, molasses	PP	0.005	NC	-	NC	-	0.10	0.00	NC	-	NC	-	NC	-



## AZOXYSTROBIN (229)

## International Estimated Daily Intake (IEDI)

ADI = 0 - 00 mg/kg bw

Codex Code	Commodity description	Expr as	STMR mg/kg	Diets as g/person/day				Intake as ug/person/day							
				G07 diet	G07 intake	G08 diet	G08 intake	G09 diet	G09 intake	G10 diet	G10 intake	G11 diet	G11 intake	G12 diet	G12 intake
-	Sugar cane, sugar (incl non-centrifugal sugar, incl refined sugar and maltose)	PP	0.0066	92.24	0.61	95.72	0.63	24.12	0.16	77.39	0.51	117.73	0.78	100.67	0.66
TN 0295	Cashew nuts, nutmeat	RAC	0.01	0.59	0.01	0.23	0.00	0.18	0.00	0.52	0.01	1.75	0.02	2.78	0.03
TN 0660	Almonds, nutmeat	RAC	0.01	0.81	0.01	2.21	0.02	0.10	0.00	1.02	0.01	1.47	0.01	NC	-
TN 0662	Brazil nuts, nutmeat	RAC	0.01	0.12	0.00	0.10	0.00	0.10	0.00	0.10	0.00	0.13	0.00	NC	-
TN 0664	Chestnut, raw	RAC	0.01	0.34	0.00	0.21	0.00	1.14	0.01	0.52	0.01	0.10	0.00	NC	-
TN 0665	Coconut, nutmeat (incl. copra, incl desiccated, incl oil)	RAC	0.01	4.13	0.04	2.73	0.03	13.15	0.13	5.85	0.06	6.92	0.07	22.24	0.22
TN 0666	Hazelnuts, nutmeat	RAC	0.01	0.45	0.00	1.12	0.01	0.10	0.00	0.34	0.00	1.63	0.02	NC	-
TN 0669	Macadamia nuts, nutmeat (i.e. Queensland nuts)	RAC	0.01	NC	-	0.40	0.00	NC	-	NC	-	NC	-	0.10	0.00
TN 0672	Pecan nuts, nutmeat	RAC	0.01	0.38	0.00	NC	-	NC	-	0.27	0.00	NC	-	0.26	0.00
TN 0673	Pine nuts, nutmeat (i.e. pignolia nuts)	RAC	0.01	0.99	0.01	0.66	0.01	0.22	0.00	0.27	0.00	1.89	0.02	0.89	0.01
TN 0675	Pistachio nut, nutmeat	RAC	0.44	0.35	0.15	0.48	0.21	0.10	0.04	0.39	0.17	0.23	0.10	0.10	0.04
TN 0678	Walnuts, nutmeat	RAC	0.01	0.34	0.00	0.84	0.01	0.28	0.00	0.39	0.00	0.45	0.00	NC	-
SO 0495	Rape seed, raw (incl oil)	RAC	0.02	32.68	0.65	19.91	0.40	7.83	0.16	15.69	0.31	NC	-	NC	-
SO 0691	Cotton seed, raw (incl oil)	RAC	0.01	10.71	0.11	4.23	0.04	7.19	0.07	7.54	0.08	5.66	0.06	2.38	0.02
SO 0697	Peanuts, nutmeat, raw (incl roasted, incl butter, excl oil)	RAC	0.01	3.26	0.03	2.22	0.02	5.38	0.05	4.85	0.05	1.54	0.02	1.82	0.02
OR 0697	Peanut oil, edible	PP	0.03	1.02	0.03	0.23	0.01	1.81	0.05	0.42	0.01	5.23	0.16	0.10	0.00
SO 0702	Sunflower seed, raw	RAC	0.04	0.10	0.00	1.32	0.05	0.10	0.00	1.17	0.05	NC	-	0.10	0.00
OR 0702	Sunflower seed oil, edible	PP	0.01	9.50	0.10	11.37	0.11	0.49	0.00	5.15	0.05	2.63	0.03	2.80	0.03
SB 0716	Coffee beans, raw (i.e. green coffee)	RAC	0.01	0.60	0.01	NC	-	0.62	0.01	1.71	0.02	NC	-	3.51	0.04
SM 0716	Coffee beans, roasted	PP	0.006	7.02	0.04	9.75	0.06	0.10	0.00	5.09	0.03	13.38	0.08	0.77	0.00
-	Coffee beans, instant coffee (incl essences and concentrates)	PP	0.01	0.75	0.01	0.30	0.00	0.10	0.00	0.67	0.01	2.43	0.02	1.43	0.01

AZOXYSTROBIN (229)				International Estimated Daily Intake (IEDI)				ADI = 0 - 00 mg/kg bw							
Codex Code	Commodity description	Expr as	STMR mg/kg	Diets as g/person/day				Intake as ug/person/day							
				G07 diet	G07 intake	G08 diet	G08 intake	G09 diet	G09 intake	G10 diet	G10 intake	G11 diet	G11 intake	G12 diet	G12 intake
-	Coffee beans, substitutes, containing coffee	PP	0.01	0.10	0.00	0.10	0.00	0.10	0.00	0.10	0.00	0.10	0.00	0.15	0.00
HH 0720	Herbs, raw (incl dried)	RAC	23	2.61	60.03	2.31	53.13	8.89	204.47	3.92	90.16	1.16	26.68	2.06	47.38
DH 1100	Hops, dry	RAC	11	NC	-	NC	-	0.10	1.10	0.10	1.10	NC	-	NC	-
MM 0095	MEAT FROM MAMMALS other than marine mammals, raw (incl prepared meat) -80% as muscle	RAC	0.01	112.02	1.12	120.71	1.21	63.46	0.63	88.99	0.89	96.24	0.96	41.02	0.41
MM 0095	MEAT FROM MAMMALS other than marine mammals, raw (incl prepared meat) - 20% as fat	RAC	0.015	28.01	0.42	30.18	0.45	15.86	0.24	22.25	0.33	24.06	0.36	10.25	0.15
MF 0100	Mammalian fats, raw, excl milk fats (incl rendered fats)	RAC	0.015	6.44	0.10	15.51	0.23	3.79	0.06	8.29	0.12	18.44	0.28	8.00	0.12
MO 0105	Edible offal (mammalian), raw	RAC	0.02	15.17	0.30	5.19	0.10	6.30	0.13	6.78	0.14	3.32	0.07	3.17	0.06
ML 0106	Milks, raw or skimmed (incl dairy products)	RAC	0.01	388.92	3.89	335.88	3.36	49.15	0.49	331.25	3.31	468.56	4.69	245.45	2.45
PM 0110	Poultry meat, raw (incl prepared)	RAC	0	73.76	0.00	53.86	0.00	23.98	0.00	87.12	0.00	53.38	0.00	84.45	0.00
PF 0111	Poultry fat, raw (incl rendered)	RAC	0	0.10	0.00	0.10	0.00	NC	-	0.10	0.00	0.71	0.00	NC	-
PE 0112	Eggs, raw, (incl dried)	RAC	0	25.84	0.00	29.53	0.00	28.05	0.00	33.19	0.00	36.44	0.00	8.89	0.00
Total intake (ug/person)=				1009.8		1129.8		719.4		1012.3		1042.8		2565.5	
Bodyweight per region (kg bw) =				60		60		55		60		60		60	
ADI (ug/person)=				12000		12000		11000		12000		12000		12000	
%ADI=				8.4%		9.4%		6.5%		8.4%		8.7%		21.4%	
Rounded %ADI=				8%		9%		7%		8%		9%		20%	

AZOXYSTROBIN (229)				International Estimated Daily Intake (IEDI)				ADI = 0 - 00 mg/kg bw							
Codex Code	Commodity description	Expr as	STMR mg/kg	Diets: g/person/day				Intake = daily intake: ug/person							
				G13 diet	G13 intake	G14 diet	G14 intake	G15 diet	G15 intake	G16 diet	G16 intake	G17 diet	G17 intake		
FC 0001	Citrus fruit, raw (incl kumquat commodities)	RAC	4.9	20.93	102.56	2.35	11.52	30.71	150.48	0.15	0.74	4.45	21.81		
JF 0001	Citrus fruit, juice	PP	0.39	0.11	0.04	0.29	0.11	13.55	5.28	0.14	0.05	0.33	0.13		
FS 0012	Stone fruits, raw (incl dried apricots, excl dried plums)	RAC	0.74	0.10	0.07	0.10	0.07	32.27	23.88	0.10	0.07	NC	-		
DF 0014	Plum, dried (prunes)	PP	0.14	0.10	0.01	0.10	0.01	0.37	0.05	0.10	0.01	NC	-		
FB 0264	Blackberries, raw	RAC	1	0.10	0.10	7.29	7.29	0.25	0.25	0.10	0.10	NC	-		
FB 0266	Dewberries, incl boysen- & loganberry, raw	RAC	1	0.10	0.10	0.10	0.10	NC	-	0.10	0.10	NC	-		

## AZOXYSTROBIN (229)

## International Estimated Daily Intake (IEDI)

ADI = 0 - 00 mg/kg bw

Codex Code	Commodity description	Expr as	STMR mg/kg	Diets: g/person/day				Intake = daily intake: ug/person					
				G13 diet	G13 intake	G14 diet	G14 intake	G15 diet	G15 intake	G16 diet	G16 intake	G17 diet	G17 intake
FB 0272	Raspberries, red, black, raw	RAC	1	0.10	0.10	0.10	0.10	2.04	2.04	0.10	0.10	NC	-
FB 0020	Blueberries, raw	RAC	1	NC	-	NC	-	0.20	0.20	NC	-	NC	-
FB 0021	Currants, red, black, white, raw	RAC	1	0.10	0.10	NC	-	0.74	0.74	NC	-	NC	-
FB 0268	Gooseberries, raw	RAC	1	NC	-	NC	-	0.12	0.12	NC	-	NC	-
FB 0267	Elderberries, raw (incl processed)	RAC	1	0.71	0.71	3.52	3.52	NC	-	0.38	0.38	2.32	2.32
FB 0269	Grape, raw (incl must, excl dried, excl juice, excl wine)	RAC	0.53	0.14	0.07	0.36	0.19	15.33	8.12	0.10	0.05	0.28	0.15
DF 0269	Grape, dried (= currants, raisins and sultanas)	PP	0.24	0.10	0.02	0.13	0.03	1.06	0.25	0.10	0.02	0.10	0.02
JF 0269	Grape juice	PP	0.19	0.10	0.02	0.10	0.02	0.41	0.08	0.10	0.02	NC	-
-	Grape wine (incl vermouths)	PP	0.36	0.31	0.11	0.23	0.08	60.43	21.75	0.52	0.19	31.91	11.49
FB 0265	Cranberries, raw	RAC	0.23	NC	-	NC	-	0.10	0.02	NC	-	NC	-
FB 0275	Strawberry, raw	RAC	1.3	0.10	0.13	0.10	0.13	3.35	4.36	0.10	0.13	0.10	0.13
FT 0289	Carambola, raw (i.e. star fruit)	RAC	0.023	0.10	0.00	0.10	0.00	NC	-	0.10	0.00	0.10	0.00
FT 0336	Guava, raw	RAC	0.055	0.10	0.01	0.10	0.01	NC	-	0.14	0.01	3.11	0.17
FI 0327	Banana, raw (incl plantains) (incl dried)	RAC	0.03	20.88	0.63	81.15	2.43	24.58	0.74	37.92	1.14	310.23	9.31
FI 0345	Mango, raw (incl canned mango, incl mango juice)	RAC	0.05	12.25	0.61	6.83	0.34	0.76	0.04	0.10	0.01	20.12	1.01
FI 0350	Papaya, raw	RAC	0.02	6.47	0.13	0.25	0.01	0.19	0.00	0.10	0.00	26.42	0.53
FI 2540	Pitaya, raw (i.e dragon fruit or pitahaya)	RAC	0.041	0.10	0.00	0.10	0.00	NC	-	0.10	0.00	0.10	0.00
VA 0035	Bulb vegetables, raw	RAC	2.2	11.28	24.82	23.80	52.36	36.11	79.44	9.66	21.25	8.69	19.12
VB 0041	Cabbages, head, raw	RAC	1.2	3.82	4.58	2.99	3.59	49.16	58.99	0.10	0.12	NC	-
VB 0042	Flowerhead brassicas, raw	RAC	1.2	0.10	0.12	0.10	0.12	4.86	5.83	0.10	0.12	NC	-
VB 0402	Brussels sprouts, raw	RAC	1.2	0.88	1.06	0.69	0.83	2.89	3.47	0.10	0.12	NC	-
VB 0405	Kohlrabi, raw	RAC	1.2	0.12	0.14	0.10	0.12	1.81	2.17	0.10	0.12	NC	-
VC 0046	Melons, raw (excl watermelons)	RAC	0.02	0.19	0.00	0.10	0.00	4.98	0.10	0.10	0.00	NC	-
VC 0423	Chayote (Christophine)	RAC	0.17	NC	-	NC	-	NC	-	NC	-	NC	-
VC 0424	Cucumber, raw	RAC	0.17	0.68	0.12	1.81	0.31	10.40	1.77	0.10	0.02	0.10	0.02
VC 0425	Gherkin, raw	RAC	0.17	0.15	0.03	0.39	0.07	3.15	0.54	0.10	0.02	0.10	0.02
VC 0431	Squash, summer, raw (= courgette, zucchini)	RAC	0.17	0.10	0.02	1.01	0.17	NC	-	1.91	0.32	NC	-
VC 0432	Watermelon, raw	RAC	0.02	4.29	0.09	0.30	0.01	28.70	0.57	0.10	0.00	NC	-
VC 0433	Winter squash, raw (= pumpkin)	RAC	0.02	0.56	0.01	6.14	0.12	4.59	0.09	11.70	0.23	NC	-
VO 0050	Fruiting vegetables other than cucurbits, raw, (incl processed commodities), excl tomato commodities, excl sweet corn commodities, excl mushroom commodities	RAC	0.35	20.58	7.20	31.41	10.99	37.56	13.15	1.79	0.63	NC	-
-	Peppers, chili, dried	PP	3.5	0.58	2.03	1.27	4.45	1.21	4.24	0.12	0.42	NC	-

AZOXYSTROBIN (229)				International Estimated Daily Intake (IEDI)				ADI = 0 - 00 mg/kg bw					
Codex Code	Commodity description	Expr as	STMR mg/kg	Diets: g/person/day				Intake = daily intake: ug/person					
				G13 diet	G13 intake	G14 diet	G14 intake	G15 diet	G15 intake	G16 diet	G16 intake	G17 diet	G17 intake
VO 0448	Tomato, raw (incl canned, excl juice, excl paste)	RAC	0.35	13.10	4.59	4.90	1.72	62.16	21.76	1.04	0.36	0.10	0.04
-	Tomato, paste (i.e. concentrated tomato sauce/puree)	PP	1.1	0.58	0.64	0.22	0.24	2.21	2.43	0.24	0.26	3.10	3.41
JF 0448	Tomato, juice (single strength, incl concentrated)	PP	0.16	0.10	0.02	0.10	0.02	0.42	0.07	0.10	0.02	0.10	0.02
VL 0463	Cassava leaves, raw	RAC	0.23	NC	-	NC	-	NC	-	NC	-	NC	-
VL 0469	Chicory leaves (sugar loaf), raw	RAC	0.23	NC	-	NC	-	NC	-	NC	-	NC	-
VL 0482	Lettuce, head, raw	RAC	0.28	NC	-	NC	-	NC	-	NC	-	NC	-
VL 0483	Lettuce, leaf, raw	RAC	0.28	0.29	0.08	0.10	0.03	6.71	1.88	0.10	0.03	NC	-
VL 0506	Turnip greens, raw (i.e. Namera, Tendergreen)	RAC	0.23	NC	-	NC	-	NC	-	NC	-	NC	-
VP 0060	Legume vegetables, raw	RAC	1	0.58	0.58	3.16	3.16	10.38	10.38	0.10	0.10	NC	-
VD 0070	Pulses, raw (incl processed), excl soya bean commodities	RAC	0.01	28.22	0.28	14.71	0.15	8.15	0.08	58.39	0.58	4.48	0.04
VD 0541	Soya bean, dry, raw (incl flour, incl paste, incl curd, incl sauce, excl oil)	RAC	0.06	2.89	0.17	0.21	0.01	0.48	0.03	3.16	0.19	0.26	0.02
OR 0541	Soya oil, refined	PP	0.05	2.32	0.12	2.54	0.13	18.70	0.94	2.51	0.13	6.29	0.31
VR 0469	Chicory, roots, raw	RAC	0.05	0.10	0.01	0.10	0.01	0.10	0.01	NC	-	NC	-
VR 0494	Radish roots, raw	RAC	0.23	3.96	0.91	2.86	0.66	3.30	0.76	2.67	0.61	5.34	1.23
VR 0497	Swede, raw (i.e. rutabaga)	RAC	0.23	2.71	0.62	1.96	0.45	7.80	1.79	1.83	0.42	3.66	0.84
VR 0498	Salsify, raw (i.e. oysterplant)	RAC	0.23	0.36	0.08	0.26	0.06	NC	-	0.24	0.06	0.48	0.11
VR 0504	Tannia, raw (i.e. yautia)	RAC	0.23	NC	-	NC	-	0.10	0.02	NC	-	NC	-
VR 0505	Taro, raw	RAC	0.23	6.71	1.54	31.91	7.34	NC	-	10.73	2.47	264.31	60.79
VR 0508	Sweet potato, raw (incl dried)	RAC	0.23	28.83	6.63	61.55	14.16	0.15	0.03	221.94	51.05	NC	-
VR 0574	Beetroot, raw	RAC	0.23	5.86	1.35	4.23	0.97	9.46	2.18	3.96	0.91	7.91	1.82
VR 0577	Carrots, raw	RAC	0.23	2.07	0.48	3.00	0.69	25.29	5.82	0.10	0.02	NC	-
VR 0578	Celeriac, raw	RAC	0.23	2.91	0.67	2.10	0.48	7.59	1.75	1.97	0.45	3.93	0.90
VR 0583	Horseradish, raw	RAC	0.23	0.88	0.20	0.63	0.14	0.54	0.12	0.59	0.14	1.19	0.27
VR 0585	Jerusalem artichoke, raw (i.e. topinambur)	RAC	0.23	14.22	3.27	18.75	4.31	0.10	0.02	0.10	0.02	20.14	4.63
VR 0588	Parsnip, raw	RAC	0.23	1.02	0.23	0.74	0.17	3.50	0.81	0.69	0.16	1.37	0.32
VR 0589	Potato, raw (incl flour, incl frozen, incl starch, incl tapioca)	RAC	2.3	23.96	55.11	13.56	31.19	213.41	490.84	104.35	240.01	8.56	19.69
VR 0590	Black radish, raw	RAC	0.23	NC	-	NC	-	NC	-	NC	-	NC	-
VR 0591	Japanese radish, raw (i.e. daikon)	RAC	0.23	3.25	0.75	2.35	0.54	NC	-	2.20	0.51	4.39	1.01
VR 0596	Sugar beet, raw (incl sugar)	RAC	0.08	3.93	0.31	1.68	0.13	NC	-	NC	-	36.12	2.89
VR 0600	Yams, raw (incl dried)	RAC	0.23	70.93	16.31	30.62	7.04	0.10	0.02	5.65	1.30	30.85	7.10
VS 0620	Artichoke globe	RAC	1.8	0.10	0.18	NC	-	0.10	0.18	0.10	0.18	NC	-
VS 0621	Asparagus	RAC	0.01	0.10	0.00	0.10	0.00	0.17	0.00	0.10	0.00	NC	-

## AZOXYSTROBIN (229)

## International Estimated Daily Intake (IEDI)

ADI = 0 - 00 mg/kg bw

Codex Code	Commodity description	Expr as	STM <sup>R</sup> mg/kg	Diets: g/person/day				Intake = daily intake: ug/person					
				G13 diet	G13 intake	G14 diet	G14 intake	G15 diet	G15 intake	G16 diet	G16 intake	G17 diet	G17 intake
VS 0624	Celery	RAC	0.43	3.66	1.57	2.65	1.14	4.84	2.08	2.47	1.06	4.94	2.12
GC 0640	Barley, raw (incl malt extract, incl pot&pearled, incl flour & grits, incl malt, excl beer)	RAC	0.05	8.50	0.43	0.17	0.01	3.92	0.20	0.10	0.01	6.34	0.32
-	Barley beer	PP	0.0015	16.25	0.02	11.36	0.02	225.21	0.34	19.49	0.03	52.17	0.08
GC 0645	Maize, raw (incl glucose & dextrose & isoglucose, incl germ, incl starch, excl flour, excl oil, excl beer)	RAC	0.01	0.38	0.00	0.52	0.01	3.26	0.03	0.18	0.00	NC	-
CF 1255	Maize, flour (white flour and wholemeal flour)	PP	0.01	94.34	0.94	8.09	0.08	28.03	0.28	55.94	0.56	28.07	0.28
-	Maize beer	PP	0.01	1.03	0.01	NC	-	NC	-	40.94	0.41	NC	-
OR 0645	Maize oil	PP	0.06	0.33	0.02	0.10	0.01	0.81	0.05	0.10	0.01	NC	-
GC 0647	Oats, raw (incl rolled)	RAC	0.05	0.37	0.02	0.10	0.01	2.79	0.14	0.10	0.01	NC	-
CM 0649 (GC 0649)	Rice, husked, dry (incl paddy rice)	REP	0.68	13.53	9.20	3.48	2.37	1.96	1.33	0.10	0.07	8.84	6.01
CM 1205	Rice polished, dry	PP	0.06	30.20	1.81	218.34	13.10	12.77	0.77	15.24	0.91	51.35	3.08
-	Rice flour	PP	0.06	0.10	0.01	0.13	0.01	0.16	0.01	0.10	0.01	NC	-
-	Rice, starch	PP	0.06	0.10	0.01	0.10	0.01	NC	-	NC	-	NC	-
-	Rice bran oil	PP	0.68	NC	-	0.60	0.41	NC	-	NC	-	NC	-
-	Rice, Fermented Beverages (rice wine, sake)	PP	0.68	NC	-	NC	-	NC	-	NC	-	NC	-
GC 0650	Rye, raw (incl flour)	RAC	0.01	0.10	0.00	0.10	0.00	13.95	0.14	0.10	0.00	0.88	0.01
GC 0651	Sorghum, raw (incl flour, incl beer)	RAC	1.85	89.16	164.95	2.02	3.74	NC	-	35.38	65.45	NC	-
GC 0653	Triticale, raw (incl flour)	RAC	0.01	0.10	0.00	NC	-	NC	-	NC	-	NC	-
GC 0654	Wheat, raw (incl meslin)	RAC	0.01	NC	-	NC	-	NC	-	NC	-	0.97	0.01
-	Wheat, bulgur	PP	0.01	0.10	0.00	NC	-	NC	-	NC	-	NC	-
CF 1210	Wheat, germ	PP	0.01	0.10	0.00	0.10	0.00	0.10	0.00	0.10	0.00	NC	-
CF 0654	Wheat, bran	PP	0.004	NC	-	NC	-	NC	-	NC	-	NC	-
CF 1212	Wheat, wholemeal flour	PP	0.01	NC	-	NC	-	NC	-	NC	-	NC	-
CP 1212	Wheat, wholemeal bread	PP	0.001	0.10	0.00	0.10	0.00	0.10	0.00	0.10	0.00	0.10	0.00
CP 1211	Wheat, white bread	PP	0.001	0.43	0.00	0.41	0.00	1.56	0.00	0.11	0.00	0.10	0.00
-	Wheat, Fermented Beverages (Korean jakju and takju)	PP	0.01	NC	-	NC	-	NC	-	NC	-	NC	-
CF 1211	Wheat, white flour (incl white flour products: starch, gluten, macaroni, pastry)	PP	0.003	45.21	0.14	87.37	0.26	215.61	0.65	20.42	0.06	103.67	0.31
GS 0659	Sugar cane, raw	RAC	0.02	5.62	0.11	50.91	1.02	NC	-	11.04	0.22	0.10	0.00
-	Sugar cane, molasses	PP	0.005	NC	-	NC	-	NC	-	NC	-	NC	-
-	Sugar cane, sugar (incl non-centrifugal sugar, incl refined sugar and maltose)	PP	0.0066	28.13	0.19	55.38	0.37	78.09	0.52	18.04	0.12	45.60	0.30
TN 0295	Cashew nuts, nutmeat	RAC	0.01	0.91	0.01	0.14	0.00	0.11	0.00	0.10	0.00	NC	-

## AZOXYSTROBIN (229)

## International Estimated Daily Intake (IEDI)

ADI = 0 - 00 mg/kg bw

Codex Code	Commodity description	Expr as	STMR mg/kg	Diets: g/person/day				Intake = daily intake: ug/person					
				G13 diet	G13 intake	G14 diet	G14 intake	G15 diet	G15 intake	G16 diet	G16 intake	G17 diet	G17 intake
TN 0660	Almonds, nutmeat	RAC	0.01	0.10	0.00	0.10	0.00	0.61	0.01	0.10	0.00	NC	-
TN 0662	Brazil nuts, nutmeat	RAC	0.01	0.10	0.00	0.10	0.00	0.10	0.00	0.10	0.00	NC	-
TN 0664	Chestnut, raw	RAC	0.01	0.10	0.00	0.10	0.00	0.75	0.01	0.10	0.00	NC	-
TN 0665	Coconut, nutmeat (incl. copra, incl desiccated, incl oil)	RAC	0.01	2.77	0.03	134.37	1.34	2.81	0.03	0.70	0.01	317.67	3.18
TN 0666	Hazelnuts, nutmeat	RAC	0.01	0.10	0.00	0.10	0.00	0.21	0.00	0.10	0.00	NC	-
TN 0669	Macadamia nuts, nutmeat (i.e. Queensland nuts)	RAC	0.01	0.10	0.00	0.10	0.00	NC	-	0.10	0.00	0.10	0.00
TN 0672	Pecan nuts, nutmeat	RAC	0.01	0.15	0.00	0.22	0.00	0.31	0.00	0.10	0.00	0.10	0.00
TN 0673	Pine nuts, nutmeat (i.e. pignolia nuts)	RAC	0.01	0.51	0.01	0.74	0.01	0.36	0.00	0.10	0.00	0.10	0.00
TN 0675	Pistachio nut, nutmeat	RAC	0.44	0.10	0.04	0.10	0.04	0.15	0.07	0.10	0.04	NC	-
TN 0678	Walnuts, nutmeat	RAC	0.01	0.10	0.00	0.10	0.00	0.81	0.01	0.10	0.00	NC	-
SO 0495	Rape seed, raw (incl oil)	RAC	0.02	0.19	0.00	0.10	0.00	12.07	0.24	0.10	0.00	NC	-
SO 0691	Cotton seed, raw (incl oil)	RAC	0.01	8.14	0.08	0.32	0.00	2.84	0.03	2.69	0.03	0.97	0.01
SO 0697	Peanuts, nutmeat, raw (incl roasted, incl butter, excl oil)	RAC	0.01	7.14	0.07	0.45	0.00	1.87	0.02	6.22	0.06	0.53	0.01
OR 0697	Peanut oil, edible	PP	0.03	5.02	0.15	0.10	0.00	0.17	0.01	0.29	0.01	NC	-
SO 0702	Sunflower seed, raw	RAC	0.04	0.10	0.00	0.10	0.00	0.10	0.00	2.23	0.09	NC	-
OR 0702	Sunflower seed oil, edible	PP	0.01	0.37	0.00	0.10	0.00	12.98	0.13	4.01	0.04	0.20	0.00
SB 0716	Coffee beans, raw (i.e. green coffee)	RAC	0.01	0.83	0.01	0.69	0.01	1.09	0.01	2.91	0.03	0.82	0.01
SM 0716	Coffee beans, roasted	PP	0.006	0.10	0.00	0.41	0.00	7.50	0.05	0.10	0.00	0.10	0.00
-	Coffee beans, instant coffee (incl essences and concentrates)	PP	0.01	0.10	0.00	0.10	0.00	0.60	0.01	0.10	0.00	5.53	0.06
-	Coffee beans, substitutes, containing coffee	PP	0.01	0.10	0.00	0.10	0.00	0.13	0.00	0.10	0.00	NC	-
HH 0720	Herbs, raw (incl dried)	RAC	23	1.85	42.55	1.67	38.41	2.80	64.40	1.24	28.52	2.75	63.25
DH 1100	Hops, dry	RAC	11	NC	-	NC	-	0.10	1.10	NC	-	NC	-
MM 0095	MEAT FROM MAMMALS other than marine mammals, raw (incl prepared meat) -80% as muscle	RAC	0.01	23.34	0.23	40.71	0.41	97.15	0.97	18.06	0.18	57.71	0.58
MM 0095	MEAT FROM MAMMALS other than marine mammals, raw (incl prepared meat) - 20% as fat	RAC	0.015	5.84	0.09	10.18	0.15	24.29	0.36	4.52	0.07	14.43	0.22
MF 0100	Mammalian fats, raw, excl milk fats (incl rendered fats)	RAC	0.015	1.05	0.02	1.14	0.02	18.69	0.28	0.94	0.01	3.12	0.05
MO 0105	Edible offal (mammalian), raw	RAC	0.02	4.64	0.09	1.97	0.04	10.01	0.20	3.27	0.07	3.98	0.08
ML 0106	Milks, raw or skimmed (incl dairy products)	RAC	0.01	108.75	1.09	70.31	0.70	436.11	4.36	61.55	0.62	79.09	0.79
PM 0110	Poultry meat, raw (incl prepared)	RAC	0	3.92	0.00	12.03	0.00	57.07	0.00	5.03	0.00	55.56	0.00
PF 0111	Poultry fat, raw (incl rendered)	RAC	0	NC	-	NC	-	0.32	0.00	NC	-	NC	-
PE 0112	Eggs, raw, (incl dried)	RAC	0	3.84	0.00	4.41	0.00	27.25	0.00	1.13	0.00	7.39	0.00

AZOXYSTROBIN (229)				International Estimated Daily Intake (IEDI)				ADI = 0 - 00 mg/kg bw					
Codex Code	Commodity description	Expr as	STMR mg/kg	Diets: g/person/day				Intake = daily intake: ug/person					
				G13 diet	G13 intake	G14 diet	G14 intake	G15 diet	G15 intake	G16 diet	G16 intake	G17 diet	G17 intake
	Total intake (ug/person)=				464.8		236.6		1009.5		425.2		252.4
	Bodyweight per region (kg bw) =				60		60		60		60		60
	ADI (ug/person)=				12000		12000		12000		12000		12000
	%ADI=				3.9%		2.0%		8.4%		3.5%		2.1%
	Rounded %ADI=				4%		2%		8%		4%		2%

BOSCALID (221)				International Estimated Daily Intake (IEDI)				ADI = 0 - 0.04 mg/kg bw							
Codex Code	Commodity description	Expr as	STMR mg/kg	Diets as g/person/day				Intake as ug/person/day							
				G01 diet	G01 intake	G02 diet	G02 intake	G03 diet	G03 intake	G04 diet	G04 intake	G05 diet	G05 intake	G06 diet	G06 intake
FC 0002	Subgroup of Lemons and limes, raw (incl lemon juice) (incl kumquat commodities)	RAC	0.05	4.82	0.24	2.45	0.12	3.93	0.20	25.44	1.27	8.74	0.44	16.23	0.81
FC 0003	Subgroup of Mandarins, raw (incl mandarin juice)	RAC	0.05	6.18	0.31	3.66	0.18	0.25	0.01	6.82	0.34	3.49	0.17	19.38	0.97
FC 0004	Subgroup of Oranges, sweet, sour, raw	RAC	0.05	20.66	1.03	5.23	0.26	11.90	0.60	37.90	1.90	21.16	1.06	56.46	2.82
JF 0004	Subgroup of Oranges, juice (single strength, incl. concentrated)	PP	0.0108	1.27	0.01	2.20	0.02	0.10	0.00	11.81	0.13	0.46	0.00	1.69	0.02
FC 0005	Subgroup of Pummelo and grapefruits, raw (incl grapefruit juice)	RAC	0.05	0.66	0.03	0.69	0.03	0.96	0.05	10.20	0.51	1.25	0.06	2.97	0.15
FP 0226	Apple, raw (incl cider, excl juice)	RAC	0.35	13.49	4.72	26.63	9.32	15.05	5.27	16.28	5.70	6.47	2.26	47.88	16.76
JF 0226	Apple juice, single strength (incl. concentrated)	PP	0.028	0.32	0.01	3.07	0.09	0.10	0.00	5.00	0.14	0.29	0.01	5.57	0.16
FP 0228	Loquat, raw (incl processed) (i.e. Japanese medlar)	RAC	0.35	0.59	0.21	0.36	0.13	0.46	0.16	1.88	0.66	NC	-	1.15	0.40
FP 0229	Medlar, raw (incl processed)	RAC	0.35	0.47	0.16	0.29	0.10	0.36	0.13	1.49	0.52	NC	-	0.92	0.32
FP 0230	Pear, raw	RAC	0.35	2.16	0.76	6.24	2.18	0.10	0.04	4.07	1.42	1.16	0.41	5.34	1.87
FP 0307	Persimmon, Japanese, raw (i.e. Kaki fruit)	RAC	0.35	1.91	0.67	0.10	0.04	1.94	0.68	1.96	0.69	NC	-	0.25	0.09
FP 0231	Quince, raw	RAC	0.35	0.73	0.26	0.54	0.19	0.10	0.04	0.10	0.04	0.10	0.04	1.31	0.46
FS 0013	Subgroup of Cherries, raw	RAC	1.5	0.92	1.38	9.15	13.73	0.10	0.15	0.61	0.92	0.10	0.15	6.64	9.96
FS 0014	Subgroup of Plums, raw	RAC	0.25	2.40	0.60	8.60	2.15	0.10	0.03	2.52	0.63	0.58	0.15	4.16	1.04
DF 0014	Plums, dried (prunes)	PP	0.7	0.10	0.07	0.10	0.07	0.10	0.07	0.18	0.13	0.10	0.07	0.10	0.07
FS 2001	Subgroup of peaches, raw (incl dried apricots)	RAC	0.6	8.01	4.81	5.87	3.52	0.18	0.11	8.19	4.91	1.64	0.98	22.46	13.48
FB 2005	Subgroup of Caneberries, raw	RAC	2.53	0.42	1.06	1.05	2.66	0.10	0.25	0.10	0.25	0.10	0.25	1.24	3.14
FB 2006	Subgroup of Bush berries, raw (including processed)	RAC	2.53	0.53	1.34	1.31	3.31	0.40	1.01	1.66	4.20	0.10	0.25	0.99	2.50
FB 2007	Subgroup of Large shrub/tree berries, raw (including processed)	RAC	2.53	0.62	1.57	0.33	0.83	0.34	0.86	1.42	3.59	0.10	0.25	1.51	3.82
FB 0269	Grapes, raw (incl must, excl dried, excl juice, excl wine)	RAC	1.09	13.02	14.19	9.25	10.08	0.10	0.11	16.91	18.43	3.70	4.03	54.44	59.34
DF 0269	Grapes, dried (= currants, raisins and sultanas) (from table-grapes)	PP	2.6	0.51	1.33	0.51	1.33	0.10	0.26	1.27	3.30	0.12	0.31	2.07	5.38
JF 0269	Grape juice (from wine grapes)	PP	0.46	0.14	0.06	0.29	0.13	0.10	0.05	0.30	0.14	0.24	0.11	0.10	0.05
-	Grape wine (incl vermouths) (from wine-grapes)	PP	0.38	0.67	0.25	12.53	4.76	2.01	0.76	1.21	0.46	3.53	1.34	4.01	1.52
FB 0275	Strawberry, raw	RAC	0.555	0.70	0.39	2.01	1.12	0.10	0.06	1.36	0.75	0.37	0.21	2.53	1.40
FI 0327	Banana, raw (incl plantains) (incl dried)	RAC	0.05	5.23	0.26	6.94	0.35	99.45	4.97	32.47	1.62	48.30	2.42	24.70	1.24
FI 0345	Mango, raw (incl canned mango, incl mango juice)	RAC	0.255	10.48	2.67	0.10	0.03	7.24	1.85	6.87	1.75	19.98	5.09	6.25	1.59



**BOSCALID (221)**

## International Estimated Daily Intake (IEDI)

ADI = 0 - 0.04 mg/kg bw

Codex Code	Commodity description	Expr as	STMR mg/kg	Diets as g/person/day				Intake as ug/person/day							
				G01 diet	G01 intake	G02 diet	G02 intake	G03 diet	G03 intake	G04 diet	G04 intake	G05 diet	G05 intake	G06 diet	G06 intake
FI 0341	Kiwifruit, raw	RAC	0.0073	0.10	0.00	0.36	0.00	0.10	0.00	1.17	0.01	0.10	0.00	0.69	0.01
VA 0035	Group of Bulb vegetables, raw	RAC	1.02	34.29	34.98	46.37	47.30	4.73	4.82	41.36	42.19	21.08	21.50	52.54	53.59
VB 0040	Group of Brassica vegetables (except Brassica leafy vegetables), raw	RAC	1.52	6.43	9.77	40.26	61.20	0.80	1.22	9.94	15.11	12.07	18.35	17.73	26.95
VC 0045	Group of Fruiting vegetables, cucurbits, raw	RAC	0.565	53.14	30.02	86.21	48.71	6.28	3.55	92.76	52.41	15.64	8.84	155.30	87.74
VO 0448	Tomato, raw (incl canned, excl juice, excl paste)	RAC	0.565	42.04	23.75	76.13	43.01	10.69	6.04	84.59	47.79	24.92	14.08	203.27	114.85
-	Tomato, paste (i.e. concentrated tomato sauce/puree)	PP	0.413	2.34	0.97	1.33	0.55	1.57	0.65	4.24	1.75	0.34	0.14	2.83	1.17
JF 0448	Tomato, juice (single strength, incl concentrated)	PP	0.085	0.29	0.02	0.29	0.02	0.10	0.01	0.38	0.03	0.10	0.01	0.14	0.01
VO 0051	Subgroup of peppers, raw (incl dried sweet peppers, excl dried chilipeppers) (Capsicum spp. Only)	RAC	0.565	8.48	4.79	13.74	7.76	10.13	5.72	11.29	6.38	9.52	5.38	26.36	14.89
-	Peppers, chili, dried	PP	1.4	0.42	0.59	0.53	0.74	0.84	1.18	0.50	0.70	0.95	1.33	0.37	0.52
VO 2046	Subgroup of eggplants	RAC	0.565	5.58	3.15	4.31	2.44	0.89	0.50	9.31	5.26	13.64	7.71	20.12	11.37
VL 0053	Group of Leafy vegetables, raw	RAC	2.95	8.47	24.99	22.36	65.96	7.74	22.83	25.51	75.25	45.77	135.02	21.22	62.60
VP 0060	Group of Legume vegetables, raw	RAC	0.5	7.73	3.87	1.53	0.77	0.51	0.26	2.95	1.48	5.08	2.54	12.86	6.43
VD 0070	Group of Pulses, raw (incl processed)	RAC	0.12	87.29	10.47	64.04	7.68	37.15	4.46	89.82	10.78	91.02	10.92	98.20	11.78
VR 0075	Group of Root and tuber vegetables, raw (incl processed)	RAC	0.305	87.83	26.79	374.04	114.08	668.92	204.02	121.64	37.10	94.20	28.73	247.11	75.37
VS 0078	Group of Stalk and stem vegetables, raw	RAC	8.85	6.03	53.37	9.47	83.81	5.86	51.86	14.55	128.77	2.61	23.10	8.27	73.19
GC 0648	Quinoa, raw	RAC	0.1	NC	-	NC	-	NC	-	NC	-	0.10	0.01	NC	-
GC 0650	Rye, raw (incl flour)	RAC	0.075	0.13	0.01	19.38	1.45	0.10	0.01	0.12	0.01	0.10	0.01	2.15	0.16
GC 0653	Triticale, raw (incl flour)	RAC	0.075	NC	-	NC	-	NC	-	0.10	0.01	0.39	0.03	NC	-
GC 0654	Wheat, raw (incl bulgur, incl fermented beverages, excl germ, excl wholemeal bread, excl white flour products, excl white bread)	RAC	0.075	0.10	0.01	1.12	0.08	NC	-	0.10	0.01	0.56	0.04	NC	-
CF 1210	Wheat, germ	PP	0.1	NC	-	NC	-	0.10	0.01	0.10	0.01	0.14	0.01	0.10	0.01
CP 1212	Wheat, wholemeal bread	PP	0.092	0.10	0.01	0.10	0.01	0.10	0.01	0.10	0.01	0.10	0.01	0.10	0.01
CP 1211	Wheat, white bread	PP	0.026	0.25	0.01	0.63	0.02	0.12	0.00	0.43	0.01	1.39	0.04	0.22	0.01

BOSCALID (221)				International Estimated Daily Intake (IEDI)				ADI = 0 - 0.04 mg/kg bw							
Codex Code	Commodity description	Expr as	STMR mg/kg	Diets as g/person/day				Intake as ug/person/day							
				G01 diet	G01 intake	G02 diet	G02 intake	G03 diet	G03 intake	G04 diet	G04 intake	G05 diet	G05 intake	G06 diet	G06 intake
CF 1211	Wheat, white flour (incl white flour products: starch, gluten, macaroni, pastry)	PP	0.026	301.24	7.83	268.64	6.98	30.21	0.79	222.51	5.79	134.73	3.50	343.12	8.92
GC 0640	Barley, raw (incl malt extract, incl flour & grits, incl beer, excl pot&pearled, excl malt)	RAC	0.075	8.83	0.66	18.46	1.38	4.76	0.36	2.60	0.20	8.68	0.65	3.86	0.29
-	Barley, pot&pearled	PP	0.026	7.12	0.19	7.34	0.19	0.10	0.00	0.10	0.00	0.67	0.02	0.20	0.01
GC 0647	Oats, raw (incl rolled)	RAC	0.075	0.10	0.01	7.05	0.53	0.10	0.01	1.71	0.13	0.96	0.07	0.10	0.01
GC 2088	Subgroup of rice cereals	REP	0.1	45.40	4.54	14.99	1.50	84.88	8.49	111.73	11.17	194.75	19.48	93.12	9.31
GC 2089	Subgroup of Sorghum Grain and Millet	RAC	0.1	5.80	0.58	2.32	0.23	23.09	2.31	16.72	1.67	27.14	2.71	2.92	0.29
GC 2091	Subgroup of Maize Cereals	RAC	0.1	29.81	2.98	44.77	4.48	108.95	10.90	52.37	5.24	60.28	6.03	75.69	7.57
GC 2090	Subgroup of Sweet Corns	RAC	0.1	0.14	0.01	0.94	0.09	5.70	0.57	2.61	0.26	1.94	0.19	0.22	0.02
TN 0295	Cashew nuts, nutmeat	RAC	0.05	0.10	0.01	0.10	0.01	0.24	0.01	0.47	0.02	0.32	0.02	0.10	0.01
TN 0660	Almonds, nutmeat	RAC	0.05	1.38	0.07	0.10	0.01	0.10	0.01	1.00	0.05	0.10	0.01	0.81	0.04
TN 0662	Brazil nuts, nutmeat	RAC	0.05	0.10	0.01	0.10	0.01	0.10	0.01	0.10	0.01	0.10	0.01	0.10	0.01
TN 0664	Chestnut, raw	RAC	0.05	0.10	0.01	0.10	0.01	0.10	0.01	0.31	0.02	0.10	0.01	0.67	0.03
TN 0665	Coconut, nutmeat (incl. copra, incl desiccated, incl oil)	RAC	0.05	1.73	0.09	1.20	0.06	6.63	0.33	10.18	0.51	13.07	0.65	2.98	0.15
TN 0666	Hazelnuts, nutmeat	RAC	0.05	0.10	0.01	0.13	0.01	0.10	0.01	0.11	0.01	0.10	0.01	1.11	0.06
TN 0669	Macadamia nuts, nutmeat (i.e. Queensland nuts)	RAC	0.05	0.10	0.01	0.10	0.01	0.10	0.01	0.10	0.01	NC	-	0.10	0.01
TN 0672	Pecan nuts, nutmeat	RAC	0.05	0.10	0.01	0.10	0.01	0.10	0.01	0.14	0.01	0.10	0.01	0.13	0.01
TN 0673	Pine nuts, nutmeat (i.e. pignolia nuts)	RAC	0.05	0.18	0.01	0.18	0.01	0.10	0.01	0.49	0.02	0.25	0.01	0.43	0.02
TN 0675	Pistachio nut, nutmeat	RAC	0.27	0.41	0.11	0.10	0.03	0.10	0.03	0.85	0.23	0.10	0.03	1.08	0.29
TN 0678	Walnuts, nutmeat	RAC	0.05	0.23	0.01	1.49	0.07	0.10	0.01	0.33	0.02	0.10	0.01	2.06	0.10
SO 0088	Oilseeds, raw (incl processed)	RAC	0.145	79.30	11.50	54.81	7.95	96.74	14.03	137.72	19.97	61.07	8.86	88.71	12.86
SB 0716	Coffee beans raw (incl roasted, incl instant coffee, incl substitutes)	RAC	0.05	1.36	0.07	3.59	0.18	1.44	0.07	5.18	0.26	2.02	0.10	1.70	0.09

BOSCALID (221)				International Estimated Daily Intake (IEDI)				ADI = 0 - 0.04 mg/kg bw							
Codex Code	Commodity description	Expr as	STMR mg/kg	Diets as g/person/day				Intake as ug/person/day							
				G01 diet	G01 intake	G02 diet	G02 intake	G03 diet	G03 intake	G04 diet	G04 intake	G05 diet	G05 intake	G06 diet	G06 intake
DH 1100	Hops, dry	RAC	21.5	0.10	2.15	0.10	2.15	0.10	2.15	0.10	2.15	NC	-	0.10	2.15
DT 1114	Tea, green or black, fermented and dried	RAC	6.25	2.28	14.25	1.92	12.00	0.46	2.88	2.40	15.00	1.29	8.06	3.04	19.00
MM 0095	MEAT FROM MAMMALS other than marine mammals, raw (incl prepared meat) -80% as muscle	RAC	0.035	24.96	0.87	57.95	2.03	16.70	0.58	38.38	1.34	26.46	0.93	29.00	1.02
MM 0095	MEAT FROM MAMMALS other than marine mammals, raw (incl prepared meat) - 20% as fat	RAC	0.18	6.24	1.12	14.49	2.61	4.18	0.75	9.60	1.73	6.62	1.19	7.25	1.31
MF 0100	Mammalian fats, raw, excl milk fats (incl rendered fats)	RAC	0.18	3.29	0.59	6.14	1.11	0.82	0.15	1.57	0.28	2.23	0.40	1.07	0.19
MO 0105	Edible offal (mammalian), raw	RAC	0.16	4.79	0.77	9.68	1.55	2.97	0.48	5.49	0.88	3.84	0.61	5.03	0.80
ML 0106	Milks, raw or skimmed (incl dairy products)	RAC	0.066	289.65	19.12	485.88	32.07	26.92	1.78	239.03	15.78	199.91	13.19	180.53	11.91
PM 0110	Poultry meat, raw (incl prepared) - 90% as muscle	RAC	0.02	13.17	0.26	26.78	0.54	7.24	0.14	116.71	2.33	22.54	0.45	32.09	0.64
PM 0110	Poultry meat, raw (incl prepared) - 10% as fat	RAC	0.02	1.46	0.03	2.98	0.06	0.80	0.02	12.97	0.26	2.50	0.05	3.57	0.07
PF 0111	Poultry fat, raw (incl rendered)	RAC	0.02	0.10	0.00	0.10	0.00	NC	-	0.10	0.00	0.10	0.00	0.10	0.00
PO 0111	Poultry edible offal, raw (incl prepared)	RAC	0.02	0.12	0.00	0.12	0.00	0.11	0.00	5.37	0.11	0.24	0.00	0.10	0.00
PE 0112	Eggs, raw, (incl dried)	RAC	0.02	7.84	0.16	23.08	0.46	2.88	0.06	14.89	0.30	9.81	0.20	14.83	0.30
Total intake (ug/person)=				334.0				620.6				371.7			
Bodyweight per region (kg bw) =				60				60				60			
ADI (ug/person)=				2400				2400				2400			
%ADI=				13.9%				25.9%				15.5%			
Rounded %ADI=				10%				30%				20%			

BOSCALID (221)				International Estimated Daily Intake (IEDI)				ADI = 0 - 0.04 mg/kg bw							
Codex Code	Commodity description	Expr as	STMR mg/kg	Diets as g/person/day				Intake as ug/person/day							
				G07 diet	G07 intake	G08 diet	G08 intake	G09 diet	G09 intake	G10 diet	G10 intake	G11 diet	G11 intake	G12 diet	G12 intake
FC 0002	Subgroup of Lemons and limes, raw (incl lemon juice) (incl kumquat commodities)	RAC	0.05	10.12	0.51	15.69	0.78	2.88	0.14	12.30	0.62	22.32	1.12	6.59	0.33
FC 0003	Subgroup of Mandarins, raw (incl mandarin juice)	RAC	0.05	12.42	0.62	14.99	0.75	16.08	0.80	10.78	0.54	9.94	0.50	NC	-
FC 0004	Subgroup of Oranges, sweet, sour, raw	RAC	0.05	15.68	0.78	24.00	1.20	6.80	0.34	29.09	1.45	15.39	0.77	160.47	8.02

BOSCALID (221)				International Estimated Daily Intake (IEDI)				ADI = 0 - 0.04 mg/kg bw							
Codex Code	Commodity description	Expr as	STMR mg/kg	Diets as g/person/day				Intake as ug/person/day							
				G07 diet	G07 intake	G08 diet	G08 intake	G09 diet	G09 intake	G10 diet	G10 intake	G11 diet	G11 intake	G12 diet	G12 intake
JF 0004	Subgroup of Oranges, juice (single strength, incl. concentrated)	PP	0.0108	33.31	0.36	1.78	0.02	0.28	0.00	18.97	0.20	14.01	0.15	13.36	0.14
FC 0005	Subgroup of Pummelo and grapefruits, raw (incl grapefruit juice)	RAC	0.05	8.21	0.41	4.60	0.23	0.64	0.03	5.85	0.29	19.98	1.00	368.86	18.44
FP 0226	Apple, raw (incl cider, excl juice)	RAC	0.35	41.14	14.40	56.49	19.77	26.64	9.32	31.58	11.05	51.94	18.18	3.05	1.07
JF 0226	Apple juice, single strength (incl. concentrated)	PP	0.028	14.88	0.42	11.98	0.34	0.15	0.00	9.98	0.28	30.32	0.85	3.47	0.10
FP 0228	Loquat, raw (incl processed) (i.e. Japanese medlar)	RAC	0.35	0.96	0.34	NC	-	NC	-	3.92	1.37	NC	-	2.49	0.87
FP 0229	Medlar, raw (incl processed)	RAC	0.35	NC	-	NC	-	NC	-	NC	-	NC	-	1.98	0.69
FP 0230	Pear, raw	RAC	0.35	8.79	3.08	8.44	2.95	12.37	4.33	9.60	3.36	10.27	3.59	0.23	0.08
FP 0307	Persimmon, Japanese, raw (i.e. Kaki fruit)	RAC	0.35	0.10	0.04	0.30	0.11	3.59	1.26	0.15	0.05	0.10	0.04	NC	-
FP 0231	Quince, raw	RAC	0.35	0.19	0.07	0.18	0.06	0.11	0.04	0.10	0.04	0.28	0.10	NC	-
FS 0013	Subgroup of Cherries, raw	RAC	1.5	1.40	2.10	4.21	6.32	0.10	0.15	2.93	4.40	1.50	2.25	NC	-
FS 0014	Subgroup of Plums, raw	RAC	0.25	3.75	0.94	3.33	0.83	5.94	1.49	2.64	0.66	2.50	0.63	0.10	0.03
DF 0014	Plums, dried (prunes)	PP	0.7	0.61	0.43	0.35	0.25	0.10	0.07	0.35	0.25	0.49	0.34	0.13	0.09
FS 2001	Subgroup of peaches, raw (incl dried apricots)	RAC	0.6	13.03	7.82	16.29	9.77	8.29	4.97	12.95	7.77	5.35	3.21	0.10	0.06
FB 2005	Subgroup of Caneberries, raw	RAC	2.53	0.56	1.42	1.43	3.62	0.14	0.35	1.23	3.11	1.14	2.88	0.10	0.25
FB 2006	Subgroup of Bush berries, raw (including processed)	RAC	2.53	1.31	3.31	5.50	13.92	0.10	0.25	2.57	6.50	0.82	2.07	2.15	5.44
FB 2007	Subgroup of Large shrub/tree berries, raw (including processed)	RAC	2.53	8.26	20.90	0.14	0.35	0.10	0.25	0.13	0.33	0.19	0.48	1.87	4.73
FB 0269	Grapes, raw (incl must, excl dried, excl juice, excl wine)	RAC	1.09	6.48	7.06	11.31	12.33	5.21	5.68	9.50	10.36	4.66	5.08	0.78	0.85
DF 0269	Grapes, dried (= currants, raisins and sultanas) (from table-grapes)	PP	2.6	3.09	8.03	1.51	3.93	0.10	0.26	1.38	3.59	4.26	11.08	0.42	1.09
JF 0269	Grape juice (from wine grapes)	PP	0.46	0.56	0.26	1.96	0.90	0.10	0.05	2.24	1.03	2.27	1.04	0.34	0.16
-	Grape wine (incl vermouths) (from wine-grapes)	PP	0.38	88.93	33.79	62.41	23.72	1.84	0.70	25.07	9.53	61.17	23.24	5.84	2.22
FB 0275	Strawberry, raw	RAC	0.555	4.49	2.49	5.66	3.14	0.10	0.06	6.63	3.68	5.75	3.19	0.10	0.06
FI 0327	Banana, raw (incl plantains) (incl dried)	RAC	0.05	25.76	1.29	23.65	1.18	23.83	1.19	24.37	1.22	19.43	0.97	101.55	5.08
FI 0345	Mango, raw (incl canned mango, incl mango juice)	RAC	0.255	1.80	0.46	0.63	0.16	10.05	2.56	1.07	0.27	3.52	0.90	16.44	4.19
FI 0341	Kiwifruit, raw	RAC	0.0073	2.46	0.02	3.62	0.03	0.10	0.00	1.48	0.01	7.43	0.05	0.10	0.00
VA 0035	Group of Bulb vegetables, raw	RAC	1.02	26.24	26.76	36.47	37.20	39.29	40.08	39.37	40.16	29.12	29.70	20.21	20.61
VB 0040	Group of Brassica vegetables (except Brassica leafy vegetables), raw	RAC	1.52	20.71	31.48	39.81	60.51	25.06	38.09	37.93	57.65	18.12	27.54	16.74	25.44
VC 0045	Group of Fruiting vegetables, cucurbits, raw	RAC	0.565	27.81	15.71	41.93	23.69	123.30	69.66	49.47	27.95	15.95	9.01	35.99	20.33
VO 0448	Tomato, raw (incl canned, excl juice, excl paste)	RAC	0.565	43.88	24.79	55.41	31.31	35.38	19.99	74.88	42.31	26.50	14.97	9.51	5.37

## BOSCALID (221)

## International Estimated Daily Intake (IEDI)

ADI = 0 - 0.04 mg/kg bw

Codex Code	Commodity description	Expr as	STMR mg/kg	Diets as g/person/day				Intake as ug/person/day							
				G07 diet	G07 intake	G08 diet	G08 intake	G09 diet	G09 intake	G10 diet	G10 intake	G11 diet	G11 intake	G12 diet	G12 intake
-	Tomato, paste (i.e. concentrated tomato sauce/puree)	PP	0.413	4.96	2.05	3.20	1.32	0.15	0.06	1.61	0.66	6.88	2.84	0.52	0.21
JF 0448	Tomato, juice (single strength, incl concentrated)	PP	0.085	0.80	0.07	0.10	0.01	0.10	0.01	0.61	0.05	0.40	0.03	0.10	0.01
VO 0051	Subgroup of peppers, raw (incl dried sweet peppers, excl dried chili peppers) (Capsicum spp. Only)	RAC	0.565	6.39	3.61	15.53	8.77	19.09	10.79	10.36	5.85	8.29	4.68	4.53	2.56
-	Peppers, chili, dried	PP	1.4	0.11	0.15	0.21	0.29	0.36	0.50	0.21	0.29	0.25	0.35	0.15	0.21
VO 2046	Subgroup of eggplants	RAC	0.565	1.01	0.57	1.69	0.95	21.37	12.07	3.00	1.70	1.40	0.79	NC	-
VL 0053	Group of Leafy vegetables, raw	RAC	2.95	18.83	55.55	21.85	64.46	121.23	357.63	43.09	127.12	18.18	53.63	18.32	54.04
VP 0060	Group of Legume vegetables, raw	RAC	0.5	18.21	9.11	8.91	4.46	7.22	3.61	10.04	5.02	23.22	11.61	0.17	0.09
VD 0070	Group of Pulses, raw (incl processed)	RAC	0.12	112.88	13.55	123.05	14.77	47.73	5.73	204.75	24.57	227.52	27.30	110.05	13.21
VR 0075	Group of Root and tuber vegetables, raw (incl processed)	RAC	0.305	290.31	88.54	300.35	91.61	214.25	65.35	242.72	74.03	348.67	106.34	137.52	41.94
VS 0078	Group of Stalk and stem vegetables, raw	RAC	8.85	12.56	111.16	15.57	137.79	72.50	641.63	8.11	71.77	28.79	254.79	10.13	89.65
GC 0648	Quinoa, raw	RAC	0.1	NC	-	NC	-	NC	-	NC	-	NC	-	NC	-
GC 0650	Rye, raw (incl flour)	RAC	0.075	3.21	0.24	35.38	2.65	0.21	0.02	6.50	0.49	1.49	0.11	NC	-
GC 0653	Triticale, raw (incl flour)	RAC	0.075	0.10	0.01	0.17	0.01	0.29	0.02	0.10	0.01	NC	-	NC	-
GC 0654	Wheat, raw (incl bulgur, incl fermented beverages, excl germ, excl wholemeal bread, excl white flour products, excl white bread)	RAC	0.075	NC	-	NC	-	0.10	0.01	0.83	0.06	NC	-	NC	-
CF 1210	Wheat, germ	PP	0.1	0.97	0.10	0.10	0.01	0.10	0.01	0.10	0.01	NC	-	0.10	0.01
CP 1212	Wheat, wholemeal bread	PP	0.092	0.10	0.01	0.10	0.01	0.10	0.01	0.10	0.01	0.10	0.01	0.10	0.01
CP 1211	Wheat, white bread	PP	0.026	1.30	0.03	0.46	0.01	0.10	0.00	0.22	0.01	2.44	0.06	0.77	0.02
CF 1211	Wheat, white flour (incl white flour products: starch, gluten, macaroni, pastry)	PP	0.026	198.08	5.15	193.03	5.02	106.24	2.76	185.09	4.81	168.67	4.39	131.59	3.42
GC 0640	Barley, raw (incl malt extract, incl flour & grits, incl beer, excl pot&pearled, excl malt)	RAC	0.075	35.06	2.63	49.50	3.71	8.81	0.66	34.28	2.57	46.12	3.46	13.03	0.98
-	Barley, pot&pearled	PP	0.026	0.57	0.01	2.56	0.07	0.33	0.01	0.56	0.01	0.36	0.01	NC	-
GC 0647	Oats, raw (incl rolled)	RAC	0.075	7.50	0.56	6.26	0.47	0.15	0.01	4.87	0.37	3.16	0.24	2.98	0.22
GC 2088	Subgroup of rice cereals	REP	0.1	20.96	2.10	16.04	1.60	339.67	33.97	75.51	7.55	16.86	1.69	86.13	8.61
GC 2089	Subgroup of Sorghum Grain and Millet	RAC	0.1	0.10	0.01	0.16	0.02	3.19	0.32	1.85	0.19	NC	-	7.12	0.71
GC 2091	Subgroup of Maize Cereals	RAC	0.1	18.51	1.85	26.18	2.62	26.04	2.60	39.99	4.00	7.36	0.74	64.58	6.46
GC 2090	Subgroup of Sweet Corns	RAC	0.1	11.43	1.14	3.71	0.37	0.74	0.07	13.63	1.36	3.07	0.31	1.50	0.15
TN 0295	Cashew nuts, nutmeat	RAC	0.05	0.59	0.03	0.23	0.01	0.18	0.01	0.52	0.03	1.75	0.09	2.78	0.14
TN 0660	Almonds, nutmeat	RAC	0.05	0.81	0.04	2.21	0.11	0.10	0.01	1.02	0.05	1.47	0.07	NC	-
TN 0662	Brazil nuts, nutmeat	RAC	0.05	0.12	0.01	0.10	0.01	0.10	0.01	0.10	0.01	0.13	0.01	NC	-
TN 0664	Chestnut, raw	RAC	0.05	0.34	0.02	0.21	0.01	1.14	0.06	0.52	0.03	0.10	0.01	NC	-

BOSCALID (221)				International Estimated Daily Intake (IEDI)				ADI = 0 - 0.04 mg/kg bw							
Codex Code	Commodity description	Expr as	STMR mg/kg	Diets as g/person/day				Intake as ug/person/day							
				G07 diet	G07 intake	G08 diet	G08 intake	G09 diet	G09 intake	G10 diet	G10 intake	G11 diet	G11 intake	G12 diet	G12 intake
TN 0665	Coconut, nutmeat (incl. copra, incl desiccated, incl oil)	RAC	0.05	4.13	0.21	2.73	0.14	13.15	0.66	5.85	0.29	6.92	0.35	22.24	1.11
TN 0666	Hazelnuts, nutmeat	RAC	0.05	0.45	0.02	1.12	0.06	0.10	0.01	0.34	0.02	1.63	0.08	NC	-
TN 0669	Macadamia nuts, nutmeat (i.e. Queensland nuts)	RAC	0.05	NC	-	0.40	0.02	NC	-	NC	-	NC	-	0.10	0.01
TN 0672	Pecan nuts, nutmeat	RAC	0.05	0.38	0.02	NC	-	NC	-	0.27	0.01	NC	-	0.26	0.01
TN 0673	Pine nuts, nutmeat (i.e. pignolia nuts)	RAC	0.05	0.99	0.05	0.66	0.03	0.22	0.01	0.27	0.01	1.89	0.09	0.89	0.04
TN 0675	Pistachio nut, nutmeat	RAC	0.27	0.35	0.09	0.48	0.13	0.10	0.03	0.39	0.11	0.23	0.06	0.10	0.03
TN 0678	Walnuts, nutmeat	RAC	0.05	0.34	0.02	0.84	0.04	0.28	0.01	0.39	0.02	0.45	0.02	NC	-
SO 0088	Oilseeds, raw (incl processed)	RAC	0.145	108.63	15.75	112.14	16.26	64.25	9.32	81.75	11.85	66.09	9.58	20.34	2.95
SB 0716	Coffee beans raw (incl roasted, incl instant coffee, incl substitutes)	RAC	0.05	10.90	0.55	12.44	0.62	0.77	0.04	9.48	0.47	22.07	1.10	8.15	0.41
DH 1100	Hops, dry	RAC	21.5	NC	-	NC	-	0.10	2.15	0.10	2.15	NC	-	NC	-
DT 1114	Tea, green or black, fermented and dried	RAC	6.25	2.71	16.94	0.82	5.13	1.14	7.13	1.59	9.94	1.82	11.38	0.53	3.31
MM 0095	MEAT FROM MAMMALS other than marine mammals, raw (incl prepared meat) -80% as muscle	RAC	0.035	112.02	3.92	120.71	4.22	63.46	2.22	88.99	3.11	96.24	3.37	41.02	1.44
MM 0095	MEAT FROM MAMMALS other than marine mammals, raw (incl prepared meat) - 20% as fat	RAC	0.18	28.01	5.04	30.18	5.43	15.86	2.86	22.25	4.00	24.06	4.33	10.25	1.85
MF 0100	Mammalian fats, raw, excl milk fats (incl rendered fats)	RAC	0.18	6.44	1.16	15.51	2.79	3.79	0.68	8.29	1.49	18.44	3.32	8.00	1.44
MO 0105	Edible offal (mammalian), raw	RAC	0.16	15.17	2.43	5.19	0.83	6.30	1.01	6.78	1.08	3.32	0.53	3.17	0.51
ML 0106	Milks, raw or skimmed (incl dairy products)	RAC	0.066	388.92	25.67	335.88	22.17	49.15	3.24	331.25	21.86	468.56	30.92	245.45	16.20
PM 0110	Poultry meat, raw (incl prepared) - 90% as muscle	RAC	0.02	66.38	1.33	48.47	0.97	21.58	0.43	78.41	1.57	48.04	0.96	76.01	1.52
PM 0110	Poultry meat, raw (incl prepared) - 10% as fat	RAC	0.02	7.38	0.15	5.39	0.11	2.40	0.05	8.71	0.17	5.34	0.11	8.45	0.17
PF 0111	Poultry fat, raw (incl rendered)	RAC	0.02	0.10	0.00	0.10	0.00	NC	-	0.10	0.00	0.71	0.01	NC	-
PO 0111	Poultry edible offal, raw (incl prepared)	RAC	0.02	0.33	0.01	0.72	0.01	0.27	0.01	0.35	0.01	0.80	0.02	NC	-
PE 0112	Eggs, raw, (incl dried)	RAC	0.02	25.84	0.52	29.53	0.59	28.05	0.56	33.19	0.66	36.44	0.73	8.89	0.18
Total intake (ug/person)=				582.2				660.1				1370.5			
Bodyweight per region (kg bw) =				60				60				60			
ADI (ug/person)=				2400				2400				2400			
%ADI=				24.3%				27.5%				62.3%			
Rounded %ADI=				20%				30%				30%			

## BOSCALID (221)

## International Estimated Daily Intake (IEDI)

ADI = 0 - 0.04 mg/kg bw

Codex Code	Commodity description	Expr as	STMR mg/kg	Diets: g/person/day				Intake = daily intake: ug/person					
				G13 diet	G13 intake	G14 diet	G14 intake	G15 diet	G15 intake	G16 diet	G16 intake	G17 diet	G17 intake
FC 0002	Subgroup of Lemons and limes, raw (incl lemon juice) (incl kumquat commodities)	RAC	0.05	18.97	0.95	0.97	0.05	6.23	0.31	0.10	0.01	3.35	0.17
FC 0003	Subgroup of Mandarins, raw (incl mandarin juice)	RAC	0.05	0.16	0.01	0.27	0.01	9.06	0.45	0.10	0.01	0.10	0.01
FC 0004	Subgroup of Oranges, sweet, sour, raw	RAC	0.05	1.18	0.06	1.11	0.06	14.28	0.71	0.10	0.01	1.08	0.05
JF 0004	Subgroup of Oranges, juice (single strength, incl. concentrated)	PP	0.0108	0.10	0.00	0.26	0.00	12.61	0.14	0.14	0.00	0.33	0.00
FC 0005	Subgroup of Pummelo and grapefruits, raw (incl grapefruit juice)	RAC	0.05	0.68	0.03	0.10	0.01	3.21	0.16	0.10	0.01	NC	-
FP 0226	Apple, raw (incl cider, excl juice)	RAC	0.35	66.67	23.33	2.06	0.72	55.83	19.54	188.29	65.90	1.38	0.48
JF 0226	Apple juice, single strength (incl. concentrated)	PP	0.028	0.10	0.00	0.10	0.00	7.19	0.20	0.10	0.00	NC	-
FP 0228	Loquat, raw (incl processed) (i.e. Japanese medlar)	RAC	0.35	0.94	0.33	4.68	1.64	NC	-	0.50	0.18	3.08	1.08
FP 0229	Medlar, raw (incl processed)	RAC	0.35	0.75	0.26	3.73	1.31	4.87	1.70	0.40	0.14	2.45	0.86
FP 0230	Pear, raw	RAC	0.35	0.10	0.04	0.14	0.05	9.45	3.31	0.10	0.04	0.14	0.05
FP 0307	Persimmon, Japanese, raw (i.e. Kaki fruit)	RAC	0.35	0.41	0.14	0.32	0.11	0.10	0.04	0.58	0.20	12.51	4.38
FP 0231	Quince, raw	RAC	0.35	NC	-	NC	-	0.65	0.23	NC	-	NC	-
FS 0013	Subgroup of Cherries, raw	RAC	1.5	0.10	0.15	0.10	0.15	5.96	8.94	0.10	0.15	NC	-
FS 0014	Subgroup of Plums, raw	RAC	0.25	0.10	0.03	0.10	0.03	15.56	3.89	0.10	0.03	NC	-
DF 0014	Plums, dried (prunes)	PP	0.7	0.10	0.07	0.10	0.07	0.37	0.26	0.10	0.07	NC	-
FS 0001	Subgroup of peaches, raw (incl dried apricots)	RAC	0.6	0.10	0.06	0.10	0.06	10.76	6.46	0.10	0.06	NC	-
FB 0005	Subgroup of Caneberries, raw	RAC	2.53	0.10	0.25	7.30	18.47	2.29	5.79	0.10	0.25	NC	-
FB 0006	Subgroup of Bush berries, raw (including processed)	RAC	2.53	0.82	2.07	4.05	10.25	5.94	15.03	0.43	1.09	2.66	6.73
FB 0007	Subgroup of Large shrub/tree berries, raw (including processed)	RAC	2.53	0.71	1.80	7.32	18.52	NC	-	0.38	0.96	2.32	5.87
FB 0269	Grapes, raw (incl must, excl dried, excl juice, excl wine)	RAC	1.09	0.14	0.15	0.36	0.39	15.33	16.71	0.10	0.11	0.28	0.31
DF 0269	Grapes, dried (= currants, raisins and sultanas) (from table-grapes)	PP	2.6	0.10	0.26	0.13	0.34	1.06	2.76	0.10	0.26	0.10	0.26
JF 0269	Grape juice (from wine grapes)	PP	0.46	0.10	0.05	0.10	0.05	0.41	0.19	0.10	0.05	NC	-
-	Grape wine (incl vermouths) (from wine-grapes)	PP	0.38	0.31	0.12	0.23	0.09	60.43	22.96	0.52	0.20	31.91	12.13
FB 0275	Strawberry, raw	RAC	0.555	0.10	0.06	0.10	0.06	3.35	1.86	0.10	0.06	0.10	0.06
FI 0327	Banana, raw (incl plantains) (incl dried)	RAC	0.05	44.80	2.24	118.17	5.91	25.25	1.26	454.49	22.72	310.23	15.51
FI 0345	Mango, raw (incl canned mango, incl mango juice)	RAC	0.255	12.25	3.12	6.83	1.74	0.76	0.19	0.10	0.03	20.12	5.13
FI 0341	Kiwifruit, raw	RAC	0.0073	0.10	0.00	0.10	0.00	2.00	0.01	0.10	0.00	NC	-
VA 0035	Group of Bulb vegetables, raw	RAC	1.02	11.28	11.51	23.80	24.28	36.11	36.83	9.66	9.85	8.69	8.86
VB 0040	Group of Brassica vegetables (except Brassica leafy vegetables), raw	RAC	1.52	5.46	8.30	4.28	6.51	58.72	89.25	0.10	0.15	NC	-

BOSCALID (221)				International Estimated Daily Intake (IEDI)				ADI = 0 - 0.04 mg/kg bw					
Codex Code	Commodity description	Expr as	STMR mg/kg	Diets: g/person/day				Intake = daily intake: ug/person					
				G13 diet	G13 intake	G14 diet	G14 intake	G15 diet	G15 intake	G16 diet	G16 intake	G17 diet	G17 intake
VC 0045	Group of Fruiting vegetables, cucurbits, raw	RAC	0.565	5.96	3.37	9.74	5.50	51.82	29.28	13.61	7.69	0.10	0.06
VO 0448	Tomato, raw (incl canned, excl juice, excl paste)	RAC	0.565	13.10	7.40	4.90	2.77	62.16	35.12	1.04	0.59	0.10	0.06
-	Tomato, paste (i.e. concentrated tomato sauce/puree)	PP	0.413	0.58	0.24	0.22	0.09	2.21	0.91	0.24	0.10	3.10	1.28
JF 0448	Tomato, juice (single strength, incl concentrated)	PP	0.085	0.10	0.01	0.10	0.01	0.42	0.04	0.10	0.01	0.10	0.01
VO 0051	Subgroup of peppers, raw (incl dried sweet peppers, excl dried chilepeppers) (Capsicum spp. Only)	RAC	0.565	8.97	5.07	14.13	7.98	25.14	14.20	0.91	0.51	NC	-
-	Peppers, chili, dried	PP	1.4	0.58	0.81	1.27	1.78	1.21	1.69	0.12	0.17	NC	-
VO 2046	Subgroup of eggplants	RAC	0.565	1.31	0.74	8.26	4.67	3.95	2.23	0.10	0.06	NC	-
VL 0053	Group of Leafy vegetables, raw	RAC	2.95	12.42	36.64	8.75	25.81	7.53	22.21	7.07	20.86	14.11	41.62
VP 0060	Group of Legume vegetables, raw	RAC	0.5	0.58	0.29	3.16	1.58	10.38	5.19	0.10	0.05	NC	-
VD 0070	Group of Pulses, raw (incl processed)	RAC	0.12	46.57	5.59	30.77	3.69	112.53	13.50	75.53	9.06	43.68	5.24
VR 0075	Group of Root and tuber vegetables, raw (incl processed)	RAC	0.305	282.25	86.09	232.11	70.79	281.91	85.98	620.21	189.16	459.96	140.29
VS 0078	Group of Stalk and stem vegetables, raw	RAC	8.85	9.14	80.89	6.60	58.41	7.58	67.08	6.18	54.69	12.34	109.21
GC 0648	Quinoa, raw	RAC	0.1	NC	-	NC	-	NC	-	NC	-	NC	-
GC 0650	Rye, raw (incl flour)	RAC	0.075	0.10	0.01	0.10	0.01	13.95	1.05	0.10	0.01	0.88	0.07
GC 0653	Triticale, raw (incl flour)	RAC	0.075	0.10	0.01	NC	-	NC	-	NC	-	NC	-
GC 0654	Wheat, raw (incl bulgur, incl fermented beverages, excl germ, excl wholemeal bread, excl white flour products, excl white bread)	RAC	0.075	0.10	0.01	NC	-	NC	-	NC	-	0.97	0.07
CF 1210	Wheat, germ	PP	0.1	0.10	0.01	0.10	0.01	0.10	0.01	0.10	0.01	NC	-
CP 1212	Wheat, wholemeal bread	PP	0.092	0.10	0.01	0.10	0.01	0.10	0.01	0.10	0.01	0.10	0.01
CP 1211	Wheat, white bread	PP	0.026	0.43	0.01	0.41	0.01	1.56	0.04	0.11	0.00	0.10	0.00
CF 1211	Wheat, white flour (incl white flour products: starch, gluten, macaroni, pastry)	PP	0.026	44.78	1.16	86.96	2.26	214.05	5.57	20.31	0.53	103.60	2.69
GC 0640	Barley, raw (incl malt extract, incl flour & grits, incl beer, excl pot&pearled, excl malt)	RAC	0.075	3.17	0.24	2.16	0.16	43.59	3.27	3.71	0.28	10.02	0.75
-	Barley, pot&pearled	PP	0.026	5.46	0.14	0.10	0.00	1.44	0.04	0.10	0.00	NC	-
GC 0647	Oats, raw (incl rolled)	RAC	0.075	0.37	0.03	0.10	0.01	2.79	0.21	0.10	0.01	NC	-
GC 2088	Subgroup of rice cereals	REP	0.1	52.55	5.26	286.02	28.60	18.64	1.86	19.67	1.97	75.09	7.51
GC 2089	Subgroup of Sorghum Grain and Millet	RAC	0.1	150.90	15.09	2.80	0.28	NC	-	68.93	6.89	NC	-
GC 2091	Subgroup of Maize Cereals	RAC	0.1	116.66	11.67	10.52	1.05	38.46	3.85	76.60	7.66	34.44	3.44
GC 2090	Subgroup of Sweet Corns	RAC	0.1	3.63	0.36	20.50	2.05	8.78	0.88	0.10	0.01	0.17	0.02
TN 0295	Cashew nuts, nutmeat	RAC	0.05	0.91	0.05	0.14	0.01	0.11	0.01	0.10	0.01	NC	-
TN 0660	Almonds, nutmeat	RAC	0.05	0.10	0.01	0.10	0.01	0.61	0.03	0.10	0.01	NC	-



## BOSCALID (221)

## International Estimated Daily Intake (IEDI)

ADI = 0 - 0.04 mg/kg bw

Codex Code	Commodity description	Expr as	STMR mg/kg	Diets: g/person/day				Intake = daily intake: ug/person					
				G13 diet	G13 intake	G14 diet	G14 intake	G15 diet	G15 intake	G16 diet	G16 intake	G17 diet	G17 intake
TN 0662	Brazil nuts, nutmeat	RAC	0.05	0.10	0.01	0.10	0.01	0.10	0.01	0.10	0.01	NC	-
TN 0664	Chestnut, raw	RAC	0.05	0.10	0.01	0.10	0.01	0.75	0.04	0.10	0.01	NC	-
TN 0665	Coconut, nutmeat (incl. copra, incl desiccated, incl oil)	RAC	0.05	2.77	0.14	134.37	6.72	2.81	0.14	0.70	0.04	317.67	15.88
TN 0666	Hazelnuts, nutmeat	RAC	0.05	0.10	0.01	0.10	0.01	0.21	0.01	0.10	0.01	NC	-
TN 0669	Macadamia nuts, nutmeat (i.e. Queensland nuts)	RAC	0.05	0.10	0.01	0.10	0.01	NC	-	0.10	0.01	0.10	0.01
TN 0672	Pecan nuts, nutmeat	RAC	0.05	0.15	0.01	0.22	0.01	0.31	0.02	0.10	0.01	0.10	0.01
TN 0673	Pine nuts, nutmeat (i.e. pignolia nuts)	RAC	0.05	0.51	0.03	0.74	0.04	0.36	0.02	0.10	0.01	0.10	0.01
TN 0675	Pistachio nut, nutmeat	RAC	0.27	0.10	0.03	0.10	0.03	0.15	0.04	0.10	0.03	NC	-
TN 0678	Walnuts, nutmeat	RAC	0.05	0.10	0.01	0.10	0.01	0.81	0.04	0.10	0.01	NC	-
SO 0088	Oilseeds, raw (incl processed)	RAC	0.145	131.71	19.10	22.49	3.26	69.33	10.05	57.68	8.36	86.74	12.58
SB 0716	Coffee beans raw (incl roasted, incl instant coffee, incl substitutes)	RAC	0.05	0.95	0.05	1.32	0.07	11.64	0.58	2.96	0.15	14.73	0.74
DH 1100	Hops, dry	RAC	21.5	NC	-	NC	-	0.10	2.15	NC	-	NC	-
DT 1114	Tea, green or black, fermented and dried	RAC	6.25	0.53	3.31	5.25	32.81	0.63	3.94	0.56	3.50	0.82	5.13
MM 0095	MEAT FROM MAMMALS other than marine mammals, raw (incl prepared meat) -80% as muscle	RAC	0.035	23.34	0.82	40.71	1.42	97.15	3.40	18.06	0.63	57.71	2.02
MM 0095	MEAT FROM MAMMALS other than marine mammals, raw (incl prepared meat) - 20% as fat	RAC	0.18	5.84	1.05	10.18	1.83	24.29	4.37	4.52	0.81	14.43	2.60
MF 0100	Mammalian fats, raw, excl milk fats (incl rendered fats)	RAC	0.18	1.05	0.19	1.14	0.21	18.69	3.36	0.94	0.17	3.12	0.56
MO 0105	Edible offal (mammalian), raw	RAC	0.16	4.64	0.74	1.97	0.32	10.01	1.60	3.27	0.52	3.98	0.64
ML 0106	Milks, raw or skimmed (incl dairy products)	RAC	0.066	108.75	7.18	70.31	4.64	436.11	28.78	61.55	4.06	79.09	5.22
PM 0110	Poultry meat, raw (incl prepared) - 90% as muscle	RAC	0.02	3.53	0.07	10.83	0.22	51.36	1.03	4.53	0.09	50.00	1.00
PM 0110	Poultry meat, raw (incl prepared) - 10% as fat	RAC	0.02	0.39	0.01	1.20	0.02	5.71	0.11	0.50	0.01	5.56	0.11
PF 0111	Poultry fat, raw (incl rendered)	RAC	0.02	NC	-	NC	-	0.32	0.01	NC	-	NC	-
PO 0111	Poultry edible offal, raw (incl prepared)	RAC	0.02	0.10	0.00	0.70	0.01	0.97	0.02	0.10	0.00	NC	-
PE 0112	Eggs, raw, (incl dried)	RAC	0.02	3.84	0.08	4.41	0.09	27.25	0.55	1.13	0.02	7.39	0.15
Total intake (ug/person)=				349.4				593.7				420.9	
Bodyweight per region (kg bw) =				60				60				60	
ADI (ug/person)=				2400				2400				2400	
%ADI=				14.6%				24.7%				17.5%	
Rounded %ADI=				10%				20%				20%	

**CHLORANTRANILIPROLE (230)**

International Estimated Daily Intake (IEDI)

ADI = 0 - 2 mg/kg bw

Codex Code	Commodity description	Expr as	STMR mg/kg	Diets as g/person/day				Intake as ug/person/day							
				G07 diet	G07 intake	G08 diet	G08 intake	G09 diet	G09 intake	G10 diet	G10 intake	G11 diet	G11 intake	G12 diet	G12 intake
FC 0001	Group of Citrus fruit, raw (incl kumquat commodities)	RAC	0.06	32.25	1.94	11.67	0.70	16.70	1.00	76.01	4.56	33.90	2.03	92.97	5.58
JF 0001	Group of Citrus fruit, juice	PP	0.037	1.30	0.05	2.37	0.09	0.22	0.01	13.88	0.51	0.75	0.03	2.63	0.10
FP 0009	Group of Pome fruits, raw (incl apple cider, excl apple juice)	RAC	0.07	19.35	1.35	34.06	2.38	17.87	1.25	25.74	1.80	7.69	0.54	56.85	3.98
JF 0226	Apple juice, single strength (incl. concentrated)	PP	0.0098	0.32	0.00	3.07	0.03	0.10	0.00	5.00	0.05	0.29	0.00	5.57	0.05
FS 0012	Group of Stone fruits, raw (incl dried plums, incl dried apricots)	RAC	0.2	11.60	2.32	23.79	4.76	0.25	0.05	11.84	2.37	2.41	0.48	33.44	6.69
FB 2005	Subgroup of Caneberries, raw	RAC	0.336	0.42	0.14	1.05	0.35	0.10	0.03	0.10	0.03	0.10	0.03	1.24	0.42
FB 2006	Subgroup of Bush berries, raw (including processed)	RAC	0.336	0.53	0.18	1.31	0.44	0.40	0.13	1.66	0.56	0.10	0.03	0.99	0.33
FB 2007	Subgroup of Large shrub/tree berries, raw (including processed)	RAC	0.336	0.62	0.21	0.33	0.11	0.34	0.11	1.42	0.48	0.10	0.03	1.51	0.51
FB 0269	Grapes, raw (incl must, excl dried, excl juice, excl wine)	RAC	0.119	13.02	1.55	9.25	1.10	0.10	0.01	16.91	2.01	3.70	0.44	54.44	6.48
DF 0269	Grapes, dried (= currants, raisins and sultanas) (from table-grapes)	PP	0.411	0.51	0.21	0.51	0.21	0.10	0.04	1.27	0.52	0.12	0.05	2.07	0.85
JF 0269	Grape juice (from wine grapes)	PP	0.0869	0.14	0.01	0.29	0.03	0.10	0.01	0.30	0.03	0.24	0.02	0.10	0.01
-	Grape wine (incl vermouths) (from wine-grapes)	PP	0.14	0.67	0.09	12.53	1.75	2.01	0.28	1.21	0.17	3.53	0.49	4.01	0.56
FI 0355	Pomegranate, raw, (incl processed)	RAC	0.1	3.40	0.34	2.10	0.21	2.65	0.27	10.89	1.09	NC	-	6.67	0.67
VB 0040	Group of Brassica vegetables (except Brassica leafy vegetables), raw	RAC	0.385	6.43	2.48	40.26	15.50	0.80	0.31	9.94	3.83	12.07	4.65	17.73	6.83
VC 0045	Group of Fruiting vegetables, cucurbits, raw	RAC	0.065	53.14	3.45	86.21	5.60	6.28	0.41	92.76	6.03	15.64	1.02	155.30	10.09
VO 0448	Tomato, raw (incl canned, excl juice, excl paste)	RAC	0.066	42.04	2.77	76.13	5.02	10.69	0.71	84.59	5.58	24.92	1.64	203.27	13.42
-	Tomato, paste (i.e. concentrated tomato sauce/puree)	PP	0.109	2.34	0.26	1.33	0.14	1.57	0.17	4.24	0.46	0.34	0.04	2.83	0.31
JF 0448	Tomato, juice (single strength, incl concentrated)	PP	0.0589	0.29	0.02	0.29	0.02	0.10	0.01	0.38	0.02	0.10	0.01	0.14	0.01
VO 0051	Subgroup of peppers, raw (incl dried sweet peppers, excl dried chilipeppers) (Capsicum spp. Only)	RAC	0.066	8.48	0.56	13.74	0.91	10.13	0.67	11.29	0.75	9.52	0.63	26.36	1.74
-	Peppers, chili, dried	PP	0.46	0.42	0.19	0.53	0.24	0.84	0.39	0.50	0.23	0.95	0.44	0.37	0.17
VO 2046	Subgroup of eggplants	RAC	0.066	5.58	0.37	4.31	0.28	0.89	0.06	9.31	0.61	13.64	0.90	20.12	1.33
VL 2050	Subgroup of Leafy greens	RAC	7.3	3.93	28.69	5.28	38.54	3.07	22.41	14.53	106.07	8.25	60.23	12.75	93.08
VL 0401	Broccoli, Chinese, raw (i.e. kailan)	RAC	7.3	0.42	3.07	0.10	0.73	0.10	0.73	0.60	4.38	NC	-	0.52	3.80
VL 0472	Cress, garden, raw	RAC	7.3	0.10	0.73	0.10	0.73	0.10	0.73	0.15	1.10	NC	-	0.10	0.73

**CHLORANTRANILIPROLE (230)**

International Estimated Daily Intake (IEDI)

ADI = 0 - 2 mg/kg bw

Codex Code	Commodity description	Expr as	STM mg/kg	Diets as g/person/day				Intake as ug/person/day							
				G07 diet	G07 intake	G08 diet	G08 intake	G09 diet	G09 intake	G10 diet	G10 intake	G11 diet	G11 intake	G12 diet	G12 intake
VL 0480	Kale (Borecole, Collards), raw	RAC	7.3	0.57	4.16	5.77	42.12	0.11	0.80	0.92	6.72	5.25	38.33	2.12	15.48
VL 0485	Mustard greens, raw (i.e. Indian mustard, Amsoi, mustard cabbage)	RAC	7.3	0.10	0.73	0.31	2.26	0.10	0.73	0.10	0.73	0.47	3.43	0.11	0.80
VL 0494	Radish leaves, raw	RAC	10.5	0.26	2.73	0.45	4.73	0.28	2.94	0.68	7.14	NC	-	0.33	3.47
VL 0495	Rape greens, raw	RAC	7.3	0.10	0.73	0.31	2.26	0.10	0.73	0.10	0.73	NC	-	0.11	0.80
VL 0496	Rucola, raw (i.e. Arrugula, Rocket salad, Roquette)	RAC	7.3	1.27	9.27	2.25	16.43	1.39	10.15	3.38	24.67	13.81	100.81	1.63	11.90
VL 2052	Subgroup of Leaves of Root and Tuber Vegetables	RAC	7.3	0.18	1.31	0.31	2.26	0.84	6.13	0.47	3.43	2.06	15.04	0.23	1.68
VL 2053	Subgroup of Leaves of trees, shrubs and vines	RAC	7.3	0.39	2.85	0.69	5.04	0.43	3.14	1.04	7.59	4.57	33.36	0.50	3.65
VL 2054	Subgroup of Leafy aquatic vegetables	RAC	7.3	1.21	8.83	2.15	15.70	1.33	9.71	3.24	23.65	11.36	82.93	1.56	11.39
VL 2832	Witloof chicory (sprouts)	RAC	7.3	0.10	0.73	0.10	0.73	0.10	0.73	0.36	2.63	0.10	0.73	0.35	2.56
VP 2060	Subgroup of beans with pods (all commodities within this group)	RAC	0.16	0.68	0.11	NC	-	NC	-	0.39	0.06	0.22	0.04	0.49	0.08
<b>014B</b>	<b>Peas with pods</b>	-	0.545	-	-	-	-	-	-	-	-	-	-	-	-
VP 0523	Broad bean without pods (succulent seeds) (Vicia spp), raw	RAC	0.16	3.51	0.56	0.43	0.07	0.10	0.02	0.60	0.10	0.29	0.05	0.78	0.12
VP 2063	Subgroup of succulent peas without pods	RAC	0.025	1.97	0.05	0.51	0.01	0.10	0.00	0.79	0.02	3.68	0.09	3.80	0.10
VD 0071	Beans, dry, raw (Phaseolus spp)	RAC	0.0305	2.39	0.07	1.61	0.05	10.47	0.32	1.84	0.06	12.90	0.39	7.44	0.23
VD 0523	Broad bean, dry, raw (incl horse-bean, field bean) (Vicia faba)	RAC	0.0305	1.27	0.04	0.10	0.00	0.12	0.00	2.49	0.08	0.23	0.01	5.54	0.17
VD 0527	Cowpea, dry, raw (Vigna sinensis, Dolichos sinensis)	RAC	0.0305	0.10	0.00	NC	-	1.74	0.05	0.10	0.00	0.10	0.00	0.10	0.00
VD 0541	Soya bean, dry, raw (incl paste, incl curd, incl oil, incl sauce)	RAC	0.01	72.79	0.73	59.05	0.59	20.55	0.21	74.20	0.74	61.12	0.61	73.24	0.73
VD 2066	Subgroup of dry peas, raw	RAC	0.0305	9.09	0.28	3.35	0.10	1.06	0.03	9.48	0.29	15.11	0.46	10.58	0.32
VR 0574	Beetroot, raw	RAC	0.01	3.42	0.03	6.06	0.06	3.75	0.04	9.11	0.09	NC	-	4.39	0.04
VR 0575	Burdock, greater or edible, raw	RAC	0.01	0.10	0.00	0.10	0.00	0.10	0.00	0.10	0.00	NC	-	0.10	0.00
VR 0577	Carrots, raw	RAC	0.02	9.51	0.19	30.78	0.62	0.37	0.01	8.75	0.18	2.80	0.06	6.10	0.12
VR 0578	Celeriac, raw	RAC	0.01	1.70	0.02	3.01	0.03	1.87	0.02	4.53	0.05	NC	-	2.19	0.02
VR 0469	Chicory, roots, raw	RAC	0.01	0.10	0.00	0.20	0.00	0.10	0.00	0.10	0.00	0.10	0.00	0.10	0.00
VR 0583	Horseradish, raw	RAC	0.01	0.51	0.01	0.91	0.01	0.56	0.01	1.37	0.01	NC	-	0.66	0.01
VR 0587	Parsley turnip-rooted, raw	RAC	0.01	0.32	0.00	0.57	0.01	0.35	0.00	0.85	0.01	NC	-	0.41	0.00
VR 0588	Parsnip, raw	RAC	0.01	0.59	0.01	1.05	0.01	0.65	0.01	1.58	0.02	NC	-	0.76	0.01
VR 0494	Radish roots, raw	RAC	0.055	2.31	0.13	4.09	0.22	2.53	0.14	6.15	0.34	5.88	0.32	2.97	0.16

**CHLORANTRANILIPROLE (230)**

International Estimated Daily Intake (IEDI)

ADI = 0 - 2 mg/kg bw

Codex Code	Commodity description	Expr as	STMR mg/kg	Diets as g/person/day				Intake as ug/person/day							
				G07 diet	G07 intake	G08 diet	G08 intake	G09 diet	G09 intake	G10 diet	G10 intake	G11 diet	G11 intake	G12 diet	G12 intake
VR 0591	Japanese radish, raw (i.e. Chinese radish, Daikon)	RAC	0.01	1.90	0.02	3.36	0.03	2.08	0.02	5.06	0.05	NC	-	2.44	0.02
VR 0498	Salsify, raw (i.e. Oysterplant)	RAC	0.01	0.21	0.00	0.37	0.00	0.23	0.00	0.55	0.01	NC	-	0.27	0.00
VR 0596	Sugar beet, raw (incl sugar)	RAC	0.01	0.13	0.00	NC	-	0.10	0.00	0.66	0.01	0.47	0.00	88.94	0.89
VR 0497	Swede, raw (i.e. Rutabaga)	RAC	0.01	1.58	0.02	2.80	0.03	1.74	0.02	4.21	0.04	NC	-	2.03	0.02
VR 0506	Turnip, garden, raw	RAC	0.01	2.50	0.03	4.44	0.04	2.75	0.03	6.67	0.07	0.14	0.00	3.22	0.03
VR 2071	Subgroup of tuberous and corm vegetables, raw (incl processed)	RAC	0.01	63.11	0.63	316.33	3.16	651.91	6.52	72.06	0.72	84.88	0.85	132.70	1.33
VR 2072	Subgroup of Aquatic root and tuber vegetables	RAC	0.01	NC	-	NC	-	NC	-	NC	-	NC	-	NC	-
VS 0624	Celery	RAC	2.1	2.14	4.49	3.79	7.96	2.35	4.94	5.69	11.95	0.10	0.21	2.75	5.78
VS 0620	Artichoke globe, raw	RAC	0.56	0.69	0.39	0.10	0.06	0.10	0.06	0.32	0.18	0.26	0.15	1.21	0.68
GC 0648	Quinoa, raw	RAC	0.01	NC	-	NC	-	NC	-	NC	-	0.10	0.00	NC	-
GC 0650	Rye, raw (incl flour)	RAC	0.01	0.13	0.00	19.38	0.19	0.10	0.00	0.12	0.00	0.10	0.00	2.15	0.02
GC 0653	Triticale, raw (incl flour)	RAC	0.01	NC	-	NC	-	NC	-	0.10	0.00	0.39	0.00	NC	-
GC 0654	Wheat, raw (incl bulgur, incl fermented beverages, excl germ, excl wholemeal bread, excl white flour products, excl white bread)	RAC	0.01	0.10	0.00	1.12	0.01	NC	-	0.10	0.00	0.56	0.01	NC	-
CF 1210	Wheat, germ	PP	0.012	NC	-	NC	-	0.10	0.00	0.10	0.00	0.14	0.00	0.10	0.00
CP 1212	Wheat, wholemeal bread	PP	0.01	0.10	0.00	0.10	0.00	0.10	0.00	0.10	0.00	0.10	0.00	0.10	0.00
CP 1211	Wheat, white bread	PP	0.004	0.25	0.00	0.63	0.00	0.12	0.00	0.43	0.00	1.39	0.01	0.22	0.00
CF 1211	Wheat, white flour (incl white flour products: starch, gluten, macaroni, pastry)	PP	0.004	301.24	1.20	268.64	1.07	30.21	0.12	222.51	0.89	134.73	0.54	343.12	1.37
GC 2087	Subgroup of barley, similar grains, and pseudocereals with husks, raw (including processed)	RAC	0.01	19.96	0.20	38.62	0.39	5.13	0.05	4.81	0.05	10.80	0.11	4.44	0.04
CM 0649 (GC 0649)	Rice, husked, dry ( incl flour, incl oil, incl beverages, incl starch, excl polished)	REP	0.115	1.26	0.14	1.58	0.18	31.05	3.57	5.43	0.62	0.90	0.10	2.18	0.25
CM 1205	Rice polished, dry	PP	0.013	34.21	0.44	10.39	0.14	41.72	0.54	82.38	1.07	150.24	1.95	70.47	0.92
GC 2089	Subgroup of Sorghum Grain and Millet	RAC	0.01	5.80	0.06	2.32	0.02	23.09	0.23	16.72	0.17	27.14	0.27	2.92	0.03
GC 2091	Subgroup of Maize Cereals	RAC	0.01	29.81	0.30	44.77	0.45	108.95	1.09	52.37	0.52	60.28	0.60	75.69	0.76
GC 2090	Subgroup of Sweet Corns	RAC	0.01	0.14	0.00	0.94	0.01	5.70	0.06	2.61	0.03	1.94	0.02	0.22	0.00
GS 0659	Sugar cane, raw (incl sugar, incl molasses)	RAC	0.145	99.68	14.45	86.27	12.51	31.38	4.55	80.36	11.65	84.18	12.21	99.10	14.37
TN 0085	Tree nuts, raw (incl processed)	RAC	0.01	4.06	0.04	3.27	0.03	7.01	0.07	13.93	0.14	14.01	0.14	9.36	0.09
SO 0495	Rape seed, raw (incl oil)	RAC	0.295	0.93	0.27	1.16	0.34	0.49	0.14	2.53	0.75	9.32	2.75	2.02	0.60
SO 0691	Cotton seed, raw (incl oil)	RAC	0.049	20.53	1.01	9.80	0.48	6.42	0.31	4.73	0.23	7.14	0.35	18.68	0.92

**CHLORANTRANILIPROLE (230)**

International Estimated Daily Intake (IEDI)

ADI = 0 - 2 mg/kg bw

Codex Code	Commodity description	Expr as	STMR mg/kg	Diets as g/person/day				Intake as ug/person/day							
				G07 diet	G07 intake	G08 diet	G08 intake	G09 diet	G09 intake	G10 diet	G10 intake	G11 diet	G11 intake	G12 diet	G12 intake
OR 0691	Cotton seed oil, edible	PP	0.012 2	3.22	0.04	1.54	0.02	1.01	0.01	0.74	0.01	1.12	0.01	2.93	0.04
SO 0696	Palm kernels, raw (incl oil)	RAC	0.009 8	5.81	0.06	3.77	0.04	20.07	0.20	24.53	0.24	5.94	0.06	8.99	0.09
SO 0696	Palm fruit, raw (incl oil)	RAC	0.195	28.87	5.63	1.09	0.21	53.08	10.35	80.61	15.72	24.20	4.72	17.72	3.46
OR 0696	Palm fruit oil, edible	PP	0.507	5.34	2.71	0.20	0.10	9.82	4.98	14.91	7.56	4.48	2.27	3.28	1.66
SO 0697	Peanuts, nutmeat, raw (incl roasted, incl oil, incl butter)	RAC	0.01	1.30	0.01	1.23	0.01	12.62	0.13	2.87	0.03	6.59	0.07	2.67	0.03
SO 0702	Sunflower seed, raw (incl oil)	RAC	0.185	7.40	1.37	35.86	6.63	1.15	0.21	8.76	1.62	5.45	1.01	13.62	2.52
SB 0716	Coffee beans raw (incl roasted, incl instant coffee, incl substitutes)	RAC	0.015	1.36	0.02	3.59	0.05	1.44	0.02	5.18	0.08	2.02	0.03	1.70	0.03
HH 0738	Mints, raw	RAC	4.6	0.50	2.30	0.10	0.46	NC	-	NC	-	NC	-	NC	-
DH 1100	Hops, dry	RAC	10.9	0.10	1.09	0.10	1.09	0.10	1.09	0.10	1.09	NC	-	0.10	1.09
MM 0095	MEAT FROM MAMMALS other than marine mammals, raw (incl prepared meat) - 80% as muscle	RAC	0.009	24.96	0.22	57.95	0.52	16.70	0.15	38.38	0.35	26.46	0.24	29.00	0.26
MM 0095	MEAT FROM MAMMALS other than marine mammals, raw (incl prepared meat) - 20% as fat	RAC	0.049	6.24	0.31	14.49	0.71	4.18	0.20	9.60	0.47	6.62	0.32	7.25	0.36
MF 0100	Mammalian fats, raw, excl milk fats (incl rendered fats)	RAC	0.049	3.29	0.16	6.14	0.30	0.82	0.04	1.57	0.08	2.23	0.11	1.07	0.05
MO 0105	Edible offal (mammalian), raw	RAC	0.047	4.79	0.23	9.68	0.45	2.97	0.14	5.49	0.26	3.84	0.18	5.03	0.24
ML 0106	Milks, raw or skimmed (incl dairy products)	RAC	0.013	289.65	3.77	485.88	6.32	26.92	0.35	239.03	3.11	199.91	2.60	180.53	2.35
PM 0110	Poultry meat, raw (incl prepared) - 90% as muscle	RAC	0.008	13.17	0.11	26.78	0.21	7.24	0.06	116.71	0.93	22.54	0.18	32.09	0.26
PM 0110	Poultry meat, raw (incl prepared) - 10% as fat	RAC	0.031	1.46	0.05	2.98	0.09	0.80	0.02	12.97	0.40	2.50	0.08	3.57	0.11
PF 0111	Poultry fat, raw (incl rendered)	RAC	0.031	0.10	0.00	0.10	0.00	NC	-	0.10	0.00	0.10	0.00	0.10	0.00
PO 0111	Poultry edible offal, raw (incl prepared)	RAC	0.028	0.12	0.00	0.12	0.00	0.11	0.00	5.37	0.15	0.24	0.01	0.10	0.00
PE 0112	Eggs, raw, (incl dried)	RAC	0.099	7.84	0.78	23.08	2.28	2.88	0.29	14.89	1.47	9.81	0.97	14.83	1.47

Total intake (ug/person)=	127.1	219.8	106.3	285.3	383.5	253.7
Bodyweight per region (kg bw) =	60	60	60	60	60	60
		12000	12000	12000	12000	12000
ADI (ug/person)=	120000	0	0	0	0	0
%ADI=	0.1%	0.2%	0.1%	0.2%	0.3%	0.2%
Rounded %ADI=	0%	0%	0%	0%	0%	0%

## CHLORANTRANILIPROLE (230)

## International Estimated Daily Intake (IEDI)

ADI = 0 - 2 mg/kg bw

Codex Code	Commodity description	Expr as	STMR mg/kg	Diets as g/person/day				Intake as ug/person/day							
				G07 diet	G07 intake	G08 diet	G08 intake	G09 diet	G09 intake	G10 diet	G10 intake	G11 diet	G11 intake	G12 diet	G12 intake
FC 0001	Group of Citrus fruit, raw (incl kumquat commodities)	RAC	0.06	38.66	2.32	54.93	3.30	26.36	1.58	51.46	3.09	51.06	3.06	466.36	27.98
JF 0001	Group of Citrus fruit, juice	PP	0.037	36.84	1.36	3.75	0.14	0.30	0.01	21.62	0.80	21.82	0.81	46.67	1.73
FP 0009	Group of Pome fruits, raw (incl apple cider, excl apple juice)	RAC	0.07	51.09	3.58	65.40	4.58	42.71	2.99	45.29	3.17	62.51	4.38	7.74	0.54
JF 0226	Apple juice, single strength (incl. concentrated)	PP	0.0098	14.88	0.15	11.98	0.12	0.15	0.00	9.98	0.10	30.32	0.30	3.47	0.03
FS 0012	Group of Stone fruits, raw (incl dried plums, incl dried apricots)	RAC	0.2	19.98	4.00	24.87	4.97	14.41	2.88	19.54	3.91	10.78	2.16	0.50	0.10
FB 2005	Subgroup of Caneberries, raw	RAC	0.336	0.56	0.19	1.43	0.48	0.14	0.05	1.23	0.41	1.14	0.38	0.10	0.03
FB 2006	Subgroup of Bush berries, raw (including processed)	RAC	0.336	1.31	0.44	5.50	1.85	0.10	0.03	2.57	0.86	0.82	0.28	2.15	0.72
FB 2007	Subgroup of Large shrub/tree berries, raw (including processed)	RAC	0.336	8.26	2.78	0.14	0.05	0.10	0.03	0.13	0.04	0.19	0.06	1.87	0.63
FB 0269	Grapes, raw (incl must, excl dried, excl juice, excl wine)	RAC	0.119	6.48	0.77	11.31	1.35	5.21	0.62	9.50	1.13	4.66	0.55	0.78	0.09
DF 0269	Grapes, dried (= currants, raisins and sultanas) (from table-grapes)	PP	0.411	3.09	1.27	1.51	0.62	0.10	0.04	1.38	0.57	4.26	1.75	0.42	0.17
JF 0269	Grape juice (from wine grapes)	PP	0.0869	0.56	0.05	1.96	0.17	0.10	0.01	2.24	0.19	2.27	0.20	0.34	0.03
-	Grape wine (incl vermouths) (from wine-grapes)	PP	0.14	88.93	12.45	62.41	8.74	1.84	0.26	25.07	3.51	61.17	8.56	5.84	0.82
FI 0355	Pomegranate, raw, (incl processed)	RAC	0.1	7.91	0.79	9.72	0.97	7.67	0.77	5.26	0.53	9.04	0.90	14.43	1.44
VB 0040	Group of Brassica vegetables (except Brassica leafy vegetables), raw	RAC	0.385	20.71	7.97	39.81	15.33	25.06	9.65	37.93	14.60	18.12	6.98	16.74	6.44
VC 0045	Group of Fruiting vegetables, cucurbits, raw	RAC	0.065	27.81	1.81	41.93	2.73	123.30	8.01	49.47	3.22	15.95	1.04	35.99	2.34
VO 0448	Tomato, raw (incl canned, excl juice, excl paste)	RAC	0.066	43.88	2.90	55.41	3.66	35.38	2.34	74.88	4.94	26.50	1.75	9.51	0.63
-	Tomato, paste (i.e. concentrated tomato sauce/puree)	PP	0.109	4.96	0.54	3.20	0.35	0.15	0.02	1.61	0.18	6.88	0.75	0.52	0.06
JF 0448	Tomato, juice (single strength, incl concentrated)	PP	0.0589	0.80	0.05	0.10	0.01	0.10	0.01	0.61	0.04	0.40	0.02	0.10	0.01
VO 0051	Subgroup of peppers, raw (incl dried sweet peppers, excl dried chilipeppers) (Capsicum spp. Only)	RAC	0.066	6.39	0.42	15.53	1.02	19.09	1.26	10.36	0.68	8.29	0.55	4.53	0.30
-	Peppers, chili, dried	PP	0.46	0.11	0.05	0.21	0.10	0.36	0.17	0.21	0.10	0.25	0.12	0.15	0.07
VO 2046	Subgroup of eggplants	RAC	0.066	1.01	0.07	1.69	0.11	21.37	1.41	3.00	0.20	1.40	0.09	NC	-
VL 2050	Subgroup of Leafy greens	RAC	7.3	18.38	134.17	18.73	136.73	82.36	601.23	25.32	184.84	17.60	128.48	7.37	53.80
VL 0401	Broccoli, Chinese, raw (i.e. kailan)	RAC	7.3	NC	-	NC	-	9.03	65.92	NC	-	NC	-	0.12	0.88
VL 0472	Cress, garden, raw	RAC	7.3	0.10	0.73	NC	-	1.27	9.27	0.13	0.95	0.21	1.53	0.10	0.73
VL 0480	Kale (Borecole, Collards), raw	RAC	7.3	NC	-	NC	-	14.54	106.14	NC	-	NC	-	2.32	16.94
VL 0485	Mustard greens, raw (i.e. Indian mustard, Amsoi, mustard cabbage)	RAC	7.3	NC	-	NC	-	NC	-	NC	-	NC	-	0.13	0.95
VL 0494	Radish leaves, raw	RAC	10.5	NC	-	NC	-	NC	-	3.78	39.69	NC	-	0.48	5.04

## CHLORANTRANILIPROLE (230)

## International Estimated Daily Intake (IEDI)

ADI = 0 - 2 mg/kg bw

Codex Code	Commodity description	Expr as	STMR mg/kg	Diets as g/person/day				Intake as ug/person/day							
				G07 diet	G07 intake	G08 diet	G08 intake	G09 diet	G09 intake	G10 diet	G10 intake	G11 diet	G11 intake	G12 diet	G12 intake
VL 0495	Rape greens, raw	RAC	7.3	NC	-	NC	-	1.93	14.09	NC	-	NC	-	0.12	0.88
VL 0496	Rucola, raw (i.e. Arrugula, Rocket salad, Roquette)	RAC	7.3	NC	-	NC	-	NC	-	1.09	7.96	0.38	2.77	2.40	17.52
VL 2052	Subgroup of Leaves of Root and Tuber Vegetables	RAC	7.3	NC	-	NC	-	NC	-	NC	-	NC	-	0.33	2.41
VL 2053	Subgroup of Leaves of trees, shrubs and vines	RAC	7.3	NC	-	NC	-	NC	-	NC	-	NC	-	0.74	5.40
VL 2054	Subgroup of Leafy aquatic vegetables	RAC	7.3	0.35	2.56	3.13	22.85	3.74	27.30	1.79	13.07	NC	-	2.30	16.79
VL 2832	Witloof chicory (sprouts)	RAC	7.3	1.50	10.95	0.95	6.94	NC	-	1.84	13.43	0.65	4.75	0.13	0.95
VP 2060	Subgroup of beans with pods (all commodities within this group)	RAC	0.16	5.07	0.81	0.83	0.13	0.17	0.03	3.70	0.59	NC	-	NC	-
014B	Peas with pods	-	0.545	-	-	-	-	-	-	-	-	-	-	-	-
VP 0523	Broad bean without pods (succulent seeds) ( <i>Vicia</i> spp), raw	RAC	0.16	0.22	0.04	0.84	0.13	0.15	0.02	0.48	0.08	2.04	0.33	NC	-
VP 2063	Subgroup of succulent peas without pods	RAC	0.025	10.72	0.27	1.99	0.05	2.72	0.07	4.26	0.11	4.23	0.11	NC	-
VD 0071	Beans, dry, raw ( <i>Phaseolus</i> spp)	RAC	0.0305	1.51	0.05	1.50	0.05	1.90	0.06	5.11	0.16	1.36	0.04	23.43	0.71
VD 0523	Broad bean, dry, raw (incl horse-bean, field bean) ( <i>Vicia faba</i> )	RAC	0.0305	0.10	0.00	0.10	0.00	1.16	0.04	0.40	0.01	NC	-	0.10	0.00
VD 0527	Cowpea, dry, raw ( <i>Vigna sinensis</i> , <i>Dolichos sinensis</i> )	RAC	0.0305	NC	-	NC	-	0.16	0.00	0.10	0.00	NC	-	NC	-
VD 0541	Soya bean, dry, raw (incl paste, incl curd, incl oil, incl sauce)	RAC	0.01	106.33	1.06	117.78	1.18	42.12	0.42	195.70	1.96	222.52	2.23	80.47	0.80
VD 2066	Subgroup of dry peas, raw	RAC	0.0305	5.01	0.15	3.76	0.11	1.82	0.06	3.44	0.10	3.49	0.11	5.15	0.16
VR 0574	Beetroot, raw	RAC	0.01	9.91	0.10	6.34	0.06	NC	-	9.65	0.10	19.11	0.19	6.47	0.06
VR 0575	Burdock, greater or edible, raw	RAC	0.01	NC	-	NC	-	NC	-	0.48	0.00	NC	-	0.10	0.00
VR 0577	Carrots, raw	RAC	0.02	26.26	0.53	27.13	0.54	10.07	0.20	16.49	0.33	44.69	0.89	8.75	0.18
VR 0578	Celeriac, raw	RAC	0.01	2.97	0.03	1.79	0.02	NC	-	0.10	0.00	16.91	0.17	3.22	0.03
VR 0469	Chicory, roots, raw	RAC	0.01	0.10	0.00	0.51	0.01	0.10	0.00	0.10	0.00	21.12	0.21	NC	-
VR 0583	Horseradish, raw	RAC	0.01	0.10	0.00	0.42	0.00	13.01	0.13	0.26	0.00	2.70	0.03	0.97	0.01
VR 0587	Parsley turnip-rooted, raw	RAC	0.01	NC	-	NC	-	NC	-	NC	-	NC	-	0.61	0.01
VR 0588	Parsnip, raw	RAC	0.01	4.42	0.04	0.10	0.00	NC	-	NC	-	NC	-	1.12	0.01
VR 0494	Radish roots, raw	RAC	0.055	3.83	0.21	11.99	0.66	NC	-	5.26	0.29	2.19	0.12	4.37	0.24
VR 0591	Japanese radish, raw (i.e. Chinese radish, Daikon)	RAC	0.01	NC	-	NC	-	26.64	0.27	18.92	0.19	NC	-	3.59	0.04
VR 0498	Salsify, raw (i.e. Oysterplant)	RAC	0.01	1.02	0.01	0.52	0.01	NC	-	NC	-	2.08	0.02	0.39	0.00
VR 0596	Sugar beet, raw (incl sugar)	RAC	0.01	0.10	0.00	NC	-	0.10	0.00	0.10	0.00	NC	-	NC	-
VR 0497	Swede, raw (i.e. Rutabaga)	RAC	0.01	10.01	0.10	1.66	0.02	NC	-	NC	-	3.06	0.03	2.99	0.03
VR 0506	Turnip, garden, raw	RAC	0.01	5.78	0.06	15.35	0.15	NC	-	6.54	0.07	1.95	0.02	4.73	0.05

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ADI = 0 - 2 mg/kg bw

Codex Code	Commodity description	Expr as	STMR mg/kg	Diets as g/person/day				Intake as ug/person/day							
				G07 diet	G07 intake	G08 diet	G08 intake	G09 diet	G09 intake	G10 diet	G10 intake	G11 diet	G11 intake	G12 diet	G12 intake
VR 2071	Subgroup of tuberous and corm vegetables, raw (incl processed)	RAC	0.01	226.09	2.26	234.58	2.35	161.10	1.61	185.04	1.85	234.85	2.35	100.25	1.00
VR 2072	Subgroup of Aquatic root and tuber vegetables	RAC	0.01	NC	-	NC	-	3.42	0.03	NC	-	NC	-	NC	-
VS 0624	Celery	RAC	2.1	7.68	16.13	2.85	5.99	NC	-	3.34	7.01	16.83	35.34	4.04	8.48
VS 0620	Artichoke globe, raw	RAC	0.56	0.98	0.55	3.65	2.04	0.10	0.06	1.67	0.94	0.26	0.15	NC	-
GC 0648	Quinoa, raw	RAC	0.01	NC	-	NC	-	NC	-	NC	-	NC	-	NC	-
GC 0650	Rye, raw (incl flour)	RAC	0.01	3.21	0.03	35.38	0.35	0.21	0.00	6.50	0.07	1.49	0.01	NC	-
GC 0653	Triticale, raw (incl flour)	RAC	0.01	0.10	0.00	0.17	0.00	0.29	0.00	0.10	0.00	NC	-	NC	-
GC 0654	Wheat, raw (incl bulgur, incl fermented beverages, excl germ, excl wholemeal bread, excl white flour products, excl white bread)	RAC	0.01	NC	-	NC	-	0.10	0.00	0.83	0.01	NC	-	NC	-
CF 1210	Wheat, germ	PP	0.012	0.97	0.01	0.10	0.00	0.10	0.00	0.10	0.00	NC	-	0.10	0.00
CP 1212	Wheat, wholemeal bread	PP	0.01	0.10	0.00	0.10	0.00	0.10	0.00	0.10	0.00	0.10	0.00	0.10	0.00
CP 1211	Wheat, white bread	PP	0.004	1.30	0.01	0.46	0.00	0.10	0.00	0.22	0.00	2.44	0.01	0.77	0.00
CF 1211	Wheat, white flour (incl white flour products: starch, gluten, macaroni, pastry)	PP	0.004	198.08	0.79	193.03	0.77	106.24	0.42	185.09	0.74	168.67	0.67	131.59	0.53
GC 2087	Subgroup of barley, similar grains, and pseudocereals with husks, raw (including processed)	RAC	0.01	43.68	0.44	60.49	0.60	9.72	0.10	40.47	0.40	49.83	0.50	18.90	0.19
CM 0649 (GC 0649)	Rice, husked, dry ( incl flour, incl oil, incl beverages, incl starch, excl polished)	REP	0.115	3.70	0.43	2.11	0.24	1.51	0.17	1.75	0.20	0.29	0.03	5.12	0.59
CM 1205	Rice polished, dry	PP	0.013	13.38	0.17	10.80	0.14	262.08	3.41	57.16	0.74	12.83	0.17	62.78	0.82
GC 2089	Subgroup of Sorghum Grain and Millet	RAC	0.01	0.10	0.00	0.16	0.00	3.19	0.03	1.85	0.02	NC	-	7.12	0.07
GC 2091	Subgroup of Maize Cereals	RAC	0.01	18.51	0.19	26.18	0.26	26.04	0.26	39.99	0.40	7.36	0.07	64.58	0.65
GC 2090	Subgroup of Sweet Corns	RAC	0.01	11.43	0.11	3.71	0.04	0.74	0.01	13.63	0.14	3.07	0.03	1.50	0.02
GS 0659	Sugar cane, raw (incl sugar, incl molasses)	RAC	0.145	92.24	13.37	95.72	13.88	28.47	4.13	77.39	11.22	117.73	17.07	103.90	15.07
TN 0085	Tree nuts, raw (incl processed)	RAC	0.01	8.52	0.09	8.94	0.09	15.09	0.15	9.60	0.10	14.57	0.15	26.26	0.26
SO 0495	Rape seed, raw (incl oil)	RAC	0.295	32.68	9.64	19.91	5.87	7.83	2.31	15.69	4.63	NC	-	NC	-
SO 0691	Cotton seed, raw (incl oil)	RAC	0.049	10.71	0.52	4.23	0.21	7.19	0.35	7.54	0.37	5.66	0.28	2.38	0.12
OR 0691	Cotton seed oil, edible	PP	0.0122	1.68	0.02	0.66	0.01	1.13	0.01	1.18	0.01	0.89	0.01	0.37	0.00
SO 0696	Palm kernels, raw (incl oil)	RAC	0.0098	5.33	0.05	5.04	0.05	11.83	0.12	7.94	0.08	10.77	0.11	4.53	0.04
SO 0696	Palm fruit, raw (incl oil)	RAC	0.195	12.11	2.36	1.38	0.27	24.43	4.76	6.52	1.27	14.27	2.78	1.35	0.26
OR 0696	Palm fruit oil, edible	PP	0.507	2.24	1.14	0.25	0.13	4.52	2.29	1.21	0.61	2.64	1.34	0.25	0.13
SO 0697	Peanuts, nutmeat, raw (incl roasted, incl oil, incl butter)	RAC	0.01	5.63	0.06	2.75	0.03	9.58	0.10	5.82	0.06	13.71	0.14	1.84	0.02
SO 0702	Sunflower seed, raw (incl oil)	RAC	0.185	23.40	4.33	29.33	5.43	1.24	0.23	13.85	2.56	6.48	1.20	6.91	1.28



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				G07 diet	G07 intake	G08 diet	G08 intake	G09 diet	G09 intake	G10 diet	G10 intake	G11 diet	G11 intake	G12 diet	G12 intake
SB 0716	Coffee beans raw (incl roasted, incl instant coffee, incl substitutes)	RAC	0.015	10.90	0.16	12.44	0.19	0.77	0.01	9.48	0.14	22.07	0.33	8.15	0.12
HH 0738	Mints, raw	RAC	4.6	NC	-	NC	-	NC	-	NC	-	NC	-	NC	-
DH 1100	Hops, dry	RAC	10.9	NC	-	NC	-	0.10	1.09	0.10	1.09	NC	-	NC	-
MM 0095	MEAT FROM MAMMALS other than marine mammals, raw (incl prepared meat) -80% as muscle	RAC	0.009	112.02	1.01	120.71	1.09	63.46	0.57	88.99	0.80	96.24	0.87	41.02	0.37
MM 0095	MEAT FROM MAMMALS other than marine mammals, raw (incl prepared meat) - 20% as fat	RAC	0.049	28.01	1.37	30.18	1.48	15.86	0.78	22.25	1.09	24.06	1.18	10.25	0.50
MF 0100	Mammalian fats, raw, excl milk fats (incl rendered fats)	RAC	0.049	6.44	0.32	15.51	0.76	3.79	0.19	8.29	0.41	18.44	0.90	8.00	0.39
MO 0105	Edible offal (mammalian), raw	RAC	0.047	15.17	0.71	5.19	0.24	6.30	0.30	6.78	0.32	3.32	0.16	3.17	0.15
ML 0106	Milks, raw or skimmed (incl dairy products)	RAC	0.013	388.92	5.06	335.88	4.37	49.15	0.64	331.25	4.31	468.56	6.09	245.45	3.19
PM 0110	Poultry meat, raw (incl prepared) - 90% as muscle	RAC	0.008	66.38	0.53	48.47	0.39	21.58	0.17	78.41	0.63	48.04	0.38	76.01	0.61
PM 0110	Poultry meat, raw (incl prepared) - 10% as fat	RAC	0.031	7.38	0.23	5.39	0.17	2.40	0.07	8.71	0.27	5.34	0.17	8.45	0.26
PF 0111	Poultry fat, raw (incl rendered)	RAC	0.031	0.10	0.00	0.10	0.00	NC	-	0.10	0.00	0.71	0.02	NC	-
PO 0111	Poultry edible offal, raw (incl prepared)	RAC	0.028	0.33	0.01	0.72	0.02	0.27	0.01	0.35	0.01	0.80	0.02	NC	-
PE 0112	Eggs, raw, (incl dried)	RAC	0.099	25.84	2.56	29.53	2.92	28.05	2.78	33.19	3.29	36.44	3.61	8.89	0.88

Total intake (ug/person)=	260.5	270.6	884.5	352.0	252.8	204.8
Bodyweight per region (kg bw) =	60	60	55	60	60	60
ADI (ug/person)=	120000	120000	110000	120000	120000	120000
% ADI=	0.2%	0.2%	0.8%	0.3%	0.2%	0.2%
Rounded % ADI=	0%	0%	1%	0%	0%	0%

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ADI = 0 - 2 mg/kg bw

Codex Code	Commodity description	Expr as	STMR mg/kg	Diets: g/person/day				Intake = daily intake: ug/person					
				G13 diet	G13 intake	G14 diet	G14 intake	G15 diet	G15 intake	G16 diet	G16 intake	G17 diet	G17 intake
FC 0001	Group of Citrus fruit, raw (incl kumquat commodities)	RAC	0.06	20.93	1.26	2.35	0.14	30.71	1.84	0.15	0.01	4.45	0.27
JF 0001	Group of Citrus fruit, juice	PP	0.037	0.11	0.00	0.29	0.01	13.55	0.50	0.14	0.01	0.33	0.01
FP 0009	Group of Pome fruits, raw (incl apple cider, excl apple juice)	RAC	0.07	68.85	4.82	10.93	0.77	70.82	4.96	189.78	13.28	19.56	1.37
JF 0226	Apple juice, single strength (incl. concentrated)	PP	0.0098	0.10	0.00	0.10	0.00	7.19	0.07	0.10	0.00	NC	-
FS 0012	Group of Stone fruits, raw (incl dried plums, incl dried apricots)	RAC	0.2	0.10	0.02	0.10	0.02	33.36	6.67	0.10	0.02	NC	-
FB 2005	Subgroup of Caneberries, raw	RAC	0.336	0.10	0.03	7.30	2.45	2.29	0.77	0.10	0.03	NC	-
FB 2006	Subgroup of Bush berries, raw (including processed)	RAC	0.336	0.82	0.28	4.05	1.36	5.94	2.00	0.43	0.14	2.66	0.89
FB 2007	Subgroup of Large shrub/tree berries, raw (including processed)	RAC	0.336	0.71	0.24	7.32	2.46	NC	-	0.38	0.13	2.32	0.78
FB 0269	Grapes, raw (incl must, excl dried, excl juice, excl wine)	RAC	0.119	0.14	0.02	0.36	0.04	15.33	1.82	0.10	0.01	0.28	0.03
DF 0269	Grapes, dried (= currants, raisins and sultanas) (from table-grapes)	PP	0.411	0.10	0.04	0.13	0.05	1.06	0.44	0.10	0.04	0.10	0.04
JF 0269	Grape juice (from wine grapes)	PP	0.0869	0.10	0.01	0.10	0.01	0.41	0.04	0.10	0.01	NC	-
-	Grape wine (incl vermouths) (from wine-grapes)	PP	0.14	0.31	0.04	0.23	0.03	60.43	8.46	0.52	0.07	31.91	4.47
FI 0355	Pomegranate, raw, (incl processed)	RAC	0.1	5.49	0.55	27.17	2.72	NC	-	2.89	0.29	17.87	1.79
VB 0040	Group of Brassica vegetables (except Brassica leafy vegetables), raw	RAC	0.385	5.46	2.10	4.28	1.65	58.72	22.61	0.10	0.04	NC	-
VC 0045	Group of Fruiting vegetables, cucurbits, raw	RAC	0.065	5.96	0.39	9.74	0.63	51.82	3.37	13.61	0.88	0.10	0.01
VO 0448	Tomato, raw (incl canned, excl juice, excl paste)	RAC	0.066	13.10	0.86	4.90	0.32	62.16	4.10	1.04	0.07	0.10	0.01
-	Tomato, paste (i.e. concentrated tomato sauce/puree)	PP	0.109	0.58	0.06	0.22	0.02	2.21	0.24	0.24	0.03	3.10	0.34
JF 0448	Tomato, juice (single strength, incl concentrated)	PP	0.0589	0.10	0.01	0.10	0.01	0.42	0.02	0.10	0.01	0.10	0.01
VO 0051	Subgroup of peppers, raw (incl dried sweet peppers, excl dried chilipeppers) (Capsicum spp. Only)	RAC	0.066	8.97	0.59	14.13	0.93	25.14	1.66	0.91	0.06	NC	-
-	Peppers, chili, dried	PP	0.46	0.58	0.27	1.27	0.58	1.21	0.56	0.12	0.06	NC	-
VO 2046	Subgroup of eggplants	RAC	0.066	1.31	0.09	8.26	0.55	3.95	0.26	0.10	0.01	NC	-
VL 2050	Subgroup of Leafy greens	RAC	7.3	4.99	36.43	3.29	24.02	7.53	54.97	3.05	22.27	6.09	44.46
VL 0401	Broccoli, Chinese, raw (i.e. kailan)	RAC	7.3	0.10	0.73	0.10	0.73	NC	-	0.10	0.73	NC	-
VL 0472	Cress, garden, raw	RAC	7.3	0.10	0.73	0.10	0.73	NC	-	0.10	0.73	0.13	0.95
VL 0480	Kale (Borecole, Collards), raw	RAC	7.3	0.79	5.77	0.62	4.53	NC	-	0.10	0.73	NC	-
VL 0485	Mustard greens, raw (i.e. Indian mustard, Amsoi, mustard cabbage)	RAC	7.3	0.10	0.73	0.10	0.73	NC	-	0.10	0.73	NC	-
VL 0494	Radish leaves, raw	RAC	10.5	0.44	4.62	0.32	3.36	NC	-	0.30	3.15	0.59	6.20

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				G13 diet	G13 intake	G14 diet	G14 intake	G15 diet	G15 intake	G16 diet	G16 intake	G17 diet	G17 intake
VL 0495	Rape greens, raw	RAC	7.3	0.10	0.73	0.10	0.73	NC	-	0.10	0.73	NC	-
VL 0496	Rucola, raw (i.e. Arrugula, Rocket salad, Rocket)	RAC	7.3	2.17	15.84	1.57	11.46	NC	-	1.47	10.73	2.93	21.39
VL 2052	Subgroup of Leaves of Root and Tuber Vegetables	RAC	7.3	0.30	2.19	0.22	1.61	NC	-	0.20	1.46	0.41	2.99
VL 2053	Subgroup of Leaves of trees, shrubs and vines	RAC	7.3	0.67	4.89	0.48	3.50	NC	-	0.45	3.29	0.90	6.57
VL 2054	Subgroup of Leafy aquatic vegetables	RAC	7.3	2.08	15.18	1.50	10.95	0.10	0.73	1.41	10.29	2.81	20.51
VL 2832	Witloof chicory (sprouts)	RAC	7.3	0.10	0.73	0.10	0.73	0.10	0.73	0.10	0.73	NC	-
VP 2060	Subgroup of beans with pods (all commodities within this group)	RAC	0.16	NC	-	NC	-	NC	-	NC	-	NC	-
014B	Peas with pods	-	0.545	-	-	-	-	-	-	-	-	-	-
VP 0523	Broad bean without pods (succulent seeds) ( <i>Vicia spp.</i> ), raw	RAC	0.16	0.10	0.02	0.10	0.02	0.76	0.12	NC	-	NC	-
VP 2063	Subgroup of succulent peas without pods	RAC	0.025	0.21	0.01	0.10	0.00	5.51	0.14	0.10	0.00	NC	-
VD 0071	Beans, dry, raw ( <i>Phaseolus spp.</i> )	RAC	0.0305	7.11	0.22	2.33	0.07	3.76	0.11	44.70	1.36	3.27	0.10
VD 0523	Broad bean, dry, raw (incl horse-bean, field bean) ( <i>Vicia faba</i> )	RAC	0.0305	3.70	0.11	0.10	0.00	0.17	0.01	0.10	0.00	NC	-
VD 0527	Cowpea, dry, raw ( <i>Vigna sinensis</i> , <i>Dolichos sinensis</i> )	RAC	0.0305	12.77	0.39	0.99	0.03	0.10	0.00	4.33	0.13	NC	-
VD 0541	Soya bean, dry, raw (incl paste, incl curd, incl oil, incl sauce)	RAC	0.01	15.80	0.16	14.29	0.14	104.36	1.04	17.11	0.17	35.20	0.35
VD 2066	Subgroup of dry peas, raw	RAC	0.0305	4.43	0.14	11.36	0.35	4.22	0.13	9.36	0.29	1.21	0.04
VR 0574	Beetroot, raw	RAC	0.01	5.86	0.06	4.23	0.04	9.46	0.09	3.96	0.04	7.91	0.08
VR 0575	Burdock, greater or edible, raw	RAC	0.01	0.10	0.00	0.10	0.00	NC	-	0.10	0.00	0.10	0.00
VR 0577	Carrots, raw	RAC	0.02	2.07	0.04	3.00	0.06	25.29	0.51	0.10	0.00	NC	-
VR 0578	Celeriac, raw	RAC	0.01	2.91	0.03	2.10	0.02	7.59	0.08	1.97	0.02	3.93	0.04
VR 0469	Chicory, roots, raw	RAC	0.01	0.10	0.00	0.10	0.00	0.10	0.00	NC	-	NC	-
VR 0583	Horseradish, raw	RAC	0.01	0.88	0.01	0.63	0.01	0.54	0.01	0.59	0.01	1.19	0.01
VR 0587	Parsley turnip-rooted, raw	RAC	0.01	0.55	0.01	0.40	0.00	4.29	0.04	0.37	0.00	0.74	0.01
VR 0588	Parsnip, raw	RAC	0.01	1.02	0.01	0.74	0.01	3.50	0.04	0.69	0.01	1.37	0.01
VR 0494	Radish roots, raw	RAC	0.055	3.96	0.22	2.86	0.16	3.30	0.18	2.67	0.15	5.34	0.29
VR 0591	Japanese radish, raw (i.e. Chinese radish, Daikon)	RAC	0.01	3.25	0.03	2.35	0.02	NC	-	2.20	0.02	4.39	0.04
VR 0498	Salsify, raw (i.e. Oysterplant)	RAC	0.01	0.36	0.00	0.26	0.00	NC	-	0.24	0.00	0.48	0.00
VR 0596	Sugar beet, raw (incl sugar)	RAC	0.01	3.93	0.04	1.68	0.02	NC	-	NC	-	36.12	0.36
VR 0497	Swede, raw (i.e. Rutabaga)	RAC	0.01	2.71	0.03	1.96	0.02	7.80	0.08	1.83	0.02	3.66	0.04
VR 0506	Turnip, garden, raw	RAC	0.01	4.29	0.04	3.10	0.03	6.41	0.06	2.90	0.03	5.79	0.06
VR 2071	Subgroup of tuberous and corm vegetables, raw (incl processed)	RAC	0.01	250.41	2.50	208.74	2.09	213.64	2.14	602.70	6.03	388.95	3.89

## CHLORANTRANILIPROLE (230)

## International Estimated Daily Intake (IEDI)

ADI = 0 - 2 mg/kg bw

Codex Code	Commodity description	Expr as	STM <sup>R</sup> mg/kg	Diets: g/person/day				Intake = daily intake: ug/person					
				G13 diet	G13 intake	G14 diet	G14 intake	G15 diet	G15 intake	G16 diet	G16 intake	G17 diet	G17 intake
VR 2072	Subgroup of Aquatic root and tuber vegetables	RAC	0.01	NC	-	NC	-	NC	-	NC	-	NC	-
VS 0624	Celery	RAC	2.1	3.66	7.69	2.65	5.57	4.84	10.16	2.47	5.19	4.94	10.37
VS 0620	Artichoke globe, raw	RAC	0.56	0.10	0.06	NC	-	0.10	0.06	0.10	0.06	NC	-
GC 0648	Quinoa, raw	RAC	0.01	NC	-	NC	-	NC	-	NC	-	NC	-
GC 0650	Rye, raw (incl flour)	RAC	0.01	0.10	0.00	0.10	0.00	13.95	0.14	0.10	0.00	0.88	0.01
GC 0653	Triticale, raw (incl flour)	RAC	0.01	0.10	0.00	NC	-	NC	-	NC	-	NC	-
GC 0654	Wheat, raw (incl bulgur, incl fermented beverages, excl germ, excl wholemeal bread, excl white flour products, excl white bread)	RAC	0.01	0.10	0.00	NC	-	NC	-	NC	-	0.97	0.01
CF 1210	Wheat, germ	PP	0.012	0.10	0.00	0.10	0.00	0.10	0.00	0.10	0.00	NC	-
CP 1212	Wheat, wholemeal bread	PP	0.01	0.10	0.00	0.10	0.00	0.10	0.00	0.10	0.00	0.10	0.00
CP 1211	Wheat, white bread	PP	0.004	0.43	0.00	0.41	0.00	1.56	0.01	0.11	0.00	0.10	0.00
CF 1211	Wheat, white flour (incl white flour products: starch, gluten, macaroni, pastry)	PP	0.004	44.78	0.18	86.96	0.35	214.05	0.86	20.31	0.08	103.60	0.41
GC 2087	Subgroup of barley, similar grains, and pseudocereals with husks, raw (including processed)	RAC	0.01	11.99	0.12	5.22	0.05	49.50	0.50	3.82	0.04	16.26	0.16
CM 0649 (GC 0649)	Rice, husked, dry (incl flour, incl oil, incl beverages, incl starch, excl polished)	REP	0.115	13.58	1.56	4.29	0.49	2.17	0.25	0.10	0.01	8.84	1.02
CM 1205	Rice polished, dry	PP	0.013	30.20	0.39	218.34	2.84	12.77	0.17	15.24	0.20	51.35	0.67
GC 2089	Subgroup of Sorghum Grain and Millet	RAC	0.01	150.90	1.51	2.80	0.03	NC	-	68.93	0.69	NC	-
GC 2091	Subgroup of Maize Cereals	RAC	0.01	116.66	1.17	10.52	0.11	38.46	0.38	76.60	0.77	34.44	0.34
GC 2090	Subgroup of Sweet Corns	RAC	0.01	3.63	0.04	20.50	0.21	8.78	0.09	0.10	0.00	0.17	0.00
GS 0659	Sugar cane, raw (incl sugar, incl molasses)	RAC	0.145	33.75	4.89	106.29	15.41	78.09	11.32	29.09	4.22	45.70	6.63
TN 0085	Tree nuts, raw (incl processed)	RAC	0.01	4.39	0.04	135.53	1.36	6.11	0.06	0.72	0.01	317.74	3.18
SO 0495	Rape seed, raw (incl oil)	RAC	0.295	0.19	0.06	0.10	0.03	12.07	3.56	0.10	0.03	NC	-
SO 0691	Cotton seed, raw (incl oil)	RAC	0.049	8.14	0.40	0.32	0.02	2.84	0.14	2.69	0.13	0.97	0.05
OR 0691	Cotton seed oil, edible	PP	0.0122	1.28	0.02	0.10	0.00	0.45	0.01	0.42	0.01	0.15	0.00
SO 0696	Palm kernels, raw (incl oil)	RAC	0.0098	60.84	0.60	12.77	0.13	5.41	0.05	0.57	0.01	53.45	0.52
SO 0696	Palm fruit, raw (incl oil)	RAC	0.195	36.35	7.09	7.16	1.40	2.99	0.58	22.89	4.46	28.38	5.53
OR 0696	Palm fruit oil, edible	PP	0.507	6.72	3.41	1.32	0.67	0.55	0.28	4.23	2.14	5.25	2.66
SO 0697	Peanuts, nutmeat, raw (incl roasted, incl oil, incl butter)	RAC	0.01	18.82	0.19	0.57	0.01	2.28	0.02	6.90	0.07	0.53	0.01
SO 0702	Sunflower seed, raw (incl oil)	RAC	0.185	0.94	0.17	0.22	0.04	32.01	5.92	12.12	2.24	0.48	0.09
SB 0716	Coffee beans raw (incl roasted, incl instant coffee, incl substitutes)	RAC	0.015	0.95	0.01	1.32	0.02	11.64	0.17	2.96	0.04	14.73	0.22

## CHLORANTRANILIPROLE (230)

## International Estimated Daily Intake (IEDI)

ADI = 0 - 2 mg/kg bw

Codex Code	Commodity description	Expr as	STMR mg/kg	Diets: g/person/day				Intake = daily intake: ug/person					
				G13 diet	G13 intake	G14 diet	G14 intake	G15 diet	G15 intake	G16 diet	G16 intake	G17 diet	G17 intake
HH 0738	Mints, raw	RAC	4.6	NC	-	NC	-	NC	-	NC	-	NC	-
DH 1100	Hops, dry	RAC	10.9	NC	-	NC	-	0.10	1.09	NC	-	NC	-
MM 0095	MEAT FROM MAMMALS other than marine mammals, raw (incl prepared meat) -80% as muscle	RAC	0.009	23.34	0.21	40.71	0.37	97.15	0.87	18.06	0.16	57.71	0.52
MM 0095	MEAT FROM MAMMALS other than marine mammals, raw (incl prepared meat) - 20% as fat	RAC	0.049	5.84	0.29	10.18	0.50	24.29	1.19	4.52	0.22	14.43	0.71
MF 0100	Mammalian fats, raw, excl milk fats (incl rendered fats)	RAC	0.049	1.05	0.05	1.14	0.06	18.69	0.92	0.94	0.05	3.12	0.15
MO 0105	Edible offal (mammalian), raw	RAC	0.047	4.64	0.22	1.97	0.09	10.01	0.47	3.27	0.15	3.98	0.19
ML 0106	Milks, raw or skimmed (incl dairy products)	RAC	0.013	108.75	1.41	70.31	0.91	436.11	5.67	61.55	0.80	79.09	1.03
PM 0110	Poultry meat, raw (incl prepared) - 90% as muscle	RAC	0.008	3.53	0.03	10.83	0.09	51.36	0.41	4.53	0.04	50.00	0.40
PM 0110	Poultry meat, raw (incl prepared) - 10% as fat	RAC	0.031	0.39	0.01	1.20	0.04	5.71	0.18	0.50	0.02	5.56	0.17
PF 0111	Poultry fat, raw (incl rendered)	RAC	0.031	NC	-	NC	-	0.32	0.01	NC	-	NC	-
PO 0111	Poultry edible offal, raw (incl prepared)	RAC	0.028	0.10	0.00	0.70	0.02	0.97	0.03	0.10	0.00	NC	-
PE 0112	Eggs, raw, (incl dried)	RAC	0.099	3.84	0.38	4.41	0.44	27.25	2.70	1.13	0.11	7.39	0.73
Total intake (ug/person)=				136.5				112.1				154.2	
Bodyweight per region (kg bw) =				60				60				60	
ADI (ug/person)=				120000				120000				120000	
%ADI=				0.1%				0.1%				0.1%	
Rounded %ADI=				0%				0%				0%	

**CHLOROTHALONIL (81)**

International Estimated Daily Intake (IEDI)

ADI = 0 - 0.02 mg/kg bw

Codex Code	Commodity description	Expr as	STMR mg/kg	Diets as g/person/day				Intake as ug/person/day							
				G01 diet	G01 intake	G02 diet	G02 intake	G03 diet	G03 intake	G04 diet	G04 intake	G05 diet	G05 intake	G06 diet	G06 intake
FS 0013	Subgroup of Cherries, raw	RAC	0.39	0.92	0.36	9.15	3.57	0.10	0.04	0.61	0.24	0.10	0.04	6.64	2.59
FS 2001	Subgroup of peaches, raw (incl dried apricots)	RAC	0.12	8.01	0.96	5.87	0.70	0.18	0.02	8.19	0.98	1.64	0.20	22.46	2.70
FB 0021	Currants, Black, Red, White, raw	RAC	20	0.10	2.00	0.74	14.80	0.10	2.00	0.10	2.00	0.10	2.00	0.10	2.00
FB 0268	Gooseberry, raw	RAC	20	0.10	2.00	0.24	4.80	NC	-	0.10	2.00	0.10	2.00	NC	-
FB 0269	Grapes, raw (incl must, excl dried, excl juice, excl wine)	RAC	0.955	13.02	12.43	9.25	8.83	0.10	0.10	16.91	16.15	3.70	3.53	54.44	51.99
DF 0269	Grapes, dried (= currants, raisins and sultanas) (from table-grapes)	PP	0.248	0.51	0.13	0.51	0.13	0.10	0.02	1.27	0.31	0.12	0.03	2.07	0.51
JF 0269	Grape juice (from wine grapes)	PP	0.134	0.14	0.02	0.29	0.04	0.10	0.01	0.30	0.04	0.24	0.03	0.10	0.01
-	Grape wine (incl vermouths) (from wine-grapes)	PP	0.0096	0.67	0.01	12.53	0.12	2.01	0.02	1.21	0.01	3.53	0.03	4.01	0.04
FB 0265	Cranberry, raw	RAC	3	0.10	0.30	0.10	0.30	NC	-	0.10	0.30	0.10	0.30	0.10	0.30
FB 0275	Strawberry, raw	RAC	2.05	0.70	1.44	2.01	4.12	0.10	0.21	1.36	2.79	0.37	0.76	2.53	5.19
FI 0327	Banana, raw (incl plantains) (incl dried)	RAC	0.033	5.23	0.17	6.94	0.23	99.45	3.28	32.47	1.07	48.30	1.59	24.70	0.82
FI 0350	Papaya, raw	RAC	2.3	0.35	0.81	0.10	0.23	3.05	7.02	0.80	1.84	7.28	16.74	1.00	2.30
VA 2031	Subgroup of bulb onions	RAC	0.4	31.65	12.66	43.28	17.31	3.68	1.47	38.48	15.39	20.46	8.18	47.29	18.92
VA 0384	Leek, raw	RAC	17.5	0.18	3.15	1.59	27.83	0.10	1.75	0.28	4.90	0.10	1.75	3.21	56.18
-	Onions, green, raw	RAC	0.835	2.45	2.05	1.49	1.24	1.02	0.85	2.60	2.17	0.60	0.50	2.03	1.70
VB 0042	Subgroup of Flowerhead Brassica, raw	RAC	5	2.54	12.70	0.49	2.45	0.10	0.50	3.57	17.85	7.79	38.95	3.12	15.60
VB 0402	Brussels sprouts, raw	RAC	1.5	0.63	0.95	6.41	9.62	0.13	0.20	1.03	1.55	NC	-	2.35	3.53
VC 0424	Cucumber, raw	RAC	0.41	8.01	3.28	30.66	12.57	1.45	0.59	19.84	8.13	0.27	0.11	34.92	14.32
VC 0425	Gherkin, raw	RAC	0.41	1.73	0.71	6.64	2.72	0.31	0.13	4.29	1.76	0.29	0.12	7.56	3.10
VC 0431	Squash, Summer (Courgette, Marrow, Zucchini, Zucchini), raw	RAC	0.41	0.78	0.32	2.06	0.84	0.30	0.12	1.61	0.66	2.25	0.92	2.36	0.97
VC 0046	Melons, except watermelon, raw (Cantaloupe)	RAC	0.04	8.90	0.36	8.64	0.35	0.80	0.03	17.90	0.72	2.80	0.11	29.17	1.17
VO 0448	Tomato, raw	RAC	1.1	41.73	45.90	75.65	83.22	10.66	11.73	82.87	91.16	24.75	27.23	200.93	221.02
-	Tomato, canned (& peeled)	PP	1.1	0.20	0.22	0.31	0.34	0.10	0.11	1.11	1.22	0.11	0.12	1.50	1.65
-	Tomato, paste (i.e. concentrated tomato sauce/puree)	PP	1.1	2.34	2.57	1.33	1.46	1.57	1.73	4.24	4.66	0.34	0.37	2.83	3.11
JF 0448	Tomato, juice (single strength, incl concentrated)	PP	1.1	0.29	0.32	0.29	0.32	0.10	0.11	0.38	0.42	0.10	0.11	0.14	0.15
VO 0051	Subgroup of peppers, raw (incl dried sweet peppers, excl dried chili peppers) (Capsicum spp. Only)	RAC	1.5	8.48	12.72	13.74	20.61	10.13	15.20	11.29	16.94	9.52	14.28	26.36	39.54
-	Peppers, chili, dried	PP	15	0.42	6.30	0.53	7.95	0.84	12.60	0.50	7.50	0.95	14.25	0.37	5.55
VL 0464	Chard, raw (i.e. Beet leaves; Silver beet)	RAC	16	0.40	6.40	0.70	11.20	0.44	7.04	1.06	16.96	4.66	74.56	0.51	8.16
VD 0070	Group of Pulses, raw (incl processed)	RAC	0.19	87.29	16.59	64.04	12.17	37.15	7.06	89.82	17.07	91.02	17.29	98.20	18.66

**CHLOROTHALONIL (81)**

International Estimated Daily Intake (IEDI)

ADI = 0 - 0.02 mg/kg bw

Codex Code	Commodity description	Expr as	STMR mg/kg	Diets as g/person/day				Intake as ug/person/day							
				G01 diet	G01 intake	G02 diet	G02 intake	G03 diet	G03 intake	G04 diet	G04 intake	G05 diet	G05 intake	G06 diet	G06 intake
VR 0075	Group of Root and tuber vegetables, raw (incl processed)	RAC	0.3	87.83	26.35	374.04	112.21	668.92	200.68	121.64	36.49	94.20	28.26	247.11	74.13
VS 0624	Celery	RAC	2.65	2.14	5.67	3.79	10.04	2.35	6.23	5.69	15.08	0.10	0.27	2.75	7.29
VS 0627	Rhubarb	RAC	0.55	0.73	0.40	1.30	0.72	0.80	0.44	1.95	1.07	NC	-	0.94	0.52
TN 0675	Pistachio nut, nutmeat	RAC	0.082	0.41	0.03	0.10	0.01	0.10	0.01	0.85	0.07	0.10	0.01	1.08	0.09
SO 0697	Peanuts, nutmeat, raw (incl roasted, incl oil, incl butter)	RAC	0.01	1.30	0.01	1.23	0.01	12.62	0.13	2.87	0.03	6.59	0.07	2.67	0.03
Total intake (ug/person)=				180.3		373.1		281.4		289.5		254.7		563.8	
Bodyweight per region (kg bw) =				60		60		60		60		60		60	
ADI (ug/person)=				1200		1200		1200		1200		1200		1200	
%ADI=				15.0%		31.1%		23.5%		24.1%		21.2%		47.0%	
Rounded %ADI=				20%		30%		20%		20%		20%		50%	

**CHLOROTHALONIL (81)**

International Estimated Daily Intake (IEDI)

ADI = 0 - 0.02 mg/kg bw

Codex Code	Commodity description	Expr as	STMR mg/kg	Diets as g/person/day				Intake as ug/person/day							
				G07 diet	G07 intake	G08 diet	G08 intake	G09 diet	G09 intake	G10 diet	G10 intake	G11 diet	G11 intake	G12 diet	G12 intake
FS 0013	Subgroup of Cherries, raw	RAC	0.39	1.40	0.55	4.21	1.64	0.10	0.04	2.93	1.14	1.50	0.59	NC	-
FS 2001	Subgroup of peaches, raw (incl dried apricots)	RAC	0.12	13.03	1.56	16.29	1.95	8.29	0.99	12.95	1.55	5.35	0.64	0.10	0.01
FB 0021	Currants, Black, Red, White, raw	RAC	20	0.48	9.60	4.23	84.60	NC	-	1.51	30.20	0.49	9.80	NC	-
FB 0268	Gooseberry, raw	RAC	20	0.10	2.00	1.04	20.80	0.10	2.00	0.23	4.60	NC	-	NC	-
FB 0269	Grapes, raw (incl must, excl dried, excl juice, excl wine)	RAC	0.955	6.48	6.19	11.31	10.80	5.21	4.98	9.50	9.07	4.66	4.45	0.78	0.74
DF 0269	Grapes, dried (= currants, raisins and sultanas) (from table-grapes)	PP	0.248	3.09	0.77	1.51	0.37	0.10	0.02	1.38	0.34	4.26	1.06	0.42	0.10
JF 0269	Grape juice (from wine grapes)	PP	0.134	0.56	0.08	1.96	0.26	0.10	0.01	2.24	0.30	2.27	0.30	0.34	0.05
-	Grape wine (incl vermouths) (from wine-grapes)	PP	0.0096	88.93	0.85	62.41	0.60	1.84	0.02	25.07	0.24	61.17	0.59	5.84	0.06
FB 0265	Cranberry, raw	RAC	3	0.10	0.30	0.10	0.30	0.10	0.30	1.22	3.66	0.11	0.33	NC	-
FB 0275	Strawberry, raw	RAC	2.05	4.49	9.20	5.66	11.60	0.10	0.21	6.63	13.59	5.75	11.79	0.10	0.21
FI 0327	Banana, raw (incl plantains) (incl dried)	RAC	0.033	25.76	0.85	23.65	0.78	23.83	0.79	24.37	0.80	19.43	0.64	101.55	3.35
FI 0350	Papaya, raw	RAC	2.3	0.31	0.71	0.18	0.41	1.50	3.45	0.51	1.17	0.54	1.24	1.08	2.48
VA 2031	Subgroup of bulb onions	RAC	0.4	20.67	8.27	31.32	12.53	37.52	15.01	35.08	14.03	11.77	4.71	13.74	5.50
VA 0384	Leek, raw	RAC	17.5	4.01	70.18	4.41	77.18	0.72	12.60	0.54	9.45	16.41	287.18	0.10	1.75
-	Onions, green, raw	RAC	0.835	1.55	1.29	0.74	0.62	1.05	0.88	3.74	3.12	0.94	0.78	6.45	5.39

## CHLOROTHALONIL (81)

## International Estimated Daily Intake (IEDI)

ADI = 0 - 0.02 mg/kg bw

Codex Code	Commodity description	Expr as	STMR mg/kg	Diets as g/person/day				Intake as ug/person/day							
				G07 diet	G07 intake	G08 diet	G08 intake	G09 diet	G09 intake	G10 diet	G10 intake	G11 diet	G11 intake	G12 diet	G12 intake
VB 0042	Subgroup of Flowerhead Brassica, raw	RAC	5	9.50	47.50	6.77	33.85	NC	-	3.21	16.05	9.36	46.80	0.75	3.75
VB 0402	Brussels sprouts, raw	RAC	1.5	2.24	3.36	2.67	4.01	6.23	9.35	0.32	0.48	4.19	6.29	2.58	3.87
VC 0424	Cucumber, raw	RAC	0.41	6.72	2.76	11.03	4.52	32.10	13.16	15.10	6.19	4.05	1.66	9.57	3.92
VC 0425	Gherkin, raw	RAC	0.41	0.41	0.17	5.89	2.41	NC	-	0.10	0.04	0.37	0.15	2.07	0.85
VC 0431	Squash, Summer (Courgette, Marrow, Zucchini), raw	RAC	0.41	NC	-	NC	-	5.48	2.25	NC	-	NC	-	1.03	0.42
VC 0046	Melons, except watermelon, raw (Cantaloupe)	RAC	0.04	9.20	0.37	11.95	0.48	14.63	0.59	8.99	0.36	7.86	0.31	2.46	0.10
VO 0448	Tomato, raw	RAC	1.1	32.13	35.34	51.27	56.40	34.92	38.41	73.37	80.71	15.15	16.67	8.88	9.77
-	Tomato, canned (& peeled)	PP	1.1	7.57	8.33	2.66	2.93	0.30	0.33	0.97	1.07	7.31	8.04	0.41	0.45
-	Tomato, paste (i.e. concentrated tomato sauce/puree)	PP	1.1	4.96	5.46	3.20	3.52	0.15	0.17	1.61	1.77	6.88	7.57	0.52	0.57
JF 0448	Tomato, juice (single strength, incl concentrated)	PP	1.1	0.80	0.88	0.10	0.11	0.10	0.11	0.61	0.67	0.40	0.44	0.10	0.11
VO 0051	Subgroup of peppers, raw (incl dried sweet peppers, excl dried chilipeppers) (Capsicum spp. Only)	RAC	1.5	6.39	9.59	15.53	23.30	19.09	28.64	10.36	15.54	8.29	12.44	4.53	6.80
-	Peppers, chili, dried	PP	15	0.11	1.65	0.21	3.15	0.36	5.40	0.21	3.15	0.25	3.75	0.15	2.25
VL 0464	Chard, raw (i.e. Beet leaves; Silver beet)	RAC	16	NC	-	NC	-	NC	-	NC	-	NC	-	0.75	12.00
VD 0070	Group of Pulses, raw (incl processed)	RAC	0.19	112.88	21.45	123.05	23.38	47.73	9.07	204.75	38.90	227.52	43.23	110.05	20.91
VR 0075	Group of Root and tuber vegetables, raw (incl processed)	RAC	0.3	290.31	87.09	300.35	90.11	214.25	64.28	242.72	72.82	348.67	104.60	137.52	41.26
VS 0624	Celery	RAC	2.65	7.68	20.35	2.85	7.55	NC	-	3.34	8.85	16.83	44.60	4.04	10.71
VS 0627	Rhubarb	RAC	0.55	1.61	0.89	2.23	1.23	NC	-	0.52	0.29	7.63	4.20	1.39	0.76
TN 0675	Pistachio nut, nutmeat	RAC	0.082	0.35	0.03	0.48	0.04	0.10	0.01	0.39	0.03	0.23	0.02	0.10	0.01
SO 0697	Peanuts, nutmeat, raw (incl roasted, incl oil, incl butter)	RAC	0.01	5.63	0.06	2.75	0.03	9.58	0.10	5.82	0.06	13.71	0.14	1.84	0.02

Total intake (ug/person)=	357.7	481.5	213.1	340.3	625.0	138.2
Bodyweight per region (kg bw) =	60	60	55	60	60	60
ADI (ug/person)=	1200	1200	1100	1200	1200	1200
%ADI=	29.8%	40.1%	19.4%	28.4%	52.1%	11.5%
Rounded %ADI=	30%	40%	20%	30%	50%	10%



## CHLOROTHALONIL (81)

## International Estimated Daily Intake (IEDI)

ADI = 0 - 0.02 mg/kg bw

Codex Code	Commodity description	Expr as	STMR mg/kg	Diets: g/person/day				Intake = daily intake: ug/person					
				G13 diet	G13 intake	G14 diet	G14 intake	G15 diet	G15 intake	G16 diet	G16 intake	G17 diet	G17 intake
FS 0013	Subgroup of Cherries, raw	RAC	0.39	0.10	0.04	0.10	0.04	5.96	2.32	0.10	0.04	NC	-
FS 2001	Subgroup of peaches, raw (incl dried apricots)	RAC	0.12	0.10	0.01	0.10	0.01	10.76	1.29	0.10	0.01	NC	-
FB 0021	Currants, Black, Red, White, raw	RAC	20	0.10	2.00	NC	-	0.74	14.80	NC	-	NC	-
FB 0268	Gooseberry, raw	RAC	20	NC	-	NC	-	0.12	2.40	NC	-	NC	-
FB 0269	Grapes, raw (incl must, excl dried, excl juice, excl wine)	RAC	0.955	0.14	0.13	0.36	0.34	15.33	14.64	0.10	0.10	0.28	0.27
DF 0269	Grapes, dried (= currants, raisins and sultanas) (from table-grapes)	PP	0.248	0.10	0.02	0.13	0.03	1.06	0.26	0.10	0.02	0.10	0.02
JF 0269	Grape juice (from wine grapes)	PP	0.134	0.10	0.01	0.10	0.01	0.41	0.05	0.10	0.01	NC	-
-	Grape wine (incl vermouths) (from wine-grapes)	PP	0.0096	0.31	0.00	0.23	0.00	60.43	0.58	0.52	0.00	31.91	0.31
FB 0265	Cranberry, raw	RAC	3	NC	-	NC	-	0.10	0.30	NC	-	NC	-
FB 0275	Strawberry, raw	RAC	2.05	0.10	0.21	0.10	0.21	3.35	6.87	0.10	0.21	0.10	0.21
FI 0327	Banana, raw (incl plantains) (incl dried)	RAC	0.033	44.80	1.48	118.17	3.90	25.25	0.83	454.49	15.00	310.23	10.24
FI 0350	Papaya, raw	RAC	2.3	6.47	14.88	0.25	0.58	0.19	0.44	0.10	0.23	26.42	60.77
VA 2031	Subgroup of bulb onions	RAC	0.4	9.83	3.93	22.30	8.92	34.69	13.88	9.65	3.86	2.39	0.96
VA 0384	Leek, raw	RAC	17.5	0.10	1.75	1.44	25.20	1.22	21.35	0.10	1.75	NC	-
-	Onions, green, raw	RAC	0.835	1.43	1.19	0.10	0.08	0.20	0.17	NC	-	6.30	5.26
VB 0042	Subgroup of Flowerhead Brassica, raw	RAC	5	0.10	0.50	0.10	0.50	4.86	24.30	0.10	0.50	NC	-
VB 0402	Brussels sprouts, raw	RAC	1.5	0.88	1.32	0.69	1.04	2.89	4.34	0.10	0.15	NC	-
VC 0424	Cucumber, raw	RAC	0.41	0.68	0.28	1.81	0.74	10.40	4.26	0.10	0.04	0.10	0.04
VC 0425	Gherkin, raw	RAC	0.41	0.15	0.06	0.39	0.16	3.15	1.29	0.10	0.04	0.10	0.04
VC 0431	Squash, Summer (Courgette, Marrow, Zucchini, Zucchini), raw	RAC	0.41	0.10	0.04	1.01	0.41	NC	-	1.91	0.78	NC	-
VC 0046	Melons, except watermelon, raw (Cantaloupe)	RAC	0.04	0.19	0.01	0.10	0.00	4.98	0.20	0.10	0.00	NC	-
VO 0448	Tomato, raw	RAC	1.1	12.99	14.29	4.79	5.27	58.40	64.24	0.92	1.01	0.10	0.11
-	Tomato, canned (& peeled)	PP	1.1	0.10	0.11	0.10	0.11	2.42	2.66	0.10	0.11	NC	-
-	Tomato, paste (i.e. concentrated tomato sauce/puree)	PP	1.1	0.58	0.64	0.22	0.24	2.21	2.43	0.24	0.26	3.10	3.41
JF 0448	Tomato, juice (single strength, incl concentrated)	PP	1.1	0.10	0.11	0.10	0.11	0.42	0.46	0.10	0.11	0.10	0.11
VO 0051	Subgroup of peppers, raw (incl dried sweet peppers, excl dried chilipeppers) (Capsicum spp. Only)	RAC	1.5	8.97	13.46	14.13	21.20	25.14	37.71	0.91	1.37	NC	-
-	Peppers, chili, dried	PP	15	0.58	8.70	1.27	19.05	1.21	18.15	0.12	1.80	NC	-
VL 0464	Chard, raw (i.e. Beet leaves; Silver beet)	RAC	16	0.68	10.88	0.49	7.84	NC	-	0.46	7.36	0.92	14.72
VD 0070	Group of Pulses, raw (incl processed)	RAC	0.19	46.57	8.85	30.77	5.85	112.53	21.38	75.53	14.35	43.68	8.30
VR 0075	Group of Root and tuber vegetables, raw (incl processed)	RAC	0.3	282.25	84.68	232.11	69.63	281.91	84.57	620.21	186.06	459.96	137.99

## CHLOROTHALONIL (81)

## International Estimated Daily Intake (IEDI)

ADI = 0 - 0.02 mg/kg bw

Codex Code	Commodity description	Expr as	STMR mg/kg	Diets: g/person/day				Intake = daily intake: ug/person					
				G13 diet	G13 intake	G14 diet	G14 intake	G15 diet	G15 intake	G16 diet	G16 intake	G17 diet	G17 intake
VS 0624	Celery	RAC	2.65	3.66	9.70	2.65	7.02	4.84	12.83	2.47	6.55	4.94	13.09
VS 0627	Rhubarb	RAC	0.55	1.26	0.69	0.91	0.50	0.96	0.53	0.85	0.47	1.70	0.94
TN 0675	Pistachio nut, nutmeat	RAC	0.082	0.10	0.01	0.10	0.01	0.15	0.01	0.10	0.01	NC	-
SO 0697	Peanuts, nutmeat, raw (incl roasted, incl oil, incl butter)	RAC	0.01	18.82	0.19	0.57	0.01	2.28	0.02	6.90	0.07	0.53	0.01

Total intake (ug/person)=	180.2	179.0	359.6	242.3	256.8
Bodyweight per region (kg bw) =	60	60	60	60	60
ADI (ug/person)=	1200	1200	1200	1200	1200
%ADI=	15.0%	14.9%	30.0%	20.2%	21.4%
Rounded %ADI=	20%	10%	30%	20%	20%

## SDS-3701

## International Estimated Daily Intake (IEDI)

ADI = 0 - 0.008 mg/kg bw

Codex Code	Commodity description	Expr as	STMR mg/kg	Diets as g/person/day				Intake as ug/person/day							
				G01 diet	G01 intake	G02 diet	G02 intake	G03 diet	G03 intake	G04 diet	G04 intake	G05 diet	G05 intake	G06 diet	G06 intake
FS 0013	Subgroup of Cherries, raw	RAC	0.01	0.92	0.01	9.15	0.09	0.10	0.00	0.61	0.01	0.10	0.00	6.64	0.07
FS 2001	Subgroup of peaches, raw (incl dried apricots)	RAC	0.011	8.01	0.09	5.87	0.06	0.18	0.00	8.19	0.09	1.64	0.02	22.46	0.25
FB 2005	Subgroup of Caneberries, raw	RAC	0.01	0.42	0.00	1.05	0.01	0.10	0.00	0.10	0.00	0.10	0.00	1.24	0.01
FB 2006	Subgroup of Bush berries, raw (including processed)	RAC	0.01	0.53	0.01	1.31	0.01	0.40	0.00	1.66	0.02	0.10	0.00	0.99	0.01
FB 2007	Subgroup of Large shrub/tree berries, raw (including processed)	RAC	0.01	0.62	0.01	0.33	0.00	0.34	0.00	1.42	0.01	0.10	0.00	1.51	0.02
FB 0269	Grapes, raw (incl must, excl dried, excl juice, excl wine)	RAC	0.01	13.02	0.13	9.25	0.09	0.10	0.00	16.91	0.17	3.70	0.04	54.44	0.54
DF 0269	Grapes, dried (= currants, raisins and sultanas) (from table-grapes)	PP	0.0079	0.51	0.00	0.51	0.00	0.10	0.00	1.27	0.01	0.12	0.00	2.07	0.02
JF 0269	Grape juice (from wine grapes)	PP	0.0027	0.14	0.00	0.29	0.00	0.10	0.00	0.30	0.00	0.24	0.00	0.10	0.00
-	Grape wine (incl vermouths) (from wine-grapes)	PP	0.019	0.67	0.01	12.53	0.24	2.01	0.04	1.21	0.02	3.53	0.07	4.01	0.08
FB 0265	Cranberry, raw	RAC	0.01	0.10	0.00	0.10	0.00	NC	-	0.10	0.00	0.10	0.00	0.10	0.00
VA 0381	Garlic, raw	RAC	0.01	2.29	0.02	5.78	0.06	0.11	0.00	3.69	0.04	1.65	0.02	3.91	0.04
-	Onions, dry, raw	RAC	0.02	29.36	0.59	37.50	0.75	3.56	0.07	34.78	0.70	18.81	0.38	43.38	0.87
-	Onions, green, raw	RAC	0.01	2.45	0.02	1.49	0.01	1.02	0.01	2.60	0.03	0.60	0.01	2.03	0.02
VB 0040	Group of Brassica vegetables (except Brassica leafy vegetables), raw	RAC	0.01	6.43	0.06	40.26	0.40	0.80	0.01	9.94	0.10	12.07	0.12	17.73	0.18
VO 0448	Tomato, raw	RAC	0.0135	41.73	0.56	75.65	1.02	10.66	0.14	82.87	1.12	24.75	0.33	200.93	2.71

**SDS-3701**

International Estimated Daily Intake (IEDI)

ADI = 0 - 0.008 mg/kg bw

Codex Code	Commodity description	Expr as	STMR mg/kg	Diets as g/person/day				Intake as ug/person/day							
				G01 diet	G01 intake	G02 diet	G02 intake	G03 diet	G03 intake	G04 diet	G04 intake	G05 diet	G05 intake	G06 diet	G06 intake
-	Tomato, canned (& peeled)	PP	0.027	0.20	0.01	0.31	0.01	0.10	0.00	1.11	0.03	0.11	0.00	1.50	0.04
-	Tomato, paste (i.e. concentrated tomato sauce/puree)	PP	0.0185	2.34	0.04	1.33	0.02	1.57	0.03	4.24	0.08	0.34	0.01	2.83	0.05
JF 0448	Tomato, juice (single strength, incl concentrated)	PP	0.0135	0.29	0.00	0.29	0.00	0.10	0.00	0.38	0.01	0.10	0.00	0.14	0.00
VO 0442	Okra, raw (i.e. Lady's Finger, Gombo)	RAC	0.015	1.97	0.03	NC	-	3.68	0.06	3.24	0.05	5.72	0.09	1.57	0.02
VO 0444	Peppers, chili, raw	RAC	0.015	3.99	0.06	7.30	0.11	2.93	0.04	5.62	0.08	NC	-	17.44	0.26
-	Peppers, chili, dried	PP	0.45	0.42	0.19	0.53	0.24	0.84	0.38	0.50	0.23	0.95	0.43	0.37	0.17
VO 0445	Peppers, sweet, raw (incl dried)	RAC	0.045	4.49	0.20	6.44	0.29	7.21	0.32	5.68	0.26	9.52	0.43	8.92	0.40
VO 0440	Egg plant, raw (i.e. aubergine)	RAC	0.015	5.58	0.08	4.31	0.06	0.89	0.01	9.31	0.14	13.64	0.20	20.12	0.30
VL 0053	Group of Leafy vegetables, raw	RAC	0.02	8.47	0.17	22.36	0.45	7.74	0.15	25.51	0.51	45.77	0.92	21.22	0.42
VP 0060	Group of Legume vegetables, raw	RAC	0.01	7.73	0.08	1.53	0.02	0.51	0.01	2.95	0.03	5.08	0.05	12.86	0.13
VD 0070	Group of Pulses, raw (incl processed)	RAC	0.02	87.29	1.75	64.04	1.28	37.15	0.74	89.82	1.80	91.02	1.82	98.20	1.96
VR 0075	Group of Root and tuber vegetables, raw (incl processed)	RAC	0.02	87.83	1.76	374.04	7.48	668.92	13.38	121.64	2.43	94.20	1.88	247.11	4.94
VR 0583	Horseradish, raw	RAC	0.16	0.51	0.08	0.91	0.15	0.56	0.09	1.37	0.22	NC	-	0.66	0.11
VS 0627	Rhubarb	RAC	0.02	0.73	0.01	1.30	0.03	0.80	0.02	1.95	0.04	NC	-	0.94	0.02
GC 0080	Group of Cereal grains, raw, (incl processed) (incl sweet corn)	RAC	0.02	484.43	9.69	464.63	9.29	262.36	5.25	486.81	9.74	469.62	9.39	614.04	12.28
GC 2090	Subgroup of Sweet Corns	RAC	0.015	0.14	0.00	0.94	0.01	5.70	0.09	2.61	0.04	1.94	0.03	0.22	0.00
TN 0675	Pistachio nut, nutmeat	RAC	0.01	0.41	0.00	0.10	0.00	0.10	0.00	0.85	0.01	0.10	0.00	1.08	0.01
SO 0088	Oilseeds, raw (incl processed)	RAC	0.02	79.30	1.59	54.81	1.10	96.74	1.93	137.72	2.75	61.07	1.22	88.71	1.77
MM 0095	MEAT FROM MAMMALS other than marine mammals, raw (incl prepared meat)	RAC	0.01	31.20	0.31	72.44	0.72	20.88	0.21	47.98	0.48	33.08	0.33	36.25	0.36
MF 0100	Mammalian fats, raw, excl milk fats (incl rendered fats)	RAC	0.025	3.29	0.08	6.14	0.15	0.82	0.02	1.57	0.04	2.23	0.06	1.07	0.03
MO 0105	Edible offal (mammalian), raw	RAC	0.16	4.79	0.77	9.68	1.55	2.97	0.48	5.49	0.88	3.84	0.61	5.03	0.80
ML 0106	Milks, raw or skimmed (incl dairy products)	RAC	0.05	289.65	14.48	485.88	24.29	26.92	1.35	239.03	11.95	199.91	10.00	180.53	9.03
PM 0110	Poultry meat, raw (incl prepared)	RAC	0.01	14.63	0.15	29.76	0.30	8.04	0.08	129.68	1.30	25.04	0.25	35.66	0.36
PF 0111	Poultry fat, raw (incl rendered)	RAC	0.01	0.10	0.00	0.10	0.00	NC	-	0.10	0.00	0.10	0.00	0.10	0.00
PO 0111	Poultry edible offal, raw (incl prepared)	RAC	0.039	0.12	0.00	0.12	0.00	0.11	0.00	5.37	0.21	0.24	0.01	0.10	0.00
PE 0112	Eggs, raw, (incl dried)	RAC	0.031	7.84	0.24	23.08	0.72	2.88	0.09	14.89	0.46	9.81	0.30	14.83	0.46

Total intake (ug/person)=	33.3	51.0	25.0	36.1	29.0	38.8
Bodyweight per region (kg bw) =	60	60	60	60	60	60
ADI (ug/person)=	480	480	480	480	480	480
%ADI=	6.9%	10.6%	5.2%	7.5%	6.0%	8.1%
Rounded %ADI=	7%	10%	5%	8%	6%	8%

SDS-3701				International Estimated Daily Intake (IEDI)				ADI = 0 - 0.008 mg/kg bw							
Codex Code	Commodity description	Expr as	STMR mg/kg	Diets as g/person/day				Intake as ug/person/day							
				G07 diet	G07 intake	G08 diet	G08 intake	G09 diet	G09 intake	G10 diet	G10 intake	G11 diet	G11 intake	G12 diet	G12 intake
FS 0013	Subgroup of Cherries, raw	RAC	0.01	1.40	0.01	4.21	0.04	0.10	0.00	2.93	0.03	1.50	0.02	NC	-
FS 2001	Subgroup of peaches, raw (incl dried apricots)	RAC	0.011	13.03	0.14	16.29	0.18	8.29	0.09	12.95	0.14	5.35	0.06	0.10	0.00
FB 2005	Subgroup of Caneberries, raw	RAC	0.01	0.56	0.01	1.43	0.01	0.14	0.00	1.23	0.01	1.14	0.01	0.10	0.00
FB 2006	Subgroup of Bush berries, raw (including processed)	RAC	0.01	1.31	0.01	5.50	0.06	0.10	0.00	2.57	0.03	0.82	0.01	2.15	0.02
FB 2007	Subgroup of Large shrub/tree berries, raw (including processed)	RAC	0.01	8.26	0.08	0.14	0.00	0.10	0.00	0.13	0.00	0.19	0.00	1.87	0.02
FB 0269	Grapes, raw (incl must, excl dried, excl juice, excl wine)	RAC	0.01	6.48	0.06	11.31	0.11	5.21	0.05	9.50	0.10	4.66	0.05	0.78	0.01
DF 0269	Grapes, dried (= currants, raisins and sultanas) (from table-grapes)	PP	0.0079	3.09	0.02	1.51	0.01	0.10	0.00	1.38	0.01	4.26	0.03	0.42	0.00
JF 0269	Grape juice (from wine grapes)	PP	0.0027	0.56	0.00	1.96	0.01	0.10	0.00	2.24	0.01	2.27	0.01	0.34	0.00
-	Grape wine (incl vermouths) (from wine-grapes)	PP	0.019	88.93	1.69	62.41	1.19	1.84	0.03	25.07	0.48	61.17	1.16	5.84	0.11
FB 0265	Cranberry, raw	RAC	0.01	0.10	0.00	0.10	0.00	0.10	0.00	1.22	0.01	0.11	0.00	NC	-
VA 0381	Garlic, raw	RAC	0.01	0.98	0.01	1.49	0.01	12.88	0.13	3.74	0.04	2.05	0.02	1.14	0.01
-	Onions, dry, raw	RAC	0.02	19.69	0.39	29.83	0.60	24.64	0.49	31.35	0.63	9.72	0.19	12.59	0.25
-	Onions, green, raw	RAC	0.01	1.55	0.02	0.74	0.01	1.05	0.01	3.74	0.04	0.94	0.01	6.45	0.06
VB 0040	Group of Brassica vegetables (except Brassica leafy vegetables), raw	RAC	0.01	20.71	0.21	39.81	0.40	25.06	0.25	37.93	0.38	18.12	0.18	16.74	0.17
VO 0448	Tomato, raw	RAC	0.0135	32.13	0.43	51.27	0.69	34.92	0.47	73.37	0.99	15.15	0.20	8.88	0.12
-	Tomato, canned (& peeled)	PP	0.027	7.57	0.20	2.66	0.07	0.30	0.01	0.97	0.03	7.31	0.20	0.41	0.01
-	Tomato, paste (i.e. concentrated tomato sauce/puree)	PP	0.0185	4.96	0.09	3.20	0.06	0.15	0.00	1.61	0.03	6.88	0.13	0.52	0.01
JF 0448	Tomato, juice (single strength, incl concentrated)	PP	0.0135	0.80	0.01	0.10	0.00	0.10	0.00	0.61	0.01	0.40	0.01	0.10	0.00
VO 0442	Okra, raw (i.e. Lady's Finger, Gombo)	RAC	0.015	NC	-	NC	-	0.10	0.00	0.17	0.00	NC	-	0.72	0.01
VO 0444	Peppers, chili, raw	RAC	0.015	5.57	0.08	14.00	0.21	8.25	0.12	5.77	0.09	6.44	0.10	2.53	0.04
-	Peppers, chili, dried	PP	0.45	0.11	0.05	0.21	0.09	0.36	0.16	0.21	0.09	0.25	0.11	0.15	0.07
VO 0445	Peppers, sweet, raw (incl dried)	RAC	0.045	0.82	0.04	1.53	0.07	10.85	0.49	4.59	0.21	1.84	0.08	2.00	0.09
VO 0440	Egg plant, raw (i.e. aubergine)	RAC	0.015	1.01	0.02	1.69	0.03	21.37	0.32	3.00	0.05	1.40	0.02	NC	-
VL 0053	Group of Leafy vegetables, raw	RAC	0.02	18.83	0.38	21.85	0.44	121.23	2.42	43.09	0.86	18.18	0.36	18.32	0.37
VP 0060	Group of Legume vegetables, raw	RAC	0.01	18.21	0.18	8.91	0.09	7.22	0.07	10.04	0.10	23.22	0.23	0.17	0.00

SDS-3701

International Estimated Daily Intake (IEDI)

ADI = 0 - 0.008 mg/kg bw

Codex Code	Commodity description	Expr as	STMR mg/kg	Diets as g/person/day				Intake as ug/person/day							
				G07 diet	G07 intake	G08 diet	G08 intake	G09 diet	G09 intake	G10 diet	G10 intake	G11 diet	G11 intake	G12 diet	G12 intake
VD 0070	Group of Pulses, raw (incl processed)	RAC	0.02	112.88	2.26	123.05	2.46	47.73	0.95	204.75	4.10	227.52	4.55	110.05	2.20
VR 0075	Group of Root and tuber vegetables, raw (incl processed)	RAC	0.02	290.31	5.81	300.35	6.01	214.25	4.29	242.72	4.85	348.67	6.97	137.52	2.75
VR 0583	Horseradish, raw	RAC	0.16	0.10	0.02	0.42	0.07	13.01	2.08	0.26	0.04	2.70	0.43	0.97	0.16
VS 0627	Rhubarb	RAC	0.02	1.61	0.03	2.23	0.04	NC	-	0.52	0.01	7.63	0.15	1.39	0.03
GC 0080	Group of Cereal grains, raw, (incl processed) (incl sweet corn)	RAC	0.02	345.63	6.91	386.16	7.72	514.33	10.29	402.72	8.05	295.30	5.91	359.97	7.20
GC 2090	Subgroup of Sweet Corns	RAC	0.015	11.43	0.17	3.71	0.06	0.74	0.01	13.63	0.20	3.07	0.05	1.50	0.02
TN 0675	Pistachio nut, nutmeat	RAC	0.01	0.35	0.00	0.48	0.00	0.10	0.00	0.39	0.00	0.23	0.00	0.10	0.00
SO 0088	Oilseeds, raw (incl processed)	RAC	0.02	108.63	2.17	112.14	2.24	64.25	1.29	81.75	1.64	66.09	1.32	20.34	0.41
MM 0095	MEAT FROM MAMMALS other than marine mammals, raw (incl prepared meat)	RAC	0.01	140.03	1.40	150.89	1.51	79.32	0.79	111.24	1.11	120.30	1.20	51.27	0.51
MF 0100	Mammalian fats, raw, excl milk fats (incl rendered fats)	RAC	0.025	6.44	0.16	15.51	0.39	3.79	0.09	8.29	0.21	18.44	0.46	8.00	0.20
MO 0105	Edible offal (mammalian), raw	RAC	0.16	15.17	2.43	5.19	0.83	6.30	1.01	6.78	1.08	3.32	0.53	3.17	0.51
ML 0106	Milks, raw or skimmed (incl dairy products)	RAC	0.05	388.92	19.45	335.88	16.79	49.15	2.46	331.25	16.56	468.56	23.43	245.45	12.27
PM 0110	Poultry meat, raw (incl prepared)	RAC	0.01	73.76	0.74	53.86	0.54	23.98	0.24	87.12	0.87	53.38	0.53	84.45	0.84
PF 0111	Poultry fat, raw (incl rendered)	RAC	0.01	0.10	0.00	0.10	0.00	NC	-	0.10	0.00	0.71	0.01	NC	-
PO 0111	Poultry edible offal, raw (incl prepared)	RAC	0.039	0.33	0.01	0.72	0.03	0.27	0.01	0.35	0.01	0.80	0.03	NC	-
PE 0112	Eggs, raw, (incl dried)	RAC	0.031	25.84	0.80	29.53	0.92	28.05	0.87	33.19	1.03	36.44	1.13	8.89	0.28

Total intake (ug/person)=	46.5	44.0	29.5	44.1	49.9	28.8
Bodyweight per region (kg bw) =	60	60	55	60	60	60
ADI (ug/person)=	480	480	440	480	480	480
%ADI=	9.7%	9.2%	6.7%	9.2%	10.4%	6.0%
Rounded %ADI=	10%	9%	7%	9%	10%	6%

SDS-3701				International Estimated Daily Intake (IEDI)				ADI = 0 - 0.008 mg/kg bw					
Codex Code	Commodity description	Expr as	STMR mg/kg	Diets: g/person/day				Intake = daily intake: ug/person					
				G13 diet	G13 intake	G14 diet	G14 intake	G15 diet	G15 intake	G16 diet	G16 intake	G17 diet	G17 intake
FS 0013	Subgroup of Cherries, raw	RAC	0.01	0.10	0.00	0.10	0.00	5.96	0.06	0.10	0.00	NC	-
FS 2001	Subgroup of peaches, raw (incl dried apricots)	RAC	0.011	0.10	0.00	0.10	0.00	10.76	0.12	0.10	0.00	NC	-
FB 2005	Subgroup of Caneberries, raw	RAC	0.01	0.10	0.00	7.30	0.07	2.29	0.02	0.10	0.00	NC	-
FB 2006	Subgroup of Bush berries, raw (including processed)	RAC	0.01	0.82	0.01	4.05	0.04	5.94	0.06	0.43	0.00	2.66	0.03
FB 2007	Subgroup of Large shrub/tree berries, raw (including processed)	RAC	0.01	0.71	0.01	7.32	0.07	NC	-	0.38	0.00	2.32	0.02
FB 0269	Grapes, raw (incl must, excl dried, excl juice, excl wine)	RAC	0.01	0.14	0.00	0.36	0.00	15.33	0.15	0.10	0.00	0.28	0.00
DF 0269	Grapes, dried (= currants, raisins and sultanas) (from table-grapes)	PP	0.0079	0.10	0.00	0.13	0.00	1.06	0.01	0.10	0.00	0.10	0.00
JF 0269	Grape juice (from wine grapes)	PP	0.0027	0.10	0.00	0.10	0.00	0.41	0.00	0.10	0.00	NC	-
-	Grape wine (incl vermouths) (from wine-grapes)	PP	0.019	0.31	0.01	0.23	0.00	60.43	1.15	0.52	0.01	31.91	0.61
FB 0265	Cranberry, raw	RAC	0.01	NC	-	NC	-	0.10	0.00	NC	-	NC	-
VA 0381	Garlic, raw	RAC	0.01	0.82	0.01	2.06	0.02	3.79	0.04	0.10	0.00	0.29	0.00
-	Onions, dry, raw	RAC	0.02	9.01	0.18	20.24	0.40	30.90	0.62	9.61	0.19	2.11	0.04
-	Onions, green, raw	RAC	0.01	1.43	0.01	0.10	0.00	0.20	0.00	NC	-	6.30	0.06
VB 0040	Group of Brassica vegetables (except Brassica leafy vegetables), raw	RAC	0.01	5.46	0.05	4.28	0.04	58.72	0.59	0.10	0.00	NC	-
VO 0448	Tomato, raw	RAC	0.0135	12.99	0.18	4.79	0.06	58.40	0.79	0.92	0.01	0.10	0.00
-	Tomato, canned (& peeled)	PP	0.027	0.10	0.00	0.10	0.00	2.42	0.07	0.10	0.00	NC	-
-	Tomato, paste (i.e. concentrated tomato sauce/puree)	PP	0.0185	0.58	0.01	0.22	0.00	2.21	0.04	0.24	0.00	3.10	0.06
JF 0448	Tomato, juice (single strength, incl concentrated)	PP	0.0135	0.10	0.00	0.10	0.00	0.42	0.01	0.10	0.00	0.10	0.00
VO 0442	Okra, raw (i.e. Lady's Finger, Gombo)	RAC	0.015	6.23	0.09	0.10	0.00	NC	-	NC	-	NC	-
VO 0444	Peppers, chili, raw	RAC	0.015	3.47	0.05	3.56	0.05	16.30	0.24	0.10	0.00	NC	-
-	Peppers, chili, dried	PP	0.45	0.58	0.26	1.27	0.57	1.21	0.54	0.12	0.05	NC	-
VO 0445	Peppers, sweet, raw (incl dried)	RAC	0.045	5.49	0.25	10.57	0.48	8.84	0.40	0.91	0.04	NC	-
VO 0440	Egg plant, raw (i.e. aubergine)	RAC	0.015	1.31	0.02	8.26	0.12	3.95	0.06	0.10	0.00	NC	-
VL 0053	Group of Leafy vegetables, raw	RAC	0.02	12.42	0.25	8.75	0.18	7.53	0.15	7.07	0.14	14.11	0.28
VP 0060	Group of Legume vegetables, raw	RAC	0.01	0.58	0.01	3.16	0.03	10.38	0.10	0.10	0.00	NC	-
VD 0070	Group of Pulses, raw (incl processed)	RAC	0.02	46.57	0.93	30.77	0.62	112.53	2.25	75.53	1.51	43.68	0.87
VR 0075	Group of Root and tuber vegetables, raw (incl processed)	RAC	0.02	282.25	5.65	232.11	4.64	281.91	5.64	620.21	12.40	459.96	9.20
VR 0583	Horseradish, raw	RAC	0.16	0.88	0.14	0.63	0.10	0.54	0.09	0.59	0.09	1.19	0.19
VS 0627	Rhubarb	RAC	0.02	1.26	0.03	0.91	0.02	0.96	0.02	0.85	0.02	1.70	0.03

**SDS-3701**

International Estimated Daily Intake (IEDI)

ADI = 0 - 0.008 mg/kg bw

Codex Code	Commodity description	Expr as	STMR mg/kg	Diets: g/person/day				Intake = daily intake: ug/person					
				G13 diet	G13 intake	G14 diet	G14 intake	G15 diet	G15 intake	G16 diet	G16 intake	G17 diet	G17 intake
GC 0080	Group of Cereal grains, raw, (incl processed) (incl sweet corn)	RAC	0.02	407.04	8.14	417.04	8.34	402.79	8.06	195.30	3.91	263.26	5.27
GC 2090	Subgroup of Sweet Corns	RAC	0.015	3.63	0.05	20.50	0.31	8.78	0.13	0.10	0.00	0.17	0.00
TN 0675	Pistachio nut, nutmeat	RAC	0.01	0.10	0.00	0.10	0.00	0.15	0.00	0.10	0.00	NC	-
SO 0088	Oilseeds, raw (incl processed)	RAC	0.02	131.71	2.63	22.49	0.45	69.33	1.39	57.68	1.15	86.74	1.73
MM 0095	MEAT FROM MAMMALS other than marine mammals, raw (incl prepared meat)	RAC	0.01	29.18	0.29	50.89	0.51	121.44	1.21	22.58	0.23	72.14	0.72
MF 0100	Mammalian fats, raw, excl milk fats (incl rendered fats)	RAC	0.025	1.05	0.03	1.14	0.03	18.69	0.47	0.94	0.02	3.12	0.08
MO 0105	Edible offal (mammalian), raw	RAC	0.16	4.64	0.74	1.97	0.32	10.01	1.60	3.27	0.52	3.98	0.64
ML 0106	Milks, raw or skimmed (incl dairy products)	RAC	0.05	108.75	5.44	70.31	3.52	436.11	21.81	61.55	3.08	79.09	3.95
PM 0110	Poultry meat, raw (incl prepared)	RAC	0.01	3.92	0.04	12.03	0.12	57.07	0.57	5.03	0.05	55.56	0.56
PF 0111	Poultry fat, raw (incl rendered)	RAC	0.01	NC	-	NC	-	0.32	0.00	NC	-	NC	-
PO 0111	Poultry edible offal, raw (incl prepared)	RAC	0.039	0.10	0.00	0.70	0.03	0.97	0.04	0.10	0.00	NC	-
PE 0112	Eggs, raw, (incl dried)	RAC	0.031	3.84	0.12	4.41	0.14	27.25	0.84	1.13	0.04	7.39	0.23
Total intake (ug/person)=				25.6		21.3		49.3		23.5		24.6	
Bodyweight per region (kg bw) =				60		60		60		60		60	
ADI (ug/person)=				480		480		480		480		480	
%ADI=				5.3%		4.4%		10.3%		4.9%		5.1%	
Rounded %ADI=				5%		4%		10%		5%		5%	

CYPRODINIL (207)				International Estimated Daily Intake (IEDI)				ADI = 0 - 0.03 mg/kg bw							
Codex Code	Commodity description	Expr as	STMR mg/kg	Diets as g/person/day				Intake as ug/person/day							
				G01 diet	G01 intake	G02 diet	G02 intake	G03 diet	G03 intake	G04 diet	G04 intake	G05 diet	G05 intake	G06 diet	G06 intake
FP 0009	Group of Pome fruits, raw (incl apple cider, excl apple juice)	RAC	0.48	19.35	9.29	34.06	16.35	17.87	8.58	25.74	12.36	7.69	3.69	56.85	27.29
JF 0226	Apple juice, single strength (incl. concentrated)	PP	0.015	0.32	0.00	3.07	0.05	0.10	0.00	5.00	0.08	0.29	0.00	5.57	0.08
FS 0012	Group of Stone fruits, raw (incl dried plums, incl dried apricots)	RAC	0.68	11.60	7.89	23.79	16.18	0.25	0.17	11.84	8.05	2.41	1.64	33.44	22.74
DF 0014	Plums, dried (prunes)	PP	1.2	0.10	0.12	0.10	0.12	0.10	0.12	0.18	0.22	0.10	0.12	0.10	0.12
FB 0018	Group of Berries and other small fruits, raw (incl processed)	RAC	2.2	18.53	40.77	33.67	74.07	3.65	8.03	28.70	63.14	9.72	21.38	74.91	164.80
FB 0269	Grapes, raw (incl must, incl juice, incl wine, excl dried)	RAC	0.79	14.11	11.15	26.83	21.20	2.85	2.25	18.95	14.97	8.84	6.98	60.01	47.41
DF 0269	Grapes, dried (= currants, raisins and sultanas) (from table-grapes)	PP	1.7	0.51	0.87	0.51	0.87	0.10	0.17	1.27	2.16	0.12	0.20	2.07	3.52
FB 0275	Strawberry, raw	RAC	0.31	0.70	0.22	2.01	0.62	0.10	0.03	1.36	0.42	0.37	0.11	2.53	0.78
FT 0336	Guava, raw	RAC	0.485	0.47	0.23	0.10	0.05	0.48	0.23	0.49	0.24	4.42	2.14	0.10	0.05
FI 0326	Avocado, raw	RAC	0.265	0.13	0.03	0.10	0.03	2.05	0.54	2.54	0.67	2.34	0.62	0.12	0.03
FI 0355	Pomegranate, raw, (incl processed)	RAC	3.3	3.40	11.22	2.10	6.93	2.65	8.75	10.89	35.94	NC	-	6.67	22.01
VA 2031	Subgroup of bulb onions	RAC	0.065	31.65	2.06	43.28	2.81	3.68	0.24	38.48	2.50	20.46	1.33	47.29	3.07
VB 0041	Cabbages, head, raw	RAC	0.03	2.73	0.08	27.92	0.84	0.55	0.02	4.47	0.13	4.27	0.13	10.25	0.31
VC 0424	Cucumber, raw	RAC	0.08	8.01	0.64	30.66	2.45	1.45	0.12	19.84	1.59	0.27	0.02	34.92	2.79
VC 0431	Squash, Summer (Courgette, Marrow, Zucchini, Zucchini), raw	RAC	0.08	0.78	0.06	2.06	0.16	0.30	0.02	1.61	0.13	2.25	0.18	2.36	0.19
-	Tomato, paste (i.e. concentrated tomato sauce/puree)	PP	0.48	2.34	1.12	1.33	0.64	1.57	0.75	4.24	2.04	0.34	0.16	2.83	1.36
JF 0448	Tomato, juice (single strength, incl concentrated)	PP	0.036	0.29	0.01	0.29	0.01	0.10	0.00	0.38	0.01	0.10	0.00	0.14	0.01
-	Peppers, chili, dried	PP	2	0.42	0.84	0.53	1.06	0.84	1.68	0.50	1.00	0.95	1.90	0.37	0.74
VO 0440	Egg plant, raw (i.e. aubergine)	RAC	0.07	5.58	0.39	4.31	0.30	0.89	0.06	9.31	0.65	13.64	0.95	20.12	1.41
VL 2050	Subgroup of Leafy greens	RAC	11	3.93	43.23	5.28	58.08	3.07	33.77	14.53	159.83	8.25	90.75	12.75	140.25
VL 0054	Subgroup of Leaves of Brassicaceae, raw	RAC	0.37	2.63	0.97	9.27	3.43	1.86	0.69	5.82	2.15	19.53	7.23	4.90	1.81
VL 2052	Subgroup of Leaves of Root and Tuber Vegetables	RAC	11	0.18	1.98	0.31	3.41	0.84	9.24	0.47	5.17	2.06	22.66	0.23	2.53
VL 2053	Subgroup of Leaves of trees, shrubs and vines	RAC	11	0.39	4.29	0.69	7.59	0.43	4.73	1.04	11.44	4.57	50.27	0.50	5.50
VL 2054	Subgroup of Leafy aquatic vegetables	RAC	11	1.21	13.31	2.15	23.65	1.33	14.63	3.24	35.64	11.36	124.96	1.56	17.16
VL 2832	Witloof chicory (sprouts)	RAC	11	0.10	1.10	0.10	1.10	0.10	1.10	0.36	3.96	0.10	1.10	0.35	3.85
VP 2060	Subgroup of beans with pods (all commodities within this group)	RAC	0.6	0.68	0.41	NC	-	NC	-	0.39	0.23	0.22	0.13	0.49	0.29
VP 0062	Beans without pods: (Phaseolus spp.) (succulent seeds), raw	RAC	0.02	1.56	0.03	0.60	0.01	0.49	0.01	1.18	0.02	0.90	0.02	7.79	0.16



## CYPRODINIL (207)

International Estimated Daily Intake (IEDI)

ADI = 0 - 0.03 mg/kg bw

Codex Code	Commodity description	Expr as	STMR mg/kg	Diets as g/person/day				Intake as ug/person/day							
				G01 diet	G01 intake	G02 diet	G02 intake	G03 diet	G03 intake	G04 diet	G04 intake	G05 diet	G05 intake	G06 diet	G06 intake
VD 0541	Soya bean, dry, raw (incl flour, incl paste, incl curd, incl oil, excl sauce)	RAC	0.085	72.79	6.19	59.05	5.02	20.55	1.75	74.06	6.30	61.11	5.19	73.23	6.22
VR 0577	Carrots, raw	RAC	0.195	9.51	1.85	30.78	6.00	0.37	0.07	8.75	1.71	2.80	0.55	6.10	1.19
VR 0588	Parsnip, raw	RAC	0.09	0.59	0.05	1.05	0.09	0.65	0.06	1.58	0.14	NC	-	0.76	0.07
VR 0494	Radish roots, raw	RAC	0.01	2.31	0.02	4.09	0.04	2.53	0.03	6.15	0.06	5.88	0.06	2.97	0.03
VR 0589	Potato, raw (incl flour, incl frozen, incl starch, incl tapioca)	RAC	0.01	59.74	0.60	316.14	3.16	9.78	0.10	60.26	0.60	54.12	0.54	119.82	1.20
VS 0624	Celery	RAC	8.45	2.14	18.08	3.79	32.03	2.35	19.86	5.69	48.08	0.10	0.85	2.75	23.24
VS 0620	Artichoke globe, raw	RAC	1.2	0.69	0.83	0.10	0.12	0.10	0.12	0.32	0.38	0.26	0.31	1.21	1.45
GC 0654	Wheat, raw (incl bulgur, incl fermented beverages, incl germ, incl wholemeal bread, incl white flour products, incl white bread)	RAC	0.07	381.15	26.68	341.55	23.91	38.35	2.68	281.89	19.73	172.83	12.10	434.07	30.38
GC 0640	Barley, raw (incl malt extract, incl pot&pearled, incl flour & grits, incl beer, incl malt)	RAC	0.58	19.91	11.55	31.16	18.07	5.04	2.92	3.10	1.80	9.77	5.67	4.31	2.50
TN 0085	Tree nuts, raw (incl processed)	RAC	0.01	4.06	0.04	3.27	0.03	7.01	0.07	13.93	0.14	14.01	0.14	9.36	0.09
SO 0495	Rape seed, raw (incl oil)	RAC	0.02	0.93	0.02	1.16	0.02	0.49	0.01	2.53	0.05	9.32	0.19	2.02	0.04
HH 0720	Herbs, raw (incl dried)	RAC	5.05	1.69	8.53	1.91	9.65	1.18	5.96	3.35	16.92	0.55	2.78	1.64	8.28
MO 0105	Edible offal (mammalian), raw	RAC	0.01	4.79	0.05	9.68	0.10	2.97	0.03	5.49	0.05	3.84	0.04	5.03	0.05

Total intake (ug/person)=	226.8	340.3	129.6	460.7	367.1	545.0
Bodyweight per region (kg bw) =	60	60	60	60	60	60
ADI (ug/person)=	1800	1800	1800	1800	1800	1800
%ADI=	12.6%	18.9%	7.2%	25.6%	20.4%	30.3%
Rounded %ADI=	10%	20%	7%	30%	20%	30%

CYPRODINIL (207)				International Estimated Daily Intake (IEDI)				ADI = 0 - 0.03 mg/kg bw							
Codex Code	Commodity description	Expr as	STMR mg/kg	Diets as g/person/day				Intake as ug/person/day							
				G07 diet	G07 intake	G08 diet	G08 intake	G09 diet	G09 intake	G10 diet	G10 intake	G11 diet	G11 intake	G12 diet	G12 intake
FP 0009	Group of Pome fruits, raw (incl apple cider, excl apple juice)	RAC	0.48	51.09	24.52	65.40	31.39	42.71	20.50	45.29	21.74	62.51	30.00	7.74	3.72
JF 0226	Apple juice, single strength (incl. concentrated)	PP	0.015	14.88	0.22	11.98	0.18	0.15	0.00	9.98	0.15	30.32	0.45	3.47	0.05
FS 0012	Group of Stone fruits, raw (incl dried plums, incl dried apricots)	RAC	0.68	19.98	13.59	24.87	16.91	14.41	9.80	19.54	13.29	10.78	7.33	0.50	0.34
DF 0014	Plums, dried (prunes)	PP	1.2	0.61	0.73	0.35	0.42	0.10	0.12	0.35	0.42	0.49	0.59	0.13	0.16
FB 0018	Group of Berries and other small fruits, raw (incl processed)	RAC	2.2	156.91	345.20	118.51	260.72	8.10	17.82	64.22	141.28	117.23	257.91	15.04	33.09
FB 0269	Grapes, raw (incl must, incl juice, incl wine, excl dried)	RAC	0.79	129.34	102.18	99.46	78.57	7.76	6.13	46.71	36.90	91.48	72.27	9.23	7.29
DF 0269	Grapes, dried (= currants, raisins and sultanas) (from table-grapes)	PP	1.7	3.09	5.25	1.51	2.57	0.10	0.17	1.38	2.35	4.26	7.24	0.42	0.71
FB 0275	Strawberry, raw	RAC	0.31	4.49	1.39	5.66	1.75	0.10	0.03	6.63	2.06	5.75	1.78	0.10	0.03
FT 0336	Guava, raw	RAC	0.485	0.10	0.05	NC	-	0.42	0.20	NC	-	NC	-	NC	-
FI 0326	Avocado, raw	RAC	0.265	2.65	0.70	0.87	0.23	0.46	0.12	1.64	0.43	1.30	0.34	0.96	0.25
FI 0355	Pomegranate, raw, (incl processed)	RAC	3.3	7.91	26.10	9.72	32.08	7.67	25.31	5.26	17.36	9.04	29.83	14.43	47.62
VA 2031	Subgroup of bulb onions	RAC	0.065	20.67	1.34	31.32	2.04	37.52	2.44	35.08	2.28	11.77	0.77	13.74	0.89
VB 0041	Cabbages, head, raw	RAC	0.03	8.97	0.27	27.12	0.81	1.44	0.04	24.96	0.75	4.55	0.14	11.23	0.34
VC 0424	Cucumber, raw	RAC	0.08	6.72	0.54	11.03	0.88	32.10	2.57	15.10	1.21	4.05	0.32	9.57	0.77
VC 0431	Squash, Summer (Courgette, Marrow, Zucchetti, Zucchini), raw	RAC	0.08	NC	-	NC	-	5.48	0.44	NC	-	NC	-	1.03	0.08
-	Tomato, paste (i.e. concentrated tomato sauce/puree)	PP	0.48	4.96	2.38	3.20	1.54	0.15	0.07	1.61	0.77	6.88	3.30	0.52	0.25
JF 0448	Tomato, juice (single strength, incl concentrated)	PP	0.036	0.80	0.03	0.10	0.00	0.10	0.00	0.61	0.02	0.40	0.01	0.10	0.00
-	Peppers, chili, dried	PP	2	0.11	0.22	0.21	0.42	0.36	0.72	0.21	0.42	0.25	0.50	0.15	0.30
VO 0440	Egg plant, raw (i.e. aubergine)	RAC	0.07	1.01	0.07	1.69	0.12	21.37	1.50	3.00	0.21	1.40	0.10	NC	-
VL 2050	Subgroup of Leafy greens	RAC	11	18.38	202.18	18.73	206.03	82.36	905.96	25.32	278.52	17.60	193.60	7.37	81.07
VL 0054	Subgroup of Leaves of Brassicaceae, raw	RAC	0.37	0.10	0.04	NC	-	26.78	9.91	5.00	1.85	0.58	0.21	5.68	2.10
VL 2052	Subgroup of Leaves of Root and Tuber Vegetables	RAC	11	NC	-	NC	-	NC	-	NC	-	NC	-	0.33	3.63
VL 2053	Subgroup of Leaves of trees, shrubs and vines	RAC	11	NC	-	NC	-	NC	-	NC	-	NC	-	0.74	8.14
VL 2054	Subgroup of Leafy aquatic vegetables	RAC	11	0.35	3.85	3.13	34.43	3.74	41.14	1.79	19.69	NC	-	2.30	25.30
VL 2832	Witloof chicory (sprouts)	RAC	11	1.50	16.50	0.95	10.45	NC	-	1.84	20.24	0.65	7.15	0.13	1.43
VP 2060	Subgroup of beans with pods (all commodities within this group)	RAC	0.6	5.07	3.04	0.83	0.50	0.17	0.10	3.70	2.22	NC	-	NC	-
VP 0062	Beans without pods: (Phaseolus spp.) (succulent seeds), raw	RAC	0.02	2.21	0.04	5.25	0.11	4.17	0.08	1.61	0.03	16.95	0.34	0.17	0.00

## CYPRODINIL (207)

## International Estimated Daily Intake (IEDI)

ADI = 0 - 0.03 mg/kg bw

STMR mg/kg				Diets as g/person/day				Intake as ug/person/day								
Codex Code	Commodity description	Expr as	STMR mg/kg	G07 diet	G07 intake	G08 diet	G08 intake	G09 diet	G09 intake	G10 diet	G10 intake	G11 diet	G11 intake	G12 diet	G12 intake	
VD 0541	Soya bean, dry, raw (incl flour, incl paste, incl curd, incl oil, excl sauce)	RAC	0.085	106.15	9.02	117.67	10.00	40.94	3.48	193.94	16.48	222.48	18.91	80.19	6.82	
VR 0577	Carrots, raw	RAC	0.195	26.26	5.12	27.13	5.29	10.07	1.96	16.49	3.22	44.69	8.71	8.75	1.71	
VR 0588	Parsnip, raw	RAC	0.09	4.42	0.40	0.10	0.01	NC	-	NC	-	NC	-	1.12	0.10	
VR 0494	Radish roots, raw	RAC	0.01	3.83	0.04	11.99	0.12	NC	-	5.26	0.05	2.19	0.02	4.37	0.04	
VR 0589	Potato, raw (incl flour, incl frozen, incl starch, incl tapioca)	RAC	0.01	225.03	2.25	234.24	2.34	71.48	0.71	177.55	1.78	234.55	2.35	37.71	0.38	
VS 0624	Celery	RAC	8.45	7.68	64.90	2.85	24.08	NC	-	3.34	28.22	16.83	142.21	4.04	34.14	
VS 0620	Artichoke globe, raw	RAC	1.2	0.98	1.18	3.65	4.38	0.10	0.12	1.67	2.00	0.26	0.31	NC	-	
GC 0654	Wheat, raw (incl bulgur, incl fermented beverages, incl germ, incl wholemeal bread, incl white flour products, incl white bread)	RAC	0.07	253.07	17.71	244.73	17.13	134.44	9.41	235.10	16.46	216.39	15.15	167.40	11.72	
GC 0640	Barley, raw (incl malt extract, incl pot&pearled, incl flour & grits, incl beer, incl malt)	RAC	0.58	36.18	20.98	53.45	31.00	9.39	5.45	35.25	20.45	46.68	27.07	15.92	9.23	
TN 0085	Tree nuts, raw (incl processed)	RAC	0.01	8.52	0.09	8.94	0.09	15.09	0.15	9.60	0.10	14.57	0.15	26.26	0.26	
SO 0495	Rape seed, raw (incl oil)	RAC	0.02	32.68	0.65	19.91	0.40	7.83	0.16	15.69	0.31	NC	-	NC	-	
HH 0720	Herbs, raw (incl dried)	RAC	5.05	2.61	13.18	2.31	11.67	8.89	44.89	3.92	19.80	1.16	5.86	2.06	10.40	
MO 0105	Edible offal (mammalian), raw	RAC	0.01	15.17	0.15	5.19	0.05	6.30	0.06	6.78	0.07	3.32	0.03	3.17	0.03	
Total intake (ug/person)=					886.1		788.7		1111.6		673.1		835.0		292.4	
Bodyweight per region (kg bw) =					60		60		55		60		60		60	
ADI (ug/person)=					1800		1800		1650		1800		1800		1800	
%ADI=					49.2%		43.8%		67.4%		37.4%		46.4%		16.2%	
Rounded %ADI=					50%		40%		70%		40%		50%		20%	

CYPRODINIL (207)				International Estimated Daily Intake (IEDI)				ADI = 0 - 0.03 mg/kg bw					
Codex Code	Commodity description	Expr as	STMR mg/kg	Diets: g/person/day				Intake = daily intake: ug/person					
				G13 diet	G13 intake	G14 diet	G14 intake	G15 diet	G15 intake	G16 diet	G16 intake	G17 diet	G17 intake
FP 0009	Group of Pome fruits, raw (incl apple cider, excl apple juice)	RAC	0.48	68.85	33.05	10.93	5.25	70.82	33.99	189.78	91.09	19.56	9.39
JF 0226	Apple juice, single strength (incl. concentrated)	PP	0.015	0.10	0.00	0.10	0.00	7.19	0.11	0.10	0.00	NC	-
FS 0012	Group of Stone fruits, raw (incl dried plums, incl dried apricots)	RAC	0.68	0.10	0.07	0.10	0.07	33.36	22.68	0.10	0.07	NC	-
DF 0014	Plums, dried (prunes)	PP	1.2	0.10	0.12	0.10	0.12	0.37	0.44	0.10	0.12	NC	-
FB 0018	Group of Berries and other small fruits, raw (incl processed)	RAC	2.2	2.14	4.71	19.92	43.82	114.85	252.67	1.55	3.41	49.22	108.28
FB 0269	Grapes, raw (incl must, incl juice, incl wine, excl dried)	RAC	0.79	0.58	0.46	0.70	0.55	98.85	78.09	0.73	0.58	44.12	34.85
DF 0269	Grapes, dried (= currants, raisins and sultanas) (from table-grapes)	PP	1.7	0.10	0.17	0.13	0.22	1.06	1.80	0.10	0.17	0.10	0.17
FB 0275	Strawberry, raw	RAC	0.31	0.10	0.03	0.10	0.03	3.35	1.04	0.10	0.03	0.10	0.03
FT 0336	Guava, raw	RAC	0.485	0.10	0.05	0.10	0.05	NC	-	0.14	0.07	3.11	1.51
FI 0326	Avocado, raw	RAC	0.265	1.12	0.30	0.10	0.03	0.84	0.22	0.10	0.03	6.60	1.75
FI 0355	Pomegranate, raw, (incl processed)	RAC	3.3	5.49	18.12	27.17	89.66	NC	-	2.89	9.54	17.87	58.97
VA 2031	Subgroup of bulb onions	RAC	0.065	9.83	0.64	22.30	1.45	34.69	2.25	9.65	0.63	2.39	0.16
VB 0041	Cabbages, head, raw	RAC	0.03	3.82	0.11	2.99	0.09	49.16	1.47	0.10	0.00	NC	-
VC 0424	Cucumber, raw	RAC	0.08	0.68	0.05	1.81	0.14	10.40	0.83	0.10	0.01	0.10	0.01
VC 0431	Squash, Summer (Courgette, Marrow, Zucchini, Zucchini), raw	RAC	0.08	0.10	0.01	1.01	0.08	NC	-	1.91	0.15	NC	-
-	Tomato, paste (i.e. concentrated tomato sauce/puree)	PP	0.48	0.58	0.28	0.22	0.11	2.21	1.06	0.24	0.12	3.10	1.49
JF 0448	Tomato, juice (single strength, incl concentrated)	PP	0.036	0.10	0.00	0.10	0.00	0.42	0.02	0.10	0.00	0.10	0.00
-	Peppers, chili, dried	PP	2	0.58	1.16	1.27	2.54	1.21	2.42	0.12	0.24	NC	-
VO 0440	Egg plant, raw (i.e. aubergine)	RAC	0.07	1.31	0.09	8.26	0.58	3.95	0.28	0.10	0.01	NC	-
VL 2050	Subgroup of Leafy greens	RAC	11	4.99	54.89	3.29	36.19	7.53	82.83	3.05	33.55	6.09	66.99
VL 0054	Subgroup of Leaves of Brassicaceae, raw	RAC	0.37	3.58	1.32	2.64	0.98	NC	-	1.83	0.68	3.65	1.35
VL 2052	Subgroup of Leaves of Root and Tuber Vegetables	RAC	11	0.30	3.30	0.22	2.42	NC	-	0.20	2.20	0.41	4.51
VL 2053	Subgroup of Leaves of trees, shrubs and vines	RAC	11	0.67	7.37	0.48	5.28	NC	-	0.45	4.95	0.90	9.90
VL 2054	Subgroup of Leafy aquatic vegetables	RAC	11	2.08	22.88	1.50	16.50	0.10	1.10	1.41	15.51	2.81	30.91
VL 2832	Witloof chicory (sprouts)	RAC	11	0.10	1.10	0.10	1.10	0.10	1.10	0.10	1.10	NC	-
VP 2060	Subgroup of beans with pods (all commodities within this group)	RAC	0.6	NC	-	NC	-	NC	-	NC	-	NC	-
VP 0062	Beans without pods: (Phaseolus spp.) (succulent seeds), raw	RAC	0.02	0.30	0.01	3.13	0.06	4.11	0.08	0.10	0.00	NC	-
VD 0541	Soya bean, dry, raw (incl flour, incl paste, incl curd, incl oil, excl sauce)	RAC	0.085	15.80	1.34	14.24	1.21	104.29	8.86	17.11	1.45	34.98	2.97

## CYPRODINIL (207)

## International Estimated Daily Intake (IEDI)

ADI = 0 - 0.03 mg/kg bw

Codex Code	Commodity description	Expr as	STM <sup>R</sup> mg/kg	Diets: g/person/day				Intake = daily intake: ug/person					
				G13 diet	G13 intake	G14 diet	G14 intake	G15 diet	G15 intake	G16 diet	G16 intake	G17 diet	G17 intake
VR 0577	Carrots, raw	RAC	0.195	2.07	0.40	3.00	0.59	25.29	4.93	0.10	0.02	NC	-
VR 0588	Parsnip, raw	RAC	0.09	1.02	0.09	0.74	0.07	3.50	0.32	0.69	0.06	1.37	0.12
VR 0494	Radish roots, raw	RAC	0.01	3.96	0.04	2.86	0.03	3.30	0.03	2.67	0.03	5.34	0.05
VR 0589	Potato, raw (incl flour, incl frozen, incl starch, incl tapioca)	RAC	0.01	23.96	0.24	13.56	0.14	213.41	2.13	104.35	1.04	8.56	0.09
VS 0624	Celery	RAC	8.45	3.66	30.93	2.65	22.39	4.84	40.90	2.47	20.87	4.94	41.74
VS 0620	Artichoke globe, raw	RAC	1.2	0.10	0.12	NC	-	0.10	0.12	0.10	0.12	NC	-
GC 0654	Wheat, raw (incl bulgur, incl fermented beverages, incl germ, incl wholemeal bread, incl white flour products, incl white bread)	RAC	0.07	57.20	4.00	110.47	7.73	272.62	19.08	25.82	1.81	132.04	9.24
GC 0640	Barley, raw (incl malt extract, incl pot&pearled, incl flour & grits, incl beer, incl malt)	RAC	0.58	11.58	6.72	2.33	1.35	46.71	27.09	3.72	2.16	16.26	9.43
TN 0085	Tree nuts, raw (incl processed)	RAC	0.01	4.39	0.04	135.53	1.36	6.11	0.06	0.72	0.01	317.74	3.18
SO 0495	Rape seed, raw (incl oil)	RAC	0.02	0.19	0.00	0.10	0.00	12.07	0.24	0.10	0.00	NC	-
HH 0720	Herbs, raw (incl dried)	RAC	5.05	1.85	9.34	1.67	8.43	2.80	14.14	1.24	6.26	2.75	13.89
MO 0105	Edible offal (mammalian), raw	RAC	0.01	4.64	0.05	1.97	0.02	10.01	0.10	3.27	0.03	3.98	0.04
Total intake (ug/person)=				203.6		250.6		602.5		198.1		411.0	
Bodyweight per region (kg bw) =				60		60		60		60		60	
ADI (ug/person)=				1800		1800		1800		1800		1800	
%ADI=				11.3%		13.9%		33.5%		11.0%		22.8%	
Rounded %ADI=				10%		10%		30%		10%		20%	

DICAMBA (240)				International Estimated Daily Intake (IEDI)				ADI = 0 - 0.3 mg/kg bw							
Codex Code	Commodity description	Expr as	STMR mg/kg	Diets as g/person/day				Intake as ug/person/day							
				G01 diet	G01 intake	G02 diet	G02 intake	G03 diet	G03 intake	G04 diet	G04 intake	G05 diet	G05 intake	G06 diet	G06 intake
VD 0541	Soya bean, dry, raw (incl flour, incl paste, incl sauce, excl curd, excl oil)	RAC	0.054	0.63	0.03	1.09	0.06	0.40	0.02	1.40	0.08	1.68	0.09	0.48	0.03
-	Soya curd (i.e. tofu)	PP	0.0034	NC	-	NC	-	NC	-	NC	-	NC	-	NC	-
OR 0541	Soya oil, refined	PP	0.0032	12.99	0.04	10.43	0.03	3.63	0.01	13.10	0.04	10.70	0.03	13.10	0.04
VS 0621	Asparagus, raw	RAC	0.87	0.10	0.09	0.10	0.09	0.10	0.09	0.10	0.09	0.10	0.09	0.21	0.18
GC 0654	Wheat, raw (incl bulgur, incl fermented beverages, incl germ, incl wholemeal bread, excl white flour products, excl white bread)	RAC	0.26	0.10	0.03	1.13	0.29	0.10	0.03	0.10	0.03	0.74	0.19	0.10	0.03
CP 1212	Wheat, wholemeal bread	PP	0.26	0.10	0.03	0.10	0.03	0.10	0.03	0.10	0.03	0.10	0.03	0.10	0.03
CP 1211	Wheat, white bread	PP	0.26	0.25	0.07	0.63	0.16	0.12	0.03	0.43	0.11	1.39	0.36	0.22	0.06
CF 1211	Wheat, white flour	PP	0.02	299.27	5.99	263.32	5.27	27.93	0.56	214.18	4.28	133.47	2.67	340.03	6.80
GC 0640	Barley, raw (incl malt extract, incl pot&pearled, incl flour & grits, incl beer, incl malt)	RAC	1.7	19.91	33.85	31.16	52.97	5.04	8.57	3.10	5.27	9.77	16.61	4.31	7.33
GC 0651	Sorghum, raw (incl flour, incl beer) (i.e. Chicken corn, Dari seed, Durra, Feterita)	RAC	2	4.34	8.68	0.10	0.20	16.25	32.50	15.82	31.64	10.97	21.94	2.92	5.84
GC 0645	Maize, raw (incl glucose & dextrose & isoglucose, incl flour, incl beer, incl germ, incl starch, excl oil)	RAC	0.02	28.85	0.58	43.93	0.88	108.66	2.17	46.94	0.94	59.87	1.20	73.58	1.47
OR 0645	Maize oil	PP	0.00058	0.96	0.00	0.85	0.00	0.29	0.00	5.42	0.00	0.42	0.00	2.10	0.00
GS 0659	Sugar cane, raw	RAC	0.095	38.16	3.63	NC	-	12.58	1.20	0.34	0.03	17.79	1.69	42.78	4.06
-	Sugar cane, molasses	PP	3.4	NC	-	NC	-	NC	-	NC	-	0.10	0.34	NC	-
-	Sugar cane, sugar (incl non-centrifugal sugar, incl refined sugar and maltose)	PP	0.05	61.52	3.08	86.27	4.31	18.80	0.94	80.02	4.00	66.39	3.32	56.32	2.82
OR 0691	Cotton seed oil, edible	PP	0.055	3.22	0.18	1.54	0.08	1.01	0.06	0.74	0.04	1.12	0.06	2.93	0.16
MM 0095	MEAT FROM MAMMALS other than marine mammals, raw (incl prepared meat)	RAC	0.01	31.20	0.31	72.44	0.72	20.88	0.21	47.98	0.48	33.08	0.33	36.25	0.36
MF 0100	Mammalian fats, raw, excl milk fats (incl rendered fats)	RAC	0.023	3.29	0.08	6.14	0.14	0.82	0.02	1.57	0.04	2.23	0.05	1.07	0.02
MO 0105	Edible offal (mammalian), raw	RAC	0.16	4.79	0.77	9.68	1.55	2.97	0.48	5.49	0.88	3.84	0.61	5.03	0.80
ML 0106	Milks, raw or skimmed (incl dairy products)	RAC	0.021	289.65	6.08	485.88	10.20	26.92	0.57	239.03	5.02	199.91	4.20	180.53	3.79
PM 0110	Poultry meat, raw (incl prepared)	RAC	0.01	14.63	0.15	29.76	0.30	8.04	0.08	129.68	1.30	25.04	0.25	35.66	0.36

## DICAMBA (240)

## International Estimated Daily Intake (IEDI)

ADI = 0 - 0.3 mg/kg bw

Codex Code	Commodity description	Expr as	STMR mg/kg	Diets as g/person/day				Intake as ug/person/day							
				G01 diet	G01 intake	G02 diet	G02 intake	G03 diet	G03 intake	G04 diet	G04 intake	G05 diet	G05 intake	G06 diet	G06 intake
PF 0111	Poultry fat, raw (incl rendered)	RAC	0.01	0.10	0.00	0.10	0.00	NC	-	0.10	0.00	0.10	0.00	0.10	0.00
PO 0111	Poultry edible offal, raw (incl prepared)	RAC	0.01	0.12	0.00	0.12	0.00	0.11	0.00	5.37	0.05	0.24	0.00	0.10	0.00
PE 0112	Eggs, raw, (incl dried)	RAC	0.01	7.84	0.08	23.08	0.23	2.88	0.03	14.89	0.15	9.81	0.10	14.83	0.15
Total intake (ug/person)=				63.7		77.5		47.6		54.5		54.2		34.3	
Bodyweight per region (kg bw) =				60		60		60		60		60		60	
ADI (ug/person)=				18000		18000		18000		18000		18000		18000	
%ADI=				0.4%		0.4%		0.3%		0.3%		0.3%		0.2%	
Rounded %ADI=				0%		0%		0%		0%		0%		0%	

## DICAMBA (240)

## International Estimated Daily Intake (IEDI)

ADI = 0 - 0.3 mg/kg bw

Codex Code	Commodity description	Expr as	STMR mg/kg	Diets as g/person/day				Intake as ug/person/day							
				G07 diet	G07 intake	G08 diet	G08 intake	G09 diet	G09 intake	G10 diet	G10 intake	G11 diet	G11 intake	G12 diet	G12 intake
VD 0541	Soya bean, dry, raw (incl flour, incl paste, incl sauce, excl curd, excl oil)	RAC	0.054	0.47	0.03	0.77	0.04	8.17	0.44	6.84	0.37	0.10	0.01	6.06	0.33
-	Soya curd (i.e. tofu)	PP	0.0034	NC	-	NC	-	0.68	0.00	0.87	0.00	NC	-	NC	-
OR 0541	Soya oil, refined	PP	0.0032	19.06	0.06	21.06	0.07	5.94	0.02	33.78	0.11	40.05	0.13	13.39	0.04
VS 0621	Asparagus, raw	RAC	0.87	0.84	0.73	2.08	1.81	7.11	6.19	1.01	0.88	1.69	1.47	0.10	0.09
GC 0654	Wheat, raw (incl bulgur, incl fermented beverages, incl germ, incl wholemeal bread, excl white flour products, excl white bread)	RAC	0.26	1.00	0.26	0.11	0.03	0.10	0.03	0.84	0.22	0.10	0.03	0.10	0.03
CP 1212	Wheat, wholemeal bread	PP	0.26	0.10	0.03	0.10	0.03	0.10	0.03	0.10	0.03	0.10	0.03	0.10	0.03
CP 1211	Wheat, white bread	PP	0.26	1.30	0.34	0.46	0.12	0.10	0.03	0.22	0.06	2.44	0.63	0.77	0.20
CF 1211	Wheat, white flour	PP	0.02	182.77	3.66	187.54	3.75	103.82	2.08	180.42	3.61	164.00	3.28	118.84	2.38
GC 0640	Barley, raw (incl malt extract, incl pot&pearled, incl flour & grits, incl beer, incl malt)	RAC	1.7	36.18	61.51	53.45	90.87	9.39	15.96	35.25	59.93	46.68	79.36	15.92	27.06
GC 0651	Sorghum, raw (incl flour, incl beer) (i.e. Chicken corn, Dari seed, Durra, Feterita)	RAC	2	NC	-	NC	-	1.44	2.88	1.15	2.30	NC	-	7.12	14.24
GC 0645	Maize, raw (incl glucose & dextrose & isoglucose, incl flour, incl beer, incl germ, incl starch, excl oil)	RAC	0.02	17.61	0.35	25.71	0.51	25.89	0.52	36.98	0.74	5.49	0.11	64.23	1.28
OR 0645	Maize oil	PP	0.00058	0.90	0.00	0.47	0.00	0.15	0.00	3.01	0.00	1.86	0.00	0.36	0.00
GS 0659	Sugar cane, raw	RAC	0.095	NC	-	NC	-	4.27	0.41	0.10	0.01	NC	-	3.24	0.31
-	Sugar cane, molasses	PP	3.4	NC	-	NC	-	0.10	0.34	NC	-	NC	-	NC	-
-	Sugar cane, sugar (incl non-centrifugal sugar, incl refined sugar and maltose)	PP	0.05	92.24	4.61	95.72	4.79	24.12	1.21	77.39	3.87	117.73	5.89	100.67	5.03

DICAMBA (240)				International Estimated Daily Intake (IEDI)				ADI = 0 - 0.3 mg/kg bw							
Codex Code	Commodity description	Expr as	STMR mg/kg	Diets as g/person/day				Intake as ug/person/day							
				G07 diet	G07 intake	G08 diet	G08 intake	G09 diet	G09 intake	G10 diet	G10 intake	G11 diet	G11 intake	G12 diet	G12 intake
OR 0691	Cotton seed oil, edible	PP	0.055	1.68	0.09	0.66	0.04	1.13	0.06	1.18	0.06	0.89	0.05	0.37	0.02
MM 0095	MEAT FROM MAMMALS other than marine mammals, raw (incl prepared meat)	RAC	0.01	140.03	1.40	150.89	1.51	79.32	0.79	111.24	1.11	120.30	1.20	51.27	0.51
MF 0100	Mammalian fats, raw, excl milk fats (incl rendered fats)	RAC	0.023	6.44	0.15	15.51	0.36	3.79	0.09	8.29	0.19	18.44	0.42	8.00	0.18
MO 0105	Edible offal (mammalian), raw	RAC	0.16	15.17	2.43	5.19	0.83	6.30	1.01	6.78	1.08	3.32	0.53	3.17	0.51
ML 0106	Milks, raw or skimmed (incl dairy products)	RAC	0.021	388.92	8.17	335.88	7.05	49.15	1.03	331.25	6.96	468.56	9.84	245.45	5.15
PM 0110	Poultry meat, raw (incl prepared)	RAC	0.01	73.76	0.74	53.86	0.54	23.98	0.24	87.12	0.87	53.38	0.53	84.45	0.84
PF 0111	Poultry fat, raw (incl rendered)	RAC	0.01	0.10	0.00	0.10	0.00	NC	-	0.10	0.00	0.71	0.01	NC	-
PO 0111	Poultry edible offal, raw (incl prepared)	RAC	0.01	0.33	0.00	0.72	0.01	0.27	0.00	0.35	0.00	0.80	0.01	NC	-
PE 0112	Eggs, raw, (incl dried)	RAC	0.01	25.84	0.26	29.53	0.30	28.05	0.28	33.19	0.33	36.44	0.36	8.89	0.09
Total intake (ug/person)=				84.8				112.6				33.6			
Bodyweight per region (kg bw) =				60				60				55			
ADI (ug/person)=				18000				18000				16500			
%ADI=				0.5%				0.6%				0.2%			
Rounded %ADI=				0%				1%				0%			

DICAMBA (240)				International Estimated Daily Intake (IEDI)				ADI = 0 - 0.3 mg/kg bw							
Codex Code	Commodity description	Expr as	STMR mg/kg	Diets: g/person/day				Intake = daily intake: ug/person							
				G13 diet	G13 intake	G14 diet	G14 intake	G15 diet	G15 intake	G16 diet	G16 intake	G17 diet	G17 intake		
VD 0541	Soya bean, dry, raw (incl flour, incl paste, incl sauce, excl curd, excl oil)	RAC	0.054	2.89	0.16	0.21	0.01	0.48	0.03	3.16	0.17	0.26	0.01		
-	Soya curd (i.e. tofu)	PP	0.0034	NC	-	NC	-	NC	-	NC	-	NC	-		
OR 0541	Soya oil, refined	PP	0.0032	2.32	0.01	2.54	0.01	18.70	0.06	2.51	0.01	6.29	0.02		
VS 0621	Asparagus, raw	RAC	0.87	0.10	0.09	0.10	0.09	0.17	0.15	0.10	0.09	NC	-		
GC 0654	Wheat, raw (incl bulgur, incl fermented beverages, incl germ, incl wholemeal bread, excl white flour products, excl white bread)	RAC	0.26	0.10	0.03	0.10	0.03	0.10	0.03	0.10	0.03	0.97	0.25		
CP 1212	Wheat, wholemeal bread	PP	0.26	0.10	0.03	0.10	0.03	0.10	0.03	0.10	0.03	0.10	0.03		
CP 1211	Wheat, white bread	PP	0.26	0.43	0.11	0.41	0.11	1.56	0.41	0.11	0.03	0.10	0.03		
CF 1211	Wheat, white flour	PP	0.02	43.75	0.88	85.81	1.72	206.68	4.13	19.38	0.39	92.92	1.86		
GC 0640	Barley, raw (incl malt extract, incl pot&pearled, incl flour & grits, incl beer, incl malt)	RAC	1.7	11.58	19.69	2.33	3.96	46.71	79.41	3.72	6.32	16.26	27.64		



DICAMBA (240)				International Estimated Daily Intake (IEDI)				ADI = 0 - 0.3 mg/kg bw					
Codex Code	Commodity description	Expr as	STMR mg/kg	Diets: g/person/day				Intake = daily intake: ug/person					
				G13 diet	G13 intake	G14 diet	G14 intake	G15 diet	G15 intake	G16 diet	G16 intake	G17 diet	G17 intake
GC 0651	Sorghum, raw (incl flour, incl beer) (i.e. Chicken corn, Dari seed, Durra, Feterita)	RAC	2	89.16	178.32	2.02	4.04	NC	-	35.38	70.76	NC	-
GC 0645	Maize, raw (incl glucose & dextrose & isoglucose, incl flour, incl beer, incl germ, incl starch, excl oil)	RAC	0.02	116.33	2.33	10.45	0.21	37.65	0.75	76.60	1.53	34.44	0.69
OR 0645	Maize oil	PP	0.00058	0.33	0.00	0.10	0.00	0.81	0.00	0.10	0.00	NC	-
GS 0659	Sugar cane, raw	RAC	0.095	5.62	0.53	50.91	4.84	NC	-	11.04	1.05	0.10	0.01
-	Sugar cane, molasses	PP	3.4	NC	-	NC	-	NC	-	NC	-	NC	-
-	Sugar cane, sugar (incl non-centrifugal sugar, incl refined sugar and maltose)	PP	0.05	28.13	1.41	55.38	2.77	78.09	3.90	18.04	0.90	45.60	2.28
OR 0691	Cotton seed oil, edible	PP	0.055	1.28	0.07	0.10	0.01	0.45	0.02	0.42	0.02	0.15	0.01
MM 0095	MEAT FROM MAMMALS other than marine mammals, raw (incl prepared meat)	RAC	0.01	29.18	0.29	50.89	0.51	121.44	1.21	22.58	0.23	72.14	0.72
MF 0100	Mammalian fats, raw, excl milk fats (incl rendered fats)	RAC	0.023	1.05	0.02	1.14	0.03	18.69	0.43	0.94	0.02	3.12	0.07
MO 0105	Edible offal (mammalian), raw	RAC	0.16	4.64	0.74	1.97	0.32	10.01	1.60	3.27	0.52	3.98	0.64
ML 0106	Milks, raw or skimmed (incl dairy products)	RAC	0.021	108.75	2.28	70.31	1.48	436.11	9.16	61.55	1.29	79.09	1.66
PM 0110	Poultry meat, raw (incl prepared)	RAC	0.01	3.92	0.04	12.03	0.12	57.07	0.57	5.03	0.05	55.56	0.56
PF 0111	Poultry fat, raw (incl rendered)	RAC	0.01	NC	-	NC	-	0.32	0.00	NC	-	NC	-
PO 0111	Poultry edible offal, raw (incl prepared)	RAC	0.01	0.10	0.00	0.70	0.01	0.97	0.01	0.10	0.00	NC	-
PE 0112	Eggs, raw, (incl dried)	RAC	0.01	3.84	0.04	4.41	0.04	27.25	0.27	1.13	0.01	7.39	0.07
Total intake (ug/person)=				207.1				20.3				102.2	
Bodyweight per region (kg bw) =				60				60				60	
ADI (ug/person)=				18000				18000				18000	
%ADI=				1.2%				0.1%				0.6%	
Rounded %ADI=				1%				0%				1%	

**FENAZAQUIN (297)**

## International Estimated Daily Intake (IEDI)

ADI = 0 - 0.05 mg/kg bw

Codex Code	Commodity description	Expr as	STMR mg/kg	Diets as g/person/day				Intake as ug/person/day							
				G01 diet	G01 intake	G02 diet	G02 intake	G03 diet	G03 intake	G04 diet	G04 intake	G05 diet	G05 intake	G06 diet	G06 intake
FS 0013	Subgroup of Cherries, raw	RAC	0.56	0.92	0.52	9.15	5.12	0.10	0.06	0.61	0.34	0.10	0.06	6.64	3.72
TN 0085	Tree nuts raw, excl coconut commodities	RAC	0.01	2.33	0.02	2.07	0.02	0.39	0.00	3.75	0.04	0.93	0.01	6.38	0.06
DH 1100	Hops, dry	RAC	9	0.10	0.90	0.10	0.90	0.10	0.90	0.10	0.90	NC	-	0.10	0.90
MM 0095	MEAT FROM MAMMALS other than marine mammals, raw (incl prepared meat) -80% as muscle	RAC	0	24.96	0.00	57.95	0.00	16.70	0.00	38.38	0.00	26.46	0.00	29.00	0.00
MM 0095	MEAT FROM MAMMALS other than marine mammals, raw (incl prepared meat) - 20% as fat	RAC	0	6.24	0.00	14.49	0.00	4.18	0.00	9.60	0.00	6.62	0.00	7.25	0.00
MF 0100	Mammalian fats, raw, excl milk fats (incl rendered fats)	RAC	0	3.29	0.00	6.14	0.00	0.82	0.00	1.57	0.00	2.23	0.00	1.07	0.00
MO 0105	Edible offal (mammalian), raw	RAC	0	4.79	0.00	9.68	0.00	2.97	0.00	5.49	0.00	3.84	0.00	5.03	0.00
ML 0106	Milks, raw or skimmed (incl dairy products)	RAC	0	289.65	0.00	485.88	0.00	26.92	0.00	239.03	0.00	199.91	0.00	180.53	0.00
Total intake (ug/person)=				1.4				6.0				1.3			
Bodyweight per region (kg bw) =				60				60				60			
ADI (ug/person)=				3000				3000				3000			
% ADI=				0.0%				0.2%				0.0%			
Rounded % ADI=				0%				0%				0%			

**FENAZAQUIN (297)**

## International Estimated Daily Intake (IEDI)

ADI = 0 - 0.05 mg/kg bw

Codex Code	Commodity description	Expr as	STMR mg/kg	Diets as g/person/day				Intake as ug/person/day							
				G07 diet	G07 intake	G08 diet	G08 intake	G09 diet	G09 intake	G10 diet	G10 intake	G11 diet	G11 intake	G12 diet	G12 intake
FS 0013	Subgroup of Cherries, raw	RAC	0.56	1.40	0.78	4.21	2.36	0.10	0.06	2.93	1.64	1.50	0.84	NC	-
TN 0085	Tree nuts raw, excl coconut commodities	RAC	0.01	4.38	0.04	6.21	0.06	1.94	0.02	3.76	0.04	7.65	0.08	4.01	0.04
DH 1100	Hops, dry	RAC	9	NC	-	NC	-	0.10	0.90	0.10	0.90	NC	-	NC	-
MM 0095	MEAT FROM MAMMALS other than marine mammals, raw (incl prepared meat) -80% as muscle	RAC	0	112.02	0.00	120.71	0.00	63.46	0.00	88.99	0.00	96.24	0.00	41.02	0.00
MM 0095	MEAT FROM MAMMALS other than marine mammals, raw (incl prepared meat) - 20% as fat	RAC	0	28.01	0.00	30.18	0.00	15.86	0.00	22.25	0.00	24.06	0.00	10.25	0.00
MF 0100	Mammalian fats, raw, excl milk fats (incl rendered fats)	RAC	0	6.44	0.00	15.51	0.00	3.79	0.00	8.29	0.00	18.44	0.00	8.00	0.00

FENAZAQUIN (297)				International Estimated Daily Intake (IEDI)				ADI = 0 - 0.05 mg/kg bw							
Codex Code	Commodity description	Expr as	STMR mg/kg	Diets as g/person/day				Intake as ug/person/day							
				G07 diet	G07 intake	G08 diet	G08 intake	G09 diet	G09 intake	G10 diet	G10 intake	G11 diet	G11 intake	G12 diet	G12 intake
MO 0105	Edible offal (mammalian), raw	RAC	0	15.17	0.00	5.19	0.00	6.30	0.00	6.78	0.00	3.32	0.00	3.17	0.00
ML 0106	Milks, raw or skimmed (incl dairy products)	RAC	0	388.92	0.00	335.88	0.00	49.15	0.00	331.25	0.00	468.56	0.00	245.45	0.00
Total intake (ug/person)=				0.8		2.4		1.0		2.6		0.9		0.0	
Bodyweight per region (kg bw) =				60		60		55		60		60		60	
ADI (ug/person)=				3000		3000		2750		3000		3000		3000	
%ADI=				0.0%		0.1%		0.0%		0.1%		0.0%		0.0%	
Rounded %ADI=				0%		0%		0%		0%		0%		0%	

FENAZAQUIN (297)				International Estimated Daily Intake (IEDI)				ADI = 0 - 0.05 mg/kg bw							
Codex Code	Commodity description	Expr as	STMR mg/kg	Diets: g/person/day				Intake = daily intake: ug/person							
				G13 diet	G13 intake	G14 diet	G14 intake	G15 diet	G15 intake	G16 diet	G16 intake	G17 diet	G17 intake		
FS 0013	Subgroup of Cherries, raw	RAC	0.56	0.10	0.06	0.10	0.06	5.96	3.34	0.10	0.06	NC	-		
TN 0085	Tree nuts raw, excl coconut commodities	RAC	0.01	1.61	0.02	1.16	0.01	3.31	0.03	0.10	0.00	0.10	0.00		
DH 1100	Hops, dry	RAC	9	NC	-	NC	-	0.10	0.90	NC	-	NC	-		
MM 0095	MEAT FROM MAMMALS other than marine mammals, raw (incl prepared meat) -80% as muscle	RAC	0	23.34	0.00	40.71	0.00	97.15	0.00	18.06	0.00	57.71	0.00		
MM 0095	MEAT FROM MAMMALS other than marine mammals, raw (incl prepared meat) - 20% as fat	RAC	0	5.84	0.00	10.18	0.00	24.29	0.00	4.52	0.00	14.43	0.00		
MF 0100	Mammalian fats, raw, excl milk fats (incl rendered fats)	RAC	0	1.05	0.00	1.14	0.00	18.69	0.00	0.94	0.00	3.12	0.00		
MO 0105	Edible offal (mammalian), raw	RAC	0	4.64	0.00	1.97	0.00	10.01	0.00	3.27	0.00	3.98	0.00		
ML 0106	Milks, raw or skimmed (incl dairy products)	RAC	0	108.75	0.00	70.31	0.00	436.11	0.00	61.55	0.00	79.09	0.00		
Total intake (ug/person)=				0.1		0.1		4.3		0.1		0.0		0.0	
Bodyweight per region (kg bw) =				60		60		60		60		60		60	
ADI (ug/person)=				3000		3000		3000		3000		3000		3000	
%ADI=				0.0%		0.0%		0.1%		0.0%		0.0%		0.0%	
Rounded %ADI=				0%		0%		0%		0%		0%		0%	

FLONICAMID (282)				International Estimated Daily Intake (IEDI)				ADI = 0 - 0.07 mg/kg bw							
Codex Code	Commodity description	Expr as	STM <sup>R</sup> mg/kg	Diets as g/person/day				Intake as ug/person/day							
				G01 diet	G01 intake	G02 diet	G02 intake	G03 diet	G03 intake	G04 diet	G04 intake	G05 diet	G05 intake	G06 diet	G06 intake
JF 0001	Group of Citrus fruit, juice	PP	0.0023	1.30	0.00	2.37	0.01	0.22	0.00	13.88	0.03	0.75	0.00	2.63	0.01
FC 0002	Subgroup of Lemons and limes, raw (excl kumquat commodities)	RAC	0.22	2.42	0.53	2.15	0.47	0.43	0.09	10.74	2.36	6.59	1.45	14.06	3.09
FC 0004	Subgroup of Oranges, sweet, sour, raw	RAC	0.115	20.66	2.38	5.23	0.60	11.90	1.37	37.90	4.36	21.16	2.43	56.46	6.49
FC 0005	Subgroup of Pummelo and grapefruits, raw	RAC	0.0635	0.64	0.04	0.35	0.02	0.93	0.06	6.10	0.39	1.01	0.06	1.36	0.09
FP 0009	Group of Pome fruits, raw (incl. apple juice, incl apple cider)	RAC	0.13	19.79	2.57	38.25	4.97	17.96	2.33	32.56	4.23	8.08	1.05	64.45	8.38
FS 0013	Subgroup of Cherries, raw	RAC	0.28	0.92	0.26	9.15	2.56	0.10	0.03	0.61	0.17	0.10	0.03	6.64	1.86
FS 0014	Subgroup of Plums, raw	RAC	0.03	2.40	0.07	8.60	0.26	0.10	0.00	2.52	0.08	0.58	0.02	4.16	0.12
DF 0014	Plums, dried (prunes)	PP	0.04	0.10	0.00	0.10	0.00	0.10	0.00	0.18	0.01	0.10	0.00	0.10	0.00
FS 2001	Subgroup of peaches, raw (incl dried apricots)	RAC	0.14	8.01	1.12	5.87	0.82	0.18	0.03	8.19	1.15	1.64	0.23	22.46	3.14
FB 2009	Subgroup of Low growing berries, raw	RAC	0.37	0.71	0.26	2.02	0.75	0.10	0.04	1.39	0.51	0.37	0.14	2.53	0.94
VB 0042	Subgroup of Flowerhead Brassica, raw	RAC	0.358	2.54	0.91	0.49	0.18	0.10	0.04	3.57	1.28	7.79	2.79	3.12	1.12
VB 0402	Brussels sprouts, raw	RAC	0.358	0.63	0.23	6.41	2.29	0.13	0.05	1.03	0.37	NC	-	2.35	0.84
VB 0041	Cabbages, head, raw	RAC	0.025	2.73	0.07	27.92	0.70	0.55	0.01	4.47	0.11	4.27	0.11	10.25	0.26
VB 0467	Chinese cabbage, type pe-tsai, raw	RAC	0.358	0.45	0.16	4.56	1.63	0.10	0.04	0.73	0.26	NC	-	1.67	0.60
VC 0045	Group of Fruiting vegetables, cucurbits, raw	RAC	0.04	53.14	2.13	86.21	3.45	6.28	0.25	92.76	3.71	15.64	0.63	155.30	6.21
VO 0448	Tomato, raw (incl juice, incl canned, excl paste)	RAC	0.09	42.41	3.82	76.50	6.89	10.69	0.96	85.07	7.66	24.98	2.25	203.44	18.31
-	Tomato, paste (i.e. concentrated tomato sauce/puree)	PP	1.45	2.34	3.39	1.33	1.93	1.57	2.28	4.24	6.15	0.34	0.49	2.83	4.10
VO 0051	Subgroup of peppers, raw (incl dried chilipeppers, incl dried sweet peppers) (Capsicum spp. Only)	RAC	0.09	11.42	1.03	17.42	1.57	16.04	1.44	14.81	1.33	16.17	1.46	28.93	2.60
VO 2046	Subgroup of eggplants	RAC	0.09	5.58	0.50	4.31	0.39	0.89	0.08	9.31	0.84	13.64	1.23	20.12	1.81
VL 0483	Lettuce, leaf, raw	RAC	2.67	0.53	1.42	0.36	0.96	0.16	0.43	6.21	16.58	1.90	5.07	6.05	16.15
VL 0502	Spinach, raw	RAC	5.72	0.74	4.23	0.22	1.26	0.10	0.57	0.91	5.21	0.10	0.57	2.92	16.70
VL 0054	Subgroup of Leaves of Brassicaceae, raw	RAC	8.31	2.63	21.86	9.27	77.03	1.86	15.46	5.82	48.36	19.53	162.29	4.90	40.72
VL 0494	Radish leaves, raw	RAC	8.5	0.26	2.21	0.45	3.83	0.28	2.38	0.68	5.78	NC	-	0.33	2.81
VP 2060	Subgroup of beans with pods (all commodities within this group)	RAC	0.1055	0.68	0.07	NC	-	NC	-	0.39	0.04	0.22	0.02	0.49	0.05
VP 2062	Subgroup of succulent beans without pods (all commodities within this group)	RAC	0.077	5.07	0.39	1.02	0.08	0.49	0.04	1.78	0.14	1.19	0.09	8.57	0.66
VP 2063	Subgroup of succulent peas without pods	RAC	0.077	1.97	0.15	0.51	0.04	0.10	0.01	0.79	0.06	3.68	0.28	3.80	0.29
VD 2065	Subgroup of dry beans, raw (incl processed)	RAC	0.02	78.20	1.56	60.68	1.21	35.89	0.72	80.34	1.61	75.90	1.52	87.62	1.75
VD 2066	Subgroup of dry peas, raw	RAC	0.16	9.09	1.45	3.35	0.54	1.06	0.17	9.48	1.52	15.11	2.42	10.58	1.69
VR 0494	Radish roots, raw	RAC	0.1	2.31	0.23	4.09	0.41	2.53	0.25	6.15	0.62	5.88	0.59	2.97	0.30

**FLONICAMID (282)**

International Estimated Daily Intake (IEDI)

ADI = 0 - 0.07 mg/kg bw

Codex Code	Commodity description	Expr as	STMR mg/kg	Diets as g/person/day				Intake as ug/person/day							
				G01 diet	G01 intake	G02 diet	G02 intake	G03 diet	G03 intake	G04 diet	G04 intake	G05 diet	G05 intake	G06 diet	G06 intake
VR 0589	Potato, raw (incl flour, incl frozen, incl starch, incl tapioca)	RAC	0.01	59.74	0.60	316.14	3.16	9.78	0.10	60.26	0.60	54.12	0.54	119.82	1.20
VS 0624	Celery	RAC	0.45	2.14	0.96	3.79	1.71	2.35	1.06	5.69	2.56	0.10	0.05	2.75	1.24
GC 0654	Wheat, raw (incl bulgur, incl fermented beverages, incl germ, incl wholemeal bread, incl white flour products, incl white bread)	RAC	0.01	381.15	3.81	341.55	3.42	38.35	0.38	281.89	2.82	172.83	1.73	434.07	4.34
TN 0660	Almonds, nutmeat	RAC	0.01	1.38	0.01	0.10	0.00	0.10	0.00	1.00	0.01	0.10	0.00	0.81	0.01
TN 0672	Pecan nuts, nutmeat	RAC	0.01	0.10	0.00	0.10	0.00	0.10	0.00	0.14	0.00	0.10	0.00	0.13	0.00
SO 0495	Rape seed, raw	RAC	0.04	0.10	0.00	NC	-	NC	-	0.10	0.00	0.75	0.03	0.10	0.00
OR 0495	Rape seed oil, edible	PP	0.004	0.35	0.00	0.44	0.00	0.19	0.00	0.97	0.00	3.28	0.01	0.77	0.00
SO 0691	Cotton seed, raw (incl oil)	RAC	0.06	20.53	1.23	9.80	0.59	6.42	0.39	4.73	0.28	7.14	0.43	18.68	1.12
OR 0691	Cotton seed oil, edible	PP	0.02	3.22	0.06	1.54	0.03	1.01	0.02	0.74	0.01	1.12	0.02	2.93	0.06
HH 0738	Mints, raw	RAC	1.92	0.50	0.96	0.10	0.19	NC	-	NC	-	NC	-	NC	-
DH 1100	Hops, dry	RAC	1.98	0.10	0.20	0.10	0.20	0.10	0.20	0.10	0.20	NC	-	0.10	0.20
MM 0095	MEAT FROM MAMMALS other than marine mammals, raw (incl prepared meat) -80% as muscle	RAC	0.06	24.96	1.50	57.95	3.48	16.70	1.00	38.38	2.30	26.46	1.59	29.00	1.74
MM 0095	MEAT FROM MAMMALS other than marine mammals, raw (incl prepared meat) - 20% as fat	RAC	0.02	6.24	0.12	14.49	0.29	4.18	0.08	9.60	0.19	6.62	0.13	7.25	0.15
MF 0100	Mammalian fats, raw, excl milk fats (incl rendered fats)	RAC	0.02	3.29	0.07	6.14	0.12	0.82	0.02	1.57	0.03	2.23	0.04	1.07	0.02
MO 0105	Edible offal (mammalian), raw	RAC	0.1	4.79	0.48	9.68	0.97	2.97	0.30	5.49	0.55	3.84	0.38	5.03	0.50
ML 0106	Milks, raw or skimmed (incl dairy products)	RAC	0.04	289.65	11.59	485.88	19.44	26.92	1.08	239.03	9.56	199.91	8.00	180.53	7.22
PM 0110	Poultry meat, raw (incl prepared)	RAC	0.02	14.63	0.29	29.76	0.60	8.04	0.16	129.68	2.59	25.04	0.50	35.66	0.71
PF 0111	Poultry fat, raw (incl rendered)	RAC	0.02	0.10	0.00	0.10	0.00	NC	-	0.10	0.00	0.10	0.00	0.10	0.00
PO 0111	Poultry edible offal, raw (incl prepared)	RAC	0.02	0.12	0.00	0.12	0.00	0.11	0.00	5.37	0.11	0.24	0.00	0.10	0.00
PE 0112	Eggs, raw, (incl dried)	RAC	0.02	7.84	0.16	23.08	0.46	2.88	0.06	14.89	0.30	9.81	0.20	14.83	0.30

Total intake (ug/person)=	75.1	149.5	34.0	137.0	200.9	159.9
Bodyweight per region (kg bw) =	60	60	60	60	60	60
ADI (ug/person)=	4200	4200	4200	4200	4200	4200
%ADI=	1.8%	3.6%	0.8%	3.3%	4.8%	3.8%
Rounded %ADI=	2%	4%	1%	3%	5%	4%

FLONICAMID (282)				International Estimated Daily Intake (IEDI)				ADI = 0 - 0.07 mg/kg bw							
Codex Code	Commodity description	Expr as	STMR mg/kg	Diets as g/person/day				Intake as ug/person/day							
				G07 diet	G07 intake	G08 diet	G08 intake	G09 diet	G09 intake	G10 diet	G10 intake	G11 diet	G11 intake	G12 diet	G12 intake
JF 0001	Group of Citrus fruit, juice	PP	0.0023	36.84	0.08	3.75	0.01	0.30	0.00	21.62	0.05	21.82	0.05	46.67	0.11
FC 0002	Subgroup of Lemons and limes, raw (excl kumquat commodities)	RAC	0.22	3.78	0.83	8.84	1.94	0.92	0.20	6.71	1.48	4.09	0.90	4.57	1.01
FC 0004	Subgroup of Oranges, sweet, sour, raw	RAC	0.115	15.68	1.80	24.00	2.76	6.80	0.78	29.09	3.35	15.39	1.77	160.47	18.45
FC 0005	Subgroup of Pummelo and grapefruits, raw	RAC	0.0635	2.19	0.14	1.24	0.08	0.60	0.04	3.44	0.22	4.60	0.29	299.96	19.05
FP 0009	Group of Pome fruits, raw (incl. apple juice, incl apple cider)	RAC	0.13	71.38	9.28	81.73	10.62	42.91	5.58	58.89	7.66	103.85	13.50	12.48	1.62
FS 0013	Subgroup of Cherries, raw	RAC	0.28	1.40	0.39	4.21	1.18	0.10	0.03	2.93	0.82	1.50	0.42	NC	-
FS 0014	Subgroup of Plums, raw	RAC	0.03	3.75	0.11	3.33	0.10	5.94	0.18	2.64	0.08	2.50	0.08	0.10	0.00
DF 0014	Plums, dried (prunes)	PP	0.04	0.61	0.02	0.35	0.01	0.10	0.00	0.35	0.01	0.49	0.02	0.13	0.01
FS 2001	Subgroup of peaches, raw (incl dried apricots)	RAC	0.14	13.03	1.82	16.29	2.28	8.29	1.16	12.95	1.81	5.35	0.75	0.10	0.01
FB 2009	Subgroup of Low growing berries, raw	RAC	0.37	4.55	1.68	5.66	2.09	0.10	0.04	7.85	2.90	5.86	2.17	0.10	0.04
VB 0042	Subgroup of Flowerhead Brassica, raw	RAC	0.358	9.50	3.40	6.77	2.42	NC	-	3.21	1.15	9.36	3.35	0.75	0.27
VB 0402	Brussels sprouts, raw	RAC	0.358	2.24	0.80	2.67	0.96	6.23	2.23	0.32	0.11	4.19	1.50	2.58	0.92
VB 0041	Cabbages, head, raw	RAC	0.025	8.97	0.22	27.12	0.68	1.44	0.04	24.96	0.62	4.55	0.11	11.23	0.28
VB 0467	Chinese cabbage, type pe-tsai, raw	RAC	0.358	NC	-	NC	-	17.39	6.23	9.44	3.38	NC	-	1.83	0.66
VC 0045	Group of Fruiting vegetables, cucurbits, raw	RAC	0.04	27.81	1.11	41.93	1.68	123.30	4.93	49.47	1.98	15.95	0.64	35.99	1.44
VO 0448	Tomato, raw (incl juice, incl canned, excl paste)	RAC	0.09	44.88	4.04	55.49	4.99	35.44	3.19	75.65	6.81	27.00	2.43	9.61	0.86
-	Tomato, paste (i.e. concentrated tomato sauce/puree)	PP	1.45	4.96	7.19	3.20	4.64	0.15	0.22	1.61	2.33	6.88	9.98	0.52	0.75
VO 0051	Subgroup of peppers, raw (incl dried chilipeppers, incl dried sweet peppers) (Capsicum spp. Only)	RAC	0.09	7.18	0.65	16.99	1.53	21.59	1.94	11.87	1.07	10.05	0.90	5.57	0.50
VO 2046	Subgroup of eggplants	RAC	0.09	1.01	0.09	1.69	0.15	21.37	1.92	3.00	0.27	1.40	0.13	NC	-
VL 0483	Lettuce, leaf, raw	RAC	2.67	14.50	38.72	11.76	31.40	13.14	35.08	19.50	52.07	4.81	12.84	2.23	5.95
VL 0502	Spinach, raw	RAC	5.72	2.20	12.58	1.76	10.07	13.38	76.53	2.94	16.82	5.53	31.63	0.10	0.57
VL 0054	Subgroup of Leaves of Brassicaceae, raw	RAC	8.31	0.10	0.83	NC	-	26.78	222.54	5.00	41.55	0.58	4.82	5.68	47.20
VL 0494	Radish leaves, raw	RAC	8.5	NC	-	NC	-	NC	-	3.78	32.13	NC	-	0.48	4.08
VP 2060	Subgroup of beans with pods (all commodities within this group)	RAC	0.1055	5.07	0.53	0.83	0.09	0.17	0.02	3.70	0.39	NC	-	NC	-
VP 2062	Subgroup of succulent beans without pods (all commodities within this group)	RAC	0.077	2.42	0.19	6.09	0.47	4.33	0.33	2.09	0.16	18.99	1.46	0.17	0.01

## FLONICAMID (282)

## International Estimated Daily Intake (IEDI)

ADI = 0 - 0.07 mg/kg bw

Codex Code	Commodity description	Expr as	STMR mg/kg	Diets as g/person/day				Intake as ug/person/day							
				G07 diet	G07 intake	G08 diet	G08 intake	G09 diet	G09 intake	G10 diet	G10 intake	G11 diet	G11 intake	G12 diet	G12 intake
VP 2063	Subgroup of succulent peas without pods	RAC	0.077	10.72	0.83	1.99	0.15	2.72	0.21	4.26	0.33	4.23	0.33	NC	-
VD 2065	Subgroup of dry beans, raw (incl processed)	RAC	0.02	107.87	2.16	119.29	2.39	45.91	0.92	201.31	4.03	224.04	4.48	104.90	2.10
VD 2066	Subgroup of dry peas, raw	RAC	0.16	5.01	0.80	3.76	0.60	1.82	0.29	3.44	0.55	3.49	0.56	5.15	0.82
VR 0494	Radish roots, raw	RAC	0.1	3.83	0.38	11.99	1.20	NC	-	5.26	0.53	2.19	0.22	4.37	0.44
VR 0589	Potato, raw (incl flour, incl frozen, incl starch, incl tapioca)	RAC	0.01	225.03	2.25	234.24	2.34	71.48	0.71	177.55	1.78	234.55	2.35	37.71	0.38
VS 0624	Celery	RAC	0.45	7.68	3.46	2.85	1.28	NC	-	3.34	1.50	16.83	7.57	4.04	1.82
GC 0654	Wheat, raw (incl bulgur, incl fermented beverages, incl germ, incl wholemeal bread, incl white flour products, incl white bread)	RAC	0.01	253.07	2.53	244.73	2.45	134.44	1.34	235.10	2.35	216.39	2.16	167.40	1.67
TN 0660	Almonds, nutmeat	RAC	0.01	0.81	0.01	2.21	0.02	0.10	0.00	1.02	0.01	1.47	0.01	NC	-
TN 0672	Pecan nuts, nutmeat	RAC	0.01	0.38	0.00	NC	-	NC	-	0.27	0.00	NC	-	0.26	0.00
SO 0495	Rape seed, raw	RAC	0.04	NC	-	NC	-	0.10	0.00	NC	-	NC	-	NC	-
OR 0495	Rape seed oil, edible	PP	0.004	12.52	0.05	7.63	0.03	3.00	0.01	6.01	0.02	NC	-	NC	-
SO 0691	Cotton seed, raw (incl oil)	RAC	0.06	10.71	0.64	4.23	0.25	7.19	0.43	7.54	0.45	5.66	0.34	2.38	0.14
OR 0691	Cotton seed oil, edible	PP	0.02	1.68	0.03	0.66	0.01	1.13	0.02	1.18	0.02	0.89	0.02	0.37	0.01
HH 0738	Mints, raw	RAC	1.92	NC	-	NC	-	NC	-	NC	-	NC	-	NC	-
DH 1100	Hops, dry	RAC	1.98	NC	-	NC	-	0.10	0.20	0.10	0.20	NC	-	NC	-
MM 0095	MEAT FROM MAMMALS other than marine mammals, raw (incl prepared meat) -80% as muscle	RAC	0.06	112.02	6.72	120.71	7.24	63.46	3.81	88.99	5.34	96.24	5.77	41.02	2.46
MM 0095	MEAT FROM MAMMALS other than marine mammals, raw (incl prepared meat) - 20% as fat	RAC	0.02	28.01	0.56	30.18	0.60	15.86	0.32	22.25	0.44	24.06	0.48	10.25	0.21
MF 0100	Mammalian fats, raw, excl milk fats (incl rendered fats)	RAC	0.02	6.44	0.13	15.51	0.31	3.79	0.08	8.29	0.17	18.44	0.37	8.00	0.16
MO 0105	Edible offal (mammalian), raw	RAC	0.1	15.17	1.52	5.19	0.52	6.30	0.63	6.78	0.68	3.32	0.33	3.17	0.32
ML 0106	Milks, raw or skimmed (incl dairy products)	RAC	0.04	388.92	15.56	335.88	13.44	49.15	1.97	331.25	13.25	468.56	18.74	245.45	9.82
PM 0110	Poultry meat, raw (incl prepared)	RAC	0.02	73.76	1.48	53.86	1.08	23.98	0.48	87.12	1.74	53.38	1.07	84.45	1.69
PF 0111	Poultry fat, raw (incl rendered)	RAC	0.02	0.10	0.00	0.10	0.00	NC	-	0.10	0.00	0.71	0.01	NC	-
PO 0111	Poultry edible offal, raw (incl prepared)	RAC	0.02	0.33	0.01	0.72	0.01	0.27	0.01	0.35	0.01	0.80	0.02	NC	-
PE 0112	Eggs, raw, (incl dried)	RAC	0.02	25.84	0.52	29.53	0.59	28.05	0.56	33.19	0.66	36.44	0.73	8.89	0.18

FLONICAMID (282)			International Estimated Daily Intake (IEDI)				ADI = 0 - 0.07 mg/kg bw								
Codex Code	Commodity description	Expr as	STMR mg/kg	Diets as g/person/day				Intake as ug/person/day							
				G07 diet	G07 intake	G08 diet	G08 intake	G09 diet	G09 intake	G10 diet	G10 intake	G11 diet	G11 intake	G12 diet	G12 intake
	Total intake (ug/person)=				126.2		114.7		375.2		213.3		135.3		126.0
	Bodyweight per region (kg bw) =				60		60		55		60		60		60
	ADI (ug/person)=				4200		4200		3850		4200		4200		4200
	%ADI=				3.0%		2.7%		9.7%		5.1%		3.2%		3.0%
	Rounded %ADI=				3%		3%		10%		5%		3%		3%



## FLONICAMID (282)

## International Estimated Daily Intake (IEDI)

ADI = 0 - 0.07 mg/kg bw

Codex Code	Commodity description	Expr as	STMR mg/kg	Diets: g/person/day				Intake = daily intake: ug/person					
				G13 diet	G13 intake	G14 diet	G14 intake	G15 diet	G15 intake	G16 diet	G16 intake	G17 diet	G17 intake
JF 0001	Group of Citrus fruit, juice	PP	0.0023	0.11	0.00	0.29	0.00	13.55	0.03	0.14	0.00	0.33	0.00
FC 0002	Subgroup of Lemons and limes, raw (excl kumquat commodities)	RAC	0.22	0.61	0.13	0.73	0.16	4.01	0.88	0.10	0.02	NC	-
FC 0004	Subgroup of Oranges, sweet, sour, raw	RAC	0.115	1.18	0.14	1.11	0.13	14.28	1.64	0.10	0.01	1.08	0.12
FC 0005	Subgroup of Pummelo and grapefruits, raw	RAC	0.0635	0.63	0.04	0.10	0.01	1.58	0.10	0.10	0.01	NC	-
FP 0009	Group of Pome fruits, raw (incl. apple juice, incl apple cider)	RAC	0.13	68.89	8.96	11.06	1.44	80.62	10.48	189.82	24.68	19.56	2.54
FS 0013	Subgroup of Cherries, raw	RAC	0.28	0.10	0.03	0.10	0.03	5.96	1.67	0.10	0.03	NC	-
FS 0014	Subgroup of Plums, raw	RAC	0.03	0.10	0.00	0.10	0.00	15.56	0.47	0.10	0.00	NC	-
DF 0014	Plums, dried (prunes)	PP	0.04	0.10	0.00	0.10	0.00	0.37	0.01	0.10	0.00	NC	-
FS 2001	Subgroup of peaches, raw (incl dried apricots)	RAC	0.14	0.10	0.01	0.10	0.01	10.76	1.51	0.10	0.01	NC	-
FB 2009	Subgroup of Low growing berries, raw	RAC	0.37	0.10	0.04	0.10	0.04	3.37	1.25	0.10	0.04	0.10	0.04
VB 0042	Subgroup of Flowerhead Brassica, raw	RAC	0.358	0.10	0.04	0.10	0.04	4.86	1.74	0.10	0.04	NC	-
VB 0402	Brussels sprouts, raw	RAC	0.358	0.88	0.32	0.69	0.25	2.89	1.03	0.10	0.04	NC	-
VB 0041	Cabbages, head, raw	RAC	0.025	3.82	0.10	2.99	0.07	49.16	1.23	0.10	0.00	NC	-
VB 0467	Chinese cabbage, type pe-tsai, raw	RAC	0.358	0.62	0.22	0.49	0.18	NC	-	0.10	0.04	NC	-
VC 0045	Group of Fruiting vegetables, cucurbits, raw	RAC	0.04	5.96	0.24	9.74	0.39	51.82	2.07	13.61	0.54	0.10	0.00
VO 0448	Tomato, raw (incl juice, incl canned, excl paste)	RAC	0.09	13.17	1.19	4.92	0.44	62.69	5.64	1.04	0.09	0.11	0.01
-	Tomato, paste (i.e. concentrated tomato sauce/puree)	PP	1.45	0.58	0.84	0.22	0.32	2.21	3.20	0.24	0.35	3.10	4.50
VO 0051	Subgroup of peppers, raw (incl dried chilepeppers, incl dried sweet peppers) (Capsicum spp. Only)	RAC	0.09	13.04	1.17	23.05	2.07	33.61	3.02	1.78	0.16	NC	-
VO 2046	Subgroup of eggplants	RAC	0.09	1.31	0.12	8.26	0.74	3.95	0.36	0.10	0.01	NC	-
VL 0483	Lettuce, leaf, raw	RAC	2.67	0.29	0.77	0.10	0.27	6.71	17.92	0.10	0.27	NC	-
VL 0502	Spinach, raw	RAC	5.72	0.17	0.97	0.10	0.57	0.81	4.63	0.10	0.57	NC	-
VL 0054	Subgroup of Leaves of Brassicaceae, raw	RAC	8.31	3.58	29.75	2.64	21.94	NC	-	1.83	15.21	3.65	30.33
VL 0494	Radish leaves, raw	RAC	8.5	0.44	3.74	0.32	2.72	NC	-	0.30	2.55	0.59	5.02
VP 2060	Subgroup of beans with pods (all commodities within this group)	RAC	0.1055	NC	-	NC	-	NC	-	NC	-	NC	-
VP 2062	Subgroup of succulent beans without pods (all commodities within this group)	RAC	0.077	0.37	0.03	3.14	0.24	4.88	0.38	0.10	0.01	NC	-
VP 2063	Subgroup of succulent peas without pods	RAC	0.077	0.21	0.02	0.10	0.01	5.51	0.42	0.10	0.01	NC	-
VD 2065	Subgroup of dry beans, raw (incl processed)	RAC	0.02	41.93	0.84	19.42	0.39	108.31	2.17	66.18	1.32	42.47	0.85
VD 2066	Subgroup of dry peas, raw	RAC	0.16	4.43	0.71	11.36	1.82	4.22	0.68	9.36	1.50	1.21	0.19
VR 0494	Radish roots, raw	RAC	0.1	3.96	0.40	2.86	0.29	3.30	0.33	2.67	0.27	5.34	0.53
VR 0589	Potato, raw (incl flour, incl frozen, incl starch, incl tapioca)	RAC	0.01	23.96	0.24	13.56	0.14	213.41	2.13	104.35	1.04	8.56	0.09

FLONICAMID (282)				International Estimated Daily Intake (IEDI)				ADI = 0 - 0.07 mg/kg bw					
Codex Code	Commodity description	Expr as	STMR mg/kg	Diets: g/person/day				Intake = daily intake: ug/person					
				G13 diet	G13 intake	G14 diet	G14 intake	G15 diet	G15 intake	G16 diet	G16 intake	G17 diet	G17 intake
VS 0624	Celery	RAC	0.45	3.66	1.65	2.65	1.19	4.84	2.18	2.47	1.11	4.94	2.22
GC 0654	Wheat, raw (incl bulgur, incl fermented beverages, incl germ, incl wholemeal bread, incl white flour products, incl white bread)	RAC	0.01	57.20	0.57	110.47	1.10	272.62	2.73	25.82	0.26	132.04	1.32
TN 0660	Almonds, nutmeat	RAC	0.01	0.10	0.00	0.10	0.00	0.61	0.01	0.10	0.00	NC	-
TN 0672	Pecan nuts, nutmeat	RAC	0.01	0.15	0.00	0.22	0.00	0.31	0.00	0.10	0.00	0.10	0.00
SO 0495	Rape seed, raw	RAC	0.04	NC	-	0.10	0.00	NC	-	NC	-	NC	-
OR 0495	Rape seed oil, edible	PP	0.004	0.10	0.00	0.10	0.00	4.62	0.02	0.10	0.00	NC	-
SO 0691	Cotton seed, raw (incl oil)	RAC	0.06	8.14	0.49	0.32	0.02	2.84	0.17	2.69	0.16	0.97	0.06
OR 0691	Cotton seed oil, edible	PP	0.02	1.28	0.03	0.10	0.00	0.45	0.01	0.42	0.01	0.15	0.00
HH 0738	Mints, raw	RAC	1.92	NC	-	NC	-	NC	-	NC	-	NC	-
DH 1100	Hops, dry	RAC	1.98	NC	-	NC	-	0.10	0.20	NC	-	NC	-
MM 0095	MEAT FROM MAMMALS other than marine mammals, raw (incl prepared meat) -80% as muscle	RAC	0.06	23.34	1.40	40.71	2.44	97.15	5.83	18.06	1.08	57.71	3.46
MM 0095	MEAT FROM MAMMALS other than marine mammals, raw (incl prepared meat) - 20% as fat	RAC	0.02	5.84	0.12	10.18	0.20	24.29	0.49	4.52	0.09	14.43	0.29
MF 0100	Mammalian fats, raw, excl milk fats (incl rendered fats)	RAC	0.02	1.05	0.02	1.14	0.02	18.69	0.37	0.94	0.02	3.12	0.06
MO 0105	Edible offal (mammalian), raw	RAC	0.1	4.64	0.46	1.97	0.20	10.01	1.00	3.27	0.33	3.98	0.40
ML 0106	Milks, raw or skimmed (incl dairy products)	RAC	0.04	108.75	4.35	70.31	2.81	436.11	17.44	61.55	2.46	79.09	3.16
PM 0110	Poultry meat, raw (incl prepared)	RAC	0.02	3.92	0.08	12.03	0.24	57.07	1.14	5.03	0.10	55.56	1.11
PF 0111	Poultry fat, raw (incl rendered)	RAC	0.02	NC	-	NC	-	0.32	0.01	NC	-	NC	-
PO 0111	Poultry edible offal, raw (incl prepared)	RAC	0.02	0.10	0.00	0.70	0.01	0.97	0.02	0.10	0.00	NC	-
PE 0112	Eggs, raw, (incl dried)	RAC	0.02	3.84	0.08	4.41	0.09	27.25	0.55	1.13	0.02	7.39	0.15
Total intake (ug/person)=				60.3				43.0				97.2	
Bodyweight per region (kg bw) =				60				60				60	
ADI (ug/person)=				4200				4200				4200	
%ADI=				1.4%				1.0%				2.3%	
Rounded %ADI=				1%				1%				1%	

**FLUPYRADIFURONE (285)**

International Estimated Daily Intake (IEDI)

ADI = 0 - 0.08 mg/kg bw

Codex Code	Commodity description	Expr as	STMR mg/kg	Diets as g/person/day				Intake as ug/person/day							
				G01 diet	G01 intake	G02 diet	G02 intake	G03 diet	G03 intake	G04 diet	G04 intake	G05 diet	G05 intake	G06 diet	G06 intake
JF 0001	Group of Citrus fruit, juice	PP	0.068	1.30	0.09	2.37	0.16	0.22	0.01	13.88	0.94	0.75	0.05	2.63	0.18
FC 0002	Subgroup of Lemons and limes, raw (incl kumquat commodities)	RAC	0.32	4.78	1.53	2.42	0.77	3.61	1.16	25.18	8.06	8.25	2.64	15.77	5.05
FC 0003	Subgroup of Mandarins, raw	RAC	0.44	6.18	2.72	3.66	1.61	0.25	0.11	6.82	3.00	3.49	1.54	19.38	8.53
FC 0004	Subgroup of Oranges, sweet, sour, raw	RAC	0.505	20.66	10.43	5.23	2.64	11.90	6.01	37.90	19.14	21.16	10.69	56.46	28.51
FC 0005	Subgroup of Pummelo and grapefruits, raw	RAC	0.21	0.64	0.13	0.35	0.07	0.93	0.20	6.10	1.28	1.01	0.21	1.36	0.29
FP 0009	Group of Pome fruits, raw (incl apple cider, excl apple juice)	RAC	0.45	19.35	8.71	34.06	15.33	17.87	8.04	25.74	11.58	7.69	3.46	56.85	25.58
JF 0226	Apple juice, single strength (incl. concentrated)	PP	0.14	0.32	0.04	3.07	0.43	0.10	0.01	5.00	0.70	0.29	0.04	5.57	0.78
FS 0013	Subgroup of Cherries, raw	RAC	0.555	0.92	0.51	9.15	5.08	0.10	0.06	0.61	0.34	0.10	0.06	6.64	3.69
FS 0014	Subgroup of Plums, raw	RAC	0.23	2.40	0.55	8.60	1.98	0.10	0.02	2.52	0.58	0.58	0.13	4.16	0.96
DF 0014	Plums, dried (prunes)	PP	1.15	0.10	0.12	0.10	0.12	0.10	0.12	0.18	0.21	0.10	0.12	0.10	0.12
FS 0001	Subgroup of peaches, raw (incl dried apricots)	RAC	0.39	8.01	3.12	5.87	2.29	0.18	0.07	8.19	3.19	1.64	0.64	22.46	8.76
FB 2005	Subgroup of Caneberries, raw	RAC	1.4	0.42	0.59	1.05	1.47	0.10	0.14	0.10	0.14	0.10	0.14	1.24	1.74
FB 2006	Subgroup of Bush berries, raw (including processed)	RAC	0.725	0.53	0.38	1.31	0.95	0.40	0.29	1.66	1.20	0.10	0.07	0.99	0.72
FB 0269	Grapes, raw (i.e. table grapes)	RAC	0.63	12.68	7.99	9.12	5.75	0.10	0.06	16.88	10.63	3.70	2.33	54.42	34.28
DF 0269	Grapes, dried (= currants, raisins and sultanas) (from table-grapes)	PP	1.6	0.51	0.82	0.51	0.82	0.10	0.16	1.27	2.03	0.12	0.19	2.07	3.31
JF 0269	Grape juice (from wine grapes)	PP	0.43	0.14	0.06	0.29	0.12	0.10	0.04	0.30	0.13	0.24	0.10	0.10	0.04
-	Graps must (from wine-grapes)	PP	0.44	0.33	0.15	0.13	0.06	0.10	0.04	0.10	0.04	0.10	0.04	0.10	0.04
-	Grape wine (incl vermouths) (from wine-grapes)	PP	0.26	0.67	0.17	12.53	3.26	2.01	0.52	1.21	0.31	3.53	0.92	4.01	1.04
FB 0275	Strawberry, raw	RAC	1.505	0.70	1.05	2.01	3.03	0.10	0.15	1.36	2.05	0.37	0.56	2.53	3.81
FI 0326	Avocado, raw	RAC	0.28	0.13	0.04	0.10	0.03	2.05	0.57	2.54	0.71	2.34	0.66	0.12	0.03
VA 0035	Group of Bulb vegetables, raw	RAC	0.18	34.29	6.17	46.37	8.35	4.73	0.85	41.36	7.44	21.08	3.79	52.54	9.46
VB 0404	Cauliflower, raw	RAC	0.48	1.65	0.79	0.32	0.15	0.10	0.05	2.33	1.12	4.79	2.30	2.03	0.97
VB 0041	Cabbages, head, raw	RAC	0.79	2.73	2.16	27.92	22.06	0.55	0.43	4.47	3.53	4.27	3.37	10.25	8.10
VC 0431	Squash, Summer (Courgette, Marrow, Zucchini, Zucchini), raw	RAC	0.655	0.78	0.51	2.06	1.35	0.30	0.20	1.61	1.05	2.25	1.47	2.36	1.55
VC 0046	Melons, except watermelon, raw (Cantaloupe)	RAC	0.57	8.90	5.07	8.64	4.92	0.80	0.46	17.90	10.20	2.80	1.60	29.17	16.63
VO 0448	Tomato, raw (incl canned, excl juice, excl paste)	RAC	0.71	42.04	29.85	76.13	54.05	10.69	7.59	84.59	60.06	24.92	17.69	203.27	144.32
-	Tomato, paste (i.e. concentrated tomato sauce/puree)	PP	1.3	2.34	3.04	1.33	1.73	1.57	2.04	4.24	5.51	0.34	0.44	2.83	3.68
JF 0448	Tomato, juice (single strength, incl concentrated)	PP	0.48	0.29	0.14	0.29	0.14	0.10	0.05	0.38	0.18	0.10	0.05	0.14	0.07

**FLUPYRADIFURONE (285)**

International Estimated Daily Intake (IEDI)

ADI = 0 - 0.08 mg/kg bw

Codex Code	Commodity description	Expr as	STMR mg/kg	Diets as g/person/day				Intake as ug/person/day							
				G01 diet	G01 intake	G02 diet	G02 intake	G03 diet	G03 intake	G04 diet	G04 intake	G05 diet	G05 intake	G06 diet	G06 intake
VO 0051	Subgroup of peppers, raw (incl dried sweet peppers, excl dried chili peppers) (Capsicum spp. Only)	RAC	0.68	8.48	5.77	13.74	9.34	10.13	6.89	11.29	7.68	9.52	6.47	26.36	17.92
-	Peppers, chili, dried	PP	6.8	0.42	2.86	0.53	3.60	0.84	5.71	0.50	3.40	0.95	6.46	0.37	2.52
VL 0483	Lettuce, leaf, raw	RAC	2.6	0.53	1.38	0.36	0.94	0.16	0.42	6.21	16.15	1.90	4.94	6.05	15.73
VL 0502	Spinach, raw	RAC	8.5	0.74	6.29	0.22	1.87	0.10	0.85	0.91	7.74	0.10	0.85	2.92	24.82
VL 0485	Mustard greens, raw (i.e. Indian mustard, Amsoi, mustard cabbage)	RAC	12	0.10	1.20	0.31	3.72	0.10	1.20	0.10	1.20	0.47	5.64	0.11	1.32
VP 0061	Beans with pods (Phaseolus spp): (immature pods + succulent seeds)	RAC	2.63	0.68	1.79	NC	-	NC	-	0.39	1.03	0.22	0.58	0.49	1.29
014B	Peas with pods	-	2.68	-	-	-	-	-	-	-	-	-	-	-	-
VP 0062	Beans without pods: (Phaseolus spp.) (succulent seeds), raw	RAC	1.17	1.56	1.83	0.60	0.70	0.49	0.57	1.18	1.38	0.90	1.05	7.79	9.11
VP 0064	Peas without pods (Pisum spp) (succulent seeds)	RAC	2.78	1.97	5.48	0.51	1.42	0.10	0.28	0.79	2.20	3.68	10.23	3.80	10.56
VD 0071	Beans, dry, raw (Phaseolus spp)	RAC	3.22	2.39	7.70	1.61	5.18	10.47	33.71	1.84	5.92	12.90	41.54	7.44	23.96
VD 0523	Broad bean, dry, raw (incl horse-bean, field bean) (Vicia faba)	RAC	2.49	1.27	3.16	0.10	0.25	0.12	0.30	2.49	6.20	0.23	0.57	5.54	13.79
VD 0541	Soya bean, dry, raw (incl flour, incl paste, incl curd, incl sauce, excl oil)	RAC	3.44	0.63	2.17	1.09	3.75	0.40	1.38	1.40	4.82	1.68	5.78	0.48	1.65
OR 0541	Soya oil, refined	PP	0.13	12.99	1.69	10.43	1.36	3.63	0.47	13.10	1.70	10.70	1.39	13.10	1.70
-	Soya flour	PP	5.3	0.10	0.53	0.86	4.56	0.10	0.53	1.02	5.41	0.10	0.53	0.15	0.80
VD 0072	Peas (dry) (Pisum spp), raw	RAC	3.605	1.62	5.84	3.22	11.61	0.92	3.32	1.50	5.41	2.90	10.45	0.17	0.61
VD 0524	Chick-pea (dry) (Cicer spp), raw	RAC	2.49	5.34	13.30	0.13	0.32	0.10	0.25	4.69	11.68	7.24	18.03	5.52	13.74
VD 0533	Lentil (dry) (Lens spp), raw	RAC	2.49	2.12	5.28	0.10	0.25	0.10	0.25	3.21	7.99	1.60	3.98	4.90	12.20
VD 0537	Pigeon pea (dry) (Cajanus spp), raw	RAC	2.49	NC	-	NC	-	0.10	0.25	0.10	0.25	3.38	8.42	NC	-
VR 0075	Group of Root and tuber vegetables, raw (incl processed)	RAC	0.29	87.83	25.47	374.04	108.47	668.92	193.99	121.64	35.28	94.20	27.32	247.11	71.66
VS 0624	Celery	RAC	2.38	2.14	5.09	3.79	9.02	2.35	5.59	5.69	13.54	0.10	0.24	2.75	6.55
GC 0648	Quinoa, raw	RAC	1.315	NC	-	NC	-	NC	-	NC	-	0.10	0.13	NC	-
GC 0650	Rye, raw (incl flour)	RAC	1.315	0.13	0.17	19.38	25.48	0.10	0.13	0.12	0.16	0.10	0.13	2.15	2.83
GC 0653	Triticale, raw (incl flour)	RAC	1.315	NC	-	NC	-	NC	-	0.10	0.13	0.39	0.51	NC	-
GC 0654	Wheat, raw (incl bulgur, incl fermented beverages, excl germ, excl wholemeal bread, excl white flour products, excl white bread)	RAC	1.315	0.10	0.13	1.12	1.47	NC	-	0.10	0.13	0.56	0.74	NC	-
CF 1210	Wheat, germ	PP	1.64	NC	-	NC	-	0.10	0.16	0.10	0.16	0.14	0.23	0.10	0.16
CP 1212	Wheat, wholemeal bread	PP	1.05	0.10	0.11	0.10	0.11	0.10	0.11	0.10	0.11	0.10	0.11	0.10	0.11
CF 1211	Wheat, white flour	PP	0.59	299.27	176.57	263.32	155.36	27.93	16.48	214.18	126.37	133.47	78.75	340.03	200.62
-	Wheat, starch	PP	0.034	0.10	0.00	NC	-	0.10	0.00	0.10	0.00	0.13	0.00	0.10	0.00

**FLUPYRADIFURONE (285)**

International Estimated Daily Intake (IEDI)

ADI = 0 - 0.08 mg/kg bw

Codex Code	Commodity description	Expr as	STMR mg/kg	Diets as g/person/day				Intake as ug/person/day							
				G01 diet	G01 intake	G02 diet	G02 intake	G03 diet	G03 intake	G04 diet	G04 intake	G05 diet	G05 intake	G06 diet	G06 intake
-	Wheat, gluten	PP	0.53	0.10	0.05	0.10	0.05	0.10	0.05	0.27	0.14	0.10	0.05	0.10	0.05
GC 0640	Barley, raw (incl malt extract, incl flour & grits, excl pot&pearled, excl beer, excl malt)	RAC	1.315	7.91	10.40	0.64	0.84	0.15	0.20	0.18	0.24	1.21	1.59	0.41	0.54
-	Barley, pot&pearled	PP	0.16	7.12	1.14	7.34	1.17	0.10	0.02	0.10	0.02	0.67	0.11	0.20	0.03
-	Barley beer	PP	0.099	4.87	0.48	93.78	9.28	24.28	2.40	12.76	1.26	39.28	3.89	18.15	1.80
-	Barley Malt	PP	0.64	0.10	0.06	1.04	0.67	0.18	0.12	0.33	0.21	0.10	0.06	0.10	0.06
GC 0641	Buckwheat, raw (incl flour)	RAC	1.315	NC	-	0.40	0.53	0.10	0.13	0.10	0.13	0.10	0.13	0.10	0.13
GC 0647	Oats, raw (incl rolled)	RAC	1.315	0.10	0.13	7.05	9.27	0.10	0.13	1.71	2.25	0.96	1.26	0.10	0.13
GC 2089	Subgroup of Sorghum Grain and Millet	RAC	1.315	5.80	7.63	2.32	3.05	23.09	30.36	16.72	21.99	27.14	35.69	2.92	3.84
GC 0645	Maize, raw (incl glucose & dextrose & isoglucose, incl beer, excl flour, excl oil, excl germ, excl starch)	RAC	0.49	0.84	0.41	0.24	0.12	1.56	0.76	0.46	0.23	2.21	1.08	13.13	6.43
CF 1255	Maize, flour (white flour and wholemeal flour)	PP	0.44	22.72	10.00	35.61	15.67	87.27	38.40	34.92	15.36	46.71	20.55	49.12	21.61
-	Maize, germ	PP	0.51	0.10	0.05	NC	-	0.10	0.05	0.10	0.05	0.22	0.11	NC	-
-	Maize starch	PP	0.44	0.10	0.04	NC	-	0.10	0.04	2.29	1.01	0.10	0.04	0.11	0.05
OR 0645	Maize oil	PP	0.44	0.96	0.42	0.85	0.37	0.29	0.13	5.42	2.38	0.42	0.18	2.10	0.92
GC 0447	Sweet corn on the cob, raw (incl frozen kernels, incl canned kernels)	RAC	0.56	0.14	0.08	0.94	0.53	5.70	3.19	2.61	1.46	1.94	1.09	0.22	0.12
TN 0672	Pecan nuts, nutmeat	RAC	0.06	0.10	0.01	0.10	0.01	0.10	0.01	0.14	0.01	0.10	0.01	0.13	0.01
OR 0691	Cotton seed oil, edible	PP	0.079	3.22	0.25	1.54	0.12	1.01	0.08	0.74	0.06	1.12	0.09	2.93	0.23
SO 0697	Peanuts, nutmeat, raw	RAC	0.225	0.40	0.09	1.01	0.23	6.60	1.49	1.47	0.33	1.17	0.26	1.82	0.41
-	Peanuts, roasted	PP	0.17	0.10	0.02	0.19	0.03	0.10	0.02	1.05	0.18	0.10	0.02	0.10	0.02
OR 0697	Peanut oil, edible	PP	0.13	0.36	0.05	0.10	0.01	2.57	0.33	0.10	0.01	2.29	0.30	0.36	0.05
-	Peanut butter	PP	0.17	0.10	0.02	0.10	0.02	0.10	0.02	0.19	0.03	0.10	0.02	0.10	0.02
SB 0715	Cocoa beans, raw (incl roasted, incl powder, incl butter, incl paste, incl nes products)	RAC	0.071	0.72	0.05	4.20	0.30	0.60	0.04	4.21	0.30	0.42	0.03	0.78	0.06
DM 0715	Cocoa powder	PP	0.116	0.11	0.01	0.10	0.01	0.19	0.02	0.79	0.09	0.27	0.03	0.34	0.04
SB 0716	Coffee beans, raw (i.e. green coffee)	RAC	0.295	0.96	0.28	0.16	0.05	0.91	0.27	0.27	0.08	1.37	0.40	0.46	0.14
SM 0716	Coffee beans, roasted	PP	0.21	0.19	0.04	0.91	0.19	0.16	0.03	2.50	0.53	0.39	0.08	0.40	0.08
-	Coffee beans, instant coffee (incl essences and concentrates)	PP	0.94	0.10	0.09	0.94	0.88	0.10	0.09	0.70	0.66	0.10	0.09	0.29	0.27
DH 1100	Hops, dry	RAC	3.55	0.10	0.36	0.10	0.36	0.10	0.36	0.10	0.36	NC	-	0.10	0.36
MM 0095	MEAT FROM MAMMALS other than marine mammals, raw (incl prepared meat)	RAC	0.3	31.20	9.36	72.44	21.73	20.88	6.26	47.98	14.39	33.08	9.92	36.25	10.88
MF 0100	Mammalian fats, raw, excl milk fats (incl rendered fats)	RAC	0.15	3.29	0.49	6.14	0.92	0.82	0.12	1.57	0.24	2.23	0.33	1.07	0.16
MO 0105	Edible offal (mammalian), raw	RAC	0.87	4.79	4.17	9.68	8.42	2.97	2.58	5.49	4.78	3.84	3.34	5.03	4.38

**FLUPYRADIFURONE (285)**

International Estimated Daily Intake (IEDI)

ADI = 0 - 0.08 mg/kg bw

Codex Code	Commodity description	Expr as	STMR mg/kg	Diets as g/person/day				Intake as ug/person/day							
				G01 diet	G01 intake	G02 diet	G02 intake	G03 diet	G03 intake	G04 diet	G04 intake	G05 diet	G05 intake	G06 diet	G06 intake
ML 0106	Milks, raw or skimmed (incl dairy products)	RAC	0.11	289.65	31.86	485.88	53.45	26.92	2.96	239.03	26.29	199.91	21.99	180.53	19.86
PM 0110	Poultry meat, raw (incl prepared)	RAC	0.27	14.63	3.95	29.76	8.04	8.04	2.17	129.68	35.01	25.04	6.76	35.66	9.63
PF 0111	Poultry fat, raw (incl rendered)	RAC	0.11	0.10	0.01	0.10	0.01	NC	-	0.10	0.01	0.10	0.01	0.10	0.01
PO 0111	Poultry edible offal, raw (incl prepared)	RAC	0.39	0.12	0.05	0.12	0.05	0.11	0.04	5.37	2.09	0.24	0.09	0.10	0.04
PE 0112	Eggs, raw, (incl dried)	RAC	0.15	7.84	1.18	23.08	3.46	2.88	0.43	14.89	2.23	9.81	1.47	14.83	2.22
Total intake (ug/person)=				444.0				627.3				395.6			
Bodyweight per region (kg bw) =				60				60				60			
ADI (ug/person)=				4800				4800				4800			
%ADI=				9.2%				13.1%				8.2%			
Rounded %ADI=				9%				10%				8%			

**FLUPYRADIFURONE (285)**

International Estimated Daily Intake (IEDI)

ADI = 0 - 0.08 mg/kg bw

Codex Code	Commodity description	Expr as	STMR mg/kg	Diets as g/person/day				Intake as ug/person/day							
				G07 diet	G07 intake	G08 diet	G08 intake	G09 diet	G09 intake	G10 diet	G10 intake	G11 diet	G11 intake	G12 diet	G12 intake
JF 0001	Group of Citrus fruit, juice	PP	0.068	36.84	2.51	3.75	0.26	0.30	0.02	21.62	1.47	21.82	1.48	46.67	3.17
FC 0002	Subgroup of Lemons and limes, raw (incl kumquat commodities)	RAC	0.32	8.45	2.70	14.69	4.70	2.88	0.92	8.16	2.61	21.14	6.76	5.93	1.90
FC 0003	Subgroup of Mandarins, raw	RAC	0.44	12.34	5.43	14.99	6.60	16.08	7.08	10.76	4.73	9.94	4.37	NC	-
FC 0004	Subgroup of Oranges, sweet, sour, raw	RAC	0.505	15.68	7.92	24.00	12.12	6.80	3.43	29.09	14.69	15.39	7.77	160.47	81.04
FC 0005	Subgroup of Pummelo and grapefruits, raw	RAC	0.21	2.19	0.46	1.24	0.26	0.60	0.13	3.44	0.72	4.60	0.97	299.96	62.99
FP 0009	Group of Pome fruits, raw (incl apple cider, excl apple juice)	RAC	0.45	51.09	22.99	65.40	29.43	42.71	19.22	45.29	20.38	62.51	28.13	7.74	3.48
JF 0226	Apple juice, single strength (incl. concentrated)	PP	0.14	14.88	2.08	11.98	1.68	0.15	0.02	9.98	1.40	30.32	4.24	3.47	0.49
FS 0013	Subgroup of Cherries, raw	RAC	0.555	1.40	0.78	4.21	2.34	0.10	0.06	2.93	1.63	1.50	0.83	NC	-
FS 0014	Subgroup of Plums, raw	RAC	0.23	3.75	0.86	3.33	0.77	5.94	1.37	2.64	0.61	2.50	0.58	0.10	0.02
DF 0014	Plums, dried (prunes)	PP	1.15	0.61	0.70	0.35	0.40	0.10	0.12	0.35	0.40	0.49	0.56	0.13	0.15
FS 2001	Subgroup of peaches, raw (incl dried apricots)	RAC	0.39	13.03	5.08	16.29	6.35	8.29	3.23	12.95	5.05	5.35	2.09	0.10	0.04
FB 2005	Subgroup of Caneberries, raw	RAC	1.4	0.56	0.78	1.43	2.00	0.14	0.20	1.23	1.72	1.14	1.60	0.10	0.14
FB 2006	Subgroup of Bush berries, raw (including processed)	RAC	0.725	1.31	0.95	5.50	3.99	0.10	0.07	2.57	1.86	0.82	0.59	2.15	1.56
FB 0269	Grapes, raw (i.e. table grapes)	RAC	0.63	6.33	3.99	11.22	7.07	5.21	3.28	9.38	5.91	4.55	2.87	0.78	0.49
DF 0269	Grapes, dried (= currants, raisins and sultanas) (from table-grapes)	PP	1.6	3.09	4.94	1.51	2.42	0.10	0.16	1.38	2.21	4.26	6.82	0.42	0.67
JF 0269	Grape juice (from wine grapes)	PP	0.43	0.56	0.24	1.96	0.84	0.10	0.04	2.24	0.96	2.27	0.98	0.34	0.15

## FLUPYRADIFURONE (285)

## International Estimated Daily Intake (IEDI)

ADI = 0 - 0.08 mg/kg bw

Codex Code	Commodity description	Expr as	STMR mg/kg	Diets as g/person/day				Intake as ug/person/day							
				G07 diet	G07 intake	G08 diet	G08 intake	G09 diet	G09 intake	G10 diet	G10 intake	G11 diet	G11 intake	G12 diet	G12 intake
-	Graps must (from wine-grapes)	PP	0.44	0.16	0.07	0.10	0.04	0.10	0.04	0.12	0.05	0.11	0.05	NC	-
-	Grape wine (incl vermouths) (from wine-grapes)	PP	0.26	88.93	23.12	62.41	16.23	1.84	0.48	25.07	6.52	61.17	15.90	5.84	1.52
FB 0275	Strawberry, raw	RAC	1.505	4.49	6.76	5.66	8.52	0.10	0.15	6.63	9.98	5.75	8.65	0.10	0.15
FI 0326	Avocado, raw	RAC	0.28	2.65	0.74	0.87	0.24	0.46	0.13	1.64	0.46	1.30	0.36	0.96	0.27
VA 0035	Group of Bulb vegetables, raw	RAC	0.18	26.24	4.72	36.47	6.56	39.29	7.07	39.37	7.09	29.12	5.24	20.21	3.64
VB 0404	Cauliflower, raw	RAC	0.48	5.27	2.53	5.01	2.40	NC	-	2.70	1.30	5.57	2.67	0.49	0.24
VB 0041	Cabbages, head, raw	RAC	0.79	8.97	7.09	27.12	21.42	1.44	1.14	24.96	19.72	4.55	3.59	11.23	8.87
VC 0431	Squash, Summer (Courgette, Marrow, Zucchini, Zucchini), raw	RAC	0.655	NC	-	NC	-	5.48	3.59	NC	-	NC	-	1.03	0.67
VC 0046	Melons, except watermelon, raw (Cantaloupe)	RAC	0.57	9.20	5.24	11.95	6.81	14.63	8.34	8.99	5.12	7.86	4.48	2.46	1.40
VO 0448	Tomato, raw (incl canned, excl juice, excl paste)	RAC	0.71	43.88	31.15	55.41	39.34	35.38	25.12	74.88	53.16	26.50	18.82	9.51	6.75
-	Tomato, paste (i.e. concentrated tomato sauce/puree)	PP	1.3	4.96	6.45	3.20	4.16	0.15	0.20	1.61	2.09	6.88	8.94	0.52	0.68
JF 0448	Tomato, juice (single strength, incl concentrated)	PP	0.48	0.80	0.38	0.10	0.05	0.10	0.05	0.61	0.29	0.40	0.19	0.10	0.05
VO 0051	Subgroup of peppers, raw (incl dried sweet peppers, excl dried chilipeppers) (Capsicum spp. Only)	RAC	0.68	6.39	4.35	15.53	10.56	19.09	12.98	10.36	7.04	8.29	5.64	4.53	3.08
-	Peppers, chili, dried	PP	6.8	0.11	0.75	0.21	1.43	0.36	2.45	0.21	1.43	0.25	1.70	0.15	1.02
VL 0483	Lettuce, leaf, raw	RAC	2.6	14.50	37.70	11.76	30.58	13.14	34.16	19.50	50.70	4.81	12.51	2.23	5.80
VL 0502	Spinach, raw	RAC	8.5	2.20	18.70	1.76	14.96	13.38	113.73	2.94	24.99	5.53	47.01	0.10	0.85
VL 0485	Mustard greens, raw (i.e. Indian mustard, Amsoi, mustard cabbage)	RAC	12	NC	-	NC	-	NC	-	NC	-	NC	-	0.13	1.56
VP 0061	Beans with pods (Phaseolus spp): (immature pods + succulent seeds)	RAC	2.63	5.07	13.33	0.83	2.18	0.17	0.45	3.70	9.73	NC	-	NC	-
014B	Peas with pods	-	2.68	-	-	-	-	-	-	-	-	-	-	-	-
VP 0062	Beans without pods: (Phaseolus spp.) (succulent seeds), raw	RAC	1.17	2.21	2.59	5.25	6.14	4.17	4.88	1.61	1.88	16.95	19.83	0.17	0.20
VP 0064	Peas without pods (Pisum spp) (succulent seeds)	RAC	2.78	10.72	29.80	1.99	5.53	2.72	7.56	4.26	11.84	4.23	11.76	NC	-
VD 0071	Beans, dry, raw (Phaseolus spp)	RAC	3.22	1.51	4.86	1.50	4.83	1.90	6.12	5.11	16.45	1.36	4.38	23.43	75.44
VD 0523	Broad bean, dry, raw (incl horse-bean, field bean) (Vicia faba)	RAC	2.49	0.10	0.25	0.10	0.25	1.16	2.89	0.40	1.00	NC	-	0.10	0.25
VD 0541	Soya bean, dry, raw (incl flour, incl paste, incl curd, incl sauce, excl oil)	RAC	3.44	0.47	1.62	0.77	2.65	9.12	31.37	8.05	27.69	0.10	0.34	6.06	20.85
OR 0541	Soya oil, refined	PP	0.13	19.06	2.48	21.06	2.74	5.94	0.77	33.78	4.39	40.05	5.21	13.39	1.74
-	Soya flour	PP	5.3	0.22	1.17	0.27	1.43	0.29	1.54	0.17	0.90	NC	-	NC	-

FLUPYRADIFURONE (285)				International Estimated Daily Intake (IEDI)				ADI = 0 - 0.08 mg/kg bw							
Codex Code	Commodity description	Expr as	STMR mg/kg	Diets as g/person/day				Intake as ug/person/day							
				G07 diet	G07 intake	G08 diet	G08 intake	G09 diet	G09 intake	G10 diet	G10 intake	G11 diet	G11 intake	G12 diet	G12 intake
VD 0072	Peas (dry) (Pisum spp), raw	RAC	3.605	3.80	13.70	1.25	4.51	0.90	3.24	2.33	8.40	2.70	9.73	3.83	13.81
VD 0524	Chick-pea (dry) (Cicer spp), raw	RAC	2.49	0.27	0.67	1.33	3.31	0.32	0.80	0.15	0.37	0.10	0.25	0.10	0.25
VD 0533	Lentil (dry) (Lens spp), raw	RAC	2.49	0.95	2.37	1.18	2.94	0.40	1.00	0.96	2.39	0.71	1.77	1.28	3.19
VD 0537	Pigeon pea (dry) (Cajanus spp), raw	RAC	2.49	NC	-	NC	-	0.20	0.50	NC	-	NC	-	NC	-
VR 0075	Group of Root and tuber vegetables, raw (incl processed)	RAC	0.29	290.31	84.19	300.35	87.10	214.25	62.13	242.72	70.39	348.67	101.11	137.52	39.88
VS 0624	Celery	RAC	2.38	7.68	18.28	2.85	6.78	NC	-	3.34	7.95	16.83	40.06	4.04	9.62
GC 0648	Quinoa, raw	RAC	1.315	NC	-	NC	-	NC	-	NC	-	NC	-	NC	-
GC 0650	Rye, raw (incl flour)	RAC	1.315	3.21	4.22	35.38	46.52	0.21	0.28	6.50	8.55	1.49	1.96	NC	-
GC 0653	Triticale, raw (incl flour)	RAC	1.315	0.10	0.13	0.17	0.22	0.29	0.38	0.10	0.13	NC	-	NC	-
GC 0654	Wheat, raw (incl bulgur, incl fermented beverages, excl germ, excl wholemeal bread, excl white flour products, excl white bread)	RAC	1.315	NC	-	NC	-	0.10	0.13	0.83	1.09	NC	-	NC	-
CF 1210	Wheat, germ	PP	1.64	0.97	1.59	0.10	0.16	0.10	0.16	0.10	0.16	NC	-	0.10	0.16
CP 1212	Wheat, wholemeal bread	PP	1.05	0.10	0.11	0.10	0.11	0.10	0.11	0.10	0.11	0.10	0.11	0.10	0.11
CF 1211	Wheat, white flour	PP	0.59	182.77	107.83	187.54	110.65	103.82	61.25	180.42	106.45	164.00	96.76	118.84	70.12
-	Wheat, starch	PP	0.034	NC	-	NC	-	0.10	0.00	0.31	0.01	NC	-	NC	-
-	Wheat, gluten	PP	0.53	0.68	0.36	NC	-	0.10	0.05	0.10	0.05	NC	-	NC	-
GC 0640	Barley, raw (incl malt extract, incl flour & grits, excl pot&pearled, excl beer, excl malt)	RAC	1.315	0.82	1.08	0.21	0.28	0.10	0.13	1.53	2.01	1.58	2.08	0.63	0.83
-	Barley, pot&pearled	PP	0.16	0.57	0.09	2.56	0.41	0.33	0.05	0.56	0.09	0.36	0.06	NC	-
-	Barley beer	PP	0.099	180.21	17.84	259.46	25.69	45.91	4.55	172.36	17.06	234.42	23.21	65.30	6.46
-	Barley Malt	PP	0.64	0.19	0.12	NC	-	0.10	0.06	0.10	0.06	NC	-	2.14	1.37
GC 0641	Buckwheat, raw (incl flour)	RAC	1.315	0.10	0.13	0.79	1.04	0.18	0.24	0.35	0.46	NC	-	NC	-
GC 0647	Oats, raw (incl rolled)	RAC	1.315	7.50	9.86	6.26	8.23	0.15	0.20	4.87	6.40	3.16	4.16	2.98	3.92
GC 2089	Subgroup of Sorghum Grain and Millet	RAC	1.315	0.10	0.13	0.16	0.21	3.19	4.19	1.85	2.43	NC	-	7.12	9.36
GC 0645	Maize, raw (incl glucose & dextrose & isoglucose, incl beer, excl flour, excl oil, excl germ, excl starch)	RAC	0.49	0.10	0.05	9.93	4.87	1.40	0.69	10.26	5.03	0.33	0.16	0.10	0.05
CF 1255	Maize, flour (white flour and wholemeal flour)	PP	0.44	14.27	6.28	12.86	5.66	19.71	8.67	12.55	5.52	4.21	1.85	52.30	23.01
-	Maize, germ	PP	0.51	0.10	0.05	NC	-	NC	-	0.10	0.05	NC	-	0.10	0.05
-	Maize starch	PP	0.44	NC	-	NC	-	0.19	0.08	7.13	3.14	NC	-	NC	-
OR 0645	Maize oil	PP	0.44	0.90	0.40	0.47	0.21	0.15	0.07	3.01	1.32	1.86	0.82	0.36	0.16



## FLUPYRADIFURONE (285)

## International Estimated Daily Intake (IEDI)

ADI = 0 - 0.08 mg/kg bw

Codex Code	Commodity description	Expr as	STMR mg/kg	Diets as g/person/day				Intake as ug/person/day							
				G07 diet	G07 intake	G08 diet	G08 intake	G09 diet	G09 intake	G10 diet	G10 intake	G11 diet	G11 intake	G12 diet	G12 intake
GC 0447	Sweet corn on the cob, raw (incl frozen kernels, incl canned kernels)	RAC	0.56	11.43	6.40	3.71	2.08	0.74	0.41	13.63	7.63	3.07	1.72	1.50	0.84
TN 0672	Pecan nuts, nutmeat	RAC	0.06	0.38	0.02	NC	-	NC	-	0.27	0.02	NC	-	0.26	0.02
OR 0691	Cotton seed oil, edible	PP	0.079	1.68	0.13	0.66	0.05	1.13	0.09	1.18	0.09	0.89	0.07	0.37	0.03
SO 0697	Peanuts, nutmeat, raw	RAC	0.225	2.39	0.54	2.05	0.46	5.25	1.18	4.39	0.99	1.30	0.29	0.62	0.14
-	Peanuts, roasted	PP	0.17	0.80	0.14	0.14	0.02	0.11	0.02	0.43	0.07	0.10	0.02	0.45	0.08
OR 0697	Peanut oil, edible	PP	0.13	1.02	0.13	0.23	0.03	1.81	0.24	0.42	0.05	5.23	0.68	0.10	0.01
-	Peanut butter	PP	0.17	0.10	0.02	0.10	0.02	0.10	0.02	0.10	0.02	0.15	0.03	0.75	0.13
SB 0715	Cocoa beans, raw (incl roasted, incl powder, incl butter, incl paste, incl nes products)	RAC	0.071	7.54	0.54	5.59	0.40	0.29	0.02	4.14	0.29	1.27	0.09	5.29	0.38
DM 0715	Cocoa powder	PP	0.116	2.78	0.32	1.82	0.21	0.20	0.02	1.66	0.19	0.10	0.01	0.74	0.09
SB 0716	Coffee beans, raw (i.e. green coffee)	RAC	0.295	0.60	0.18	NC	-	0.62	0.18	1.71	0.50	NC	-	3.51	1.04
SM 0716	Coffee beans, roasted	PP	0.21	7.02	1.47	9.75	2.05	0.10	0.02	5.09	1.07	13.38	2.81	0.77	0.16
-	Coffee beans, instant coffee (incl essences and concentrates)	PP	0.94	0.75	0.71	0.30	0.28	0.10	0.09	0.67	0.63	2.43	2.28	1.43	1.34
DH 1100	Hops, dry	RAC	3.55	NC	-	NC	-	0.10	0.36	0.10	0.36	NC	-	NC	-
MM 0095	MEAT FROM MAMMALS other than marine mammals, raw (incl prepared meat)	RAC	0.3	140.03	42.01	150.89	45.27	79.32	23.80	111.24	33.37	120.30	36.09	51.27	15.38
MF 0100	Mammalian fats, raw, excl milk fats (incl rendered fats)	RAC	0.15	6.44	0.97	15.51	2.33	3.79	0.57	8.29	1.24	18.44	2.77	8.00	1.20
MO 0105	Edible offal (mammalian), raw	RAC	0.87	15.17	13.20	5.19	4.52	6.30	5.48	6.78	5.90	3.32	2.89	3.17	2.76
ML 0106	Milks, raw or skimmed (incl dairy products)	RAC	0.11	388.92	42.78	335.88	36.95	49.15	5.41	331.25	36.44	468.56	51.54	245.45	27.00
PM 0110	Poultry meat, raw (incl prepared)	RAC	0.27	73.76	19.92	53.86	14.54	23.98	6.47	87.12	23.52	53.38	14.41	84.45	22.80
PF 0111	Poultry fat, raw (incl rendered)	RAC	0.11	0.10	0.01	0.10	0.01	NC	-	0.10	0.01	0.71	0.08	NC	-
PO 0111	Poultry edible offal, raw (incl prepared)	RAC	0.39	0.33	0.13	0.72	0.28	0.27	0.11	0.35	0.14	0.80	0.31	NC	-
PE 0112	Eggs, raw, (incl dried)	RAC	0.15	25.84	3.88	29.53	4.43	28.05	4.21	33.19	4.98	36.44	5.47	8.89	1.33
Total intake (ug/person)=				671.2				693.1				502.2			
Bodyweight per region (kg bw) =				60				60				55			
ADI (ug/person)=				4800				4800				4400			
%ADI=				14.0%				14.4%				11.4%			
Rounded %ADI=				10%				10%				10%			

FLUPYRADIFURONE (285)				International Estimated Daily Intake (IEDI)				ADI = 0 - 0.08 mg/kg bw					
Codex Code	Commodity description	Expr as	STMR mg/kg	Diets: g/person/day				Intake = daily intake: ug/person					
				G13 diet	G13 intake	G14 diet	G14 intake	G15 diet	G15 intake	G16 diet	G16 intake	G17 diet	G17 intake
JF 0001	Group of Citrus fruit, juice	PP	0.068	0.11	0.01	0.29	0.02	13.55	0.92	0.14	0.01	0.33	0.02
FC 0002	Subgroup of Lemons and limes, raw (incl kumquat commodities)	RAC	0.32	18.96	6.07	0.97	0.31	5.79	1.85	0.10	0.03	3.35	1.07
FC 0003	Subgroup of Mandarins, raw	RAC	0.44	0.16	0.07	0.27	0.12	9.06	3.99	0.10	0.04	0.10	0.04
FC 0004	Subgroup of Oranges, sweet, sour, raw	RAC	0.505	1.18	0.60	1.11	0.56	14.28	7.21	0.10	0.05	1.08	0.55
FC 0005	Subgroup of Pummelo and grapefruits, raw	RAC	0.21	0.63	0.13	0.10	0.02	1.58	0.33	0.10	0.02	NC	-
FP 0009	Group of Pome fruits, raw (incl apple cider, excl apple juice)	RAC	0.45	68.85	30.98	10.93	4.92	70.82	31.87	189.78	85.40	19.56	8.80
JF 0226	Apple juice, single strength (incl. concentrated)	PP	0.14	0.10	0.01	0.10	0.01	7.19	1.01	0.10	0.01	NC	-
FS 0013	Subgroup of Cherries, raw	RAC	0.555	0.10	0.06	0.10	0.06	5.96	3.31	0.10	0.06	NC	-
FS 0014	Subgroup of Plums, raw	RAC	0.23	0.10	0.02	0.10	0.02	15.56	3.58	0.10	0.02	NC	-
DF 0014	Plums, dried (prunes)	PP	1.15	0.10	0.12	0.10	0.12	0.37	0.43	0.10	0.12	NC	-
FS 2001	Subgroup of peaches, raw (incl dried apricots)	RAC	0.39	0.10	0.04	0.10	0.04	10.76	4.20	0.10	0.04	NC	-
FB 2005	Subgroup of Caneberries, raw	RAC	1.4	0.10	0.14	7.30	10.22	2.29	3.21	0.10	0.14	NC	-
FB 2006	Subgroup of Bush berries, raw (including processed)	RAC	0.725	0.82	0.59	4.05	2.94	5.94	4.31	0.43	0.31	2.66	1.93
FB 0269	Grapes, raw (i.e. table grapes)	RAC	0.63	0.14	0.09	0.36	0.23	15.22	9.59	0.10	0.06	0.10	0.06
DF 0269	Grapes, dried (= currants, raisins and sultanas) (from table-grapes)	PP	1.6	0.10	0.16	0.13	0.21	1.06	1.70	0.10	0.16	0.10	0.16
JF 0269	Grape juice (from wine grapes)	PP	0.43	0.10	0.04	0.10	0.04	0.41	0.18	0.10	0.04	NC	-
-	Graps must (from wine-grapes)	PP	0.44	0.10	0.04	0.10	0.04	0.11	0.05	0.10	0.04	0.19	0.08
-	Grape wine (incl vermouths) (from wine-grapes)	PP	0.26	0.31	0.08	0.23	0.06	60.43	15.71	0.52	0.14	31.91	8.30
FB 0275	Strawberry, raw	RAC	1.505	0.10	0.15	0.10	0.15	3.35	5.04	0.10	0.15	0.10	0.15
FI 0326	Avocado, raw	RAC	0.28	1.12	0.31	0.10	0.03	0.84	0.24	0.10	0.03	6.60	1.85
VA 0035	Group of Bulb vegetables, raw	RAC	0.18	11.28	2.03	23.80	4.28	36.11	6.50	9.66	1.74	8.69	1.56
VB 0404	Cauliflower, raw	RAC	0.48	0.10	0.05	0.10	0.05	2.73	1.31	0.10	0.05	NC	-
VB 0041	Cabbages, head, raw	RAC	0.79	3.82	3.02	2.99	2.36	49.16	38.84	0.10	0.08	NC	-
VC 0431	Squash, Summer (Courgette, Marrow, Zucchini, Zucchini), raw	RAC	0.655	0.10	0.07	1.01	0.66	NC	-	1.91	1.25	NC	-
VC 0046	Melons, except watermelon, raw (Cantaloupe)	RAC	0.57	0.19	0.11	0.10	0.06	4.98	2.84	0.10	0.06	NC	-
VO 0448	Tomato, raw (incl canned, excl juice, excl paste)	RAC	0.71	13.10	9.30	4.90	3.48	62.16	44.13	1.04	0.74	0.10	0.07
-	Tomato, paste (i.e. concentrated tomato sauce/puree)	PP	1.3	0.58	0.75	0.22	0.29	2.21	2.87	0.24	0.31	3.10	4.03
JF 0448	Tomato, juice (single strength, incl concentrated)	PP	0.48	0.10	0.05	0.10	0.05	0.42	0.20	0.10	0.05	0.10	0.05
VO 0051	Subgroup of peppers, raw (incl dried sweet peppers, excl dried chilipeppers) (Capsicum spp. Only)	RAC	0.68	8.97	6.10	14.13	9.61	25.14	17.10	0.91	0.62	NC	-
-	Peppers, chili, dried	PP	6.8	0.58	3.94	1.27	8.64	1.21	8.23	0.12	0.82	NC	-

## FLUPYRADIFURONE (285)

## International Estimated Daily Intake (IEDI)

ADI = 0 - 0.08 mg/kg bw

Codex Code	Commodity description	Expr as	STMR mg/kg	Diets: g/person/day				Intake = daily intake: ug/person					
				G13 diet	G13 intake	G14 diet	G14 intake	G15 diet	G15 intake	G16 diet	G16 intake	G17 diet	G17 intake
VL 0483	Lettuce, leaf, raw	RAC	2.6	0.29	0.75	0.10	0.26	6.71	17.45	0.10	0.26	NC	-
VL 0502	Spinach, raw	RAC	8.5	0.17	1.45	0.10	0.85	0.81	6.89	0.10	0.85	NC	-
VL 0485	Mustard greens, raw (i.e. Indian mustard, Amsoi, mustard cabbage)	RAC	12	0.10	1.20	0.10	1.20	NC	-	0.10	1.20	NC	-
VP 0061	Beans with pods (Phaseolus spp): (immature pods + succulent seeds)	RAC	2.63	NC	-	NC	-	NC	-	NC	-	NC	-
014B	Peas with pods	-	2.68	-	-	-	-	-	-	-	-	-	-
VP 0062	Beans without pods: (Phaseolus spp.) (succulent seeds), raw	RAC	1.17	0.30	0.35	3.13	3.66	4.11	4.81	0.10	0.12	NC	-
VP 0064	Peas without pods (Pisum spp) (succulent seeds)	RAC	2.78	0.21	0.58	0.10	0.28	5.51	15.32	0.10	0.28	NC	-
VD 0071	Beans, dry, raw (Phaseolus spp)	RAC	3.22	7.11	22.89	2.33	7.50	3.76	12.11	44.70	143.93	3.27	10.53
VD 0523	Broad bean, dry, raw (incl horse-bean, field bean) (Vicia faba)	RAC	2.49	3.70	9.21	0.10	0.25	0.17	0.42	0.10	0.25	NC	-
VD 0541	Soya bean, dry, raw (incl flour, incl paste, incl curd, incl sauce, excl oil)	RAC	3.44	2.89	9.94	0.21	0.72	0.48	1.65	3.16	10.87	0.26	0.89
OR 0541	Soya oil, refined	PP	0.13	2.32	0.30	2.54	0.33	18.70	2.43	2.51	0.33	6.29	0.82
-	Soya flour	PP	5.3	0.11	0.58	0.10	0.53	0.10	0.53	0.10	0.53	0.10	0.53
VD 0072	Peas (dry) (Pisum spp), raw	RAC	3.605	1.53	5.52	2.52	9.08	3.52	12.69	3.56	12.83	0.74	2.67
VD 0524	Chick-pea (dry) (Cicer spp), raw	RAC	2.49	1.09	2.71	1.56	3.88	0.33	0.82	0.18	0.45	0.47	1.17
VD 0533	Lentil (dry) (Lens spp), raw	RAC	2.49	0.67	1.67	7.26	18.08	0.37	0.92	0.10	0.25	NC	-
VD 0537	Pigeon pea (dry) (Cajanus spp), raw	RAC	2.49	1.14	2.84	0.10	0.25	NC	-	5.53	13.77	NC	-
VR 0075	Group of Root and tuber vegetables, raw (incl processed)	RAC	0.29	282.25	81.85	232.11	67.31	281.91	81.75	620.21	179.86	459.96	133.39
VS 0624	Celery	RAC	2.38	3.66	8.71	2.65	6.31	4.84	11.52	2.47	5.88	4.94	11.76
GC 0648	Quinoa, raw	RAC	1.315	NC	-	NC	-	NC	-	NC	-	NC	-
GC 0650	Rye, raw (incl flour)	RAC	1.315	0.10	0.13	0.10	0.13	13.95	18.34	0.10	0.13	0.88	1.16
GC 0653	Triticale, raw (incl flour)	RAC	1.315	0.10	0.13	NC	-	NC	-	NC	-	NC	-
GC 0654	Wheat, raw (incl bulgur, incl fermented beverages, excl germ, excl wholemeal bread, excl white flour products, excl white bread)	RAC	1.315	0.10	0.13	NC	-	NC	-	NC	-	0.97	1.28
CF 1210	Wheat, germ	PP	1.64	0.10	0.16	0.10	0.16	0.10	0.16	0.10	0.16	NC	-
CP 1212	Wheat, wholemeal bread	PP	1.05	0.10	0.11	0.10	0.11	0.10	0.11	0.10	0.11	0.10	0.11
CF 1211	Wheat, white flour	PP	0.59	43.75	25.81	85.81	50.63	206.68	121.94	19.38	11.43	92.92	54.82
-	Wheat, starch	PP	0.034	0.10	0.00	0.10	0.00	NC	-	NC	-	NC	-
-	Wheat, gluten	PP	0.53	0.10	0.05	0.10	0.05	0.10	0.05	0.10	0.05	0.19	0.10
GC 0640	Barley, raw (incl malt extract, incl flour & grits, excl pot&pearled, excl beer, excl malt)	RAC	1.315	0.10	0.13	0.10	0.13	0.80	1.05	0.10	0.13	0.11	0.14

FLUPYRADIFURONE (285)				International Estimated Daily Intake (IEDI)				ADI = 0 - 0.08 mg/kg bw					
Codex Code	Commodity description	Expr as	STMR mg/kg	Diets: g/person/day				Intake = daily intake: ug/person					
				G13 diet	G13 intake	G14 diet	G14 intake	G15 diet	G15 intake	G16 diet	G16 intake	G17 diet	G17 intake
-	Barley, pot&pearled	PP	0.16	5.46	0.87	0.10	0.02	1.44	0.23	0.10	0.02	NC	-
-	Barley beer	PP	0.099	16.25	1.61	11.36	1.12	225.21	22.30	19.49	1.93	52.17	5.16
-	Barley Malt	PP	0.64	0.10	0.06	0.11	0.07	0.67	0.43	0.10	0.06	4.61	2.95
GC 0641	Buckwheat, raw (incl flour)	RAC	1.315	0.10	0.13	2.82	3.71	0.10	0.13	0.10	0.13	NC	-
GC 0647	Oats, raw (incl rolled)	RAC	1.315	0.37	0.49	0.10	0.13	2.79	3.67	0.10	0.13	NC	-
GC 2089	Subgroup of Sorghum Grain and Millet	RAC	1.315	150.90	198.43	2.80	3.68	NC	-	68.93	90.64	NC	-
GC 0645	Maize, raw (incl glucose & dextrose & isoglucose, incl beer, excl flour, excl oil, excl germ, excl starch)	RAC	0.49	0.54	0.26	0.51	0.25	3.26	1.60	7.96	3.90	NC	-
CF 1255	Maize, flour (white flour and wholemeal flour)	PP	0.44	94.34	41.51	8.09	3.56	28.03	12.33	55.94	24.61	28.07	12.35
-	Maize, germ	PP	0.51	0.10	0.05	NC	-	NC	-	NC	-	NC	-
-	Maize starch	PP	0.44	0.10	0.04	0.10	0.04	NC	-	NC	-	NC	-
OR 0645	Maize oil	PP	0.44	0.33	0.15	0.10	0.04	0.81	0.36	0.10	0.04	NC	-
GC 0447	Sweet corn on the cob, raw (incl frozen kernels, incl canned kernels)	RAC	0.56	3.63	2.03	20.50	11.48	8.78	4.92	0.10	0.06	0.17	0.10
TN 0672	Pecan nuts, nutmeat	RAC	0.06	0.15	0.01	0.22	0.01	0.31	0.02	0.10	0.01	0.10	0.01
OR 0691	Cotton seed oil, edible	PP	0.079	1.28	0.10	0.10	0.01	0.45	0.04	0.42	0.03	0.15	0.01
SO 0697	Peanuts, nutmeat, raw	RAC	0.225	7.12	1.60	0.32	0.07	1.34	0.30	6.21	1.40	0.53	0.12
-	Peanuts, roasted	PP	0.17	0.10	0.02	0.10	0.02	0.48	0.08	0.10	0.02	NC	-
OR 0697	Peanut oil, edible	PP	0.13	5.02	0.65	0.10	0.01	0.17	0.02	0.29	0.04	NC	-
-	Peanut butter	PP	0.17	0.10	0.02	0.10	0.02	0.10	0.02	NC	-	NC	-
SB 0715	Cocoa beans, raw (incl roasted, incl powder, incl butter, incl paste, incl nes products)	RAC	0.071	0.11	0.01	0.89	0.06	6.28	0.45	0.17	0.01	2.31	0.16
DM 0715	Cocoa powder	PP	0.116	0.10	0.01	0.20	0.02	1.17	0.14	0.10	0.01	1.80	0.21
SB 0716	Coffee beans, raw (i.e. green coffee)	RAC	0.295	0.83	0.24	0.69	0.20	1.09	0.32	2.91	0.86	0.82	0.24
SM 0716	Coffee beans, roasted	PP	0.21	0.10	0.02	0.41	0.09	7.50	1.58	0.10	0.02	0.10	0.02
-	Coffee beans, instant coffee (incl essences and concentrates)	PP	0.94	0.10	0.09	0.10	0.09	0.60	0.56	0.10	0.09	5.53	5.20
DH 1100	Hops, dry	RAC	3.55	NC	-	NC	-	0.10	0.36	NC	-	NC	-
MM 0095	MEAT FROM MAMMALS other than marine mammals, raw (incl prepared meat)	RAC	0.3	29.18	8.75	50.89	15.27	121.44	36.43	22.58	6.77	72.14	21.64
MF 0100	Mammalian fats, raw, excl milk fats (incl rendered fats)	RAC	0.15	1.05	0.16	1.14	0.17	18.69	2.80	0.94	0.14	3.12	0.47
MO 0105	Edible offal (mammalian), raw	RAC	0.87	4.64	4.04	1.97	1.71	10.01	8.71	3.27	2.84	3.98	3.46
ML 0106	Milks, raw or skimmed (incl dairy products)	RAC	0.11	108.75	11.96	70.31	7.73	436.11	47.97	61.55	6.77	79.09	8.70

## FLUPYRADIFURONE (285)

## International Estimated Daily Intake (IEDI)

ADI = 0 - 0.08 mg/kg bw

Codex Code	Commodity description	Expr as	STMR mg/kg	Diets: g/person/day				Intake = daily intake: ug/person					
				G13 diet	G13 intake	G14 diet	G14 intake	G15 diet	G15 intake	G16 diet	G16 intake	G17 diet	G17 intake
PM 0110	Poultry meat, raw (incl prepared)	RAC	0.27	3.92	1.06	12.03	3.25	57.07	15.41	5.03	1.36	55.56	15.00
PF 0111	Poultry fat, raw (incl rendered)	RAC	0.11	NC	-	NC	-	0.32	0.04	NC	-	NC	-
PO 0111	Poultry edible offal, raw (incl prepared)	RAC	0.39	0.10	0.04	0.70	0.27	0.97	0.38	0.10	0.04	NC	-
PE 0112	Eggs, raw, (incl dried)	RAC	0.15	3.84	0.58	4.41	0.66	27.25	4.09	1.13	0.17	7.39	1.11
Total intake (ug/person)=				517.4		275.1		697.3		618.4		325.0	
Bodyweight per region (kg bw) =				60		60		60		60		60	
ADI (ug/person)=				4800		4800		4800		4800		4800	
%ADI=				10.8%		5.7%		14.5%		12.9%		6.8%	
Rounded %ADI=				10%		6%		10%		10%		7%	

**FOSETYL ALUMINIUM (302)**

## International Estimated Daily Intake (IEDI)

ADI = 0 - 1 mg/kg bw

Codex Code	Commodity description	Expr as	STMR mg/kg	Diets as g/person/day				Intake as ug/person/day							
				G01 diet	G01 intake	G02 diet	G02 intake	G03 diet	G03 intake	G04 diet	G04 intake	G05 diet	G05 intake	G06 diet	G06 intake
FC 0003	Subgroup of Mandarins, raw (incl mandarin juice)	RAC	13	6.18	80.34	3.66	47.58	0.25	3.25	6.82	88.66	3.49	45.37	19.38	251.94
FC 0004	Subgroup of Oranges, sweet, sour, raw	RAC	4.4	20.66	90.90	5.23	23.01	11.90	52.36	37.90	166.76	21.16	93.10	56.46	248.42
JF 0004	Subgroup of Oranges, juice (single strength, incl. concentrated)	PP	4.1	1.27	5.21	2.20	9.02	0.10	0.41	11.81	48.42	0.46	1.89	1.69	6.93
FP 0009	Group of Pomefruits, raw	RAC	15	19.24	288.60	33.89	508.35	3.34	50.10	25.53	382.95	7.59	113.85	56.76	851.40
JF 0226	Apple juice, single strength (incl. concentrated)	PP	14	0.32	4.48	3.07	42.98	0.10	1.40	5.00	70.00	0.29	4.06	5.57	77.98
FB 0264	Blackberries, raw	RAC	5.95	0.35	2.08	0.11	0.65	0.10	0.60	0.10	0.60	0.10	0.60	1.23	7.32
FB 0269	Grapes, raw (incl dried, excl must, excl juice, excl wine)	RAC	15.5	14.82	229.71	11.26	174.53	0.10	1.55	22.16	343.48	4.19	64.95	63.05	977.28
JF 0269	Grape juice (from wine grapes)	PP	15	0.14	2.10	0.29	4.35	0.10	1.50	0.30	4.50	0.24	3.60	0.10	1.50
-	Graps must (from wine-grapes)	PP	9.1	0.33	3.00	0.13	1.18	0.10	0.91	0.10	0.91	0.10	0.91	0.10	0.91
-	Grape wine (incl vermouths) (from wine-grapes)	PP	12	0.67	8.04	12.53	150.36	2.01	24.12	1.21	14.52	3.53	42.36	4.01	48.12
FB 0275	Strawberry, raw	RAC	11	0.70	7.70	2.01	22.11	0.10	1.10	1.36	14.96	0.37	4.07	2.53	27.83
FI 0326	Avocado, raw	RAC	3.4	0.13	0.44	0.10	0.34	2.05	6.97	2.54	8.64	2.34	7.96	0.12	0.41
FI 0353	Pineapple, raw (incl canned pineapple, incl pineapple juice, incl dried pineapple)	RAC	2.35	0.61	1.43	1.56	3.67	7.89	18.54	9.36	22.00	8.76	20.59	1.30	3.06
FI 0341	Kiwifruit, raw	RAC	34.5	0.10	3.45	0.36	12.42	0.10	3.45	1.17	40.37	0.10	3.45	0.69	23.81
VB 0042	Subgroup of Flowerhead Brassica, raw	RAC	0.2	2.54	0.51	0.49	0.10	0.10	0.02	3.57	0.71	7.79	1.56	3.12	0.62
VB 2036	Subgroup of Head Brassicas, raw	RAC	0.2	3.81	0.76	38.89	7.78	0.77	0.15	6.23	1.25	4.27	0.85	14.28	2.86
VC 0424	Cucumber, raw	RAC	14	8.01	112.14	30.66	429.24	1.45	20.30	19.84	277.76	0.27	3.78	34.92	488.88
VC 0431	Squash, Summer (Courgette, Marrow, Zucchini, Zucchini), raw	RAC	25.5	0.78	19.89	2.06	52.53	0.30	7.65	1.61	41.06	2.25	57.38	2.36	60.18
VC 0046	Melons, except watermelon, raw (Cantaloupe)	RAC	14	8.90	124.60	8.64	120.96	0.80	11.20	17.90	250.60	2.80	39.20	29.17	408.38
VO 0448	Tomato, raw (incl canned, excl juice, excl paste)	RAC	0.34	42.04	14.29	76.13	25.88	10.69	3.63	84.59	28.76	24.92	8.47	203.27	69.11
-	Tomato, paste (i.e. concentrated tomato sauce/puree)	PP	0.48	2.34	1.12	1.33	0.64	1.57	0.75	4.24	2.04	0.34	0.16	2.83	1.36
JF 0448	Tomato, juice (single strength, incl concentrated)	PP	0.27	0.29	0.08	0.29	0.08	0.10	0.03	0.38	0.10	0.10	0.03	0.14	0.04
VO 0445	Peppers, sweet, raw (incl dried)	RAC	0.36	4.49	1.62	6.44	2.32	7.21	2.60	5.68	2.04	9.52	3.43	8.92	3.21
VL 0483	Lettuce, leaf, raw	RAC	41	0.53	21.73	0.36	14.76	0.16	6.56	6.21	254.61	1.90	77.90	6.05	248.05
VL 0502	Spinach, raw	RAC	4.1	0.74	3.03	0.22	0.90	0.10	0.41	0.91	3.73	0.10	0.41	2.92	11.97
VL 0480	Kale (Borecole, Collards), raw	RAC	0.2	0.57	0.11	5.77	1.15	0.11	0.02	0.92	0.18	5.25	1.05	2.12	0.42
TN 0085	Tree nuts, raw (incl processed)	RAC	54	4.06	219.24	3.27	176.58	7.01	378.54	13.93	752.22	14.01	756.54	9.36	505.44
SB 0716	Coffee beans raw (incl roasted, incl instant coffee, incl substitutes)	RAC	8.8	1.36	11.97	3.59	31.59	1.44	12.67	5.18	45.58	2.02	17.78	1.70	14.96

FOSETYL ALUMINIUM (302)				International Estimated Daily Intake (IEDI)				ADI = 0 - 1 mg/kg bw							
Codex Code	Commodity description	Expr as	STMR mg/kg	Diets as g/person/day				Intake as ug/person/day							
				G01 diet	G01 intake	G02 diet	G02 intake	G03 diet	G03 intake	G04 diet	G04 intake	G05 diet	G05 intake	G06 diet	G06 intake
DH 1100	Hops, dry	RAC	350	0.10	35.00	0.10	35.00	0.10	35.00	0.10	35.00	NC	-	0.10	35.00
MM 0095	MEAT FROM MAMMALS other than marine mammals, raw (incl prepared meat)	RAC	0.077	31.20	2.40	72.44	5.58	20.88	1.61	47.98	3.69	33.08	2.55	36.25	2.79
MF 0100	Mammalian fats, raw, excl milk fats (incl rendered fats)	RAC	0.13	3.29	0.43	6.14	0.80	0.82	0.11	1.57	0.20	2.23	0.29	1.07	0.14
MO 0105	Edible offal (mammalian), raw	RAC	0.32	4.79	1.53	9.68	3.10	2.97	0.95	5.49	1.76	3.84	1.23	5.03	1.61
ML 0106	Milks, raw or skimmed (incl dairy products)	RAC	0.05	289.65	14.48	485.88	24.29	26.92	1.35	239.03	11.95	199.91	10.00	180.53	9.03
Total intake (ug/person)=				1312.4		1933.8		649.8		2920.0		1389.3		4390.9	
Bodyweight per region (kg bw) =				60		60		60		60		60		60	
ADI (ug/person)=				60000		60000		60000		60000		60000		60000	
%ADI=				2.2%		3.2%		1.1%		4.9%		2.3%		7.3%	
Rounded %ADI=				2%		3%		1%		5%		2%		7%	

FOSETYL ALUMINIUM (302)				International Estimated Daily Intake (IEDI)				ADI = 0 - 1 mg/kg bw							
Codex Code	Commodity description	Expr as	STMR mg/kg	Diets as g/person/day				Intake as ug/person/day							
				G07 diet	G07 intake	G08 diet	G08 intake	G09 diet	G09 intake	G10 diet	G10 intake	G11 diet	G11 intake	G12 diet	G12 intake
FC 0003	Subgroup of Mandarins, raw (incl mandarin juice)	RAC	13	12.42	161.46	14.99	194.87	16.08	209.04	10.78	140.14	9.94	129.22	NC	-
FC 0004	Subgroup of Oranges, sweet, sour, raw	RAC	4.4	15.68	68.99	24.00	105.60	6.80	29.92	29.09	128.00	15.39	67.72	160.47	706.07
JF 0004	Subgroup of Oranges, juice (single strength, incl. concentrated)	PP	4.1	33.31	136.57	1.78	7.30	0.28	1.15	18.97	77.78	14.01	57.44	13.36	54.78
FP 0009	Group of Pomefruits, raw	RAC	15	37.39	560.85	58.13	871.95	37.64	564.60	44.80	672.00	62.17	932.55	6.47	97.05
JF 0226	Apple juice, single strength (incl. concentrated)	PP	14	14.88	208.32	11.98	167.72	0.15	2.10	9.98	139.72	30.32	424.48	3.47	48.58
FB 0264	Blackberries, raw	RAC	5.95	0.10	0.60	0.52	3.09	0.14	0.83	0.24	1.43	NC	-	0.10	0.60
FB 0269	Grapes, raw (incl dried, excl must, excl juice, excl wine)	RAC	15.5	19.22	297.91	17.53	271.72	5.32	82.46	15.12	234.36	22.29	345.50	2.51	38.91
JF 0269	Grape juice (from wine grapes)	PP	15	0.56	8.40	1.96	29.40	0.10	1.50	2.24	33.60	2.27	34.05	0.34	5.10
-	Graps must (from wine-grapes)	PP	9.1	0.16	1.46	0.10	0.91	0.10	0.91	0.12	1.09	0.11	1.00	NC	-
-	Grape wine (incl vermouths) (from wine-grapes)	PP	12	88.93	1067.16	62.41	748.92	1.84	22.08	25.07	300.84	61.17	734.04	5.84	70.08
FB 0275	Strawberry, raw	RAC	11	4.49	49.39	5.66	62.26	0.10	1.10	6.63	72.93	5.75	63.25	0.10	1.10
FI 0326	Avocado, raw	RAC	3.4	2.65	9.01	0.87	2.96	0.46	1.56	1.64	5.58	1.30	4.42	0.96	3.26
FI 0353	Pineapple, raw (incl canned pineapple, incl pineapple juice, incl dried pineapple)	RAC	2.35	13.13	30.86	11.13	26.16	6.94	16.31	14.36	33.75	36.74	86.34	18.81	44.20
FI 0341	Kiwifruit, raw	RAC	34.5	2.46	84.87	3.62	124.89	0.10	3.45	1.48	51.06	7.43	256.34	0.10	3.45

## FOSETYL ALUMINIUM (302)

## International Estimated Daily Intake (IEDI)

ADI = 0 - 1 mg/kg bw

Codex Code	Commodity description	Expr as	STMR mg/kg	Diets as g/person/day				Intake as ug/person/day							
				G07 diet	G07 intake	G08 diet	G08 intake	G09 diet	G09 intake	G10 diet	G10 intake	G11 diet	G11 intake	G12 diet	G12 intake
VB 0042	Subgroup of Flowerhead Brassica, raw	RAC	0.2	9.50	1.90	6.77	1.35	NC	-	3.21	0.64	9.36	1.87	0.75	0.15
VB 2036	Subgroup of Head Brassicas, raw	RAC	0.2	11.20	2.24	29.79	5.96	25.06	5.01	34.72	6.94	8.73	1.75	15.64	3.13
VC 0424	Cucumber, raw	RAC	14	6.72	94.08	11.03	154.42	32.10	449.40	15.10	211.40	4.05	56.70	9.57	133.98
VC 0431	Squash, Summer (Courgette, Marrow, Zucchini, Zucchini), raw	RAC	25.5	NC	-	NC	-	5.48	139.74	NC	-	NC	-	1.03	26.27
VC 0046	Melons, except watermelon, raw (Cantaloupe)	RAC	14	9.20	128.80	11.95	167.30	14.63	204.82	8.99	125.86	7.86	110.04	2.46	34.44
VO 0448	Tomato, raw (incl canned, excl juice, excl paste)	RAC	0.34	43.88	14.92	55.41	18.84	35.38	12.03	74.88	25.46	26.50	9.01	9.51	3.23
-	Tomato, paste (i.e. concentrated tomato sauce/puree)	PP	0.48	4.96	2.38	3.20	1.54	0.15	0.07	1.61	0.77	6.88	3.30	0.52	0.25
JF 0448	Tomato, juice (single strength, incl concentrated)	PP	0.27	0.80	0.22	0.10	0.03	0.10	0.03	0.61	0.16	0.40	0.11	0.10	0.03
VO 0445	Peppers, sweet, raw (incl dried)	RAC	0.36	0.82	0.30	1.53	0.55	10.85	3.91	4.59	1.65	1.84	0.66	2.00	0.72
VL 0483	Lettuce, leaf, raw	RAC	41	14.50	594.50	11.76	482.16	13.14	538.74	19.50	799.50	4.81	197.21	2.23	91.43
VL 0502	Spinach, raw	RAC	4.1	2.20	9.02	1.76	7.22	13.38	54.86	2.94	12.05	5.53	22.67	0.10	0.41
VL 0480	Kale (Borecole, Collards), raw	RAC	0.2	NC	-	NC	-	14.54	2.91	NC	-	NC	-	2.32	0.46
TN 0085	Tree nuts, raw (incl processed)	RAC	54	8.52	460.08	8.94	482.76	15.09	814.86	9.60	518.40	14.57	786.78	26.26	1418.04
SB 0716	Coffee beans raw (incl roasted, incl instant coffee, incl substitutes)	RAC	8.8	10.90	95.92	12.44	109.47	0.77	6.78	9.48	83.42	22.07	194.22	8.15	71.72
DH 1100	Hops, dry	RAC	350	NC	-	NC	-	0.10	35.00	0.10	35.00	NC	-	NC	-
MM 0095	MEAT FROM MAMMALS other than marine mammals, raw (incl prepared meat)	RAC	0.077	140.03	10.78	150.89	11.62	79.32	6.11	111.24	8.57	120.30	9.26	51.27	3.95
MF 0100	Mammalian fats, raw, excl milk fats (incl rendered fats)	RAC	0.13	6.44	0.84	15.51	2.02	3.79	0.49	8.29	1.08	18.44	2.40	8.00	1.04
MO 0105	Edible offal (mammalian), raw	RAC	0.32	15.17	4.85	5.19	1.66	6.30	2.02	6.78	2.17	3.32	1.06	3.17	1.01
ML 0106	Milks, raw or skimmed (incl dairy products)	RAC	0.05	388.92	19.45	335.88	16.79	49.15	2.46	331.25	16.56	468.56	23.43	245.45	12.27
Total intake (ug/person)=				4126.1		4081.4		3216.2		3741.9		4556.8		2875.7	
Bodyweight per region (kg bw) =				60		60		55		60		60		60	
ADI (ug/person)=				60000		60000		55000		60000		60000		60000	
%ADI=				6.9%		6.8%		5.8%		6.2%		7.6%		4.8%	
Rounded %ADI=				7%		7%		6%		6%		8%		5%	



## FOSETYL ALUMINIUM (302)

## International Estimated Daily Intake (IEDI)

ADI = 0 - 1 mg/kg bw

Codex Code	Commodity description	Expr as	STMR mg/kg	Diets: g/person/day				Intake = daily intake: ug/person					
				G13 diet	G13 intake	G14 diet	G14 intake	G15 diet	G15 intake	G16 diet	G16 intake	G17 diet	G17 intake
FC 0003	Subgroup of Mandarins, raw (incl mandarin juice)	RAC	13	0.16	2.08	0.27	3.51	9.06	117.78	0.10	1.30	0.10	1.30
FC 0004	Subgroup of Oranges, sweet, sour, raw	RAC	4.4	1.18	5.19	1.11	4.88	14.28	62.83	0.10	0.44	1.08	4.75
JF 0004	Subgroup of Oranges, juice (single strength, incl. concentrated)	PP	4.1	0.10	0.41	0.26	1.07	12.61	51.70	0.14	0.57	0.33	1.35
FP 0009	Group of Pomefruits, raw	RAC	15	2.39	35.85	10.93	163.95	69.47	1042.05	1.59	23.85	19.56	293.40
JF 0226	Apple juice, single strength (incl. concentrated)	PP	14	0.10	1.40	0.10	1.40	7.19	100.66	0.10	1.40	NC	-
FB 0264	Blackberries, raw	RAC	5.95	0.10	0.60	7.29	43.38	0.25	1.49	0.10	0.60	NC	-
FB 0269	Grapes, raw (incl dried, excl must, excl juice, excl wine)	RAC	15.5	0.16	2.48	0.92	14.26	19.62	304.11	0.10	1.55	0.21	3.26
JF 0269	Grape juice (from wine grapes)	PP	15	0.10	1.50	0.10	1.50	0.41	6.15	0.10	1.50	NC	-
-	Graps must (from wine-grapes)	PP	9.1	0.10	0.91	0.10	0.91	0.11	1.00	0.10	0.91	0.19	1.73
-	Grape wine (incl vermouths) (from wine-grapes)	PP	12	0.31	3.72	0.23	2.76	60.43	725.16	0.52	6.24	31.91	382.92
FB 0275	Strawberry, raw	RAC	11	0.10	1.10	0.10	1.10	3.35	36.85	0.10	1.10	0.10	1.10
FI 0326	Avocado, raw	RAC	3.4	1.12	3.81	0.10	0.34	0.84	2.86	0.10	0.34	6.60	22.44
FI 0353	Pineapple, raw (incl canned pineapple, incl pineapple juice, incl dried pineapple)	RAC	2.35	8.51	20.00	6.27	14.73	6.89	16.19	0.18	0.42	24.94	58.61
FI 0341	Kiwifruit, raw	RAC	34.5	0.10	3.45	0.10	3.45	2.00	69.00	0.10	3.45	NC	-
VB 0042	Subgroup of Flowerhead Brassica, raw	RAC	0.2	0.10	0.02	0.10	0.02	4.86	0.97	0.10	0.02	NC	-
VB 2036	Subgroup of Head Brassicas, raw	RAC	0.2	5.31	1.06	4.16	0.83	52.05	10.41	0.10	0.02	NC	-
VC 0424	Cucumber, raw	RAC	14	0.68	9.52	1.81	25.34	10.40	145.60	0.10	1.40	0.10	1.40
VC 0431	Squash, Summer (Courgette, Marrow, Zucchini, Zucchini), raw	RAC	25.5	0.10	2.55	1.01	25.76	NC	-	1.91	48.71	NC	-
VC 0046	Melons, except watermelon, raw (Cantaloupe)	RAC	14	0.19	2.66	0.10	1.40	4.98	69.72	0.10	1.40	NC	-
VO 0448	Tomato, raw (incl canned, excl juice, excl paste)	RAC	0.34	13.10	4.45	4.90	1.67	62.16	21.13	1.04	0.35	0.10	0.03
-	Tomato, paste (i.e. concentrated tomato sauce/puree)	PP	0.48	0.58	0.28	0.22	0.11	2.21	1.06	0.24	0.12	3.10	1.49
JF 0448	Tomato, juice (single strength, incl concentrated)	PP	0.27	0.10	0.03	0.10	0.03	0.42	0.11	0.10	0.03	0.10	0.03
VO 0445	Peppers, sweet, raw (incl dried)	RAC	0.36	5.49	1.98	10.57	3.81	8.84	3.18	0.91	0.33	NC	-
VL 0483	Lettuce, leaf, raw	RAC	41	0.29	11.89	0.10	4.10	6.71	275.11	0.10	4.10	NC	-
VL 0502	Spinach, raw	RAC	4.1	0.17	0.70	0.10	0.41	0.81	3.32	0.10	0.41	NC	-
VL 0480	Kale (Borecole, Collards), raw	RAC	0.2	0.79	0.16	0.62	0.12	NC	-	0.10	0.02	NC	-
TN 0085	Tree nuts, raw (incl processed)	RAC	54	4.39	237.06	135.53	7318.62	6.11	329.94	0.72	38.88	317.74	17157.96
SB 0716	Coffee beans raw (incl roasted, incl instant coffee, incl substitutes)	RAC	8.8	0.95	8.36	1.32	11.62	11.64	102.43	2.96	26.05	14.73	129.62
DH 1100	Hops, dry	RAC	350	NC	-	NC	-	0.10	35.00	NC	-	NC	-
MM 0095	MEAT FROM MAMMALS other than marine mammals, raw (incl prepared meat)	RAC	0.077	29.18	2.25	50.89	3.92	121.44	9.35	22.58	1.74	72.14	5.55

FOSETYL ALUMINIUM (302)				International Estimated Daily Intake (IEDI)				ADI = 0 - 1 mg/kg bw					
Codex Code	Commodity description	Expr as	STMR mg/kg	Diets: g/person/day				Intake = daily intake: ug/person					
				G13 diet	G13 intake	G14 diet	G14 intake	G15 diet	G15 intake	G16 diet	G16 intake	G17 diet	G17 intake
MF 0100	Mammalian fats, raw, excl milk fats (incl rendered fats)	RAC	0.13	1.05	0.14	1.14	0.15	18.69	2.43	0.94	0.12	3.12	0.41
MO 0105	Edible offal (mammalian), raw	RAC	0.32	4.64	1.48	1.97	0.63	10.01	3.20	3.27	1.05	3.98	1.27
ML 0106	Milks, raw or skimmed (incl dairy products)	RAC	0.05	108.75	5.44	70.31	3.52	436.11	21.81	61.55	3.08	79.09	3.95
Total intake (ug/person)=				372.5		7659.3		3572.6		171.5		18072.6	
Bodyweight per region (kg bw) =				60		60		60		60		60	
ADI (ug/person)=				60000		60000		60000		60000		60000	
%ADI=				0.6%		12.8%		6.0%		0.3%		30.1%	
Rounded %ADI=				1%		10%		6%		0%		30%	

**GLYPHOSATE (158)**

International Estimated Daily Intake (IEDI)

ADI = 0 - 1 mg/kg bw

Codex Code	Commodity description	Expr as	STMR mg/kg	Diets as g/person/day				Intake as ug/person/day							
				G01 diet	G01 intake	G02 diet	G02 intake	G03 diet	G03 intake	G04 diet	G04 intake	G05 diet	G05 intake	G06 diet	G06 intake
FI 0327	Banana, raw (incl plantains) (incl dried)	RAC	0.05	5.23	0.26	6.94	0.35	99.45	4.97	32.47	1.62	48.30	2.42	24.70	1.24
VD 0071	Beans, dry, raw (Phaseolus spp)	RAC	0.32	2.39	0.76	1.61	0.52	10.47	3.35	1.84	0.59	12.90	4.13	7.44	2.38
VD 0523	Broad bean, dry, raw (incl horse-bean, field bean) (Vicia faba)	RAC	0.32	1.27	0.41	0.01	0.00	0.12	0.04	2.49	0.80	0.23	0.07	5.54	1.77
VD 0527	Cowpea, dry, raw (Vigna sinensis, Dolichos sinensis)	RAC	0.32	0.05	0.02	NC	-	1.74	0.56	0.01	0.00	0.01	0.00	0.07	0.02
VD 0541	Soya bean, dry, raw (incl paste, incl curd, incl oil, incl sauce)	RAC	5	72.79	363.95	59.05	295.25	20.55	102.75	74.20	371.00	61.12	305.60	73.24	366.20
-	Beans (dry) NES: including inter alia lablab or hyacinth bean (Dolichos spp.); jack or sword bean (Canavalia spp.); winged bean (Psophocarpus tetragonolobus); guar bean (Cyamopsis tetragonoloba); velvet bean (Stizolobium spp.); yam bean (Pachyrhizus erosus)	RAC	0.32	1.70	0.54	0.01	0.00	3.00	0.96	1.80	0.58	1.64	0.52	1.33	0.43
VD 2066	Subgroup of dry peas, raw	RAC	1.7	9.09	15.45	3.35	5.70	1.06	1.80	9.48	16.12	15.11	25.69	10.58	17.99
VR 0596	Sugar beet, raw (incl sugar)	RAC	3.4	0.13	0.44	NC	-	0.08	0.27	0.66	2.24	0.47	1.60	88.94	302.40
GC 2086	Subgroup of wheat, similar grains and pseudocereals without husks, raw (including processed)	RAC	3.7	381.29	1410.77	360.94	1335.48	38.45	142.27	282.01	1043.44	173.32	641.28	436.22	1614.01
GC 2087	Subgroup of barley, similar grains, and pseudocereals with husks, raw (including processed)	RAC	3.7	19.96	73.85	38.62	142.89	5.13	18.98	4.81	17.80	10.80	39.96	4.44	16.43
GC 2089	Subgroup of Sorghum Grain and Millet	RAC	3.7	5.80	21.46	2.32	8.58	23.09	85.43	16.72	61.86	27.14	100.42	2.92	10.80
GC 0645	Maize, raw (incl glucose & dextrose & isoglucose, incl flour, incl oil, incl beer, incl germ, incl starch)	RAC	0.12	29.81	3.58	44.77	5.37	108.95	13.07	52.37	6.28	60.28	7.23	75.69	9.08
GC 0447	Sweet corn on the cob, raw (incl frozen kernels, incl canned kernels)	RAC	0.325	0.14	0.05	0.94	0.31	5.70	1.85	2.61	0.85	1.94	0.63	0.22	0.07
GS 0659	Sugar cane, raw (incl sugar, incl molasses)	RAC	0.27	99.68	26.91	86.27	23.29	31.38	8.47	80.36	21.70	84.18	22.73	99.10	26.76
-	Sugar cane, molasses	PP	2.3	NC	-	NC	-	NC	-	NC	-	0.01	0.02	NC	-
SO 0495	Rape seed, raw (incl oil)	RAC	3	0.93	2.79	1.16	3.48	0.49	1.47	2.53	7.59	9.32	27.96	2.02	6.06
OR 0495	Rape seed oil, edible	PP	0.009	0.35	0.00	0.44	0.00	0.19	0.00	0.97	0.01	3.28	0.03	0.77	0.01
SO 0702	Sunflower seed, raw (incl oil)	RAC	0.395	7.40	2.92	35.86	14.16	1.15	0.45	8.76	3.46	5.45	2.15	13.62	5.38
SO 0691	Cotton seed, raw (incl oil)	RAC	5.2	20.53	106.76	9.80	50.96	6.42	33.38	4.73	24.60	7.14	37.13	18.68	97.14
MM 0095	MEAT FROM MAMMALS other than marine mammals, raw (incl prepared meat)	RAC	0.05	31.20	1.56	72.44	3.62	20.88	1.04	47.98	2.40	33.08	1.65	36.25	1.81
MO 0105	Edible offal (mammalian), raw	RAC	2.9	4.79	13.89	9.68	28.07	2.97	8.61	5.49	15.92	3.84	11.14	5.03	14.59
ML 0106	Milks, raw or skimmed (incl dairy products)	RAC	0	289.65	0.00	485.88	0.00	26.92	0.00	239.03	0.00	199.91	0.00	180.53	0.00

## GLYPHOSATE (158)

## International Estimated Daily Intake (IEDI)

ADI = 0 - 1 mg/kg bw

Codex Code	Commodity description	Expr as	STMR mg/kg	Diets as g/person/day				Intake as ug/person/day							
				G01 diet	G01 intake	G02 diet	G02 intake	G03 diet	G03 intake	G04 diet	G04 intake	G05 diet	G05 intake	G06 diet	G06 intake
PM 0110	Poultry meat, raw (incl prepared)	RAC	0	14.63	0.00	29.76	0.00	8.04	0.00	129.68	0.00	25.04	0.00	35.66	0.00
PO 0111	Poultry edible offal, raw (incl prepared)	RAC	0.088	0.12	0.01	0.12	0.01	0.11	0.01	5.37	0.47	0.24	0.02	0.10	0.01
PE 0112	Eggs, raw, (incl dried)	RAC	0	7.84	0.00	23.08	0.00	2.88	0.00	14.89	0.00	9.81	0.00	14.83	0.00
Total intake (ug/person)=				2046.4		1918.1		429.8		1599.3		1232.4		2494.6	
Bodyweight per region (kg bw) =				60		60		60		60		60		60	
ADI (ug/person)=				60000		60000		60000		60000		60000		60000	
% ADI=				3.4%		3.2%		0.7%		2.7%		2.1%		4.2%	
Rounded % ADI=				3%		3%		1%		3%		2%		4%	

## GLYPHOSATE (158)

## International Estimated Daily Intake (IEDI)

ADI = 0 - 1 mg/kg bw

Codex Code	Commodity description	Expr as	STMR mg/kg	Diets as g/person/day				Intake as ug/person/day							
				G07 diet	G07 intake	G08 diet	G08 intake	G09 diet	G09 intake	G10 diet	G10 intake	G11 diet	G11 intake	G12 diet	G12 intake
FI 0327	Banana, raw (incl plantains) (incl dried)	RAC	0.05	25.76	1.29	23.65	1.18	23.83	1.19	24.37	1.22	19.43	0.97	101.55	5.08
VD 0071	Beans, dry, raw (Phaseolus spp)	RAC	0.32	1.51	0.48	1.50	0.48	1.90	0.61	5.11	1.64	1.36	0.44	23.43	7.50
VD 0523	Broad bean, dry, raw (incl horse-bean, field bean) (Vicia faba)	RAC	0.32	0.02	0.01	0.01	0.00	1.16	0.37	0.40	0.13	NC	-	0.06	0.02
VD 0527	Cowpea, dry, raw (Vigna sinensis, Dolichos sinensis)	RAC	0.32	NC	-	NC	-	0.16	0.05	0.01	0.00	NC	-	NC	-
VD 0541	Soya bean, dry, raw (incl paste, incl curd, incl oil, incl sauce)	RAC	5	106.33	531.65	117.78	588.90	42.12	210.60	195.70	978.50	222.52	1112.60	80.47	402.35
-	Beans (dry) NES: including inter alia lablab or hyacinth bean (Dolichos spp.); jack or sword bean (Canavalia spp.); winged bean (Psophocarpus tetragonolobus); guar bean (Cyamopsis tetragonoloba); velvet bean (Stizolobium spp.); yam bean (Pachyrhizus erosus)	RAC	0.32	0.01	0.00	NC	-	0.57	0.18	0.11	0.04	0.16	0.05	0.94	0.30
VD 2066	Subgroup of dry peas, raw	RAC	1.7	5.01	8.52	3.76	6.39	1.82	3.09	3.44	5.85	3.49	5.93	5.15	8.76
VR 0596	Sugar beet, raw (incl sugar)	RAC	3.4	0.01	0.03	NC	-	0.01	0.03	0.01	0.03	NC	-	NC	-
GC 2086	Subgroup of wheat, similar grains and pseudocereals without husks, raw (including processed)	RAC	3.7	256.28	948.24	280.29	1037.07	134.94	499.28	241.61	893.96	217.88	806.16	167.40	619.38

## GLYPHOSATE (158)

## International Estimated Daily Intake (IEDI)

ADI = 0 - 1 mg/kg bw

Codex Code	Commodity description	Expr as	STMR mg/kg	Diets as g/person/day				Intake as ug/person/day							
				G07 diet	G07 intake	G08 diet	G08 intake	G09 diet	G09 intake	G10 diet	G10 intake	G11 diet	G11 intake	G12 diet	G12 intake
GC 2087	Subgroup of barley, similar grains, and pseudocereals with husks, raw (including processed)	RAC	3.7	43.68	161.62	60.49	223.81	9.72	35.96	40.47	149.74	49.83	184.37	18.90	69.93
GC 2089	Subgroup of Sorghum Grain and Millet	RAC	3.7	0.03	0.11	0.16	0.59	3.19	11.80	1.85	6.85	NC	-	7.12	26.34
GC 0645	Maize, raw (incl glucose & dextrose & isoglucose, incl flour, incl oil, incl beer, incl germ, incl starch)	RAC	0.12	18.51	2.22	26.18	3.14	26.04	3.12	39.99	4.80	7.36	0.88	64.58	7.75
GC 0447	Sweet corn on the cob, raw (incl frozen kernels, incl canned kernels)	RAC	0.325	11.43	3.71	3.71	1.21	0.74	0.24	13.63	4.43	3.07	1.00	1.50	0.49
GS 0659	Sugar cane, raw (incl sugar, incl molasses)	RAC	0.27	92.24	24.90	95.72	25.84	28.47	7.69	77.39	20.90	117.73	31.79	103.90	28.05
-	Sugar cane, molasses	PP	2.3	NC	-	NC	-	0.08	0.18	NC	-	NC	-	NC	-
SO 0495	Rape seed, raw (incl oil)	RAC	3	32.68	98.04	19.91	59.73	7.83	23.49	15.69	47.07	NC	-	NC	-
OR 0495	Rape seed oil, edible	PP	0.009	12.52	0.11	7.63	0.07	3.00	0.03	6.01	0.05	NC	-	NC	-
SO 0702	Sunflower seed, raw (incl oil)	RAC	0.395	23.40	9.24	29.33	11.59	1.24	0.49	13.85	5.47	6.48	2.56	6.91	2.73
SO 0691	Cotton seed, raw (incl oil)	RAC	5.2	10.71	55.69	4.23	22.00	7.19	37.39	7.54	39.21	5.66	29.43	2.38	12.38
MM 0095	MEAT FROM MAMMALS other than marine mammals, raw (incl prepared meat)	RAC	0.05	140.03	7.00	150.89	7.54	79.32	3.97	111.24	5.56	120.30	6.02	51.27	2.56
MO 0105	Edible offal (mammalian), raw	RAC	2.9	15.17	43.99	5.19	15.05	6.30	18.27	6.78	19.66	3.32	9.63	3.17	9.19
ML 0106	Milks, raw or skimmed (incl dairy products)	RAC	0	388.92	0.00	335.88	0.00	49.15	0.00	331.25	0.00	468.56	0.00	245.45	0.00
PM 0110	Poultry meat, raw (incl prepared)	RAC	0	73.76	0.00	53.86	0.00	23.98	0.00	87.12	0.00	53.38	0.00	84.45	0.00
PO 0111	Poultry edible offal, raw (incl prepared)	RAC	0.088	0.33	0.03	0.72	0.06	0.27	0.02	0.35	0.03	0.80	0.07	NC	-
PE 0112	Eggs, raw, (incl dried)	RAC	0	25.84	0.00	29.53	0.00	28.05	0.00	33.19	0.00	36.44	0.00	8.89	0.00
Total intake (ug/person)=				1896.9		2004.7		858.1		2185.1		2191.9		1202.8	
Bodyweight per region (kg bw) =				60		60		55		60		60		60	
ADI (ug/person)=				60000		60000		55000		60000		60000		60000	
%ADI=				3.2%		3.3%		1.6%		3.6%		3.7%		2.0%	
Rounded %ADI=				3%		3%		2%		4%		4%		2%	

GLYPHOSATE (158)				International Estimated Daily Intake (IEDI)				ADI = 0 - 1 mg/kg bw					
Codex Code	Commodity description	Expr as	STMR mg/kg	Diets: g/person/day				Intake = daily intake: ug/person					
				G13 diet	G13 intake	G14 diet	G14 intake	G15 diet	G15 intake	G16 diet	G16 intake	G17 diet	G17 intake
FI 0327	Banana, raw (incl plantains) (incl dried)	RAC	0.05	44.80	2.24	118.17	5.91	25.25	1.26	454.49	22.72	310.23	15.51
VD 0071	Beans, dry, raw (Phaseolus spp)	RAC	0.32	7.11	2.28	2.33	0.75	3.76	1.20	44.70	14.30	3.27	1.05
VD 0523	Broad bean, dry, raw (incl horse-bean, field bean) (Vicia faba)	RAC	0.32	3.70	1.18	0.03	0.01	0.17	0.05	0.01	0.00	NC	-
VD 0527	Cowpea, dry, raw (Vigna sinensis, Dolichos sinensis)	RAC	0.32	12.77	4.09	0.99	0.32	0.01	0.00	4.33	1.39	NC	-
VD 0541	Soya bean, dry, raw (incl paste, incl curd, incl oil, incl sauce)	RAC	5	15.80	79.00	14.29	71.45	104.36	521.80	17.11	85.55	35.20	176.00
-	Beans (dry) NES: including inter alia lablab or hyacinth bean (Dolichos spp.); jack or sword bean (Canavalia spp.); winged bean (Psophocarpus tetragonolobus); guar bean (Cyamopsis tetragonoloba); velvet bean (Stizolobium spp.); yam bean (Pachyrrhizus erosus)	RAC	0.32	2.54	0.81	1.77	0.57	0.03	0.01	0.03	0.01	3.99	1.28
VD 2066	Subgroup of dry peas, raw	RAC	1.7	4.43	7.53	11.36	19.31	4.22	7.17	9.36	15.91	1.21	2.06
VR 0596	Sugar beet, raw (incl sugar)	RAC	3.4	3.93	13.36	1.68	5.71	NC	-	NC	-	36.12	122.81
GC 2086	Subgroup of wheat, similar grains and pseudocereals without husks, raw (including processed)	RAC	3.7	57.23	211.75	110.47	408.74	286.57	1060.31	25.82	95.53	132.92	491.80
GC 2087	Subgroup of barley, similar grains, and pseudocereals with husks, raw (including processed)	RAC	3.7	11.99	44.36	5.22	19.31	49.50	183.15	3.82	14.13	16.26	60.16
GC 2089	Subgroup of Sorghum Grain and Millet	RAC	3.7	150.90	558.33	2.80	10.36	NC	-	68.93	255.04	NC	-
GC 0645	Maize, raw (incl glucose & dextrose & isoglucose, incl flour, incl oil, incl beer, incl germ, incl starch)	RAC	0.12	116.66	14.00	10.52	1.26	38.46	4.62	76.60	9.19	34.44	4.13
GC 0447	Sweet corn on the cob, raw (incl frozen kernels, incl canned kernels)	RAC	0.325	3.63	1.18	20.50	6.66	8.78	2.85	0.02	0.01	0.17	0.06
GS 0659	Sugar cane, raw (incl sugar, incl molasses)	RAC	0.27	33.75	9.11	106.29	28.70	78.09	21.08	29.09	7.85	45.70	12.34
-	Sugar cane, molasses	PP	2.3	NC	-	NC	-	NC	-	NC	-	NC	-
SO 0495	Rape seed, raw (incl oil)	RAC	3	0.19	0.57	0.07	0.21	12.07	36.21	0.08	0.24	NC	-
OR 0495	Rape seed oil, edible	PP	0.009	0.07	0.00	0.03	0.00	4.62	0.04	0.03	0.00	NC	-
SO 0702	Sunflower seed, raw (incl oil)	RAC	0.395	0.94	0.37	0.22	0.09	32.01	12.64	12.12	4.79	0.48	0.19
SO 0691	Cotton seed, raw (incl oil)	RAC	5.2	8.14	42.33	0.32	1.66	2.84	14.77	2.69	13.99	0.97	5.04
MM 0095	MEAT FROM MAMMALS other than marine mammals, raw (incl prepared meat)	RAC	0.05	29.18	1.46	50.89	2.54	121.44	6.07	22.58	1.13	72.14	3.61
MO 0105	Edible offal (mammalian), raw	RAC	2.9	4.64	13.46	1.97	5.71	10.01	29.03	3.27	9.48	3.98	11.54
ML 0106	Milks, raw or skimmed (incl dairy products)	RAC	0	108.75	0.00	70.31	0.00	436.11	0.00	61.55	0.00	79.09	0.00

GLYPHOSATE (158)				International Estimated Daily Intake (IEDI)				ADI = 0 - 1 mg/kg bw					
Codex Code	Commodity description	Expr as	STMR mg/kg	Diets: g/person/day				Intake = daily intake: ug/person					
				G13 diet	G13 intake	G14 diet	G14 intake	G15 diet	G15 intake	G16 diet	G16 intake	G17 diet	G17 intake
PM 0110	Poultry meat, raw (incl prepared)	RAC	0	3.92	0.00	12.03	0.00	57.07	0.00	5.03	0.00	55.56	0.00
PO 0111	Poultry edible offal, raw (incl prepared)	RAC	0.088	0.10	0.01	0.70	0.06	0.97	0.09	0.10	0.01	NC	-
PE 0112	Eggs, raw, (incl dried)	RAC	0	3.84	0.00	4.41	0.00	27.25	0.00	1.13	0.00	7.39	0.00
Total intake (ug/person)=				1007.4		589.3		1902.4		551.3		907.6	
Bodyweight per region (kg bw) =				60		60		60		60		60	
ADI (ug/person)=				60000		60000		60000		60000		60000	
%ADI=				1.7%		1.0%		3.2%		0.9%		1.5%	
Rounded %ADI=				2%		1%		3%		1%		2%	

MESOTRIONE (277)				International Estimated Daily Intake (IEDI)				ADI = 0 - 0.5 mg/kg bw							
Codex Code	Commodity description	Expr as	STMR mg/kg	Diets as g/person/day				Intake as ug/person/day							
				G01 diet	G01 intake	G02 diet	G02 intake	G03 diet	G03 intake	G04 diet	G04 intake	G05 diet	G05 intake	G06 diet	G06 intake
FC 0001	Group of Citrus fruit, raw (incl citrus fruit juice, incl kumquat commodities)	RAC	0	34.91	0.00	16.51	0.00	17.23	0.00	104.48	0.00	35.57	0.00	98.49	0.00
FP 0009	Group of Pome fruits, raw (incl. apple juice, incl apple cider)	RAC	0	19.79	0.00	38.25	0.00	17.96	0.00	32.56	0.00	8.08	0.00	64.45	0.00
FS 0012	Group of Stone fruits, raw (incl dried plums, incl dried apricots)	RAC	0	11.60	0.00	23.79	0.00	0.25	0.00	11.84	0.00	2.41	0.00	33.44	0.00
FB 2005	Subgroup of Caneberries, raw	RAC	0	0.42	0.00	1.05	0.00	0.01	0.00	0.02	0.00	0.02	0.00	1.24	0.00
FB 2006	Subgroup of Bush berries, raw (including processed)	RAC	0	0.53	0.00	1.31	0.00	0.40	0.00	1.66	0.00	0.01	0.00	0.99	0.00
FB 0265	Cranberry, raw	RAC	0	0.02	0.00	0.01	0.00	NC	-	0.03	0.00	0.01	0.00	0.01	0.00
VO 0442	Okra, raw (i.e. Lady's Finger, Gombo)	RAC	0.01	1.97	0.02	NC	-	3.68	0.04	3.24	0.03	5.72	0.06	1.57	0.02
VD 0541	Soya bean, dry, raw (Glycine soja)	RAC	0.01	0.58	0.01	0.05	0.00	0.37	0.00	0.03	0.00	1.65	0.02	0.30	0.00
-	Soya paste (i.e. miso)	PP	0.002	NC	-	NC	-	NC	-	NC	-	NC	-	NC	-
-	Soya curd (i.e. tofu)	PP	0.002	NC	-	NC	-	NC	-	NC	-	NC	-	NC	-
OR 0541	Soya oil, refined	PP	0.002	12.99	0.03	10.43	0.02	3.63	0.01	13.10	0.03	10.70	0.02	13.10	0.03
-	Soya sauce	PP	0.002	0.01	0.00	0.02	0.00	0.01	0.00	0.34	0.00	0.03	0.00	0.01	0.00
-	Soya flour	PP	0.018	0.05	0.00	0.86	0.02	0.02	0.00	1.02	0.02	0.01	0.00	0.15	0.00
VS 0627	Rhubarb	RAC	0.01	0.73	0.01	1.30	0.01	0.80	0.01	1.95	0.02	NC	-	0.94	0.01
VS 0621	Asparagus, raw	RAC	0.01	0.01	0.00	0.01	0.00	0.01	0.00	0.03	0.00	0.07	0.00	0.21	0.00
GC 0647	Oats, raw (incl rolled)	RAC	0	0.05	0.00	7.05	0.00	0.10	0.00	1.71	0.00	0.96	0.00	0.04	0.00
CM 0649 (GC 0649)	Rice, husked, dry (incl polished, incl flour, incl starch, incl oil, incl beverages)	REP	0	45.40	0.00	14.99	0.00	84.88	0.00	111.73	0.00	194.75	0.00	93.12	0.00
GC 0646	Millet, raw (incl flour, incl beer)	RAC	0	1.46	0.00	2.32	0.00	5.84	0.00	0.89	0.00	16.17	0.00	0.01	0.00
GC 0651	Sorghum, raw (incl flour, incl beer) (i.e. Chicken corn, Dari seed, Durra, Feterita)	RAC	0	4.34	0.00	0.01	0.00	16.25	0.00	15.82	0.00	10.97	0.00	2.92	0.00
GC 0645	Maize, raw (incl glucose & dextrose & isoglucose, incl flour, incl oil, incl beer, incl germ, incl starch)	RAC	0	29.81	0.00	44.77	0.00	108.95	0.00	52.37	0.00	60.28	0.00	75.69	0.00
GC 0447	Sweet corn on the cob, raw (incl frozen kernels, incl canned kernels)	RAC	0	0.14	0.00	0.94	0.00	5.70	0.00	2.61	0.00	1.94	0.00	0.22	0.00
GS 0659	Sugar cane, raw (incl sugar, incl molasses)	RAC	0	99.68	0.00	86.27	0.00	31.38	0.00	80.36	0.00	84.18	0.00	99.10	0.00
TN 0085	Group of Tree nuts, raw (incl processed)	RAC	0.01	4.06	0.04	3.27	0.03	7.01	0.07	13.93	0.14	14.01	0.14	9.36	0.09
SO 0693	Linseed, raw (incl oil)	RAC	0.01	0.02	0.00	NC	-	NC	-	0.01	0.00	0.13	0.00	NC	-
MM 0095	MEAT FROM MAMMALS other than marine mammals, raw (incl prepared meat)	RAC	0	31.20	0.00	72.44	0.00	20.88	0.00	47.98	0.00	33.08	0.00	36.25	0.00
MO 0105	Edible offal (mammalian), raw	RAC	0	4.79	0.00	9.68	0.00	2.97	0.00	5.49	0.00	3.84	0.00	5.03	0.00



## MESOTRIONE (277)

## International Estimated Daily Intake (IEDI)

ADI = 0 - 0.5 mg/kg bw

Codex Code	Commodity description	Expr as	STMR mg/kg	Diets as g/person/day				Intake as ug/person/day							
				G01 diet	G01 intake	G02 diet	G02 intake	G03 diet	G03 intake	G04 diet	G04 intake	G05 diet	G05 intake	G06 diet	G06 intake
ML 0106	Milks, raw or skimmed (incl dairy products)	RAC	0	289.65	0.00	485.88	0.00	26.92	0.00	239.03	0.00	199.91	0.00	180.53	0.00
PO 0111	Poultry edible offal, raw (incl prepared)	RAC	0	0.12	0.00	0.12	0.00	0.11	0.00	5.37	0.00	0.24	0.00	0.10	0.00
PE 0112	Eggs, raw, (incl dried)	RAC	0	7.84	0.00	23.08	0.00	2.88	0.00	14.89	0.00	9.81	0.00	14.83	0.00
Total intake (ug/person)=				0.1		0.1		0.1		0.2		0.2		0.2	
Bodyweight per region (kg bw) =				60		60		60		60		60		60	
ADI (ug/person)=				30000		30000		30000		30000		30000		30000	
%ADI=				0.0%		0.0%		0.0%		0.0%		0.0%		0.0%	
Rounded %ADI=				0%		0%		0%		0%		0%		0%	

## MESOTRIONE (277)

## International Estimated Daily Intake (IEDI)

ADI = 0 - 0.5 mg/kg bw

Codex Code	Commodity description	Expr as	STMR mg/kg	Diets as g/person/day				Intake as ug/person/day							
				G07 diet	G07 intake	G08 diet	G08 intake	G09 diet	G09 intake	G10 diet	G10 intake	G11 diet	G11 intake	G12 diet	G12 intake
FC 0001	Group of Citrus fruit, raw (incl citrus fruit juice, incl kumquat commodities)	RAC	0	114.42	0.00	62.91	0.00	26.97	0.00	96.72	0.00	96.22	0.00	563.19	0.00
FP 0009	Group of Pome fruits, raw (incl. apple juice, incl apple cider)	RAC	0	71.38	0.00	81.73	0.00	42.91	0.00	58.89	0.00	103.85	0.00	12.48	0.00
FS 0012	Group of Stone fruits, raw (incl dried plums, incl dried apricots)	RAC	0	19.98	0.00	24.87	0.00	14.41	0.00	19.54	0.00	10.78	0.00	0.50	0.00
FB 2005	Subgroup of Caneberries, raw	RAC	0	0.56	0.00	1.43	0.00	0.14	0.00	1.23	0.00	1.14	0.00	0.01	0.00
FB 2006	Subgroup of Bush berries, raw (including processed)	RAC	0	1.31	0.00	5.50	0.00	0.01	0.00	2.57	0.00	0.82	0.00	2.15	0.00
FB 0265	Cranberry, raw	RAC	0	0.06	0.00	0.01	0.00	0.01	0.00	1.22	0.00	0.11	0.00	NC	-
VO 0442	Okra, raw (i.e. Lady's Finger, Gombo)	RAC	0.01	NC	-	NC	-	0.04	0.00	0.17	0.00	NC	-	0.72	0.01
VD 0541	Soya bean, dry, raw (Glycine soja)	RAC	0.01	0.02	0.00	0.33	0.00	6.64	0.07	3.94	0.04	NC	-	5.78	0.06
-	Soya paste (i.e. miso)	PP	0.002	NC	-	NC	-	NC	-	1.87	0.00	NC	-	NC	-
-	Soya curd (i.e. tofu)	PP	0.002	NC	-	NC	-	0.68	0.00	0.87	0.00	NC	-	NC	-
OR 0541	Soya oil, refined	PP	0.002	19.06	0.04	21.06	0.04	5.94	0.01	33.78	0.07	40.05	0.08	13.39	0.03
-	Soya sauce	PP	0.002	0.45	0.00	0.29	0.00	2.93	0.01	4.35	0.01	0.09	0.00	0.70	0.00
-	Soya flour	PP	0.018	0.22	0.00	0.27	0.00	0.29	0.01	0.17	0.00	NC	-	NC	-
VS 0627	Rhubarb	RAC	0.01	1.61	0.02	2.23	0.02	NC	-	0.52	0.01	7.63	0.08	1.39	0.01
VS 0621	Asparagus, raw	RAC	0.01	0.84	0.01	2.08	0.02	7.11	0.07	1.01	0.01	1.69	0.02	0.04	0.00
GC 0647	Oats, raw (incl rolled)	RAC	0	7.50	0.00	6.26	0.00	0.15	0.00	4.87	0.00	3.16	0.00	2.98	0.00

## MESOTRIONE (277)

## International Estimated Daily Intake (IEDI)

ADI = 0 - 0.5 mg/kg bw

Codex Code	Commodity description	Expr as	STMR mg/kg	Diets as g/person/day				Intake as ug/person/day							
				G07 diet	G07 intake	G08 diet	G08 intake	G09 diet	G09 intake	G10 diet	G10 intake	G11 diet	G11 intake	G12 diet	G12 intake
CM 0649 (GC 0649)	Rice, husked, dry (incl polished, incl flour, incl starch, incl oil, incl beverages)	REP	0	20.96	0.00	16.04	0.00	339.67	0.00	75.51	0.00	16.86	0.00	86.13	0.00
GC 0646	Millet, raw (incl flour, incl beer)	RAC	0	0.03	0.00	0.16	0.00	1.75	0.00	0.69	0.00	NC	-	NC	-
GC 0651	Sorghum, raw (incl flour, incl beer) (i.e. Chicken corn, Dari seed, Durra, Feterita)	RAC	0	NC	-	NC	-	1.44	0.00	1.15	0.00	NC	-	7.12	0.00
GC 0645	Maize, raw (incl glucose & dextrose & isoglucose, incl flour, incl oil, incl beer, incl germ, incl starch)	RAC	0	18.51	0.00	26.18	0.00	26.04	0.00	39.99	0.00	7.36	0.00	64.58	0.00
GC 0447	Sweet corn on the cob, raw (incl frozen kernels, incl canned kernels)	RAC	0	11.43	0.00	3.71	0.00	0.74	0.00	13.63	0.00	3.07	0.00	1.50	0.00
GS 0659	Sugar cane, raw (incl sugar, incl molasses)	RAC	0	92.24	0.00	95.72	0.00	28.47	0.00	77.39	0.00	117.73	0.00	103.90	0.00
TN 0085	Group of Tree nuts, raw (incl processed)	RAC	0.01	8.52	0.09	8.94	0.09	15.09	0.15	9.60	0.10	14.57	0.15	26.26	0.26
SO 0693	Linseed, raw (incl oil)	RAC	0.01	NC	-	NC	-	0.02	0.00	0.01	0.00	NC	-	NC	-
MM 0095	MEAT FROM MAMMALS other than marine mammals, raw (incl prepared meat)	RAC	0	140.03	0.00	150.89	0.00	79.32	0.00	111.24	0.00	120.30	0.00	51.27	0.00
MO 0105	Edible offal (mammalian), raw	RAC	0	15.17	0.00	5.19	0.00	6.30	0.00	6.78	0.00	3.32	0.00	3.17	0.00
ML 0106	Milks, raw or skimmed (incl dairy products)	RAC	0	388.92	0.00	335.88	0.00	49.15	0.00	331.25	0.00	468.56	0.00	245.45	0.00
PO 0111	Poultry edible offal, raw (incl prepared)	RAC	0	0.33	0.00	0.72	0.00	0.27	0.00	0.35	0.00	0.80	0.00	NC	-
PE 0112	Eggs, raw, (incl dried)	RAC	0	25.84	0.00	29.53	0.00	28.05	0.00	33.19	0.00	36.44	0.00	8.89	0.00
Total intake (ug/person)=				0.2				0.2				0.3			
Bodyweight per region (kg bw) =				60				60				60			
ADI (ug/person)=				30000				30000				30000			
%ADI=				0.0%				0.0%				0.0%			
Rounded %ADI=				0%				0%				0%			

## MESOTRIONE (277)

## International Estimated Daily Intake (IEDI)

ADI = 0 - 0.5 mg/kg bw

Codex Code	Commodity description	Expr as	STM <sup>R</sup> mg/kg	Diets: g/person/day				Intake = daily intake: ug/person					
				G13 diet	G13 intake	G14 diet	G14 intake	G15 diet	G15 intake	G16 diet	G16 intake	G17 diet	G17 intake
FC 0001	Group of Citrus fruit, raw (incl citrus fruit juice, incl kumquat commodities)	RAC	0	21.16	0.00	2.94	0.00	58.52	0.00	0.44	0.00	5.13	0.00
FP 0009	Group of Pome fruits, raw (incl. apple juice, incl apple cider)	RAC	0	68.89	0.00	11.06	0.00	80.62	0.00	189.82	0.00	19.56	0.00
FS 0012	Group of Stone fruits, raw (incl dried plums, incl dried apricots)	RAC	0	0.09	0.00	0.03	0.00	33.36	0.00	0.01	0.00	NC	-
FB 2005	Subgroup of Caneberries, raw	RAC	0	0.01	0.00	7.30	0.00	2.29	0.00	0.01	0.00	NC	-
FB 2006	Subgroup of Bush berries, raw (including processed)	RAC	0	0.82	0.00	4.05	0.00	5.94	0.00	0.43	0.00	2.66	0.00
FB 0265	Cranberry, raw	RAC	0	NC	-	NC	-	0.03	0.00	NC	-	NC	-
VO 0442	Okra, raw (i.e. Lady's Finger, Gombo)	RAC	0.01	6.23	0.06	0.10	0.00	NC	-	NC	-	NC	-
VD 0541	Soya bean, dry, raw (Glycine soja)	RAC	0.01	2.76	0.03	0.07	0.00	0.33	0.00	3.16	0.03	NC	-
-	Soya paste (i.e. miso)	PP	0.002	NC	-	NC	-	NC	-	NC	-	NC	-
-	Soya curd (i.e. tofu)	PP	0.002	NC	-	NC	-	NC	-	NC	-	NC	-
OR 0541	Soya oil, refined	PP	0.002	2.32	0.00	2.54	0.01	18.70	0.04	2.51	0.01	6.29	0.01
-	Soya sauce	PP	0.002	0.01	0.00	0.13	0.00	0.17	0.00	0.01	0.00	0.56	0.00
-	Soya flour	PP	0.018	0.11	0.00	0.08	0.00	0.07	0.00	0.01	0.00	0.03	0.00
VS 0627	Rhubarb	RAC	0.01	1.26	0.01	0.91	0.01	0.96	0.01	0.85	0.01	1.70	0.02
VS 0621	Asparagus, raw	RAC	0.01	0.01	0.00	0.01	0.00	0.17	0.00	0.01	0.00	NC	-
GC 0647	Oats, raw (incl rolled)	RAC	0	0.37	0.00	0.07	0.00	2.79	0.00	0.10	0.00	NC	-
CM 0649 (GC 0649)	Rice, husked, dry (incl polished, incl flour, incl starch, incl oil, incl beverages)	REP	0	52.55	0.00	286.02	0.00	18.64	0.00	19.67	0.00	75.09	0.00
GC 0646	Millet, raw (incl flour, incl beer)	RAC	0	61.13	0.00	0.78	0.00	NC	-	33.55	0.00	NC	-
GC 0651	Sorghum, raw (incl flour, incl beer) (i.e. Chicken corn, Dari seed, Durra, Feterita)	RAC	0	89.16	0.00	2.02	0.00	NC	-	35.38	0.00	NC	-
GC 0645	Maize, raw (incl glucose & dextrose & isoglucose, incl flour, incl oil, incl beer, incl germ, incl starch)	RAC	0	116.66	0.00	10.52	0.00	38.46	0.00	76.60	0.00	34.44	0.00
GC 0447	Sweet corn on the cob, raw (incl frozen kernels, incl canned kernels)	RAC	0	3.63	0.00	20.50	0.00	8.78	0.00	0.02	0.00	0.17	0.00
GS 0659	Sugar cane, raw (incl sugar, incl molasses)	RAC	0	33.75	0.00	106.29	0.00	78.09	0.00	29.09	0.00	45.70	0.00
TN 0085	Group of Tree nuts, raw (incl processed)	RAC	0.01	4.39	0.04	135.53	1.36	6.11	0.06	0.72	0.01	317.74	3.18
SO 0693	Linseed, raw (incl oil)	RAC	0.01	0.07	0.00	NC	-	0.03	0.00	NC	-	NC	-
MM 0095	MEAT FROM MAMMALS other than marine mammals, raw (incl prepared meat)	RAC	0	29.18	0.00	50.89	0.00	121.44	0.00	22.58	0.00	72.14	0.00
MO 0105	Edible offal (mammalian), raw	RAC	0	4.64	0.00	1.97	0.00	10.01	0.00	3.27	0.00	3.98	0.00



**METAFLUMIZONE (236)**

International Estimated Daily Intake (IEDI)

ADI = 0 - 0.1 mg/kg bw

Codex Code	Commodity description	Expr as	STMR mg/kg	Diets as g/person/day				Intake as ug/person/day							
				G01 diet	G01 intake	G02 diet	G02 intake	G03 diet	G03 intake	G04 diet	G04 intake	G05 diet	G05 intake	G06 diet	G06 intake
FC 0002	Subgroup of Lemons and limes, raw (incl lemon juice) (incl kumquat commodities)	RAC	0.52	4.82	2.51	2.45	1.27	3.93	2.04	25.44	13.23	8.74	4.54	16.23	8.44
FC 0004	Subgroup of Oranges, sweet, sour, raw	RAC	0.66	20.66	13.64	5.23	3.45	11.90	7.85	37.90	25.01	21.16	13.97	56.46	37.26
JF 0004	Subgroup of Oranges, juice (single strength, incl. concentrated)	PP	0.0066	1.27	0.01	2.20	0.01	0.09	0.00	11.81	0.08	0.46	0.00	1.69	0.01
FP 0226	Apple, raw (incl cider, excl juice)	RAC	0.275	13.49	3.71	26.63	7.32	15.05	4.14	16.28	4.48	6.47	1.78	47.88	13.17
JF 0226	Apple juice, single strength (incl. concentrated)	PP	0.022	0.32	0.01	3.07	0.07	0.07	0.00	5.00	0.11	0.29	0.01	5.57	0.12
FB 0269	Grapes, raw (i.e. table grapes)	RAC	0.98	12.68	12.43	9.12	8.94	0.03	0.03	16.88	16.54	3.70	3.63	54.42	53.33
DF 0269	Grapes, dried (= currants, raisins and sultanas) (from table-grapes)	PP	2.548	0.51	1.30	0.51	1.30	0.01	0.03	1.27	3.24	0.12	0.31	2.07	5.27
JF 0269	Grape juice (from wine grapes)	PP	1.0437	0.14	0.15	0.29	0.30	0.05	0.05	0.30	0.31	0.24	0.25	0.05	0.05
-	Graps must (from wine-grapes)	PP	1.3916	0.33	0.46	0.13	0.18	0.01	0.01	0.02	0.03	0.01	0.01	0.02	0.03
-	Grape wine (incl vermouths) (from wine-grapes)	PP	0.0784	0.67	0.05	12.53	0.98	2.01	0.16	1.21	0.09	3.53	0.28	4.01	0.31
VB 0402	Brussels sprouts, raw	RAC	0.125	0.63	0.08	6.41	0.80	0.13	0.02	1.03	0.13	NC	-	2.35	0.29
VB 0467	Chinese cabbage, type pe-tsai, raw	RAC	0.765	0.45	0.34	4.56	3.49	0.09	0.07	0.73	0.56	NC	-	1.67	1.28
VC 0046	Melons, except watermelon, raw (Cantaloupe)	RAC	0.02	8.90	0.18	8.64	0.17	0.80	0.02	17.90	0.36	2.80	0.06	29.17	0.58
VO 0448	Tomato, raw	RAC	0.125	41.73	5.22	75.65	9.46	10.66	1.33	82.87	10.36	24.75	3.09	200.93	25.12
-	Tomato, canned (& peeled)	PP	0.02	0.20	0.00	0.31	0.01	0.02	0.00	1.11	0.02	0.11	0.00	1.50	0.03
-	Tomato, paste (i.e. concentrated tomato sauce/puree)	PP	0.1	2.34	0.23	1.33	0.13	1.57	0.16	4.24	0.42	0.34	0.03	2.83	0.28
JF 0448	Tomato, juice (single strength, incl concentrated)	PP	0.02	0.29	0.01	0.29	0.01	0.01	0.00	0.38	0.01	0.05	0.00	0.14	0.00
VO 0445	Peppers, sweet, raw	RAC	0.18	1.43	0.26	2.61	0.47	1.05	0.19	2.01	0.36	2.59	0.47	6.24	1.12
VO 0440	Egg plant, raw (i.e. aubergine)	RAC	0.18	5.58	1.00	4.31	0.78	0.89	0.16	9.31	1.68	13.64	2.46	20.12	3.62
VL 0483	Lettuce, leaf, raw	RAC	2	0.53	1.06	0.36	0.72	0.16	0.32	6.21	12.42	1.90	3.80	6.05	12.10
VD 0541	Soya bean, dry, raw (incl paste, incl curd, incl oil, incl sauce)	RAC	0.02	72.79	1.46	59.05	1.18	20.55	0.41	74.20	1.48	61.12	1.22	73.24	1.46
VR 0589	Potato, raw (incl flour, incl frozen, incl starch, incl tapioca)	RAC	0.02	59.74	1.19	316.14	6.32	9.78	0.20	60.26	1.21	54.12	1.08	119.82	2.40
GC 0645	Maize, raw (incl glucose & dextrose & isoglucose, incl flour, incl oil, incl beer, incl germ, incl starch)	RAC	0.02	29.81	0.60	44.77	0.90	108.95	2.18	52.37	1.05	60.28	1.21	75.69	1.51
GS 0659	Sugar cane, raw (incl sugar, incl molasses)	RAC	0	99.68	0.00	86.27	0.00	31.38	0.00	80.36	0.00	84.18	0.00	99.10	0.00
SB 0716	Coffee bean, raw (i.e. green coffee)	RAC	0.02	0.96	0.02	0.16	0.00	0.91	0.02	0.27	0.01	1.37	0.03	0.46	0.01
SM 0716	Coffee bean, roasted	PP	0.046	0.19	0.01	0.91	0.04	0.16	0.01	2.50	0.12	0.39	0.02	0.40	0.02
-	Coffee bean, instant coffee (incl essences and concentrates)	PP	0.046	0.07	0.00	0.94	0.04	0.07	0.00	0.70	0.03	0.07	0.00	0.29	0.01

## METAFLUMIZONE (236)

## International Estimated Daily Intake (IEDI)

ADI = 0 - 0.1 mg/kg bw

Codex Code	Commodity description	Expr as	STMR mg/kg	Diets as g/person/day				Intake as ug/person/day							
				G01 diet	G01 intake	G02 diet	G02 intake	G03 diet	G03 intake	G04 diet	G04 intake	G05 diet	G05 intake	G06 diet	G06 intake
HS 0444	Peppers, chili, dried	PP	1.8	0.42	0.76	0.53	0.95	0.84	1.51	0.50	0.90	0.95	1.71	0.37	0.67
MM 0095	MEAT FROM MAMMALS other than marine mammals, raw (incl prepared meat) -80% as muscle	RAC	0.02	24.96	0.50	57.95	1.16	16.70	0.33	38.38	0.77	26.46	0.53	29.00	0.58
MM 0095	MEAT FROM MAMMALS other than marine mammals, raw (incl prepared meat) - 20% as fat	RAC	0.092	6.24	0.57	14.49	1.33	4.18	0.38	9.60	0.88	6.62	0.61	7.25	0.67
MF 0100	Mammalian fats, raw, excl milk fats (incl rendered fats)	RAC	0.092	3.29	0.30	6.14	0.56	0.82	0.08	1.57	0.14	2.23	0.21	1.07	0.10
MO 0105	Edible offal (mammalian), raw	RAC	0.02	4.79	0.10	9.68	0.19	2.97	0.06	5.49	0.11	3.84	0.08	5.03	0.10
ML 0106	Milks, raw or skimmed (incl dairy products)	RAC	0.33	289.65	95.58	485.88	160.34	26.92	8.88	239.03	78.88	199.91	65.97	180.53	59.57
PM 0110	Poultry meat, raw (incl prepared) - 90% as muscle	RAC	0.0022	13.17	0.03	26.78	0.06	7.24	0.02	116.71	0.26	22.54	0.05	32.09	0.07
PM 0110	Poultry meat, raw (incl prepared) - 10% as fat	RAC	0.069	1.46	0.10	2.98	0.21	0.80	0.06	12.97	0.89	2.50	0.17	3.57	0.25
PF 0111	Poultry fat, raw (incl rendered)	RAC	0.069	0.10	0.01	0.10	0.01	NC	-	0.10	0.01	0.10	0.01	0.10	0.01
PO 0111	Poultry edible offal, raw (incl prepared)	RAC	0.0068	0.12	0.00	0.12	0.00	0.11	0.00	5.37	0.04	0.24	0.00	0.10	0.00
PE 0112	Eggs, raw, (incl dried)	RAC	0.0077	7.84	0.06	23.08	0.18	2.88	0.02	14.89	0.11	9.81	0.08	14.83	0.11

Total intake (ug/person)=	143.9	213.3	30.7	176.3	107.6	230.0
Bodyweight per region (kg bw) =	60	60	60	60	60	60
ADI (ug/person)=	6000	6000	6000	6000	6000	6000
%ADI=	2.4%	3.6%	0.5%	2.9%	1.8%	3.8%
Rounded %ADI=	2%	4%	1%	3%	2%	4%

## METAFLUMIZONE (236)

## International Estimated Daily Intake (IEDI)

ADI = 0 - 0.1 mg/kg bw

Codex Code	Commodity description	Expr as	STMR mg/kg	Diets as g/person/day				Intake as ug/person/day							
				G07 diet	G07 intake	G08 diet	G08 intake	G09 diet	G09 intake	G10 diet	G10 intake	G11 diet	G11 intake	G12 diet	G12 intake
FC 0002	Subgroup of Lemons and limes, raw (incl lemon juice) (incl kumquat commodities)	RAC	0.52	10.12	5.26	15.69	8.16	2.88	1.50	12.30	6.40	22.32	11.61	6.59	3.43
FC 0004	Subgroup of Oranges, sweet, sour, raw	RAC	0.66	15.68	10.35	24.00	15.84	6.80	4.49	29.09	19.20	15.39	10.16	160.47	105.91
JF 0004	Subgroup of Oranges, juice (single strength, incl. concentrated)	PP	0.0066	33.31	0.22	1.78	0.01	0.28	0.00	18.97	0.13	14.01	0.09	13.36	0.09
FP 0226	Apple, raw (incl cider, excl juice)	RAC	0.275	41.14	11.31	56.49	15.53	26.64	7.33	31.58	8.68	51.94	14.28	3.05	0.84
JF 0226	Apple juice, single strength (incl. concentrated)	PP	0.022	14.88	0.33	11.98	0.26	0.15	0.00	9.98	0.22	30.32	0.67	3.47	0.08
FB 0269	Grapes, raw (i.e. table grapes)	RAC	0.98	6.33	6.20	11.22	11.00	5.21	5.11	9.38	9.19	4.55	4.46	0.78	0.76
DF 0269	Grapes, dried (= currants, raisins and sultanas) (from table-grapes)	PP	2.548	3.09	7.87	1.51	3.85	0.03	0.08	1.38	3.52	4.26	10.85	0.42	1.07

## METAFLUMIZONE (236)

## International Estimated Daily Intake (IEDI)

ADI = 0 - 0.1 mg/kg bw

Codex Code	Commodity description	Expr as	STMR mg/kg	Diets as g/person/day				Intake as ug/person/day							
				G07 diet	G07 intake	G08 diet	G08 intake	G09 diet	G09 intake	G10 diet	G10 intake	G11 diet	G11 intake	G12 diet	G12 intake
JF 0269	Grape juice (from wine grapes)	PP	1.0437	0.56	0.58	1.96	2.05	0.02	0.02	2.24	2.34	2.27	2.37	0.34	0.35
-	Graps must (from wine-grapes)	PP	1.3916	0.16	0.22	0.09	0.13	0.01	0.01	0.12	0.17	0.11	0.15	NC	-
-	Grape wine (incl vermouths) (from wine-grapes)	PP	0.0784	88.93	6.97	62.41	4.89	1.84	0.14	25.07	1.97	61.17	4.80	5.84	0.46
VB 0402	Brussels sprouts, raw	RAC	0.125	2.24	0.28	2.67	0.33	6.23	0.78	0.32	0.04	4.19	0.52	2.58	0.32
VB 0467	Chinese cabbage, type pe-tsai, raw	RAC	0.765	NC	-	NC	-	17.39	13.30	9.44	7.22	NC	-	1.83	1.40
VC 0046	Melons, except watermelon, raw (Cantaloupe)	RAC	0.02	9.20	0.18	11.95	0.24	14.63	0.29	8.99	0.18	7.86	0.16	2.46	0.05
VO 0448	Tomato, raw	RAC	0.125	32.13	4.02	51.27	6.41	34.92	4.37	73.37	9.17	15.15	1.89	8.88	1.11
-	Tomato, canned (& peeled)	PP	0.02	7.57	0.15	2.66	0.05	0.30	0.01	0.97	0.02	7.31	0.15	0.41	0.01
-	Tomato, paste (i.e. concentrated tomato sauce/puree)	PP	0.1	4.96	0.50	3.20	0.32	0.15	0.02	1.61	0.16	6.88	0.69	0.52	0.05
JF 0448	Tomato, juice (single strength, incl concentrated)	PP	0.02	0.80	0.02	0.07	0.00	0.05	0.00	0.61	0.01	0.40	0.01	0.08	0.00
VO 0445	Peppers, sweet, raw	RAC	0.18	NC	-	NC	-	8.25	1.49	3.03	0.55	NC	-	0.91	0.16
VO 0440	Egg plant, raw (i.e. aubergine)	RAC	0.18	1.01	0.18	1.69	0.30	21.37	3.85	3.00	0.54	1.40	0.25	NC	-
VL 0483	Lettuce, leaf, raw	RAC	2	14.50	29.00	11.76	23.52	13.14	26.28	19.50	39.00	4.81	9.62	2.23	4.46
VD 0541	Soya bean, dry, raw (incl paste, incl curd, incl oil, incl sauce)	RAC	0.02	106.33	2.13	117.78	2.36	42.12	0.84	195.70	3.91	222.52	4.45	80.47	1.61
VR 0589	Potato, raw (incl flour, incl frozen, incl starch, incl tapioca)	RAC	0.02	225.03	4.50	234.24	4.68	71.48	1.43	177.55	3.55	234.55	4.69	37.71	0.75
GC 0645	Maize, raw (incl glucose & dextrose & isoglucose, incl flour, incl oil, incl beer, incl germ, incl starch)	RAC	0.02	18.51	0.37	26.18	0.52	26.04	0.52	39.99	0.80	7.36	0.15	64.58	1.29
GS 0659	Sugar cane, raw (incl sugar, incl molasses)	RAC	0	92.24	0.00	95.72	0.00	28.47	0.00	77.39	0.00	117.73	0.00	103.90	0.00
SB 0716	Coffee bean, raw (i.e. green coffee)	RAC	0.02	0.60	0.01	NC	-	0.62	0.01	1.71	0.03	NC	-	3.51	0.07
SM 0716	Coffee bean, roasted	PP	0.046	7.02	0.32	9.75	0.45	0.02	0.00	5.09	0.23	13.38	0.62	0.77	0.04
-	Coffee bean, instant coffee (incl essences and concentrates)	PP	0.046	0.75	0.03	0.30	0.01	0.04	0.00	0.67	0.03	2.43	0.11	1.43	0.07
HS 0444	Peppers, chili, dried	PP	1.8	0.11	0.20	0.21	0.38	0.36	0.65	0.21	0.38	0.25	0.45	0.15	0.27
MM 0095	MEAT FROM MAMMALS other than marine mammals, raw (incl prepared meat) -80% as muscle	RAC	0.02	112.02	2.24	120.71	2.41	63.46	1.27	88.99	1.78	96.24	1.92	41.02	0.82
MM 0095	MEAT FROM MAMMALS other than marine mammals, raw (incl prepared meat) - 20% as fat	RAC	0.092	28.01	2.58	30.18	2.78	15.86	1.46	22.25	2.05	24.06	2.21	10.25	0.94
MF 0100	Mammalian fats, raw, excl milk fats (incl rendered fats)	RAC	0.092	6.44	0.59	15.51	1.43	3.79	0.35	8.29	0.76	18.44	1.70	8.00	0.74
MO 0105	Edible offal (mammalian), raw	RAC	0.02	15.17	0.30	5.19	0.10	6.30	0.13	6.78	0.14	3.32	0.07	3.17	0.06

## METAFLUMIZONE (236)

## International Estimated Daily Intake (IEDI)

ADI = 0 - 0.1 mg/kg bw

Codex Code	Commodity description	Expr as	STMR mg/kg	Diets as g/person/day				Intake as ug/person/day							
				G07 diet	G07 intake	G08 diet	G08 intake	G09 diet	G09 intake	G10 diet	G10 intake	G11 diet	G11 intake	G12 diet	G12 intake
ML 0106	Milks, raw or skimmed (incl dairy products)	RAC	0.33	388.92	128.34	335.88	110.84	49.15	16.22	331.25	109.31	468.56	154.62	245.45	81.00
PM 0110	Poultry meat, raw (incl prepared) - 90% as muscle	RAC	0.0022	66.38	0.15	48.47	0.11	21.58	0.05	78.41	0.17	48.04	0.11	76.01	0.17
PM 0110	Poultry meat, raw (incl prepared) - 10% as fat	RAC	0.069	7.38	0.51	5.39	0.37	2.40	0.17	8.71	0.60	5.34	0.37	8.45	0.58
PF 0111	Poultry fat, raw (incl rendered)	RAC	0.069	0.10	0.01	0.10	0.01	NC	-	0.10	0.01	0.71	0.05	NC	-
PO 0111	Poultry edible offal, raw (incl prepared)	RAC	0.0068	0.33	0.00	0.72	0.00	0.27	0.00	0.35	0.00	0.80	0.01	NC	-
PE 0112	Eggs, raw, (incl dried)	RAC	0.0077	25.84	0.20	29.53	0.23	28.05	0.22	33.19	0.26	36.44	0.28	8.89	0.07
Total intake (ug/person)=				226.1		219.6		92.4		232.7		244.5		209.0	
Bodyweight per region (kg bw) =				60		60		55		60		60		60	
ADI (ug/person)=				6000		6000		5500		6000		6000		6000	
%ADI=				3.8%		3.7%		1.7%		3.9%		4.1%		3.5%	
Rounded %ADI=				4%		4%		2%		4%		4%		3%	

## METAFLUMIZONE (236)

## International Estimated Daily Intake (IEDI)

ADI = 0 - 0.1 mg/kg bw

Codex Code	Commodity description	Expr as	STMR mg/kg	Diets: g/person/day				Intake = daily intake: ug/person							
				G13 diet	G13 intake	G14 diet	G14 intake	G15 diet	G15 intake	G16 diet	G16 intake	G17 diet	G17 intake	G17 diet	G17 intake
FC 0002	Subgroup of Lemons and limes, raw (incl lemon juice) (incl kumquat commodities)	RAC	0.52	18.97	9.86	0.97	0.50	6.23	3.24	0.09	0.05	3.35	1.74		
FC 0004	Subgroup of Oranges, sweet, sour, raw	RAC	0.66	1.18	0.78	1.11	0.73	14.28	9.42	0.05	0.03	1.08	0.71		
JF 0004	Subgroup of Oranges, juice (single strength, incl. concentrated)	PP	0.0066	0.08	0.00	0.26	0.00	12.61	0.08	0.14	0.00	0.33	0.00		
FP 0226	Apple, raw (incl cider, excl juice)	RAC	0.275	66.67	18.33	2.06	0.57	55.83	15.35	188.29	51.78	1.38	0.38		
JF 0226	Apple juice, single strength (incl. concentrated)	PP	0.022	0.03	0.00	0.10	0.00	7.19	0.16	0.03	0.00	NC	-		
FB 0269	Grapes, raw (i.e. table grapes)	RAC	0.98	0.14	0.14	0.36	0.35	15.22	14.92	0.01	0.01	0.09	0.09		
DF 0269	Grapes, dried (= currants, raisins and sultanas) (from table-grapes)	PP	2.548	0.01	0.03	0.13	0.33	1.06	2.70	0.01	0.03	0.03	0.08		
JF 0269	Grape juice (from wine grapes)	PP	1.0437	0.01	0.01	0.01	0.01	0.41	0.43	0.01	0.01	NC	-		
-	Graps must (from wine-grapes)	PP	1.3916	0.01	0.01	0.01	0.01	0.11	0.15	0.01	0.01	0.19	0.26		
-	Grape wine (incl vermouths) (from wine-grapes)	PP	0.0784	0.31	0.02	0.23	0.02	60.43	4.74	0.52	0.04	31.91	2.50		
VB 0402	Brussels sprouts, raw	RAC	0.125	0.88	0.11	0.69	0.09	2.89	0.36	0.01	0.00	NC	-		
VB 0467	Chinese cabbage, type pe-tsai, raw	RAC	0.765	0.62	0.47	0.49	0.37	NC	-	0.01	0.01	NC	-		
VC 0046	Melons, except watermelon, raw (Cantaloupe)	RAC	0.02	0.19	0.00	0.10	0.00	4.98	0.10	0.01	0.00	NC	-		
VO 0448	Tomato, raw	RAC	0.125	12.99	1.62	4.79	0.60	58.40	7.30	0.92	0.12	0.09	0.01		
-	Tomato, canned (& peeled)	PP	0.02	0.07	0.00	0.08	0.00	2.42	0.05	0.07	0.00	NC	-		



METAFLUMIZONE (236)				International Estimated Daily Intake (IEDI)				ADI = 0 - 0.1 mg/kg bw					
Codex Code	Commodity description	Expr as	STMR mg/kg	Diets: g/person/day				Intake = daily intake: ug/person					
				G13 diet	G13 intake	G14 diet	G14 intake	G15 diet	G15 intake	G16 diet	G16 intake	G17 diet	G17 intake
-	Tomato, paste (i.e. concentrated tomato sauce/puree)	PP	0.1	0.58	0.06	0.22	0.02	2.21	0.22	0.24	0.02	3.10	0.31
JF 0448	Tomato, juice (single strength, incl concentrated)	PP	0.02	0.05	0.00	0.01	0.00	0.42	0.01	0.01	0.00	0.02	0.00
VO 0445	Peppers, sweet, raw	RAC	0.18	1.24	0.22	1.27	0.23	NC	-	0.01	0.00	NC	-
VO 0440	Egg plant, raw (i.e. aubergine)	RAC	0.18	1.31	0.24	8.26	1.49	3.95	0.71	0.01	0.00	NC	-
VL 0483	Lettuce, leaf, raw	RAC	2	0.29	0.58	0.03	0.06	6.71	13.42	0.01	0.02	NC	-
VD 0541	Soya bean, dry, raw (incl paste, incl curd, incl oil, incl sauce)	RAC	0.02	15.80	0.32	14.29	0.29	104.36	2.09	17.11	0.34	35.20	0.70
VR 0589	Potato, raw (incl flour, incl frozen, incl starch, incl tapioca)	RAC	0.02	23.96	0.48	13.56	0.27	213.41	4.27	104.35	2.09	8.56	0.17
GC 0645	Maize, raw (incl glucose & dextrose & isoglucose, incl flour, incl oil, incl beer, incl germ, incl starch)	RAC	0.02	116.66	2.33	10.52	0.21	38.46	0.77	76.60	1.53	34.44	0.69
GS 0659	Sugar cane, raw (incl sugar, incl molasses)	RAC	0	33.75	0.00	106.29	0.00	78.09	0.00	29.09	0.00	45.70	0.00
SB 0716	Coffee bean, raw (i.e. green coffee)	RAC	0.02	0.83	0.02	0.69	0.01	1.09	0.02	2.91	0.06	0.82	0.02
SM 0716	Coffee bean, roasted	PP	0.046	0.02	0.00	0.41	0.02	7.50	0.35	0.01	0.00	0.06	0.00
-	Coffee bean, instant coffee (incl essences and concentrates)	PP	0.046	0.03	0.00	0.05	0.00	0.60	0.03	0.01	0.00	5.53	0.25
HS 0444	Peppers, chili, dried	PP	1.8	0.58	1.04	1.27	2.29	1.21	2.18	0.12	0.22	NC	-
MM 0095	MEAT FROM MAMMALS other than marine mammals, raw (incl prepared meat) -80% as muscle	RAC	0.02	23.34	0.47	40.71	0.81	97.15	1.94	18.06	0.36	57.71	1.15
MM 0095	MEAT FROM MAMMALS other than marine mammals, raw (incl prepared meat) - 20% as fat	RAC	0.092	5.84	0.54	10.18	0.94	24.29	2.23	4.52	0.42	14.43	1.33
MF 0100	Mammalian fats, raw, excl milk fats (incl rendered fats)	RAC	0.092	1.05	0.10	1.14	0.10	18.69	1.72	0.94	0.09	3.12	0.29
MO 0105	Edible offal (mammalian), raw	RAC	0.02	4.64	0.09	1.97	0.04	10.01	0.20	3.27	0.07	3.98	0.08
ML 0106	Milks, raw or skimmed (incl dairy products)	RAC	0.33	108.75	35.89	70.31	23.20	436.11	143.92	61.55	20.31	79.09	26.10
PM 0110	Poultry meat, raw (incl prepared) - 90% as muscle	RAC	0.0022	3.53	0.01	10.83	0.02	51.36	0.11	4.53	0.01	50.00	0.11
PM 0110	Poultry meat, raw (incl prepared) - 10% as fat	RAC	0.069	0.39	0.03	1.20	0.08	5.71	0.39	0.50	0.03	5.56	0.38
PF 0111	Poultry fat, raw (incl rendered)	RAC	0.069	NC	-	NC	-	0.32	0.02	NC	-	NC	-
PO 0111	Poultry edible offal, raw (incl prepared)	RAC	0.0068	0.10	0.00	0.70	0.00	0.97	0.01	0.10	0.00	NC	-
PE 0112	Eggs, raw, (incl dried)	RAC	0.0077	3.84	0.03	4.41	0.03	27.25	0.21	1.13	0.01	7.39	0.06
Total intake (ug/person)=				73.8				33.7				233.8	
Bodyweight per region (kg bw) =				60				60				60	
ADI (ug/person)=				6000				6000				6000	
%ADI=				1.2%				0.6%				3.9%	
Rounded %ADI=				1%				1%				4%	

**METHOPRENE (147)**

International Estimated Daily Intake (IEDI)

ADI = 0 - 0.05 mg/kg bw

Codex Code	Commodity description	Expr as	STMR mg/kg	Diets as g/person/day				Intake as ug/person/day							
				G01 diet	G01 intake	G02 diet	G02 intake	G03 diet	G03 intake	G04 diet	G04 intake	G05 diet	G05 intake	G06 diet	G06 intake
GC 0648	Quinoa, raw	RAC	4.85	NC	-	NC	-	NC	-	NC	-	0.07	0.34	NC	-
GC 0650	Rye, raw (incl flour)	RAC	4.85	0.13	0.63	19.38	93.99	0.10	0.49	0.12	0.58	0.03	0.15	2.15	10.43
GC 0653	Triticale, raw (incl flour)	RAC	4.85	NC	-	NC	-	NC	-	0.01	0.05	0.39	1.89	NC	-
GC 0654	Wheat, raw (incl meslin)	RAC	4.85	0.01	0.05	1.12	5.43	NC	-	0.01	0.05	0.56	2.72	NC	-
-	Wheat, bulgur	PP	4.85	NC	-	NC	-	NC	-	0.03	0.15	NC	-	NC	-
CF 1210	Wheat, germ	PP	23.3	NC	-	NC	-	0.01	0.23	0.01	0.23	0.14	3.26	0.01	0.23
CP 1212	Wheat, wholemeal bread	PP	4.51	0.01	0.05	0.01	0.05	0.01	0.05	0.01	0.05	0.03	0.14	0.01	0.05
CP 1211	Wheat, white bread	PP	1.72	0.25	0.43	0.63	1.08	0.12	0.21	0.43	0.74	1.39	2.39	0.22	0.38
-	Wheat, Fermented Beverages (Korean jakju and takju)	PP	4.85	NC	-	NC	-	NC	-	NC	-	NC	-	NC	-
CF 1211	Wheat, white flour (incl white flour products: starch, gluten, macaroni, pastry)	PP	1.72	301.24	518.13	268.64	462.06	30.21	51.96	222.51	382.72	134.73	231.74	343.12	590.17
GC 0640	Barley, raw (incl malt extract, incl pot&pearled, incl flour & grits, incl beer, incl malt)	RAC	4.85	19.91	96.56	31.16	151.13	5.04	24.44	3.10	15.04	9.77	47.38	4.31	20.90
GC 0641	Buckwheat, raw (incl flour)	RAC	4.85	NC	-	0.40	1.94	0.01	0.05	0.01	0.05	0.07	0.34	0.09	0.44
GC 0647	Oats, raw (incl rolled)	RAC	4.85	0.05	0.24	7.05	34.19	0.10	0.49	1.71	8.29	0.96	4.66	0.04	0.19
CM 0649 (GC 0649)	Rice, husked, dry ( incl flour, incl oil, incl beverages, incl starch, excl polished)	REP	1.07	1.26	1.35	1.58	1.69	31.05	33.22	5.43	5.81	0.90	0.96	2.18	2.33
CM 1205	Rice polished, dry	PP	0.1	34.21	3.42	10.39	1.04	41.72	4.17	82.38	8.24	150.24	15.02	70.47	7.05
GC 0646	Millet, raw (incl flour, incl beer)	RAC	4.85	1.46	7.08	2.32	11.25	5.84	28.32	0.89	4.32	16.17	78.42	0.01	0.05
GC 0651	Sorghum, raw (incl flour, incl beer) (i.e. Chicken corn, Dari seed, Durra, Feterita)	RAC	4.85	4.34	21.05	0.01	0.05	16.25	78.81	15.82	76.73	10.97	53.20	2.92	14.16
GC 0645	Maize, raw (incl glucose & dextrose & isoglucose, incl flour, incl beer, incl germ, incl starch, excl oil)	RAC	4.85	28.85	139.92	43.93	213.06	108.66	527.00	46.94	227.66	59.87	290.37	73.58	356.86
OR 0645	Maize oil	PP	0	0.96	0.00	0.85	0.00	0.29	0.00	5.42	0.00	0.42	0.00	2.10	0.00
-	Cereals, NES, raw (including processed) : canagua, quihuicha, Job's tears and wild rice	RAC	4.85	2.04	9.89	2.99	14.50	1.86	9.02	19.17	92.97	3.33	16.15	1.66	8.05
SO 2090	Subgroup of Small seed oilseeds, raw (incl processed)	RAC	2	2.19	4.38	1.22	2.44	1.05	2.10	7.10	14.20	10.29	20.58	4.83	9.66
SO 2091	Subgroup of Sunflower seeds, raw (incl processed)	RAC	2	7.43	14.86	36.06	72.12	1.15	2.30	8.77	17.54	5.74	11.48	13.63	27.26
SO 0691	Cotton seed, raw (incl oil)	RAC	2	20.53	41.06	9.80	19.60	6.42	12.84	4.73	9.46	7.14	14.28	18.68	37.36
-	Castor bean, raw (incl oil)	RAC	2	NC	-	0.07	0.14	NC	-	NC	-	NC	-	0.01	0.02
SO 3155	Melonseed	RAC	2	0.06	0.12	NC	-	1.08	2.16	0.38	0.76	0.01	0.02	0.25	0.50
SO 0696	Palm kernels, raw (incl oil)	RAC	2	5.81	11.62	3.77	7.54	20.07	40.14	24.53	49.06	5.94	11.88	8.99	17.98

METHOPRENE (147)				International Estimated Daily Intake (IEDI)				ADI = 0 - 0.05 mg/kg bw							
Codex Code	Commodity description	Expr as	STMR mg/kg	Diets as g/person/day				Intake as ug/person/day							
				G01 diet	G01 intake	G02 diet	G02 intake	G03 diet	G03 intake	G04 diet	G04 intake	G05 diet	G05 intake	G06 diet	G06 intake
SO 0697	Peanuts, nutmeat, raw (incl roasted, incl oil, incl butter)	RAC	5	1.30	6.50	1.23	6.15	12.62	63.10	2.87	14.35	6.59	32.95	2.67	13.35
SO 0701	Shea nut (karite nuts), nutmeat, raw (incl butter)	RAC	2	NC	-	NC	-	0.34	0.68	NC	-	NC	-	NC	-
MM 0095	MEAT FROM MAMMALS other than marine mammals, raw (incl prepared meat) -80% as muscle	RAC	0.007	24.96	0.17	57.95	0.41	16.70	0.12	38.38	0.27	26.46	0.19	29.00	0.20
MM 0095	MEAT FROM MAMMALS other than marine mammals, raw (incl prepared meat) - 20% as fat	RAC	0.092	6.24	0.57	14.49	1.33	4.18	0.38	9.60	0.88	6.62	0.61	7.25	0.67
MF 0100	Mammalian fats, raw, excl milk fats (incl rendered fats)	RAC	0.092	3.29	0.30	6.14	0.56	0.82	0.08	1.57	0.14	2.23	0.21	1.07	0.10
MO 0105	Edible offal (mammalian), raw	RAC	0.014	4.79	0.07	9.68	0.14	2.97	0.04	5.49	0.08	3.84	0.05	5.03	0.07
ML 0106	Milks, raw or skimmed (incl dairy products)	RAC	0.044	289.65	12.74	485.88	21.38	26.92	1.18	239.03	10.52	199.91	8.80	180.53	7.94
PM 0110	Poultry meat, raw (incl prepared)	RAC	0.007	14.63	0.10	29.76	0.21	8.04	0.06	129.68	0.91	25.04	0.18	35.66	0.25
PO 0111	Poultry edible offal, raw (incl prepared)	RAC	0.007	0.12	0.00	0.12	0.00	0.11	0.00	5.37	0.04	0.24	0.00	0.10	0.00
PE 0112	Eggs, raw, (incl dried)	RAC	0.006	7.84	0.05	23.08	0.14	2.88	0.02	14.89	0.09	9.81	0.06	14.83	0.09
Total intake (ug/person)=				891.4				1123.6				883.7			
Bodyweight per region (kg bw) =				60				60				60			
ADI (ug/person)=				3000				3000				3000			
%ADI=				29.7%				37.5%				29.5%			
Rounded %ADI=				30%				40%				30%			

METHOPRENE (147)				International Estimated Daily Intake (IEDI)				ADI = 0 - 0.05 mg/kg bw							
Codex Code	Commodity description	Expr as	STMR mg/kg	Diets as g/person/day				Intake as ug/person/day							
				G07 diet	G07 intake	G08 diet	G08 intake	G09 diet	G09 intake	G10 diet	G10 intake	G11 diet	G11 intake	G12 diet	G12 intake
GC 0648	Quinoa, raw	RAC	4.85	NC	-	NC	-	NC	-	NC	-	NC	-	NC	-
GC 0650	Rye, raw (incl flour)	RAC	4.85	3.21	15.57	35.38	171.59	0.21	1.02	6.50	31.53	1.49	7.23	NC	-
GC 0653	Triticale, raw (incl flour)	RAC	4.85	0.01	0.05	0.17	0.82	0.29	1.41	0.01	0.05	NC	-	NC	-
GC 0654	Wheat, raw (incl meslin)	RAC	4.85	NC	-	NC	-	NC	-	0.01	0.05	NC	-	NC	-
-	Wheat, bulgur	PP	4.85	NC	-	NC	-	0.01	0.05	NC	-	NC	-	NC	-
CF 1210	Wheat, germ	PP	23.3	0.97	22.60	0.10	2.33	0.03	0.70	0.01	0.23	NC	-	0.04	0.93
CP 1212	Wheat, wholemeal bread	PP	4.51	0.03	0.14	0.01	0.05	0.01	0.05	0.01	0.05	0.05	0.23	0.02	0.09
CP 1211	Wheat, white bread	PP	1.72	1.30	2.24	0.46	0.79	0.06	0.10	0.22	0.38	2.44	4.20	0.77	1.32
-	Wheat, Fermented Beverages (Korean jakju and takju)	PP	4.85	NC	-	NC	-	NC	-	4.36	21.15	NC	-	NC	-

## METHOPRENE (147)

## International Estimated Daily Intake (IEDI)

ADI = 0 - 0.05 mg/kg bw

Codex Code	Commodity description	Expr as	STMR mg/kg	Diets as g/person/day				Intake as ug/person/day							
				G07 diet	G07 intake	G08 diet	G08 intake	G09 diet	G09 intake	G10 diet	G10 intake	G11 diet	G11 intake	G12 diet	G12 intake
CF 1211	Wheat, white flour (incl white flour products: starch, gluten, macaroni, pastry)	PP	1.72	198.08	340.70	193.03	332.01	106.24	182.73	185.09	318.35	168.67	290.11	131.59	226.33
GC 0640	Barley, raw (incl malt extract, incl pot&pearled, incl flour & grits, incl beer, incl malt)	RAC	4.85	36.18	175.47	53.45	259.23	9.39	45.54	35.25	170.96	46.68	226.40	15.92	77.21
GC 0641	Buckwheat, raw (incl flour)	RAC	4.85	0.01	0.05	0.79	3.83	0.18	0.87	0.35	1.70	NC	-	NC	-
GC 0647	Oats, raw (incl rolled)	RAC	4.85	7.50	36.38	6.26	30.36	0.15	0.73	4.87	23.62	3.16	15.33	2.98	14.45
CM 0649 (GC 0649)	Rice, husked, dry ( incl flour, incl oil, incl beverages, incl starch, excl polished)	REP	1.07	3.70	3.96	2.11	2.26	1.51	1.62	1.75	1.87	0.29	0.31	5.12	5.48
CM 1205	Rice polished, dry	PP	0.1	13.38	1.34	10.80	1.08	262.08	26.21	57.16	5.72	12.83	1.28	62.78	6.28
GC 0646	Millet, raw (incl flour, incl beer)	RAC	4.85	0.03	0.15	0.16	0.78	1.75	8.49	0.69	3.35	NC	-	NC	-
GC 0651	Sorghum, raw (incl flour, incl beer) (i.e. Chicken corn, Dari seed, Durra, Feterita)	RAC	4.85	NC	-	NC	-	1.44	6.98	1.15	5.58	NC	-	7.12	34.53
GC 0645	Maize, raw (incl glucose & dextrose & isoglucose, incl flour, incl beer, incl germ, incl starch, excl oil)	RAC	4.85	17.61	85.41	25.71	124.69	25.89	125.57	36.98	179.35	5.49	26.63	64.23	311.52
OR 0645	Maize oil	PP	0	0.90	0.00	0.47	0.00	0.15	0.00	3.01	0.00	1.86	0.00	0.36	0.00
-	Cereals, NES, raw (including processed) : canagua, quihuicha, Job's tears and wild rice	RAC	4.85	6.17	29.92	3.01	14.60	0.76	3.69	3.30	16.01	3.38	16.39	15.84	76.82
SO 2090	Subgroup of Small seed oilseeds, raw (incl processed)	RAC	2	33.60	67.20	20.72	41.44	9.72	19.44	17.21	34.42	1.11	2.22	0.54	1.08
SO 2091	Subgroup of Sunflower seeds, raw (incl processed)	RAC	2	23.43	46.86	29.34	58.68	1.24	2.48	14.00	28.00	6.48	12.96	6.91	13.82
SO 0691	Cotton seed, raw (incl oil)	RAC	2	10.71	21.42	4.23	8.46	7.19	14.38	7.54	15.08	5.66	11.32	2.38	4.76
-	Castor bean, raw (incl oil)	RAC	2	NC	-	NC	-	0.01	0.02	NC	-	NC	-	NC	-
SO 3155	Melonseed	RAC	2	NC	-	NC	-	0.01	0.02	NC	-	NC	-	NC	-
SO 0696	Palm kernels, raw (incl oil)	RAC	2	5.33	10.66	5.04	10.08	11.83	23.66	7.94	15.88	10.77	21.54	4.53	9.06
SO 0697	Peanuts, nutmeat, raw (incl roasted, incl oil, incl butter)	RAC	5	5.63	28.15	2.75	13.75	9.58	47.90	5.82	29.10	13.71	68.55	1.84	9.20
SO 0701	Shea nut (karite nuts), nutmeat, raw (incl butter)	RAC	2	NC	-	NC	-	NC	-	NC	-	NC	-	NC	-
MM 0095	MEAT FROM MAMMALS other than marine mammals, raw (incl prepared meat) -80% as muscle	RAC	0.007	112.02	0.78	120.71	0.84	63.46	0.44	88.99	0.62	96.24	0.67	41.02	0.29
MM 0095	MEAT FROM MAMMALS other than marine mammals, raw (incl prepared meat) - 20% as fat	RAC	0.092	28.01	2.58	30.18	2.78	15.86	1.46	22.25	2.05	24.06	2.21	10.25	0.94
MF 0100	Mammalian fats, raw, excl milk fats (incl rendered fats)	RAC	0.092	6.44	0.59	15.51	1.43	3.79	0.35	8.29	0.76	18.44	1.70	8.00	0.74
MO 0105	Edible offal (mammalian), raw	RAC	0.014	15.17	0.21	5.19	0.07	6.30	0.09	6.78	0.09	3.32	0.05	3.17	0.04

## METHOPRENE (147)

## International Estimated Daily Intake (IEDI)

ADI = 0 - 0.05 mg/kg bw

Codex Code	Commodity description	Expr as	STMR mg/kg	Diets as g/person/day				Intake as ug/person/day							
				G07 diet	G07 intake	G08 diet	G08 intake	G09 diet	G09 intake	G10 diet	G10 intake	G11 diet	G11 intake	G12 diet	G12 intake
ML 0106	Milks, raw or skimmed (incl dairy products)	RAC	0.044	388.92	17.11	335.88	14.78	49.15	2.16	331.25	14.58	468.56	20.62	245.45	10.80
PM 0110	Poultry meat, raw (incl prepared)	RAC	0.007	73.76	0.52	53.86	0.38	23.98	0.17	87.12	0.61	53.38	0.37	84.45	0.59
PO 0111	Poultry edible offal, raw (incl prepared)	RAC	0.007	0.33	0.00	0.72	0.01	0.27	0.00	0.35	0.00	0.80	0.01	NC	-
PE 0112	Eggs, raw, (incl dried)	RAC	0.006	25.84	0.16	29.53	0.18	28.05	0.17	33.19	0.20	36.44	0.22	8.89	0.05
Total intake (ug/person)=				910.2				1097.3				518.5			
Bodyweight per region (kg bw) =				60				60				55			
ADI (ug/person)=				3000				3000				2750			
%ADI=				30.3%				36.6%				18.9%			
Rounded %ADI=				30%				40%				20%			

## METHOPRENE (147)

## International Estimated Daily Intake (IEDI)

ADI = 0 - 0.05 mg/kg bw

METHOPRENE (147)				International Estimated Daily Intake (IEDI)				ADI = 0 - 0.05 mg/kg bw					
Codex Code	Commodity description	Expr as	STMR mg/kg	Diets: g/person/day				Intake = daily intake: ug/person					
				G13 diet	G13 intake	G14 diet	G14 intake	G15 diet	G15 intake	G16 diet	G16 intake	G17 diet	G17 intake
GC 0648	Quinoa, raw	RAC	4.85	NC	-	NC	-	NC	-	NC	-	NC	-
GC 0650	Rye, raw (incl flour)	RAC	4.85	0.03	0.15	0.01	0.05	13.95	67.66	0.01	0.05	0.88	4.27
GC 0653	Triticale, raw (incl flour)	RAC	4.85	0.01	0.05	NC	-	NC	-	NC	-	NC	-
GC 0654	Wheat, raw (incl meslin)	RAC	4.85	NC	-	NC	-	NC	-	NC	-	0.97	4.70
-	Wheat, bulgur	PP	4.85	0.01	0.05	NC	-	NC	-	NC	-	NC	-
CF 1210	Wheat, germ	PP	23.3	0.04	0.93	0.01	0.23	0.01	0.23	0.01	0.23	NC	-
CP 1212	Wheat, wholemeal bread	PP	4.51	0.01	0.05	0.01	0.05	0.03	0.14	0.01	0.05	0.01	0.05
CP 1211	Wheat, white bread	PP	1.72	0.43	0.74	0.41	0.71	1.56	2.68	0.11	0.19	0.07	0.12
-	Wheat, Fermented Beverages (Korean jakju and takju)	PP	4.85	NC	-	NC	-	NC	-	NC	-	NC	-
CF 1211	Wheat, white flour (incl white flour products: starch, gluten, macaroni, pastry)	PP	1.72	44.78	77.02	86.96	149.57	214.05	368.17	20.31	34.93	103.60	178.19
GC 0640	Barley, raw (incl malt extract, incl pot&pearled, incl flour & grits, incl beer, incl malt)	RAC	4.85	11.58	56.16	2.33	11.30	46.71	226.54	3.72	18.04	16.26	78.86
GC 0641	Buckwheat, raw (incl flour)	RAC	4.85	0.04	0.19	2.82	13.68	0.01	0.05	0.01	0.05	NC	-
GC 0647	Oats, raw (incl rolled)	RAC	4.85	0.37	1.79	0.07	0.34	2.79	13.53	0.10	0.49	NC	-
CM 0649 (GC 0649)	Rice, husked, dry ( incl flour, incl oil, incl beverages, incl starch, excl polished)	REP	1.07	13.58	14.53	4.29	4.59	2.17	2.32	0.01	0.01	8.84	9.46
CM 1205	Rice polished, dry	PP	0.1	30.20	3.02	218.34	21.83	12.77	1.28	15.24	1.52	51.35	5.14

## METHOPRENE (147)

## International Estimated Daily Intake (IEDI)

ADI = 0 - 0.05 mg/kg bw

Codex Code	Commodity description	Expr as	STMR mg/kg	Diets: g/person/day				Intake = daily intake: ug/person					
				G13 diet	G13 intake	G14 diet	G14 intake	G15 diet	G15 intake	G16 diet	G16 intake	G17 diet	G17 intake
GC 0646	Millet, raw (incl flour, incl beer)	RAC	4.85	61.13	296.48	0.78	3.78	NC	-	33.55	162.72	NC	-
GC 0651	Sorghum, raw (incl flour, incl beer) (i.e. Chicken corn, Dari seed, Durra, Feterita)	RAC	4.85	89.16	432.43	2.02	9.80	NC	-	35.38	171.59	NC	-
GC 0645	Maize, raw (incl glucose & dextrose & isoglucose, incl flour, incl beer, incl germ, incl starch, excl oil)	RAC	4.85	116.33	564.20	10.45	50.68	37.65	182.60	76.60	371.51	34.44	167.03
OR 0645	Maize oil	PP	0	0.33	0.00	0.07	0.00	0.81	0.00	0.01	0.00	NC	-
-	Cereals, NES, raw (including processed) : canagua, quihuicha, Job's tears and wild rice	RAC	4.85	17.71	85.89	2.00	9.70	9.61	46.61	0.45	2.18	4.55	22.07
SO 2090	Subgroup of Small seed oilseeds, raw (incl processed)	RAC	2	2.63	5.26	0.93	1.86	12.79	25.58	9.98	19.96	0.01	0.02
SO 2091	Subgroup of Sunflower seeds, raw (incl processed)	RAC	2	0.99	1.98	0.22	0.44	32.01	64.02	12.12	24.24	0.48	0.96
SO 0691	Cotton seed, raw (incl oil)	RAC	2	8.14	16.28	0.32	0.64	2.84	5.68	2.69	5.38	0.97	1.94
-	Castor bean, raw (incl oil)	RAC	2	NC	-	NC	-	NC	-	NC	-	NC	-
SO 3155	Melonseed	RAC	2	1.81	3.62	NC	-	0.01	0.02	NC	-	NC	-
SO 0696	Palm kernels, raw (incl oil)	RAC	2	60.84	121.68	12.77	25.54	5.41	10.82	0.57	1.14	53.45	106.90
SO 0697	Peanuts, nutmeat, raw (incl roasted, incl oil, incl butter)	RAC	5	18.82	94.10	0.57	2.85	2.28	11.40	6.90	34.50	0.53	2.65
SO 0701	Shea nut (karite nuts), nutmeat, raw (incl butter)	RAC	2	0.95	1.90	NC	-	NC	-	NC	-	NC	-
MM 0095	MEAT FROM MAMMALS other than marine mammals, raw (incl prepared meat) -80% as muscle	RAC	0.007	23.34	0.16	40.71	0.28	97.15	0.68	18.06	0.13	57.71	0.40
MM 0095	MEAT FROM MAMMALS other than marine mammals, raw (incl prepared meat) - 20% as fat	RAC	0.092	5.84	0.54	10.18	0.94	24.29	2.23	4.52	0.42	14.43	1.33
MF 0100	Mammalian fats, raw, excl milk fats (incl rendered fats)	RAC	0.092	1.05	0.10	1.14	0.10	18.69	1.72	0.94	0.09	3.12	0.29
MO 0105	Edible offal (mammalian), raw	RAC	0.014	4.64	0.06	1.97	0.03	10.01	0.14	3.27	0.05	3.98	0.06
ML 0106	Milks, raw or skimmed (incl dairy products)	RAC	0.044	108.75	4.79	70.31	3.09	436.11	19.19	61.55	2.71	79.09	3.48
PM 0110	Poultry meat, raw (incl prepared)	RAC	0.007	3.92	0.03	12.03	0.08	57.07	0.40	5.03	0.04	55.56	0.39
PO 0111	Poultry edible offal, raw (incl prepared)	RAC	0.007	0.10	0.00	0.70	0.00	0.97	0.01	0.10	0.00	NC	-
PE 0112	Eggs, raw, (incl dried)	RAC	0.006	3.84	0.02	4.41	0.03	27.25	0.16	1.13	0.01	7.39	0.04

Total intake (ug/person)=	1784.2	312.2	1053.9	852.2	588.3
Bodyweight per region (kg bw) =	60	60	60	60	60
ADI (ug/person)=	3000	3000	3000	3000	3000
%ADI=	59.5%	10.4%	35.1%	28.4%	19.6%
Rounded %ADI=	60%	10%	40%	30%	20%

**PENDIMETHALIN (292)**

International Estimated Daily Intake (IEDI)

ADI = 0 - 0.1 mg/kg bw

Codex Code	Commodity description	Expr as	STM <sup>R</sup> mg/kg	Diets as g/person/day				Intake as ug/person/day							
				G01 diet	G01 intake	G02 diet	G02 intake	G03 diet	G03 intake	G04 diet	G04 intake	G05 diet	G05 intake	G06 diet	G06 intake
FC 0001	Group of Citrus fruit, raw (incl citrus fruit juice, incl kumquat commodities)	RAC	0.005	34.91	0.17	16.51	0.08	17.23	0.09	104.48	0.52	35.57	0.18	98.49	0.49
FB 2005	Subgroup of Caneberries, raw	RAC	0.05	0.42	0.02	1.05	0.05	0.01	0.00	0.02	0.00	0.02	0.00	1.24	0.06
FB 2006	Subgroup of Bush berries, raw (including processed)	RAC	0.05	0.53	0.03	1.31	0.07	0.40	0.02	1.66	0.08	0.01	0.00	0.99	0.05
FB 0275	Strawberry, raw	RAC	0.05	0.70	0.04	2.01	0.10	0.04	0.00	1.36	0.07	0.37	0.02	2.53	0.13
VA 0381	Garlic, raw	RAC	0	2.29	0.00	5.78	0.00	0.11	0.00	3.69	0.00	1.65	0.00	3.91	0.00
-	Onions, dry, raw	RAC	0	29.36	0.00	37.50	0.00	3.56	0.00	34.78	0.00	18.81	0.00	43.38	0.00
-	Onions, dry, raw	RAC	0.095	29.36	2.79	37.50	3.56	3.56	0.34	34.78	3.30	18.81	1.79	43.38	4.12
VL 0483	Lettuce, leaf, raw	RAC	0.062	0.53	0.03	0.36	0.02	0.16	0.01	6.21	0.39	1.90	0.12	6.05	0.38
VL 0401	Broccoli, Chinese, raw (i.e. kailan)	RAC	0.05	0.42	0.02	0.08	0.00	0.01	0.00	0.60	0.03	NC	-	0.52	0.03
VL 0472	Cress, garden, raw	RAC	0.05	0.06	0.00	0.10	0.01	0.06	0.00	0.15	0.01	NC	-	0.07	0.00
VL 0480	Kale (Borecole, Collards), raw	RAC	0.05	0.57	0.03	5.77	0.29	0.11	0.01	0.92	0.05	5.25	0.26	2.12	0.11
VL 0485	Mustard greens, raw (i.e. Indian mustard, Amsoi, mustard cabbage)	RAC	0.05	0.03	0.00	0.31	0.02	0.01	0.00	0.05	0.00	0.47	0.02	0.11	0.01
VL 0494	Radish leaves, raw	RAC	0.05	0.26	0.01	0.45	0.02	0.28	0.01	0.68	0.03	NC	-	0.33	0.02
VL 0495	Rape greens, raw	RAC	0.05	0.03	0.00	0.31	0.02	0.01	0.00	0.05	0.00	NC	-	0.11	0.01
VL 0496	Rucola, raw (i.e. Arrugula, Rocket salad, Roquette)	RAC	0.05	1.27	0.06	2.25	0.11	1.39	0.07	3.38	0.17	13.81	0.69	1.63	0.08
VP 0062	Beans without pods: (Phaseolus spp.) (succulent seeds), raw	RAC	0.05	1.56	0.08	0.60	0.03	0.49	0.02	1.18	0.06	0.90	0.05	7.79	0.39
VP 0064	Peas without pods (Pisum spp) (succulent seeds)	RAC	0.01	1.97	0.02	0.51	0.01	0.02	0.00	0.79	0.01	3.68	0.04	3.80	0.04
VD 2065	Subgroup of dry beans, raw (incl processed)	RAC	0.05	78.20	3.91	60.68	3.03	35.89	1.79	80.34	4.02	75.90	3.80	87.62	4.38
VD 0072	Peas (dry) (Pisum spp), raw	RAC	0.05	1.62	0.08	3.22	0.16	0.92	0.05	1.50	0.08	2.90	0.15	0.17	0.01
VR 0577	Carrots, raw	RAC	0.0625	9.51	0.59	30.78	1.92	0.37	0.02	8.75	0.55	2.80	0.18	6.10	0.38
VS 0624	Celery	RAC	0.02	2.14	0.04	3.79	0.08	2.35	0.05	5.69	0.11	0.02	0.00	2.75	0.06
VS 0621	Asparagus, raw	RAC	0.05	0.01	0.00	0.01	0.00	0.01	0.00	0.03	0.00	0.07	0.00	0.21	0.01
TN 0085	Group of Tree nuts, raw (incl processed)	RAC	0.05	4.06	0.20	3.27	0.16	7.01	0.35	13.93	0.70	14.01	0.70	9.36	0.47
HH 0738	Mint, raw	RAC	0.077	0.50	0.04	0.01	0.00	NC	-	NC	-	NC	-	NC	-
DH 1100	Hops, dry	RAC	0.05	0.01	0.00	0.04	0.00	0.01	0.00	0.01	0.00	NC	-	0.01	0.00
MM 0095	MEAT FROM MAMMALS other than marine mammals, raw (incl prepared meat) -80% as muscle	RAC	0.026	24.96	0.65	57.95	1.51	16.70	0.43	38.38	1.00	26.46	0.69	29.00	0.75
MM 0095	MEAT FROM MAMMALS other than marine mammals, raw (incl prepared meat) - 20% as fat	RAC	0.051	6.24	0.32	14.49	0.74	4.18	0.21	9.60	0.49	6.62	0.34	7.25	0.37
MF 0100	Mammalian fats, raw, excl milk fats (incl rendered fats)	RAC	0.009	3.29	0.03	6.14	0.06	0.82	0.01	1.57	0.01	2.23	0.02	1.07	0.01

**PENDIMETHALIN (292)**

## International Estimated Daily Intake (IEDI)

ADI = 0 - 0.1 mg/kg bw

Codex Code	Commodity description	Expr as	STMR mg/kg	Diets as g/person/day				Intake as ug/person/day							
				G01 diet	G01 intake	G02 diet	G02 intake	G03 diet	G03 intake	G04 diet	G04 intake	G05 diet	G05 intake	G06 diet	G06 intake
MO 0105	Edible offal (mammalian), raw	RAC	0.026	4.79	0.12	9.68	0.25	2.97	0.08	5.49	0.14	3.84	0.10	5.03	0.13
ML 0106	Milks, raw or skimmed (incl dairy products)	RAC	0.006	289.65	1.74	485.88	2.92	26.92	0.16	239.03	1.43	199.91	1.20	180.53	1.08
PM 0110	Poultry meat, raw (incl prepared)	RAC	0	14.63	0.00	29.76	0.00	8.04	0.00	129.68	0.00	25.04	0.00	35.66	0.00
PF 0111	Poultry fat, raw (incl rendered)	RAC	0	0.10	0.00	0.10	0.00	NC	-	0.10	0.00	0.10	0.00	0.10	0.00
PO 0111	Poultry edible offal, raw (incl prepared)	RAC	0	0.12	0.00	0.12	0.00	0.11	0.00	5.37	0.00	0.24	0.00	0.10	0.00
PE 0112	Eggs, raw, (incl dried)	RAC	0	7.84	0.00	23.08	0.00	2.88	0.00	14.89	0.00	9.81	0.00	14.83	0.00
Total intake (ug/person)=				11.3		15.5		3.8		13.5		10.4		14.0	
Bodyweight per region (kg bw) =				60		60		60		60		60		60	
ADI (ug/person)=				6000		6000		6000		6000		6000		6000	
%ADI=				0.2%		0.3%		0.1%		0.2%		0.2%		0.2%	
Rounded %ADI=				0%		0%		0%		0%		0%		0%	

**PENDIMETHALIN (292)**

## International Estimated Daily Intake (IEDI)

ADI = 0 - 0.1 mg/kg bw

Codex Code	Commodity description	Expr as	STMR mg/kg	Diets as g/person/day				Intake as ug/person/day							
				G07 diet	G07 intake	G08 diet	G08 intake	G09 diet	G09 intake	G10 diet	G10 intake	G11 diet	G11 intake	G12 diet	G12 intake
FC 0001	Group of Citrus fruit, raw (incl citrus fruit juice, incl kumquat commodities)	RAC	0.005	114.42	0.57	62.91	0.31	26.97	0.13	96.72	0.48	96.22	0.48	563.19	2.82
FB 2005	Subgroup of Caneberries, raw	RAC	0.05	0.56	0.03	1.43	0.07	0.14	0.01	1.23	0.06	1.14	0.06	0.01	0.00
FB 2006	Subgroup of Bush berries, raw (including processed)	RAC	0.05	1.31	0.07	5.50	0.28	0.01	0.00	2.57	0.13	0.82	0.04	2.15	0.11
FB 0275	Strawberry, raw	RAC	0.05	4.49	0.22	5.66	0.28	0.02	0.00	6.63	0.33	5.75	0.29	0.05	0.00
VA 0381	Garlic, raw	RAC	0	0.98	0.00	1.49	0.00	12.88	0.00	3.74	0.00	2.05	0.00	1.14	0.00
-	Onions, dry, raw	RAC	0	19.69	0.00	29.83	0.00	24.64	0.00	31.35	0.00	9.72	0.00	12.59	0.00
-	Onions, dry, raw	RAC	0.095	19.69	1.87	29.83	2.83	24.64	2.34	31.35	2.98	9.72	0.92	12.59	1.20
VL 0483	Lettuce, leaf, raw	RAC	0.062	14.50	0.90	11.76	0.73	13.14	0.81	19.50	1.21	4.81	0.30	2.23	0.14
VL 0401	Broccoli, Chinese, raw (i.e. kailan)	RAC	0.05	NC	-	NC	-	9.03	0.45	NC	-	NC	-	0.12	0.01
VL 0472	Cress, garden, raw	RAC	0.05	0.10	0.01	NC	-	1.27	0.06	0.13	0.01	0.21	0.01	0.10	0.01
VL 0480	Kale (Borecole, Collards), raw	RAC	0.05	NC	-	NC	-	14.54	0.73	NC	-	NC	-	2.32	0.12
VL 0485	Mustard greens, raw (i.e. Indian mustard, Amsoi, mustard cabbage)	RAC	0.05	NC	-	NC	-	NC	-	NC	-	NC	-	0.13	0.01
VL 0494	Radish leaves, raw	RAC	0.05	NC	-	NC	-	NC	-	3.78	0.19	NC	-	0.48	0.02
VL 0495	Rape greens, raw	RAC	0.05	NC	-	NC	-	1.93	0.10	NC	-	NC	-	0.12	0.01



## PENDIMETHALIN (292)

## International Estimated Daily Intake (IEDI)

ADI = 0 - 0.1 mg/kg bw

Codex Code	Commodity description	Expr as	STMR mg/kg	Diets as g/person/day				Intake as ug/person/day							
				G07 diet	G07 intake	G08 diet	G08 intake	G09 diet	G09 intake	G10 diet	G10 intake	G11 diet	G11 intake	G12 diet	G12 intake
VL 0496	Rucola, raw (i.e. Arrugula, Rocket salad, Roquette)	RAC	0.05	NC	-	NC	-	NC	-	1.09	0.05	0.38	0.02	2.40	0.12
VP 0062	Beans without pods: (Phaseolus spp.) (succulent seeds), raw	RAC	0.05	2.21	0.11	5.25	0.26	4.17	0.21	1.61	0.08	16.95	0.85	0.17	0.01
VP 0064	Peas without pods (Pisum spp) (succulent seeds)	RAC	0.01	10.72	0.11	1.99	0.02	2.72	0.03	4.26	0.04	4.23	0.04	NC	-
VD 2065	Subgroup of dry beans, raw (incl processed)	RAC	0.05	107.87	5.39	119.29	5.96	45.91	2.30	201.31	10.07	224.04	11.20	104.90	5.25
VD 0072	Peas (dry) (Pisum spp), raw	RAC	0.05	3.80	0.19	1.25	0.06	0.90	0.05	2.33	0.12	2.70	0.14	3.83	0.19
VR 0577	Carrots, raw	RAC	0.0625	26.26	1.64	27.13	1.70	10.07	0.63	16.49	1.03	44.69	2.79	8.75	0.55
VS 0624	Celery	RAC	0.02	7.68	0.15	2.85	0.06	NC	-	3.34	0.07	16.83	0.34	4.04	0.08
VS 0621	Asparagus, raw	RAC	0.05	0.84	0.04	2.08	0.10	7.11	0.36	1.01	0.05	1.69	0.08	0.04	0.00
TN 0085	Group of Tree nuts, raw (incl processed)	RAC	0.05	8.52	0.43	8.94	0.45	15.09	0.75	9.60	0.48	14.57	0.73	26.26	1.31
HH 0738	Mint, raw	RAC	0.077	NC	-	NC	-	NC	-	NC	-	NC	-	NC	-
DH 1100	Hops, dry	RAC	0.05	NC	-	NC	-	0.02	0.00	0.02	0.00	NC	-	NC	-
MM 0095	MEAT FROM MAMMALS other than marine mammals, raw (incl prepared meat) -80% as muscle	RAC	0.026	112.02	2.91	120.71	3.14	63.46	1.65	88.99	2.31	96.24	2.50	41.02	1.07
MM 0095	MEAT FROM MAMMALS other than marine mammals, raw (incl prepared meat) - 20% as fat	RAC	0.051	28.01	1.43	30.18	1.54	15.86	0.81	22.25	1.13	24.06	1.23	10.25	0.52
MF 0100	Mammalian fats, raw, excl milk fats (incl rendered fats)	RAC	0.009	6.44	0.06	15.51	0.14	3.79	0.03	8.29	0.07	18.44	0.17	8.00	0.07
MO 0105	Edible offal (mammalian), raw	RAC	0.026	15.17	0.39	5.19	0.13	6.30	0.16	6.78	0.18	3.32	0.09	3.17	0.08
ML 0106	Milks, raw or skimmed (incl dairy products)	RAC	0.006	388.92	2.33	335.88	2.02	49.15	0.29	331.25	1.99	468.56	2.81	245.45	1.47
PM 0110	Poultry meat, raw (incl prepared)	RAC	0	73.76	0.00	53.86	0.00	23.98	0.00	87.12	0.00	53.38	0.00	84.45	0.00
PF 0111	Poultry fat, raw (incl rendered)	RAC	0	0.10	0.00	0.10	0.00	NC	-	0.10	0.00	0.71	0.00	NC	-
PO 0111	Poultry edible offal, raw (incl prepared)	RAC	0	0.33	0.00	0.72	0.00	0.27	0.00	0.35	0.00	0.80	0.00	NC	-
PE 0112	Eggs, raw, (incl dried)	RAC	0	25.84	0.00	29.53	0.00	28.05	0.00	33.19	0.00	36.44	0.00	8.89	0.00
Total intake (ug/person)=				19.4				20.6				12.1			
Bodyweight per region (kg bw) =				60				60				55			
ADI (ug/person)=				6000				6000				5500			
%ADI=				0.3%				0.3%				0.2%			
Rounded %ADI=				0%				0%				0%			

PENDIMETHALIN (292)				International Estimated Daily Intake (IEDI)				ADI = 0 - 0.1 mg/kg bw					
Codex Code	Commodity description	Expr as	STMR mg/kg	Diets: g/person/day				Intake = daily intake: ug/person					
				G13 diet	G13 intake	G14 diet	G14 intake	G15 diet	G15 intake	G16 diet	G16 intake	G17 diet	G17 intake
FC 0001	Group of Citrus fruit, raw (incl citrus fruit juice, incl kumquat commodities)	RAC	0.005	21.16	0.11	2.94	0.01	58.52	0.29	0.44	0.00	5.13	0.03
FB 2005	Subgroup of Caneberries, raw	RAC	0.05	0.01	0.00	7.30	0.37	2.29	0.11	0.01	0.00	NC	-
FB 2006	Subgroup of Bush berries, raw (including processed)	RAC	0.05	0.82	0.04	4.05	0.20	5.94	0.30	0.43	0.02	2.66	0.13
FB 0275	Strawberry, raw	RAC	0.05	0.01	0.00	0.01	0.00	3.35	0.17	0.01	0.00	0.01	0.00
VA 0381	Garlic, raw	RAC	0	0.82	0.00	2.06	0.00	3.79	0.00	0.03	0.00	0.29	0.00
-	Onions, dry, raw	RAC	0	9.01	0.00	20.24	0.00	30.90	0.00	9.61	0.00	2.11	0.00
-	Onions, dry, raw	RAC	0.095	9.01	0.86	20.24	1.92	30.90	2.94	9.61	0.91	2.11	0.20
VL 0483	Lettuce, leaf, raw	RAC	0.062	0.29	0.02	0.03	0.00	6.71	0.42	0.01	0.00	NC	-
VL 0401	Broccoli, Chinese, raw (i.e. kailan)	RAC	0.05	0.01	0.00	0.01	0.00	NC	-	0.01	0.00	NC	-
VL 0472	Cress, garden, raw	RAC	0.05	0.09	0.00	0.07	0.00	NC	-	0.06	0.00	0.13	0.01
VL 0480	Kale (Borecole, Collards), raw	RAC	0.05	0.79	0.04	0.62	0.03	NC	-	0.01	0.00	NC	-
VL 0485	Mustard greens, raw (i.e. Indian mustard, Amsoi, mustard cabbage)	RAC	0.05	0.04	0.00	0.03	0.00	NC	-	0.01	0.00	NC	-
VL 0494	Radish leaves, raw	RAC	0.05	0.44	0.02	0.32	0.02	NC	-	0.30	0.02	0.59	0.03
VL 0495	Rape greens, raw	RAC	0.05	0.04	0.00	0.03	0.00	NC	-	0.01	0.00	NC	-
VL 0496	Rucola, raw (i.e. Arrugula, Rocket salad, Roquette)	RAC	0.05	2.17	0.11	1.57	0.08	NC	-	1.47	0.07	2.93	0.15
VP 0062	Beans without pods: (Phaseolus spp.) (succulent seeds), raw	RAC	0.05	0.30	0.02	3.13	0.16	4.11	0.21	0.01	0.00	NC	-
VP 0064	Peas without pods (Pisum spp) (succulent seeds)	RAC	0.01	0.21	0.00	0.02	0.00	5.51	0.06	0.02	0.00	NC	-
VD 2065	Subgroup of dry beans, raw (incl processed)	RAC	0.05	41.93	2.10	19.42	0.97	108.31	5.42	66.18	3.31	42.47	2.12
VD 0072	Peas (dry) (Pisum spp), raw	RAC	0.05	1.53	0.08	2.52	0.13	3.52	0.18	3.56	0.18	0.74	0.04
VR 0577	Carrots, raw	RAC	0.0625	2.07	0.13	3.00	0.19	25.29	1.58	0.05	0.00	NC	-
VS 0624	Celery	RAC	0.02	3.66	0.07	2.65	0.05	4.84	0.10	2.47	0.05	4.94	0.10
VS 0621	Asparagus, raw	RAC	0.05	0.01	0.00	0.01	0.00	0.17	0.01	0.01	0.00	NC	-
TN 0085	Group of Tree nuts, raw (incl processed)	RAC	0.05	4.39	0.22	135.53	6.78	6.11	0.31	0.72	0.04	317.74	15.89
HH 0738	Mint, raw	RAC	0.077	NC	-	NC	-	NC	-	NC	-	NC	-
DH 1100	Hops, dry	RAC	0.05	NC	-	NC	-	0.04	0.00	NC	-	NC	-
MM 0095	MEAT FROM MAMMALS other than marine mammals, raw (incl prepared meat) -80% as muscle	RAC	0.026	23.34	0.61	40.71	1.06	97.15	2.53	18.06	0.47	57.71	1.50
MM 0095	MEAT FROM MAMMALS other than marine mammals, raw (incl prepared meat) - 20% as fat	RAC	0.051	5.84	0.30	10.18	0.52	24.29	1.24	4.52	0.23	14.43	0.74
MF 0100	Mammalian fats, raw, excl milk fats (incl rendered fats)	RAC	0.009	1.05	0.01	1.14	0.01	18.69	0.17	0.94	0.01	3.12	0.03
MO 0105	Edible offal (mammalian), raw	RAC	0.026	4.64	0.12	1.97	0.05	10.01	0.26	3.27	0.09	3.98	0.10
ML 0106	Milks, raw or skimmed (incl dairy products)	RAC	0.006	108.75	0.65	70.31	0.42	436.11	2.62	61.55	0.37	79.09	0.47

PENDIMETHALIN (292)

International Estimated Daily Intake (IEDI)

ADI = 0 - 0.1 mg/kg bw

Codex Code	Commodity description	Expr as	STMR mg/kg	Diets: g/person/day				Intake = daily intake: ug/person					
				G13 diet	G13 intake	G14 diet	G14 intake	G15 diet	G15 intake	G16 diet	G16 intake	G17 diet	G17 intake
PM 0110	Poultry meat, raw (incl prepared)	RAC	0	3.92	0.00	12.03	0.00	57.07	0.00	5.03	0.00	55.56	0.00
PF 0111	Poultry fat, raw (incl rendered)	RAC	0	NC	-	NC	-	0.32	0.00	NC	-	NC	-
PO 0111	Poultry edible offal, raw (incl prepared)	RAC	0	0.10	0.00	0.70	0.00	0.97	0.00	0.10	0.00	NC	-
PE 0112	Eggs, raw, (incl dried)	RAC	0	3.84	0.00	4.41	0.00	27.25	0.00	1.13	0.00	7.39	0.00
Total intake (ug/person)=				5.6		13.1		19.0		5.8		22.1	
Bodyweight per region (kg bw) =				60		60		60		60		60	
ADI (ug/person)=				6000		6000		6000		6000		6000	
%ADI=				0.1%		0.2%		0.3%		0.1%		0.4%	
Rounded %ADI=				0%		0%		0%		0%		0%	

SPIROTETRAMAT (234)				International Estimated Daily Intake (IEDI)				ADI = 0 - 0.05 mg/kg bw							
Codex Code	Commodity description	Expr as	STMR mg/kg	Diets as g/person/day				Intake as ug/person/day							
				G01 diet	G01 intake	G02 diet	G02 intake	G03 diet	G03 intake	G04 diet	G04 intake	G05 diet	G05 intake	G06 diet	G06 intake
JF 0001	Group of Citrus fruit, juice	PP	0.18	1.30	0.23	2.37	0.43	0.22	0.04	13.88	2.50	0.75	0.14	2.63	0.47
JF 0004	Subgroup of Oranges, juice (single strength, incl. concentrated)	PP	0.18	1.27	0.23	2.20	0.40	0.10	0.02	11.81	2.13	0.46	0.08	1.69	0.30
FP 0009	Group of Pome fruits, raw (incl apple cider, excl apple juice)	RAC	0.17	19.35	3.29	34.06	5.79	17.87	3.04	25.74	4.38	7.69	1.31	56.85	9.66
JF 0226	Apple juice, single strength (incl. concentrated)	PP	0.082	0.32	0.03	3.07	0.25	0.10	0.01	5.00	0.41	0.29	0.02	5.57	0.46
FS 0012	Group of Stone fruits, raw (incl dried plums, incl dried apricots)	RAC	1.6	11.60	18.56	23.79	38.06	0.25	0.40	11.84	18.94	2.41	3.86	33.44	53.50
DF 0014	Plums, dried (prunes)	PP	3.5	0.10	0.35	0.10	0.35	0.10	0.35	0.18	0.63	0.10	0.35	0.10	0.35
FB 2006	Subgroup of Bush berries, raw (including processed)	RAC	0.63	0.53	0.33	1.31	0.83	0.40	0.25	1.66	1.05	0.10	0.06	0.99	0.62
FB 0269	Grapes, raw (incl must, excl dried, excl juice, excl wine)	RAC	0.41	13.02	5.34	9.25	3.79	0.10	0.04	16.91	6.93	3.70	1.52	54.44	22.32
DF 0269	Grapes, dried (= currants, raisins and sultanas) (from table-grapes)	PP	1.1	0.51	0.56	0.51	0.56	0.10	0.11	1.27	1.40	0.12	0.13	2.07	2.28
JF 0269	Grape juice (from wine grapes)	PP	0.27	0.14	0.04	0.29	0.08	0.10	0.03	0.30	0.08	0.24	0.06	0.10	0.03
-	Grape wine (incl vermouths) (from wine-grapes)	PP	0.23	0.67	0.15	12.53	2.88	2.01	0.46	1.21	0.28	3.53	0.81	4.01	0.92
FB 0265	Cranberry, raw	RAC	0.066	0.10	0.01	0.10	0.01	NC	-	0.10	0.01	0.10	0.01	0.10	0.01
FB 0275	Strawberry, raw	RAC	0.08	0.70	0.06	2.01	0.16	0.10	0.01	1.36	0.11	0.37	0.03	2.53	0.20
FT 0336	Guava, raw	RAC	0.55	0.47	0.26	0.10	0.06	0.48	0.26	0.49	0.27	4.42	2.43	0.10	0.06
FI 0343	Litchi, raw (incl processed)	RAC	1.6	2.32	3.71	1.43	2.29	1.81	2.90	7.42	11.87	NC	-	4.54	7.26
FI 0326	Avocado, raw	RAC	0.126	0.13	0.02	0.10	0.01	2.05	0.26	2.54	0.32	2.34	0.29	0.12	0.02
FI 0345	Mango, raw (incl canned mango, incl mango juice)	RAC	0.16	10.48	1.68	0.10	0.02	7.24	1.16	6.87	1.10	19.98	3.20	6.25	1.00
FI 0350	Papaya, raw	RAC	0.17	0.35	0.06	0.10	0.02	3.05	0.52	0.80	0.14	7.28	1.24	1.00	0.17
FI 0341	Kiwifruit, raw	RAC	0.055	0.10	0.01	0.36	0.02	0.10	0.01	1.17	0.06	0.10	0.01	0.69	0.04
VA 2031	Subgroup of bulb onions	RAC	0.11	31.65	3.48	43.28	4.76	3.68	0.40	38.48	4.23	20.46	2.25	47.29	5.20
VB 0042	Subgroup of Flowerhead Brassica, raw	RAC	0.5	2.54	1.27	0.49	0.25	0.10	0.05	3.57	1.79	7.79	3.90	3.12	1.56
VB 0041	Cabbages, head, raw	RAC	0.23	2.73	0.63	27.92	6.42	0.55	0.13	4.47	1.03	4.27	0.98	10.25	2.36
VC 0045	Group of Fruiting vegetables, cucurbits, raw	RAC	0.057	53.14	3.03	86.21	4.91	6.28	0.36	92.76	5.29	15.64	0.89	155.30	8.85
VO 0448	Tomato, raw (incl canned, excl juice, excl paste)	RAC	0.43	42.04	18.08	76.13	32.74	10.69	4.60	84.59	36.37	24.92	10.72	203.27	87.41
-	Tomato, paste (i.e. concentrated tomato sauce/puree)	PP	3.2	2.34	7.49	1.33	4.26	1.57	5.02	4.24	13.57	0.34	1.09	2.83	9.06
JF 0448	Tomato, juice (single strength, incl concentrated)	PP	0.27	0.29	0.08	0.29	0.08	0.10	0.03	0.38	0.10	0.10	0.03	0.14	0.04
VO 0444	Peppers, chili, raw	RAC	0.95	3.99	3.79	7.30	6.94	2.93	2.78	5.62	5.34	NC	-	17.44	16.57
-	Peppers, chili, dried	PP	6.6	0.42	2.77	0.53	3.50	0.84	5.54	0.50	3.30	0.95	6.27	0.37	2.44

**SPIROTETRAMAT (234)**

International Estimated Daily Intake (IEDI)

ADI = 0 - 0.05 mg/kg bw

Codex Code	Commodity description	Expr as	STMR mg/kg	Diets as g/person/day				Intake as ug/person/day							
				G01 diet	G01 intake	G02 diet	G02 intake	G03 diet	G03 intake	G04 diet	G04 intake	G05 diet	G05 intake	G06 diet	G06 intake
VL 0053	Group of Leafy vegetables, raw	RAC	3.7	8.47	31.34	22.36	82.73	7.74	28.64	25.51	94.39	45.77	169.35	21.22	78.51
VP 0060	Group of Legume vegetables, raw	RAC	0.505	7.73	3.90	1.53	0.77	0.51	0.26	2.95	1.49	5.08	2.57	12.86	6.49
VD 0071	Beans, dry, raw (Phaseolus spp)	RAC	0.21	2.39	0.50	1.61	0.34	10.47	2.20	1.84	0.39	12.90	2.71	7.44	1.56
VD 0523	Broad bean, dry, raw (incl horse-bean, field bean) (Vicia faba)	RAC	0.21	1.27	0.27	0.10	0.02	0.12	0.03	2.49	0.52	0.23	0.05	5.54	1.16
VD 0527	Cowpea, dry, raw (Vigna sinensis, Dolichos sinensis)	RAC	0.21	0.10	0.02	NC	-	1.74	0.37	0.10	0.02	0.10	0.02	0.10	0.02
VD 0541	Soya bean, dry, raw (incl flour, incl paste, incl curd, incl sauce, excl oil)	RAC	0.45	0.63	0.28	1.09	0.49	0.40	0.18	1.40	0.63	1.68	0.76	0.48	0.22
OR 0541	Soya oil, refined	PP	0	12.99	0.00	10.43	0.00	3.63	0.00	13.10	0.00	10.70	0.00	13.10	0.00
VR 0577	Carrots, raw	RAC	0.0545	9.51	0.52	30.78	1.68	0.37	0.02	8.75	0.48	2.80	0.15	6.10	0.33
VR 0596	Sugar beet, raw	RAC	0.052	NC	-	NC	-	NC	-	NC	-	0.10	0.01	NC	-
-	Sugar beet, sugar	PP	0.034	0.10	0.00	NC	-	0.10	0.00	0.10	0.00	0.10	0.00	12.63	0.43
VR 0589	Potato, raw (incl flour, incl frozen, incl starch, incl tapioca)	RAC	0.12	59.74	7.17	316.14	37.94	9.78	1.17	60.26	7.23	54.12	6.49	119.82	14.38
VS 0624	Celery	RAC	0.58	2.14	1.24	3.79	2.20	2.35	1.36	5.69	3.30	0.10	0.06	2.75	1.60
VS 0620	Artichoke globe, raw	RAC	0.41	0.69	0.28	0.10	0.04	0.10	0.04	0.32	0.13	0.26	0.11	1.21	0.50
GC 0447	Sweet corn on the cob, raw (incl frozen kernels, incl canned kernels)	RAC	0.31	0.14	0.04	0.94	0.29	5.70	1.77	2.61	0.81	1.94	0.60	0.22	0.07
TN 0085	Tree nuts, raw (incl processed)	RAC	0.084	4.06	0.34	3.27	0.27	7.01	0.59	13.93	1.17	14.01	1.18	9.36	0.79
OR 0691	Cotton seed oil, edible	PP	0	3.22	0.00	1.54	0.00	1.01	0.00	0.74	0.00	1.12	0.00	2.93	0.00
DH 1100	Hops, dry	RAC	5.2	0.10	0.52	0.10	0.52	0.10	0.52	0.10	0.52	NC	-	0.10	0.52
MM 0095	MEAT FROM MAMMALS other than marine mammals, raw (incl prepared meat) -80% as muscle	RAC	0.006	24.96	0.15	57.95	0.35	16.70	0.10	38.38	0.23	26.46	0.16	29.00	0.17
MM 0095	MEAT FROM MAMMALS other than marine mammals, raw (incl prepared meat) - 20% as fat	RAC	0.012	6.24	0.07	14.49	0.17	4.18	0.05	9.60	0.12	6.62	0.08	7.25	0.09
MO 0105	Edible offal (mammalian), raw	RAC	0.16	4.79	0.77	9.68	1.55	2.97	0.48	5.49	0.88	3.84	0.61	5.03	0.80
ML 0106	Milks, raw or skimmed (incl dairy products)	RAC	0.005	289.65	1.45	485.88	2.43	26.92	0.13	239.03	1.20	199.91	1.00	180.53	0.90
PM 0110	Poultry meat, raw (incl prepared) - 90% as muscle	RAC	0	13.17	0.00	26.78	0.00	7.24	0.00	116.71	0.00	22.54	0.00	32.09	0.00
PM 0110	Poultry meat, raw (incl prepared) - 10% as fat	RAC	0	1.46	0.00	2.98	0.00	0.80	0.00	12.97	0.00	2.50	0.00	3.57	0.00
PO 0111	Poultry edible offal, raw (incl prepared)	RAC	0.0016	0.12	0.00	0.12	0.00	0.11	0.00	5.37	0.01	0.24	0.00	0.10	0.00
PE 0112	Eggs, raw, (incl dried)	RAC	0.0023	7.84	0.02	23.08	0.05	2.88	0.01	14.89	0.03	9.81	0.02	14.83	0.03
Total intake (ug/person)=				124.4				251.7				66.7			
Bodyweight per region (kg bw) =				60				60				60			
ADI (ug/person)=				3000				3000				3000			
%ADI=				4.1%				8.4%				2.2%			
								7.9%				7.6%			
												11.4%			

**SPIROTETRAMAT (234)**

International Estimated Daily Intake (IEDI)

ADI = 0 - 0.05 mg/kg bw

STMR				Diets as g/person/day				Intake as ug/person/day							
Codex Code	Commodity description	Expr as	STMR mg/kg	G01 diet	G01 intake	G02 diet	G02 intake	G03 diet	G03 intake	G04 diet	G04 intake	G05 diet	G05 intake	G06 diet	G06 intake
Rounded %ADI=				4%		8%		2%		8%		8%		10%	

**SPIROTETRAMAT (234)**

International Estimated Daily Intake (IEDI)

ADI = 0 - 0.05 mg/kg bw

Codex Code	Commodity description	Expr as	STMR mg/kg	Diets as g/person/day				Intake as ug/person/day							
				G07 diet	G07 intake	G08 diet	G08 intake	G09 diet	G09 intake	G10 diet	G10 intake	G11 diet	G11 intake	G12 diet	G12 intake
JF 0001	Group of Citrus fruit, juice	PP	0.18	36.84	6.63	3.75	0.68	0.30	0.05	21.62	3.89	21.82	3.93	46.67	8.40
JF 0004	Subgroup of Oranges, juice (single strength, incl. concentrated)	PP	0.18	33.31	6.00	1.78	0.32	0.28	0.05	18.97	3.41	14.01	2.52	13.36	2.40
FP 0009	Group of Pome fruits, raw (incl apple cider, excl apple juice)	RAC	0.17	51.09	8.69	65.40	11.12	42.71	7.26	45.29	7.70	62.51	10.63	7.74	1.32
JF 0226	Apple juice, single strength (incl. concentrated)	PP	0.082	14.88	1.22	11.98	0.98	0.15	0.01	9.98	0.82	30.32	2.49	3.47	0.28
FS 0012	Group of Stone fruits, raw (incl dried plums, incl dried apricots)	RAC	1.6	19.98	31.97	24.87	39.79	14.41	23.06	19.54	31.26	10.78	17.25	0.50	0.80
DF 0014	Plums, dried (prunes)	PP	3.5	0.61	2.14	0.35	1.23	0.10	0.35	0.35	1.23	0.49	1.72	0.13	0.46
FB 2006	Subgroup of Bush berries, raw (including processed)	RAC	0.63	1.31	0.83	5.50	3.47	0.10	0.06	2.57	1.62	0.82	0.52	2.15	1.35
FB 0269	Grapes, raw (incl must, excl dried, excl juice, excl wine)	RAC	0.41	6.48	2.66	11.31	4.64	5.21	2.14	9.50	3.90	4.66	1.91	0.78	0.32
DF 0269	Grapes, dried (= currants, raisins and sultanas) (from table-grapes)	PP	1.1	3.09	3.40	1.51	1.66	0.10	0.11	1.38	1.52	4.26	4.69	0.42	0.46
JF 0269	Grape juice (from wine grapes)	PP	0.27	0.56	0.15	1.96	0.53	0.10	0.03	2.24	0.60	2.27	0.61	0.34	0.09
-	Grape wine (incl vermouths) (from wine-grapes)	PP	0.23	88.93	20.45	62.41	14.35	1.84	0.42	25.07	5.77	61.17	14.07	5.84	1.34
FB 0265	Cranberry, raw	RAC	0.066	0.10	0.01	0.10	0.01	0.10	0.01	1.22	0.08	0.11	0.01	NC	-
FB 0275	Strawberry, raw	RAC	0.08	4.49	0.36	5.66	0.45	0.10	0.01	6.63	0.53	5.75	0.46	0.10	0.01
FT 0336	Guava, raw	RAC	0.55	0.10	0.06	NC	-	0.42	0.23	NC	-	NC	-	NC	-
FI 0343	Litchi, raw (incl processed)	RAC	1.6	8.00	12.80	3.70	5.92	2.91	4.66	0.10	0.16	11.86	18.98	9.83	15.73
FI 0326	Avocado, raw	RAC	0.126	2.65	0.33	0.87	0.11	0.46	0.06	1.64	0.21	1.30	0.16	0.96	0.12
FI 0345	Mango, raw (incl canned mango, incl mango juice)	RAC	0.16	1.80	0.29	0.63	0.10	10.05	1.61	1.07	0.17	3.52	0.56	16.44	2.63
FI 0350	Papaya, raw	RAC	0.17	0.31	0.05	0.18	0.03	1.50	0.26	0.51	0.09	0.54	0.09	1.08	0.18
FI 0341	Kiwifruit, raw	RAC	0.055	2.46	0.14	3.62	0.20	0.10	0.01	1.48	0.08	7.43	0.41	0.10	0.01
VA 2031	Subgroup of bulb onions	RAC	0.11	20.67	2.27	31.32	3.45	37.52	4.13	35.08	3.86	11.77	1.29	13.74	1.51
VB 0042	Subgroup of Flowerhead Brassica, raw	RAC	0.5	9.50	4.75	6.77	3.39	NC	-	3.21	1.61	9.36	4.68	0.75	0.38
VB 0041	Cabbages, head, raw	RAC	0.23	8.97	2.06	27.12	6.24	1.44	0.33	24.96	5.74	4.55	1.05	11.23	2.58
VC 0045	Group of Fruiting vegetables, cucurbits, raw	RAC	0.057	27.81	1.59	41.93	2.39	123.30	7.03	49.47	2.82	15.95	0.91	35.99	2.05
VO 0448	Tomato, raw (incl canned, excl juice, excl paste)	RAC	0.43	43.88	18.87	55.41	23.83	35.38	15.21	74.88	32.20	26.50	11.40	9.51	4.09

## SPIROTETRAMAT (234)

## International Estimated Daily Intake (IEDI)

ADI = 0 - 0.05 mg/kg bw

Codex Code	Commodity description	Expr as	STMR mg/kg	Diets as g/person/day				Intake as ug/person/day							
				G07 diet	G07 intake	G08 diet	G08 intake	G09 diet	G09 intake	G10 diet	G10 intake	G11 diet	G11 intake	G12 diet	G12 intake
-	Tomato, paste (i.e. concentrated tomato sauce/puree)	PP	3.2	4.96	15.87	3.20	10.24	0.15	0.48	1.61	5.15	6.88	22.02	0.52	1.66
JF 0448	Tomato, juice (single strength, incl concentrated)	PP	0.27	0.80	0.22	0.10	0.03	0.10	0.03	0.61	0.16	0.40	0.11	0.10	0.03
VO 0444	Peppers, chili, raw	RAC	0.95	5.57	5.29	14.00	13.30	8.25	7.84	5.77	5.48	6.44	6.12	2.53	2.40
-	Peppers, chili, dried	PP	6.6	0.11	0.73	0.21	1.39	0.36	2.38	0.21	1.39	0.25	1.65	0.15	0.99
VL 0053	Group of Leafy vegetables, raw	RAC	3.7	18.83	69.67	21.85	80.85	121.23	448.55	43.09	159.43	18.18	67.27	18.32	67.78
VP 0060	Group of Legume vegetables, raw	RAC	0.505	18.21	9.20	8.91	4.50	7.22	3.65	10.04	5.07	23.22	11.73	0.17	0.09
VD 0071	Beans, dry, raw (Phaseolus spp)	RAC	0.21	1.51	0.32	1.50	0.32	1.90	0.40	5.11	1.07	1.36	0.29	23.43	4.92
VD 0523	Broad bean, dry, raw (incl horse-bean, field bean) (Vicia faba)	RAC	0.21	0.10	0.02	0.10	0.02	1.16	0.24	0.40	0.08	NC	-	0.10	0.02
VD 0527	Cowpea, dry, raw (Vigna sinensis, Dolichos sinensis)	RAC	0.21	NC	-	NC	-	0.16	0.03	0.10	0.02	NC	-	NC	-
VD 0541	Soya bean, dry, raw (incl flour, incl paste, incl curd, incl sauce, excl oil)	RAC	0.45	0.47	0.21	0.77	0.35	9.12	4.10	8.05	3.62	0.10	0.05	6.06	2.73
OR 0541	Soya oil, refined	PP	0	19.06	0.00	21.06	0.00	5.94	0.00	33.78	0.00	40.05	0.00	13.39	0.00
VR 0577	Carrots, raw	RAC	0.0545	26.26	1.43	27.13	1.48	10.07	0.55	16.49	0.90	44.69	2.44	8.75	0.48
VR 0596	Sugar beet, raw	RAC	0.052	0.10	0.01	NC	-	0.10	0.01	0.10	0.01	NC	-	NC	-
-	Sugar beet, sugar	PP	0.034	0.10	0.00	NC	-	0.10	0.00	NC	-	NC	-	NC	-
VR 0589	Potato, raw (incl flour, incl frozen, incl starch, incl tapioca)	RAC	0.12	225.03	27.00	234.24	28.11	71.48	8.58	177.55	21.31	234.55	28.15	37.71	4.53
VS 0624	Celery	RAC	0.58	7.68	4.45	2.85	1.65	NC	-	3.34	1.94	16.83	9.76	4.04	2.34
VS 0620	Artichoke globe, raw	RAC	0.41	0.98	0.40	3.65	1.50	0.10	0.04	1.67	0.68	0.26	0.11	NC	-
GC 0447	Sweet corn on the cob, raw (incl frozen kernels, incl canned kernels)	RAC	0.31	11.43	3.54	3.71	1.15	0.74	0.23	13.63	4.23	3.07	0.95	1.50	0.47
TN 0085	Tree nuts, raw (incl processed)	RAC	0.084	8.52	0.72	8.94	0.75	15.09	1.27	9.60	0.81	14.57	1.22	26.26	2.21
OR 0691	Cotton seed oil, edible	PP	0	1.68	0.00	0.66	0.00	1.13	0.00	1.18	0.00	0.89	0.00	0.37	0.00
DH 1100	Hops, dry	RAC	5.2	NC	-	NC	-	0.10	0.52	0.10	0.52	NC	-	NC	-
MM 0095	MEAT FROM MAMMALS other than marine mammals, raw (incl prepared meat) -80% as muscle	RAC	0.006	112.02	0.67	120.71	0.72	63.46	0.38	88.99	0.53	96.24	0.58	41.02	0.25
MM 0095	MEAT FROM MAMMALS other than marine mammals, raw (incl prepared meat) - 20% as fat	RAC	0.012	28.01	0.34	30.18	0.36	15.86	0.19	22.25	0.27	24.06	0.29	10.25	0.12
MO 0105	Edible offal (mammalian), raw	RAC	0.16	15.17	2.43	5.19	0.83	6.30	1.01	6.78	1.08	3.32	0.53	3.17	0.51
ML 0106	Milks, raw or skimmed (incl dairy products)	RAC	0.005	388.92	1.94	335.88	1.68	49.15	0.25	331.25	1.66	468.56	2.34	245.45	1.23
PM 0110	Poultry meat, raw (incl prepared) - 90% as muscle	RAC	0	66.38	0.00	48.47	0.00	21.58	0.00	78.41	0.00	48.04	0.00	76.01	0.00

## SPIROTETRAMAT (234)

## International Estimated Daily Intake (IEDI)

ADI = 0 - 0.05 mg/kg bw

Codex Code	Commodity description	Expr as	STMR mg/kg	Diets as g/person/day				Intake as ug/person/day							
				G07 diet	G07 intake	G08 diet	G08 intake	G09 diet	G09 intake	G10 diet	G10 intake	G11 diet	G11 intake	G12 diet	G12 intake
PM 0110	Poultry meat, raw (incl prepared) - 10% as fat	RAC	0	7.38	0.00	5.39	0.00	2.40	0.00	8.71	0.00	5.34	0.00	8.45	0.00
PO 0111	Poultry edible offal, raw (incl prepared)	RAC	0.0016	0.33	0.00	0.72	0.00	0.27	0.00	0.35	0.00	0.80	0.00	NC	-
PE 0112	Eggs, raw, (incl dried)	RAC	0.0023	25.84	0.06	29.53	0.07	28.05	0.06	33.19	0.08	36.44	0.08	8.89	0.02
Total intake (ug/person)=				272.2		274.1		547.9		324.7		256.0		139.3	
Bodyweight per region (kg bw) =				60		60		55		60		60		60	
ADI (ug/person)=				3000		3000		2750		3000		3000		3000	
%ADI=				9.1%		9.1%		19.9%		10.8%		8.5%		4.6%	
Rounded %ADI=				9%		9%		20%		10%		9%		5%	

## SPIROTETRAMAT (234)

## International Estimated Daily Intake (IEDI)

ADI = 0 - 0.05 mg/kg bw

Codex Code	Commodity description	Expr as	STMR mg/kg	Diets: g/person/day				Intake = daily intake: ug/person							
				G13 diet	G13 intake	G14 diet	G14 intake	G15 diet	G15 intake	G16 diet	G16 intake	G17 diet	G17 intake		
JF 0001	Group of Citrus fruit, juice	PP	0.18	0.11	0.02	0.29	0.05	13.55	2.44	0.14	0.03	0.33	0.06		
JF 0004	Subgroup of Oranges, juice (single strength, incl. concentrated)	PP	0.18	0.10	0.02	0.26	0.05	12.61	2.27	0.14	0.03	0.33	0.06		
FP 0009	Group of Pome fruits, raw (incl apple cider, excl apple juice)	RAC	0.17	68.85	11.70	10.93	1.86	70.82	12.04	189.78	32.26	19.56	3.33		
JF 0226	Apple juice, single strength (incl. concentrated)	PP	0.082	0.10	0.01	0.10	0.01	7.19	0.59	0.10	0.01	NC	-		
FS 0012	Group of Stone fruits, raw (incl dried plums, incl dried apricots)	RAC	1.6	0.10	0.16	0.10	0.16	33.36	53.38	0.10	0.16	NC	-		
DF 0014	Plums, dried (prunes)	PP	3.5	0.10	0.35	0.10	0.35	0.37	1.30	0.10	0.35	NC	-		
FB 2006	Subgroup of Bush berries, raw (including processed)	RAC	0.63	0.82	0.52	4.05	2.55	5.94	3.74	0.43	0.27	2.66	1.68		
FB 0269	Grapes, raw (incl must, excl dried, excl juice, excl wine)	RAC	0.41	0.14	0.06	0.36	0.15	15.33	6.29	0.10	0.04	0.28	0.11		
DF 0269	Grapes, dried (= currants, raisins and sultanas) (from table-grapes)	PP	1.1	0.10	0.11	0.13	0.14	1.06	1.17	0.10	0.11	0.10	0.11		
JF 0269	Grape juice (from wine grapes)	PP	0.27	0.10	0.03	0.10	0.03	0.41	0.11	0.10	0.03	NC	-		
-	Grape wine (incl vermouths) (from wine-grapes)	PP	0.23	0.31	0.07	0.23	0.05	60.43	13.90	0.52	0.12	31.91	7.34		
FB 0265	Cranberry, raw	RAC	0.066	NC	-	NC	-	0.10	0.01	NC	-	NC	-		
FB 0275	Strawberry, raw	RAC	0.08	0.10	0.01	0.10	0.01	3.35	0.27	0.10	0.01	0.10	0.01		
FT 0336	Guava, raw	RAC	0.55	0.10	0.06	0.10	0.06	NC	-	0.14	0.08	3.11	1.71		
FI 0343	Litchi, raw (incl processed)	RAC	1.6	3.74	5.98	18.51	29.62	4.87	7.79	1.97	3.15	12.17	19.47		
FI 0326	Avocado, raw	RAC	0.126	1.12	0.14	0.10	0.01	0.84	0.11	0.10	0.01	6.60	0.83		
FI 0345	Mango, raw (incl canned mango, incl mango juice)	RAC	0.16	12.25	1.96	6.83	1.09	0.76	0.12	0.10	0.02	20.12	3.22		



## SPIROTETRAMAT (234)

## International Estimated Daily Intake (IEDI)

ADI = 0 - 0.05 mg/kg bw

Codex Code	Commodity description	Expr as	STMR mg/kg	Diets: g/person/day				Intake = daily intake: ug/person					
				G13 diet	G13 intake	G14 diet	G14 intake	G15 diet	G15 intake	G16 diet	G16 intake	G17 diet	G17 intake
FI 0350	Papaya, raw	RAC	0.17	6.47	1.10	0.25	0.04	0.19	0.03	0.10	0.02	26.42	4.49
FI 0341	Kiwifruit, raw	RAC	0.055	0.10	0.01	0.10	0.01	2.00	0.11	0.10	0.01	NC	-
VA 2031	Subgroup of bulb onions	RAC	0.11	9.83	1.08	22.30	2.45	34.69	3.82	9.65	1.06	2.39	0.26
VB 0042	Subgroup of Flowerhead Brassica, raw	RAC	0.5	0.10	0.05	0.10	0.05	4.86	2.43	0.10	0.05	NC	-
VB 0041	Cabbages, head, raw	RAC	0.23	3.82	0.88	2.99	0.69	49.16	11.31	0.10	0.02	NC	-
VC 0045	Group of Fruiting vegetables, cucurbits, raw	RAC	0.057	5.96	0.34	9.74	0.56	51.82	2.95	13.61	0.78	0.10	0.01
VO 0448	Tomato, raw (incl canned, excl juice, excl paste)	RAC	0.43	13.10	5.63	4.90	2.11	62.16	26.73	1.04	0.45	0.10	0.04
-	Tomato, paste (i.e. concentrated tomato sauce/puree)	PP	3.2	0.58	1.86	0.22	0.70	2.21	7.07	0.24	0.77	3.10	9.92
JF 0448	Tomato, juice (single strength, incl concentrated)	PP	0.27	0.10	0.03	0.10	0.03	0.42	0.11	0.10	0.03	0.10	0.03
VO 0444	Peppers, chili, raw	RAC	0.95	3.47	3.30	3.56	3.38	16.30	15.49	0.10	0.10	NC	-
-	Peppers, chili, dried	PP	6.6	0.58	3.83	1.27	8.38	1.21	7.99	0.12	0.79	NC	-
VL 0053	Group of Leafy vegetables, raw	RAC	3.7	12.42	45.95	8.75	32.38	7.53	27.86	7.07	26.16	14.11	52.21
VP 0060	Group of Legume vegetables, raw	RAC	0.505	0.58	0.29	3.16	1.60	10.38	5.24	0.10	0.05	NC	-
VD 0071	Beans, dry, raw (Phaseolus spp)	RAC	0.21	7.11	1.49	2.33	0.49	3.76	0.79	44.70	9.39	3.27	0.69
VD 0523	Broad bean, dry, raw (incl horse-bean, field bean) (Vicia faba)	RAC	0.21	3.70	0.78	0.10	0.02	0.17	0.04	0.10	0.02	NC	-
VD 0527	Cowpea, dry, raw (Vigna sinensis, Dolichos sinensis)	RAC	0.21	12.77	2.68	0.99	0.21	0.10	0.02	4.33	0.91	NC	-
VD 0541	Soya bean, dry, raw (incl flour, incl paste, incl curd, incl sauce, excl oil)	RAC	0.45	2.89	1.30	0.21	0.09	0.48	0.22	3.16	1.42	0.26	0.12
OR 0541	Soya oil, refined	PP	0	2.32	0.00	2.54	0.00	18.70	0.00	2.51	0.00	6.29	0.00
VR 0577	Carrots, raw	RAC	0.0545	2.07	0.11	3.00	0.16	25.29	1.38	0.10	0.01	NC	-
VR 0596	Sugar beet, raw	RAC	0.052	0.10	0.01	NC	-	NC	-	NC	-	NC	-
-	Sugar beet, sugar	PP	0.034	0.56	0.02	0.24	0.01	NC	-	NC	-	5.13	0.17
VR 0589	Potato, raw (incl flour, incl frozen, incl starch, incl tapioca)	RAC	0.12	23.96	2.88	13.56	1.63	213.41	25.61	104.35	12.52	8.56	1.03
VS 0624	Celery	RAC	0.58	3.66	2.12	2.65	1.54	4.84	2.81	2.47	1.43	4.94	2.87
VS 0620	Artichoke globe, raw	RAC	0.41	0.10	0.04	NC	-	0.10	0.04	0.10	0.04	NC	-
GC 0447	Sweet corn on the cob, raw (incl frozen kernels, incl canned kernels)	RAC	0.31	3.63	1.13	20.50	6.36	8.78	2.72	0.10	0.03	0.17	0.05
TN 0085	Tree nuts, raw (incl processed)	RAC	0.084	4.39	0.37	135.53	11.38	6.11	0.51	0.72	0.06	317.74	26.69
OR 0691	Cotton seed oil, edible	PP	0	1.28	0.00	0.10	0.00	0.45	0.00	0.42	0.00	0.15	0.00
DH 1100	Hops, dry	RAC	5.2	NC	-	NC	-	0.10	0.52	NC	-	NC	-
MM 0095	MEAT FROM MAMMALS other than marine mammals, raw (incl prepared meat) -80% as muscle	RAC	0.006	23.34	0.14	40.71	0.24	97.15	0.58	18.06	0.11	57.71	0.35

SPIROTETRAMAT (234)				International Estimated Daily Intake (IEDI)				ADI = 0 - 0.05 mg/kg bw					
Codex Code	Commodity description	Expr as	STMR mg/kg	Diets: g/person/day				Intake = daily intake: ug/person					
				G13 diet	G13 intake	G14 diet	G14 intake	G15 diet	G15 intake	G16 diet	G16 intake	G17 diet	G17 intake
MM 0095	MEAT FROM MAMMALS other than marine mammals, raw (incl prepared meat) - 20% as fat	RAC	0.012	5.84	0.07	10.18	0.12	24.29	0.29	4.52	0.05	14.43	0.17
MO 0105	Edible offal (mammalian), raw	RAC	0.16	4.64	0.74	1.97	0.32	10.01	1.60	3.27	0.52	3.98	0.64
ML 0106	Milks, raw or skimmed (incl dairy products)	RAC	0.005	108.75	0.54	70.31	0.35	436.11	2.18	61.55	0.31	79.09	0.40
PM 0110	Poultry meat, raw (incl prepared) - 90% as muscle	RAC	0	3.53	0.00	10.83	0.00	51.36	0.00	4.53	0.00	50.00	0.00
PM 0110	Poultry meat, raw (incl prepared) - 10% as fat	RAC	0	0.39	0.00	1.20	0.00	5.71	0.00	0.50	0.00	5.56	0.00
PO 0111	Poultry edible offal, raw (incl prepared)	RAC	0.0016	0.10	0.00	0.70	0.00	0.97	0.00	0.10	0.00	NC	-
PE 0112	Eggs, raw, (incl dried)	RAC	0.0023	3.84	0.01	4.41	0.01	27.25	0.06	1.13	0.00	7.39	0.02
Total intake (ug/person)=				100.0				111.5				256.0	
Bodyweight per region (kg bw) =				60				60				60	
ADI (ug/person)=				3000				3000				3000	
%ADI=				3.3%				3.7%				8.5%	
Rounded %ADI=				3%				4%				9%	

## TEBUCONAZOLE (184)

## International Estimated Daily Intake (IEDI)

ADI = 0 - 0.03 mg/kg bw

Codex Code	Commodity description	Expr as	STM <sup>R</sup> mg/kg	Diets as g/person/day				Intake as ug/person/day							
				G01 diet	G01 intake	G02 diet	G02 intake	G03 diet	G03 intake	G04 diet	G04 intake	G05 diet	G05 intake	G06 diet	G06 intake
FC 0003	Subgroup of Mandarins, raw	RAC	0.05	6.18	0.31	3.66	0.18	0.25	0.01	6.82	0.34	3.49	0.17	19.38	0.97
FC 0004	Subgroup of Oranges, sweet, sour, raw	RAC	0.05	20.66	1.03	5.23	0.26	11.90	0.60	37.90	1.90	21.16	1.06	56.46	2.82
FP 0226	Apple, raw	RAC	0.19	13.39	2.54	26.46	5.03	0.52	0.10	16.07	3.05	6.37	1.21	47.79	9.08
JF 0226	Apple juice, single strength (incl. concentrated)	PP	0.08	0.32	0.03	3.07	0.25	0.10	0.01	5.00	0.40	0.29	0.02	5.57	0.45
FP 0230	Pear, raw	RAC	0.19	2.16	0.41	6.24	1.19	0.10	0.02	4.07	0.77	1.16	0.22	5.34	1.01
FP 0307	Persimmon, Japanese, raw (i.e. Kaki fruit)	RAC	0.19	1.91	0.36	0.10	0.02	1.94	0.37	1.96	0.37	NC	-	0.25	0.05
FP 0231	Quince, raw	RAC	0.19	0.73	0.14	0.54	0.10	0.10	0.02	0.10	0.02	0.10	0.02	1.31	0.25
FS 0013	Subgroup of Cherries, raw	RAC	0.76	0.92	0.70	9.15	6.95	0.10	0.08	0.61	0.46	0.10	0.08	6.64	5.05
FS 0014	Subgroup of Plums, raw	RAC	0.055	2.40	0.13	8.60	0.47	0.10	0.01	2.52	0.14	0.58	0.03	4.16	0.23
DF 0014	Plums, dried (prunes)	PP	0.18	0.10	0.02	0.10	0.02	0.10	0.02	0.18	0.03	0.10	0.02	0.10	0.02
-	Peaches and nectarines, raw	RAC	0.1	2.87	0.29	2.21	0.22	0.15	0.02	5.94	0.59	1.47	0.15	15.66	1.57
FB 0267	Elderberries, raw (incl processed)	RAC	0.345	0.44	0.15	0.27	0.09	0.34	0.12	1.41	0.49	NC	-	0.87	0.30
FI 0327	Banana, raw (incl plantains) (incl dried)	RAC	0.07	5.23	0.37	6.94	0.49	99.45	6.96	32.47	2.27	48.30	3.38	24.70	1.73
FI 0345	Mango, raw (incl canned mango, incl mango juice)	RAC	0.02	10.48	0.21	0.10	0.00	7.24	0.14	6.87	0.14	19.98	0.40	6.25	0.13
FI 0350	Papaya, raw	RAC	0.18	0.35	0.06	0.10	0.02	3.05	0.55	0.80	0.14	7.28	1.31	1.00	0.18
VA 0381	Garlic, raw	RAC	0.02	2.29	0.05	5.78	0.12	0.11	0.00	3.69	0.07	1.65	0.03	3.91	0.08
-	Onions, dry, raw	RAC	0.055	29.36	1.61	37.50	2.06	3.56	0.20	34.78	1.91	18.81	1.03	43.38	2.39
VA 2032	Subgroup of Green Onions	RAC	0.055	2.64	0.15	3.09	0.17	1.05	0.06	2.89	0.16	0.61	0.03	5.24	0.29
VA 0384	Leek, raw	RAC	0.195	0.18	0.04	1.59	0.31	0.10	0.02	0.28	0.05	0.10	0.02	3.21	0.63
-	Onions, green, raw	RAC	0.1	2.45	0.25	1.49	0.15	1.02	0.10	2.60	0.26	0.60	0.06	2.03	0.20
VB 0040	Group of Brassica vegetables (except Brassica leafy vegetables), raw	RAC	0.07	6.43	0.45	40.26	2.82	0.80	0.06	9.94	0.70	12.07	0.84	17.73	1.24
VC 0424	Cucumber, raw	RAC	0.05	8.01	0.40	30.66	1.53	1.45	0.07	19.84	0.99	0.27	0.01	34.92	1.75
VC 0046	Melons, except watermelon, raw (Cantaloupe)	RAC	0.02	8.90	0.18	8.64	0.17	0.80	0.02	17.90	0.36	2.80	0.06	29.17	0.58
VC 0432	Watermelon, raw	RAC	0.02	28.96	0.58	25.65	0.51	1.56	0.03	39.26	0.79	4.94	0.10	66.90	1.34
VO 0448	Tomato, raw	RAC	0.19	41.73	7.93	75.65	14.37	10.66	2.03	82.87	15.75	24.75	4.70	200.93	38.18
-	Tomato, canned (& peeled)	PP	0.057	0.20	0.01	0.31	0.02	0.10	0.01	1.11	0.06	0.11	0.01	1.50	0.09
-	Tomato, paste (i.e. concentrated tomato sauce/puree)	PP	0.16	2.34	0.37	1.33	0.21	1.57	0.25	4.24	0.68	0.34	0.05	2.83	0.45
JF 0448	Tomato, juice (single strength, incl concentrated)	PP	0.1	0.29	0.03	0.29	0.03	0.10	0.01	0.38	0.04	0.10	0.01	0.14	0.01
VO 0445	Peppers, sweet, raw	RAC	0.14	1.43	0.20	2.61	0.37	1.05	0.15	2.01	0.28	2.59	0.36	6.24	0.87
VL 0483	Lettuce, leaf, raw	RAC	0.98	0.53	0.52	0.36	0.35	0.16	0.16	6.21	6.09	1.90	1.86	6.05	5.93
VP 2060	Subgroup of beans with pods (all commodities within this group)	RAC	0.315	0.68	0.21	NC	-	NC	-	0.39	0.12	0.22	0.07	0.49	0.15

TEBUCONAZOLE (184)				International Estimated Daily Intake (IEDI)				ADI = 0 - 0.03 mg/kg bw							
Codex Code	Commodity description	Expr as	STMR mg/kg	Diets as g/person/day				Intake as ug/person/day							
				G01 diet	G01 intake	G02 diet	G02 intake	G03 diet	G03 intake	G04 diet	G04 intake	G05 diet	G05 intake	G06 diet	G06 intake
VD 0541	Soya bean, dry, raw (Glycine soja)	RAC	0.02	0.58	0.01	0.10	0.00	0.37	0.01	0.10	0.00	1.65	0.03	0.30	0.01
OR 0541	Soya oil, refined	PP	0.001	12.99	0.01	10.43	0.01	3.63	0.00	13.10	0.01	10.70	0.01	13.10	0.01
VR 0577	Carrots, raw	RAC	0.11	9.51	1.05	30.78	3.39	0.37	0.04	8.75	0.96	2.80	0.31	6.10	0.67
VS 0621	Asparagus, raw	RAC	0.02	0.10	0.00	0.10	0.00	0.10	0.00	0.10	0.00	0.10	0.00	0.21	0.00
VS 0620	Artichoke globe, raw	RAC	0.15	0.69	0.10	0.10	0.02	0.10	0.02	0.32	0.05	0.26	0.04	1.21	0.18
GC 0640	Barley, raw	RAC	0.06	2.49	0.15	NC	-	0.10	0.01	0.10	0.01	0.18	0.01	0.38	0.02
-	Barley beer	PP	0.001	4.87	0.00	93.78	0.09	24.28	0.02	12.76	0.01	39.28	0.04	18.15	0.02
GC 0447	Sweet corn on the cob, raw (incl frozen kernels, excl canned kernels)	RAC	0.1	0.10	0.01	0.16	0.02	5.67	0.57	1.21	0.12	1.83	0.18	0.10	0.01
SO 0495	Rape seed, raw	RAC	0.09	0.10	0.01	NC	-	NC	-	0.10	0.01	0.75	0.07	0.10	0.01
OR 0495	Rape seed oil, edible	PP	0.064	0.35	0.02	0.44	0.03	0.19	0.01	0.97	0.06	3.28	0.21	0.77	0.05
SO 0697	Peanuts, nutmeat, raw	RAC	0.04	0.40	0.02	1.01	0.04	6.60	0.26	1.47	0.06	1.17	0.05	1.82	0.07
SO 0702	Sunflower seed, raw (incl oil)	RAC	0.04	7.40	0.30	35.86	1.43	1.15	0.05	8.76	0.35	5.45	0.22	13.62	0.54
SB 0716	Coffee beans raw (incl roasted, incl instant coffee, incl substitutes)	RAC	0.1	1.36	0.14	3.59	0.36	1.44	0.14	5.18	0.52	2.02	0.20	1.70	0.17
SM 0716	Coffee beans, roasted	PP	0.2	0.19	0.04	0.91	0.18	0.16	0.03	2.50	0.50	0.39	0.08	0.40	0.08
-	Coffee beans, instant coffee (incl essences and concentrates)	PP	0.08	0.10	0.01	0.94	0.08	0.10	0.01	0.70	0.06	0.10	0.01	0.29	0.02
DH 1100	Hops, dry	RAC	9.65	0.10	0.97	0.10	0.97	0.10	0.97	0.10	0.97	NC	-	0.10	0.97
MO 0105	Edible offal (mammalian), raw	RAC	0.2	4.79	0.96	9.68	1.94	2.97	0.59	5.49	1.10	3.84	0.77	5.03	1.01
Total intake (ug/person)=				23.5				47.0				14.9			
Bodyweight per region (kg bw) =				60				60				60			
ADI (ug/person)=				1800				1800				1800			
%ADI=				1.3%				2.6%				0.8%			
Rounded %ADI=				1%				3%				1%			

## TEBUCONAZOLE (184)

## International Estimated Daily Intake (IEDI)

ADI = 0 - 0.03 mg/kg bw

Codex Code	Commodity description	Expr as	STMR mg/kg	Diets as g/person/day				Intake as ug/person/day							
				G07 diet	G07 intake	G08 diet	G08 intake	G09 diet	G09 intake	G10 diet	G10 intake	G11 diet	G11 intake	G12 diet	G12 intake
FC 0003	Subgroup of Mandarins, raw	RAC	0.05	12.34	0.62	14.99	0.75	16.08	0.80	10.76	0.54	9.94	0.50	NC	-
FC 0004	Subgroup of Oranges, sweet, sour, raw	RAC	0.05	15.68	0.78	24.00	1.20	6.80	0.34	29.09	1.45	15.39	0.77	160.47	8.02
FP 0226	Apple, raw	RAC	0.19	27.44	5.21	49.21	9.35	21.57	4.10	31.09	5.91	51.60	9.80	1.77	0.34
JF 0226	Apple juice, single strength (incl. concentrated)	PP	0.08	14.88	1.19	11.98	0.96	0.15	0.01	9.98	0.80	30.32	2.43	3.47	0.28
FP 0230	Pear, raw	RAC	0.19	8.79	1.67	8.44	1.60	12.37	2.35	9.60	1.82	10.27	1.95	0.23	0.04
FP 0307	Persimmon, Japanese, raw (i.e. Kaki fruit)	RAC	0.19	0.10	0.02	0.30	0.06	3.59	0.68	0.15	0.03	0.10	0.02	NC	-
FP 0231	Quince, raw	RAC	0.19	0.19	0.04	0.18	0.03	0.11	0.02	0.10	0.02	0.28	0.05	NC	-
FS 0013	Subgroup of Cherries, raw	RAC	0.76	1.40	1.06	4.21	3.20	0.10	0.08	2.93	2.23	1.50	1.14	NC	-
FS 0014	Subgroup of Plums, raw	RAC	0.055	3.75	0.21	3.33	0.18	5.94	0.33	2.64	0.15	2.50	0.14	0.10	0.01
DF 0014	Plums, dried (prunes)	PP	0.18	0.61	0.11	0.35	0.06	0.10	0.02	0.35	0.06	0.49	0.09	0.13	0.02
-	Peaches and nectarines, raw	RAC	0.1	8.76	0.88	12.98	1.30	8.23	0.82	10.09	1.01	3.64	0.36	0.10	0.01
FB 0267	Elderberries, raw (incl processed)	RAC	0.345	8.20	2.83	0.14	0.05	NC	-	NC	-	NC	-	1.87	0.65
FI 0327	Banana, raw (incl plantains) (incl dried)	RAC	0.07	25.76	1.80	23.65	1.66	23.83	1.67	24.37	1.71	19.43	1.36	101.55	7.11
FI 0345	Mango, raw (incl canned mango, incl mango juice)	RAC	0.02	1.80	0.04	0.63	0.01	10.05	0.20	1.07	0.02	3.52	0.07	16.44	0.33
FI 0350	Papaya, raw	RAC	0.18	0.31	0.06	0.18	0.03	1.50	0.27	0.51	0.09	0.54	0.10	1.08	0.19
VA 0381	Garlic, raw	RAC	0.02	0.98	0.02	1.49	0.03	12.88	0.26	3.74	0.07	2.05	0.04	1.14	0.02
-	Onions, dry, raw	RAC	0.055	19.69	1.08	29.83	1.64	24.64	1.36	31.35	1.72	9.72	0.53	12.59	0.69
VA 2032	Subgroup of Green Onions	RAC	0.055	5.57	0.31	5.15	0.28	1.77	0.10	4.28	0.24	17.34	0.95	6.48	0.36
VA 0384	Leek, raw	RAC	0.195	4.01	0.78	4.41	0.86	0.72	0.14	0.54	0.11	16.41	3.20	0.10	0.02
-	Onions, green, raw	RAC	0.1	1.55	0.16	0.74	0.07	1.05	0.11	3.74	0.37	0.94	0.09	6.45	0.65
VB 0040	Group of Brassica vegetables (except Brassica leafy vegetables), raw	RAC	0.07	20.71	1.45	39.81	2.79	25.06	1.75	37.93	2.66	18.12	1.27	16.74	1.17
VC 0424	Cucumber, raw	RAC	0.05	6.72	0.34	11.03	0.55	32.10	1.61	15.10	0.76	4.05	0.20	9.57	0.48
VC 0046	Melons, except watermelon, raw (Cantaloupe)	RAC	0.02	9.20	0.18	11.95	0.24	14.63	0.29	8.99	0.18	7.86	0.16	2.46	0.05
VC 0432	Watermelon, raw	RAC	0.02	4.60	0.09	9.82	0.20	68.50	1.37	13.19	0.26	1.99	0.04	14.56	0.29
VO 0448	Tomato, raw	RAC	0.19	32.13	6.10	51.27	9.74	34.92	6.63	73.37	13.94	15.15	2.88	8.88	1.69
-	Tomato, canned (& peeled)	PP	0.057	7.57	0.43	2.66	0.15	0.30	0.02	0.97	0.06	7.31	0.42	0.41	0.02
-	Tomato, paste (i.e. concentrated tomato sauce/puree)	PP	0.16	4.96	0.79	3.20	0.51	0.15	0.02	1.61	0.26	6.88	1.10	0.52	0.08
JF 0448	Tomato, juice (single strength, incl concentrated)	PP	0.1	0.80	0.08	0.10	0.01	0.10	0.01	0.61	0.06	0.40	0.04	0.10	0.01
VO 0445	Peppers, sweet, raw	RAC	0.14	NC	-	NC	-	8.25	1.16	3.03	0.42	NC	-	0.91	0.13

## TEBUCONAZOLE (184)

## International Estimated Daily Intake (IEDI)

ADI = 0 - 0.03 mg/kg bw

STMR mg/kg				Diets as g/person/day				Intake as ug/person/day								
Codex Code	Commodity description	Expr as	STMR mg/kg	G07 diet	G07 intake	G08 diet	G08 intake	G09 diet	G09 intake	G10 diet	G10 intake	G11 diet	G11 intake	G12 diet	G12 intake	
VL 0483	Lettuce, leaf, raw	RAC	0.98	14.50	14.21	11.76	11.52	13.14	12.88	19.50	19.11	4.81	4.71	2.23	2.19	
VP 2060	Subgroup of beans with pods (all commodities within this group)	RAC	0.315	5.07	1.60	0.83	0.26	0.17	0.05	3.70	1.17	NC	-	NC	-	
VD 0541	Soya bean, dry, raw (Glycine soja)	RAC	0.02	0.10	0.00	0.33	0.01	6.64	0.13	3.94	0.08	NC	-	5.78	0.12	
OR 0541	Soya oil, refined	PP	0.001	19.06	0.02	21.06	0.02	5.94	0.01	33.78	0.03	40.05	0.04	13.39	0.01	
VR 0577	Carrots, raw	RAC	0.11	26.26	2.89	27.13	2.98	10.07	1.11	16.49	1.81	44.69	4.92	8.75	0.96	
VS 0621	Asparagus, raw	RAC	0.02	0.84	0.02	2.08	0.04	7.11	0.14	1.01	0.02	1.69	0.03	0.10	0.00	
VS 0620	Artichoke globe, raw	RAC	0.15	0.98	0.15	3.65	0.55	0.10	0.02	1.67	0.25	0.26	0.04	NC	-	
GC 0640	Barley, raw	RAC	0.06	0.10	0.01	NC	-	0.10	0.01	1.36	0.08	NC	-	NC	-	
-	Barley beer	PP	0.001	180.21	0.18	259.46	0.26	45.91	0.05	172.36	0.17	234.42	0.23	65.30	0.07	
GC 0447	Sweet corn on the cob, raw (incl frozen kernels, excl canned kernels)	RAC	0.1	7.76	0.78	0.71	0.07	0.62	0.06	8.62	0.86	1.34	0.13	0.10	0.01	
SO 0495	Rape seed, raw	RAC	0.09	NC	-	NC	-	0.10	0.01	NC	-	NC	-	NC	-	
OR 0495	Rape seed oil, edible	PP	0.064	12.52	0.80	7.63	0.49	3.00	0.19	6.01	0.38	NC	-	NC	-	
SO 0697	Peanuts, nutmeat, raw	RAC	0.04	2.39	0.10	2.05	0.08	5.25	0.21	4.39	0.18	1.30	0.05	0.62	0.02	
SO 0702	Sunflower seed, raw (incl oil)	RAC	0.04	23.40	0.94	29.33	1.17	1.24	0.05	13.85	0.55	6.48	0.26	6.91	0.28	
SB 0716	Coffee beans raw (incl roasted, incl instant coffee, incl substitutes)	RAC	0.1	10.90	1.09	12.44	1.24	0.77	0.08	9.48	0.95	22.07	2.21	8.15	0.82	
SM 0716	Coffee beans, roasted	PP	0.2	7.02	1.40	9.75	1.95	0.10	0.02	5.09	1.02	13.38	2.68	0.77	0.15	
-	Coffee beans, instant coffee (incl essences and concentrates)	PP	0.08	0.75	0.06	0.30	0.02	0.10	0.01	0.67	0.05	2.43	0.19	1.43	0.11	
DH 1100	Hops, dry	RAC	9.65	NC	-	NC	-	0.10	0.97	0.10	0.97	NC	-	NC	-	
MO 0105	Edible offal (mammalian), raw	RAC	0.2	15.17	3.03	5.19	1.04	6.30	1.26	6.78	1.36	3.32	0.66	3.17	0.63	
Total intake (ug/person)=					55.6		59.2		43.7		66.0		45.9		28.0	
Bodyweight per region (kg bw) =					60		60		55		60		60		60	
ADI (ug/person)=					1800		1800		1650		1800		1800		1800	
%ADI=					3.1%		3.3%		2.7%		3.7%		2.5%		1.6%	
Rounded %ADI=					3%		3%		3%		4%		3%		2%	

## TEBUCONAZOLE (184)

## International Estimated Daily Intake (IEDI)

ADI = 0 - 0.03 mg/kg bw

Codex Code	Commodity description	Expr as	STMR mg/kg	Diets: g/person/day				Intake = daily intake: ug/person					
				G13 diet	G13 intake	G14 diet	G14 intake	G15 diet	G15 intake	G16 diet	G16 intake	G17 diet	G17 intake
FC 0003	Subgroup of Mandarins, raw	RAC	0.05	0.16	0.01	0.27	0.01	9.06	0.45	0.10	0.01	0.10	0.01
FC 0004	Subgroup of Oranges, sweet, sour, raw	RAC	0.05	1.18	0.06	1.11	0.06	14.28	0.71	0.10	0.01	1.08	0.05
FP 0226	Apple, raw	RAC	0.19	0.21	0.04	2.05	0.39	54.48	10.35	0.10	0.02	1.38	0.26
JF 0226	Apple juice, single strength (incl. concentrated)	PP	0.08	0.10	0.01	0.10	0.01	7.19	0.58	0.10	0.01	NC	-
FP 0230	Pear, raw	RAC	0.19	0.10	0.02	0.14	0.03	9.45	1.80	0.10	0.02	0.14	0.03
FP 0307	Persimmon, Japanese, raw (i.e. Kaki fruit)	RAC	0.19	0.41	0.08	0.32	0.06	0.10	0.02	0.58	0.11	12.51	2.38
FP 0231	Quince, raw	RAC	0.19	NC	-	NC	-	0.65	0.12	NC	-	NC	-
FS 0013	Subgroup of Cherries, raw	RAC	0.76	0.10	0.08	0.10	0.08	5.96	4.53	0.10	0.08	NC	-
FS 0014	Subgroup of Plums, raw	RAC	0.055	0.10	0.01	0.10	0.01	15.56	0.86	0.10	0.01	NC	-
DF 0014	Plums, dried (prunes)	PP	0.18	0.10	0.02	0.10	0.02	0.37	0.07	0.10	0.02	NC	-
-	Peaches and nectarines, raw	RAC	0.1	0.10	0.01	0.10	0.01	7.47	0.75	0.10	0.01	NC	-
FB 0267	Elderberries, raw (incl processed)	RAC	0.345	0.71	0.24	3.52	1.21	NC	-	0.38	0.13	2.32	0.80
FI 0327	Banana, raw (incl plantains) (incl dried)	RAC	0.07	44.80	3.14	118.17	8.27	25.25	1.77	454.49	31.81	310.23	21.72
FI 0345	Mango, raw (incl canned mango, incl mango juice)	RAC	0.02	12.25	0.25	6.83	0.14	0.76	0.02	0.10	0.00	20.12	0.40
FI 0350	Papaya, raw	RAC	0.18	6.47	1.16	0.25	0.05	0.19	0.03	0.10	0.02	26.42	4.76
VA 0381	Garlic, raw	RAC	0.02	0.82	0.02	2.06	0.04	3.79	0.08	0.10	0.00	0.29	0.01
-	Onions, dry, raw	RAC	0.055	9.01	0.50	20.24	1.11	30.90	1.70	9.61	0.53	2.11	0.12
VA 2032	Subgroup of Green Onions	RAC	0.055	1.45	0.08	1.50	0.08	1.42	0.08	0.10	0.01	6.30	0.35
VA 0384	Leek, raw	RAC	0.195	0.10	0.02	1.44	0.28	1.22	0.24	0.10	0.02	NC	-
-	Onions, green, raw	RAC	0.1	1.43	0.14	0.10	0.01	0.20	0.02	NC	-	6.30	0.63
VB 0040	Group of Brassica vegetables (except Brassica leafy vegetables), raw	RAC	0.07	5.46	0.38	4.28	0.30	58.72	4.11	0.10	0.01	NC	-
VC 0424	Cucumber, raw	RAC	0.05	0.68	0.03	1.81	0.09	10.40	0.52	0.10	0.01	0.10	0.01
VC 0046	Melons, except watermelon, raw (Cantaloupe)	RAC	0.02	0.19	0.00	0.10	0.00	4.98	0.10	0.10	0.00	NC	-
VC 0432	Watermelon, raw	RAC	0.02	4.29	0.09	0.30	0.01	28.70	0.57	0.10	0.00	NC	-
VO 0448	Tomato, raw	RAC	0.19	12.99	2.47	4.79	0.91	58.40	11.10	0.92	0.17	0.10	0.02
-	Tomato, canned (& peeled)	PP	0.057	0.10	0.01	0.10	0.01	2.42	0.14	0.10	0.01	NC	-
-	Tomato, paste (i.e. concentrated tomato sauce/puree)	PP	0.16	0.58	0.09	0.22	0.04	2.21	0.35	0.24	0.04	3.10	0.50
JF 0448	Tomato, juice (single strength, incl concentrated)	PP	0.1	0.10	0.01	0.10	0.01	0.42	0.04	0.10	0.01	0.10	0.01
VO 0445	Peppers, sweet, raw	RAC	0.14	1.24	0.17	1.27	0.18	NC	-	0.10	0.01	NC	-
VL 0483	Lettuce, leaf, raw	RAC	0.98	0.29	0.28	0.10	0.10	6.71	6.58	0.10	0.10	NC	-
VP 2060	Subgroup of beans with pods (all commodities within this group)	RAC	0.315	NC	-	NC	-	NC	-	NC	-	NC	-
VD 0541	Soya bean, dry, raw (Glycine soja)	RAC	0.02	2.76	0.06	0.10	0.00	0.33	0.01	3.16	0.06	NC	-

## TEBUCONAZOLE (184)

## International Estimated Daily Intake (IEDI)

ADI = 0 - 0.03 mg/kg bw

Codex Code	Commodity description	Expr as	STMR mg/kg	Diets: g/person/day				Intake = daily intake: ug/person					
				G13 diet	G13 intake	G14 diet	G14 intake	G15 diet	G15 intake	G16 diet	G16 intake	G17 diet	G17 intake
OR 0541	Soya oil, refined	PP	0.001	2.32	0.00	2.54	0.00	18.70	0.02	2.51	0.00	6.29	0.01
VR 0577	Carrots, raw	RAC	0.11	2.07	0.23	3.00	0.33	25.29	2.78	0.10	0.01	NC	-
VS 0621	Asparagus, raw	RAC	0.02	0.10	0.00	0.10	0.00	0.17	0.00	0.10	0.00	NC	-
VS 0620	Artichoke globe, raw	RAC	0.15	0.10	0.02	NC	-	0.10	0.02	0.10	0.02	NC	-
GC 0640	Barley, raw	RAC	0.06	0.10	0.01	0.10	0.01	0.16	0.01	NC	-	NC	-
-	Barley beer	PP	0.001	16.25	0.02	11.36	0.01	225.21	0.23	19.49	0.02	52.17	0.05
GC 0447	Sweet corn on the cob, raw (incl frozen kernels, excl canned kernels)	RAC	0.1	3.62	0.36	20.47	2.05	6.82	0.68	0.10	0.01	0.17	0.02
SO 0495	Rape seed, raw	RAC	0.09	NC	-	0.10	0.01	NC	-	NC	-	NC	-
OR 0495	Rape seed oil, edible	PP	0.064	0.10	0.01	0.10	0.01	4.62	0.30	0.10	0.01	NC	-
SO 0697	Peanuts, nutmeat, raw	RAC	0.04	7.12	0.28	0.32	0.01	1.34	0.05	6.21	0.25	0.53	0.02
SO 0702	Sunflower seed, raw (incl oil)	RAC	0.04	0.94	0.04	0.22	0.01	32.01	1.28	12.12	0.48	0.48	0.02
SB 0716	Coffee beans raw (incl roasted, incl instant coffee, incl substitutes)	RAC	0.1	0.95	0.10	1.32	0.13	11.64	1.16	2.96	0.30	14.73	1.47
SM 0716	Coffee beans, roasted	PP	0.2	0.10	0.02	0.41	0.08	7.50	1.50	0.10	0.02	0.10	0.02
-	Coffee beans, instant coffee (incl essences and concentrates)	PP	0.08	0.10	0.01	0.10	0.01	0.60	0.05	0.10	0.01	5.53	0.44
DH 1100	Hops, dry	RAC	9.65	NC	-	NC	-	0.10	0.97	NC	-	NC	-
MO 0105	Edible offal (mammalian), raw	RAC	0.2	4.64	0.93	1.97	0.39	10.01	2.00	3.27	0.65	3.98	0.80
Total intake (ug/person)=				11.5		16.5		58.7		35.0		34.9	
Bodyweight per region (kg bw) =				60		60		60		60		60	
ADI (ug/person)=				1800		1800		1800		1800		1800	
%ADI=				0.6%		0.9%		3.3%		1.9%		1.9%	
Rounded %ADI=				1%		1%		3%		2%		2%	



**THIABENDAZOLE (65)**

International Estimated Daily Intake (IEDI)

ADI = 0 - 0.1 mg/kg bw

Codex Code	Commodity description	Expr as	STMR mg/kg	Diets as g/person/day				Intake as ug/person/day							
				G01 diet	G01 intake	G02 diet	G02 intake	G03 diet	G03 intake	G04 diet	G04 intake	G05 diet	G05 intake	G06 diet	G06 intake
FC 0001	Group of Citrus fruit, raw (incl citrus fruit juice, incl kumquat commodities)	RAC	0.1	33.64	3.36	14.31	1.43	17.13	1.71	92.67	9.27	35.11	3.51	96.80	9.68
FP 0009	Group of Pome fruits, raw (incl apple cider, excl apple juice)	RAC	1.7	19.35	32.90	34.06	57.90	17.87	30.38	25.74	43.76	7.69	13.07	56.85	96.65
JF 0226	Apple juice, single strength (incl. concentrated)	PP	0.8	0.32	0.26	3.07	2.46	0.10	0.08	5.00	4.00	0.29	0.23	5.57	4.46
FB 0275	Strawberry, raw	RAC	1.6	0.70	1.12	2.01	3.22	0.10	0.16	1.36	2.18	0.37	0.59	2.53	4.05
FI 0326	Avocado, raw	RAC	0.9	0.13	0.12	0.10	0.09	2.05	1.85	2.54	2.29	2.34	2.11	0.12	0.11
FI 0327	Banana, raw (incl plantains) (incl dried)	RAC	0.029	5.23	0.15	6.94	0.20	99.45	2.88	32.47	0.94	48.30	1.40	24.70	0.72
FI 0345	Mango, raw (incl canned mango, incl mango juice)	RAC	0.0175	10.48	0.18	0.10	0.00	7.24	0.13	6.87	0.12	19.98	0.35	6.25	0.11
FI 0350	Papaya, raw	RAC	3.8	0.35	1.33	0.10	0.38	3.05	11.59	0.80	3.04	7.28	27.66	1.00	3.80
VC 0046	Melons, except watermelon, raw (Cantaloupe)	RAC	0.43	8.90	3.83	8.64	3.72	0.80	0.34	17.90	7.70	2.80	1.20	29.17	12.54
VL 2832	Witloof chicory (sprouts)	RAC	0.05	0.10	0.01	0.10	0.01	0.10	0.01	0.36	0.02	0.10	0.01	0.35	0.02
VP 2060	Subgroup of beans with pods (all commodities within this group)	RAC	0	0.68	0.00	NC	-	NC	-	0.39	0.00	0.22	0.00	0.49	0.00
VP 0061	Beans with pods (Phaseolus spp): (immature pods + succulent seeds)	RAC	0	0.68	0.00	NC	-	NC	-	0.39	0.00	0.22	0.00	0.49	0.00
VP 2063	Subgroup of succulent peas without pods	RAC	0	1.97	0.00	0.51	0.00	0.10	0.00	0.79	0.00	3.68	0.00	3.80	0.00
VP 0064	Peas without pods (Pisum spp) (succulent seeds)	RAC	0	1.97	0.00	0.51	0.00	0.10	0.00	0.79	0.00	3.68	0.00	3.80	0.00
VD 2065	Subgroup of dry beans, raw (incl processed)	RAC	0	78.20	0.00	60.68	0.00	35.89	0.00	80.34	0.00	75.90	0.00	87.62	0.00
VD 2066	Subgroup of dry peas, raw	RAC	0	9.09	0.00	3.35	0.00	1.06	0.00	9.48	0.00	15.11	0.00	10.58	0.00
VR 0589	Potato, raw (incl flour, incl frozen, incl starch, incl tapioca), washed and peeled	RAC	0.16	59.74	9.56	316.14	50.58	9.78	1.56	60.26	9.64	54.12	8.66	119.82	19.17
VR 0508	Sweet potato, raw (incl dried), baked washed	RAC	1.3	0.18	0.23	0.18	0.23	42.16	54.81	1.61	2.09	3.06	3.98	6.67	8.67
VF 2084	Group of edible fungi (cultivated & wild), raw (incl canned, incl dried) (mushroom)	RAC	31	0.10	3.10	0.56	17.36	0.10	3.10	2.65	82.15	0.11	3.41	0.51	15.81
MF 0100	Mammalian fats, raw, excl milk fats (incl rendered fats)	RAC	0.02	3.29	0.07	6.14	0.12	0.82	0.02	1.57	0.03	2.23	0.04	1.07	0.02
MO 0105	Edible offal (mammalian), raw	RAC	0.5	4.79	2.40	9.68	4.84	2.97	1.49	5.49	2.75	3.84	1.92	5.03	2.52
ML 0106	Milks, raw or skimmed (incl dairy products)	RAC	0.12	289.65	34.76	485.88	58.31	26.92	3.23	239.03	28.68	199.91	23.99	180.53	21.66
PM 0110	Poultry meat, raw (incl prepared)	RAC	0.05	14.63	0.73	29.76	1.49	8.04	0.40	129.68	6.48	25.04	1.25	35.66	1.78
PE 0112	Eggs, raw, (incl dried)	RAC	0.1	7.84	0.78	23.08	2.31	2.88	0.29	14.89	1.49	9.81	0.98	14.83	1.48

Total intake (ug/person)=	94.9	204.6	114.0	206.6	94.4	203.2
Bodyweight per region (kg bw) =	60	60	60	60	60	60
ADI (ug/person)=	6000	6000	6000	6000	6000	6000
%ADI=	1.6%	3.4%	1.9%	3.4%	1.6%	3.4%
Rounded %ADI=	2%	3%	2%	3%	2%	3%

THIABENDAZOLE (65)				International Estimated Daily Intake (IEDI)				ADI = 0 - 0.1 mg/kg bw							
Codex Code	Commodity description	Expr as	STMR mg/kg	Diets as g/person/day				Intake as ug/person/day							
				G07 diet	G07 intake	G08 diet	G08 intake	G09 diet	G09 intake	G10 diet	G10 intake	G11 diet	G11 intake	G12 diet	G12 intake
FC 0001	Group of Citrus fruit, raw (incl citrus fruit juice, incl kumquat commodities)	RAC	0.1	81.11	8.11	61.13	6.11	26.69	2.67	77.75	7.78	82.21	8.22	549.83	54.98
FP 0009	Group of Pome fruits, raw (incl apple cider, excl apple juice)	RAC	1.7	51.09	86.85	65.40	111.18	42.71	72.61	45.29	76.99	62.51	106.27	7.74	13.16
JF 0226	Apple juice, single strength (incl. concentrated)	PP	0.8	14.88	11.90	11.98	9.58	0.15	0.12	9.98	7.98	30.32	24.26	3.47	2.78
FB 0275	Strawberry, raw	RAC	1.6	4.49	7.18	5.66	9.06	0.10	0.16	6.63	10.61	5.75	9.20	0.10	0.16
FI 0326	Avocado, raw	RAC	0.9	2.65	2.39	0.87	0.78	0.46	0.41	1.64	1.48	1.30	1.17	0.96	0.86
FI 0327	Banana, raw (incl plantains) (incl dried)	RAC	0.029	25.76	0.75	23.65	0.69	23.83	0.69	24.37	0.71	19.43	0.56	101.55	2.94
FI 0345	Mango, raw (incl canned mango, incl mango juice)	RAC	0.0175	1.80	0.03	0.63	0.01	10.05	0.18	1.07	0.02	3.52	0.06	16.44	0.29
FI 0350	Papaya, raw	RAC	3.8	0.31	1.18	0.18	0.68	1.50	5.70	0.51	1.94	0.54	2.05	1.08	4.10
VC 0046	Melons, except watermelon, raw (Cantaloupe)	RAC	0.43	9.20	3.96	11.95	5.14	14.63	6.29	8.99	3.87	7.86	3.38	2.46	1.06
VL 2832	Witloof chicory (sprouts)	RAC	0.05	1.50	0.08	0.95	0.05	NC	-	1.84	0.09	0.65	0.03	0.13	0.01
VP 2060	Subgroup of beans with pods (all commodities within this group)	RAC	0	5.07	0.00	0.83	0.00	0.17	0.00	3.70	0.00	NC	-	NC	-
VP 0061	Beans with pods (Phaseolus spp): (immature pods + succulent seeds)	RAC	0	5.07	0.00	0.83	0.00	0.17	0.00	3.70	0.00	NC	-	NC	-
VP 2063	Subgroup of succulent peas without pods	RAC	0	10.72	0.00	1.99	0.00	2.72	0.00	4.26	0.00	4.23	0.00	NC	-
VP 0064	Peas without pods (Pisum spp) (succulent seeds)	RAC	0	10.72	0.00	1.99	0.00	2.72	0.00	4.26	0.00	4.23	0.00	NC	-
VD 2065	Subgroup of dry beans, raw (incl processed)	RAC	0	107.87	0.00	119.29	0.00	45.91	0.00	201.31	0.00	224.04	0.00	104.90	0.00
VD 2066	Subgroup of dry peas, raw	RAC	0	5.01	0.00	3.76	0.00	1.82	0.00	3.44	0.00	3.49	0.00	5.15	0.00
VR 0589	Potato, raw (incl flour, incl frozen, incl starch, incl tapioca), washed and peeled	RAC	0.16	225.03	36.00	234.24	37.48	71.48	11.44	177.55	28.41	234.55	37.53	37.71	6.03
VR 0508	Sweet potato, raw (incl dried), baked washed	RAC	1.3	0.93	1.21	0.32	0.42	64.65	84.05	5.37	6.98	0.30	0.39	3.13	4.07
VF 2084	Group of edible fungi (cultivated & wild), raw (incl canned, incl dried) (mushroom)	RAC	31	7.31	226.61	5.92	183.52	1.26	39.06	3.73	115.63	14.85	460.35	0.57	17.67
MF 0100	Mammalian fats, raw, excl milk fats (incl rendered fats)	RAC	0.02	6.44	0.13	15.51	0.31	3.79	0.08	8.29	0.17	18.44	0.37	8.00	0.16
MO 0105	Edible offal (mammalian), raw	RAC	0.5	15.17	7.59	5.19	2.60	6.30	3.15	6.78	3.39	3.32	1.66	3.17	1.59

THIABENDAZOLE (65)				International Estimated Daily Intake (IEDI)				ADI = 0 - 0.1 mg/kg bw							
Codex Code	Commodity description	Expr as	STMR mg/kg	Diets as g/person/day				Intake as ug/person/day							
				G07 diet	G07 intake	G08 diet	G08 intake	G09 diet	G09 intake	G10 diet	G10 intake	G11 diet	G11 intake	G12 diet	G12 intake
ML 0106	Milks, raw or skimmed (incl dairy products)	RAC	0.12	388.92	46.67	335.88	40.31	49.15	5.90	331.25	39.75	468.56	56.23	245.45	29.45
PM 0110	Poultry meat, raw (incl prepared)	RAC	0.05	73.76	3.69	53.86	2.69	23.98	1.20	87.12	4.36	53.38	2.67	84.45	4.22
PE 0112	Eggs, raw, (incl dried)	RAC	0.1	25.84	2.58	29.53	2.95	28.05	2.81	33.19	3.32	36.44	3.64	8.89	0.89
Total intake (ug/person)=				446.9				413.6				236.5			
Bodyweight per region (kg bw) =				60				60				55			
ADI (ug/person)=				6000				6000				5500			
% ADI=				7.4%				6.9%				4.3%			
Rounded % ADI=				7%				7%				4%			

THIABENDAZOLE (65)				International Estimated Daily Intake (IEDI)				ADI = 0 - 0.1 mg/kg bw							
Codex Code	Commodity description	Expr as	STMR mg/kg	Diets: g/person/day				Intake = daily intake: ug/person							
				G13 diet	G13 intake	G14 diet	G14 intake	G15 diet	G15 intake	G16 diet	G16 intake	G17 diet	G17 intake		
FC 0001	Group of Citrus fruit, raw (incl citrus fruit juice, incl kumquat commodities)	RAC	0.1	21.06	2.11	2.68	0.27	45.91	4.59	0.30	0.03	4.80	0.48		
FP 0009	Group of Pome fruits, raw (incl apple cider, excl apple juice)	RAC	1.7	68.85	117.05	10.93	18.58	70.82	120.39	189.78	322.63	19.56	33.25		
JF 0226	Apple juice, single strength (incl. concentrated)	PP	0.8	0.10	0.08	0.10	0.08	7.19	5.75	0.10	0.08	NC	-		
FB 0275	Strawberry, raw	RAC	1.6	0.10	0.16	0.10	0.16	3.35	5.36	0.10	0.16	0.10	0.16		
FI 0326	Avocado, raw	RAC	0.9	1.12	1.01	0.10	0.09	0.84	0.76	0.10	0.09	6.60	5.94		
FI 0327	Banana, raw (incl plantains) (incl dried)	RAC	0.029	44.80	1.30	118.17	3.43	25.25	0.73	454.49	13.18	310.23	9.00		
FI 0345	Mango, raw (incl canned mango, incl mango juice)	RAC	0.0175	12.25	0.21	6.83	0.12	0.76	0.01	0.10	0.00	20.12	0.35		
FI 0350	Papaya, raw	RAC	3.8	6.47	24.59	0.25	0.95	0.19	0.72	0.10	0.38	26.42	100.40		
VC 0046	Melons, except watermelon, raw (Cantaloupe)	RAC	0.43	0.19	0.08	0.10	0.04	4.98	2.14	0.10	0.04	NC	-		
VL 2832	Witloof chicory (sprouts)	RAC	0.05	0.10	0.01	0.10	0.01	0.10	0.01	0.10	0.01	NC	-		
VP 2060	Subgroup of beans with pods (all commodities within this group)	RAC	0	NC	-	NC	-	NC	-	NC	-	NC	-		
VP 0061	Beans with pods (Phaseolus spp): (immature pods + succulent seeds)	RAC	0	NC	-	NC	-	NC	-	NC	-	NC	-		
VP 2063	Subgroup of succulent peas without pods	RAC	0	0.21	0.00	0.10	0.00	5.51	0.00	0.10	0.00	NC	-		
VP 0064	Peas without pods (Pisum spp) (succulent seeds)	RAC	0	0.21	0.00	0.10	0.00	5.51	0.00	0.10	0.00	NC	-		
VD 2065	Subgroup of dry beans, raw (incl processed)	RAC	0	41.93	0.00	19.42	0.00	108.31	0.00	66.18	0.00	42.47	0.00		
VD 2066	Subgroup of dry peas, raw	RAC	0	4.43	0.00	11.36	0.00	4.22	0.00	9.36	0.00	1.21	0.00		
VR 0589	Potato, raw (incl flour, incl frozen, incl starch, incl tapioca), washed and peeled	RAC	0.16	23.96	3.83	13.56	2.17	213.41	34.15	104.35	16.70	8.56	1.37		

THIABENDAZOLE (65)				International Estimated Daily Intake (IEDI)				ADI = 0 - 0.1 mg/kg bw					
Codex Code	Commodity description	Expr as	STMR mg/kg	Diets: g/person/day				Intake = daily intake: ug/person					
				G13 diet	G13 intake	G14 diet	G14 intake	G15 diet	G15 intake	G16 diet	G16 intake	G17 diet	G17 intake
VR 0508	Sweet potato, raw (incl dried), baked washed	RAC	1.3	28.83	37.48	61.55	80.02	0.15	0.20	221.94	288.52	NC	-
VF 2084	Group of edible fungi (cultivated & wild), raw (incl canned, incl dried) (mushroom)	RAC	31	0.10	3.10	0.10	3.10	3.73	115.63	0.10	3.10	NC	-
MF 0100	Mammalian fats, raw, excl milk fats (incl rendered fats)	RAC	0.02	1.05	0.02	1.14	0.02	18.69	0.37	0.94	0.02	3.12	0.06
MO 0105	Edible offal (mammalian), raw	RAC	0.5	4.64	2.32	1.97	0.99	10.01	5.01	3.27	1.64	3.98	1.99
ML 0106	Milks, raw or skimmed (incl dairy products)	RAC	0.12	108.75	13.05	70.31	8.44	436.11	52.33	61.55	7.39	79.09	9.49
PM 0110	Poultry meat, raw (incl prepared)	RAC	0.05	3.92	0.20	12.03	0.60	57.07	2.85	5.03	0.25	55.56	2.78
PE 0112	Eggs, raw, (incl dried)	RAC	0.1	3.84	0.38	4.41	0.44	27.25	2.73	1.13	0.11	7.39	0.74
Total intake (ug/person)=				207.0				119.5				353.7	
Bodyweight per region (kg bw) =				60				60				60	
ADI (ug/person)=				6000				6000				6000	
%ADI=				3.4%				2.0%				5.9%	
Rounded %ADI=				3%				2%				6%	
												10%	
												3%	

## Annex 4: International Estimate of Short-Term Intakes (IESTIs) of pesticide residues

ACETOCHLOR (280)											IESTI			0%	0%	0%
Acute RfD= 1 mg/kg bw (1000 µg/kg bw)											Maximum %ARfD:			all	gen pop	child
Codex Code	Commodity	Processing	STMR or STMR-P mg/kg	HR or HR-P mg/kg	DCF	Country	Population group	n	Large portion, g/person	Unit weight, edible portion, g	Variability factor	Case	IESTI µg/kg bw/day	% acute RfD rounded	% acute RfD rounded	% acute RfD rounded
VD 0541	Soya bean (dry) (Glycine spp) (all commodities)	highest utilisation: Total	0,016 - 0,15	0	1.000	CN	Child, 1-6 yrs	179	239.05	<25	NR	3	0,01 - 2,22	0% - 0%	0% - 0%	0% - 0%
MO 0105	Edible offal (mammalian)	Total		0.0418	1.000	ZA	Gen pop, > 10 yrs	-	523.58	NR	NR	1	0.39	0%	0%	0%

CHLOROTHALONIL (81)											IESTI			9%	3%	9%
Acute RfD= 0.6 mg/kg bw (600 µg/kg bw)											Maximum %ARfD:			all	gen pop	child
Codex Code	Commodity	Processing	STMR or STMR-P mg/kg	HR or HR-P mg/kg	DCF	Country	Population group	n	Large portion, g/person	Unit weight, edible portion, g	Variability factor	Case	IESTI µg/kg bw/day	% acute RfD rounded	% acute RfD rounded	% acute RfD rounded
FB 0265	Cranberry (all commodities)	highest utilisation: Total	3	7.7	1.000	AU	Child, 2-16 yrs	103	279.66	<25	NR	1	0.05 - 56.67	0% - 9%	0% - 3%	0% - 9%

SDS-3701 ()											IESTI			0%	0%	0%
Acute RfD= 0.03 mg/kg bw (30 µg/kg bw)											Maximum %ARfD:			all	gen pop	child
Codex Code	Commodity	Processing	STMR or STMR-P mg/kg	HR or HR-P mg/kg	DCF	Country	Population group	n	Large portion, g/person	Unit weight, edible portion, g	Variability factor	Case	IESTI µg/kg bw/day	% acute RfD rounded	% acute RfD rounded	% acute RfD rounded
FB 0265	Cranberry (all commodities)	highest utilisation: Total	0.01	0.019	1.000	AU	Child, 2-16 yrs	103	279.66	<25	NR	1	0 - 0.14	0% - 0%	0% - 0%	0% - 0%

**DICAMBA (240)**

Acute RfD= 0.5 mg/kg bw (500 µg/kg bw)

**IESTI**

Maximum %ARfD:

0%

all gen pop

0%

child

Codex Code	Commodity	Processing	STMR or STMR-P mg/kg	HR or HR-P mg/kg	DCF	Country	Population group	n	Large portion, g/person	Unit weight, edible portion, g	Variability factor	Case	IESTI µg/kg bw/day	% acute RfD rounded	% acute RfD rounded	% acute RfD rounded
VD 0541	Soya bean (dry) (Glycine spp) (all commodities)	highest utilisation: Total	0.0032 - 0.054		1.000	CN	Child, 1-6 yrs	179	239.05	<25	NR	3	0 - 0.8	0% - 0%	0% - 0%	0% - 0%
SO 0691	Cotton seed (all commodities)	highest utilisation: Oil (refined)	0.055 - 0.69		1.000	US	Child, < 6 yrs	6354	3.13	NR	NR	3	0.01 - 0.01	0% - 0%	0% - 0%	0% - 0%

**FENAZAQUIN (297)**

Acute RfD= mg/kg bw (0 µg/kg bw)

**IESTI**

Maximum %ARfD:

0%

0%

all gen pop

0%

child

Codex Code	Commodity	Processing	STMR or STMR-P mg/kg	HR or HR-P mg/kg	DCF	Country	Population group	n	Large portion, g/person	Unit weight, edible portion, g	Variability factor	Case	IESTI µg/kg bw/day	% acute RfD rounded	% acute RfD rounded	% acute RfD rounded
TN 0295	Cashew nut (all commodities)	highest utilisation: raw incl roasted	0.01	0.016	1.000	TH	child, 3-6 yrs	374	98.84	<25	NR	1	0.05 - 0.09	0% - 0%	0% - 0%	0% - 0%
TN 0660	Almonds (all commodities)	highest utilisation: Total	0.01	0.016	1.000	CA	Child, <6 yrs	62	63.32	<25	NR	1	0 - 0.06	0% - 0%	0% - 0%	0% - 0%
TN 0662	Brazil nut (all commodities)	highest utilisation: Total		0.016	1.000	PRIMO-UK	child, 4-6 yrs	P97.5	17.80	<25	NR	1	0.01 - 0.01	0% - 0%	0% - 0%	0% - 0%
TN 0664	Chestnuts (all commodities)	highest utilisation: Total		0.016	1.000	CN	Gen pop, > 1 yrs	807	475.25	<25	NR	1	0.04 - 0.14	0% - 0%	0% - 0%	0% - 0%
TN 0665	Coconut (all commodities)	highest utilisation: raw (i.e. nutmeat)	0.01	0.016	1.000	TH	child, 3-6 yrs	826	423.40	383	3	2a	0.01 - 1.11	0% - 0%	0% - 0%	0% - 0%

## FENAZAQUIN (297)

IESTI

0%

0%

0%

Acute RfD= mg/kg bw (0 µg/kg bw)

Maximum %ARfD:

all

gen pop

child

Codex Code	Commodity	Processing	STMR or STMR-P mg/kg	HR or HR-P mg/kg	DCF	Country	Population group	n	Large portion, g/person	Unit weight, edible portion, g	Variability factor	Case	IESTI µg/kg bw/day	% acute RfD rounded	% acute RfD rounded	% acute RfD rounded
TN 0666	Hazelnut (all commodities)	highest utilisation: Total	0.01	0.016	1.000	PRIMO-IE	child	P97.5	65.42	<25	NR	1	0.01 - 0.05	0% - 0%	0% - 0%	0% - 0%
TN 0669	Macadamia nut (all commodities)	highest utilisation: Total	0.01	0.016	1.000	PRIMO-DE	women, 14-50 yrs	P100	141.69	<25	NR	1	0 - 0.03	0% - 0%	0% - 0%	0% - 0%
TN 0672	Pecan (all commodities)	highest utilisation: Total	0.01	0.016	1.000	PRIMO-DE	child	P100	44.41	<25	NR	1	0.01 - 0.04	0% - 0%	0% - 0%	0% - 0%
TN 0673	Pine nut (all commodities)	highest utilisation: Total		0.016	1.000	BR	Gen pop, > 10 yrs	47	200.00	<25	NR	1	0.01 - 0.05	0% - 0%	0% - 0%	0% - 0%
TN 0675	Pistachio nut (all commodities)	highest utilisation: Total	0.01	0.016	1.000	PRIMO-IE	child	P97.5	115.86	<25	NR	1	0 - 0.09	0% - 0%	0% - 0%	0% - 0%
TN 0678	Walnut (all commodities)	highest utilisation: Total	0.01	0.016	1.000	PRIMO-BE	toddler	P100	60.00	<25	NR	1	0 - 0.05	0% - 0%	0% - 0%	0% - 0%
MM 0095	Meat from mammals other than marine mammals	Total	NA	NA	1.000	CN	Child, 1-6 yrs	302	264.84	NR	NR	1	NA	-	-	-
MM 0095	Meat from mammals other than marine mammals: 20% as fat	Total		0	1.000	CN	Child, 1-6 yrs	302	52.97	NR	NR	1	0.000	-	-	-
MM 0095	Meat from mammals other than marine mammals: 80% as muscle	Total		0	1.000	CN	Child, 1-6 yrs	302	211.87	NR	NR	1	0.000	-	-	-
MF 0100	Mammalian fats (except milk fats)	Total		0	1.000	PRIMO-FR	adult	P97.5	134.79	NR	NR	1	0.000	-	-	-
MO 0105	Edible offal (mammalian)	Total		0	1.000	ZA	Gen pop, > 10 yrs	-	523.58	NR	NR	1	0.000	-	-	-
ML 0106	Milks	Total	0		1.000	PRIMO-UK	infant	P97.5	1080.70	NR	NR	3	0.000	-	-	-

**FENAZAQUIN (297)**

IESTI

0%

0%

0%

Acute RfD= mg/kg bw (0 µg/kg bw)

Maximum % ARfD:

all

gen pop

child

Codex Code	Commodity	Processing	STMR or STMR-P mg/kg	HR or HR-P mg/kg	DCF	Country	Population group	n	Large portion, g/person	Unit weight, edible portion, g	Variability factor	Case	IESTI µg/kg bw/day	% acute RfD rounded	% acute RfD rounded	% acute RfD rounded
FM 0812	Cattle milk fat	Total	0	0	1.000	BR	Gen pop, > 10 yrs	441	150.00	NR	NR	3	0.000	-	-	-

**FLUPYRADIFURONE (285)**

IESTI

Acute RfD= 0.2 mg/kg bw (200 µg/kg bw)

Maximum % ARfD:

20%

20%

20%

all

gen pop

child

Codex Code	Commodity	Processing	STMR or STMR-P mg/kg	HR or HR-P mg/kg	DCF	Country	Population group	n	Large portion, g/person	Unit weight, edible portion, g	Variability factor	Case	IESTI µg/kg bw/day	% acute RfD rounded	% acute RfD rounded	% acute RfD rounded
FB 0264	Blackberries (all commodities)	highest utilisation: Total	1.4	4.3	1.000	PRIMO-UK	toddler	P97.5	155.40	<25	NR	1	0.24 - 46.08	0% - 20%	0% - 20%	0% - 20%
FB 0266	Dewberries (incl Boysenberry, Loganberry) (all commodities)	highest utilisation: Total		4.3	1.000	PRIMO-UK	toddler	P97.5	25.50	<25	NR	1	7.56 - 7.56	4% - 4%	3% - 3%	4% - 4%
FB 0272	Raspberries, red, black (all commodities)	highest utilisation: Total	1.4	4.3	1.000	PRIMO-IE	child	P97.5	184.76	<25	NR	1	0.95 - 39.72	0% - 20%	0% - 10%	0% - 20%
FI 0326	Avocado (all commodities)	highest utilisation: Total		0.36	1.000	AU	Child, 2-6 yrs	182	229.90	171	3	2a	5.54 - 10.85	3% - 5%	3% - 3%	3% - 5%
SB 0715	Cocoa beans (all commodities)	highest utilisation: Total	0.0497 - 0.116		1.000	PRIMO-FI	child 3 yrs	P97.5	49.03	<25	NR	3	0.04 - 0.23	0% - 0%	0% - 0%	0% - 0%
SB 0716	Coffee beans (all commodities)	highest utilisation: extract (beverage)	0.295		0.180	CA	women, 15-49 yrs	2666	2088.65	NR	NR	3	0.01 - 1.62	0% - 1%	0% - 1%	0% - 0%
DH 1100	Hops, dry (all commodities)	highest utilisation: beer	0.0355 - 3.55		1.000	PRIMO-NL	Gen pop	E	2368.80	NR	NR	3	0.65 - 1.28	0% - 1%	0% - 1%	0% - 0%



**PENDIMETHALIN (292)**

Acute RfD= 1 mg/kg bw (1000 µg/kg bw)

IESTI

Maximum % ARfD:

0%  
all

0%  
gen pop

0%  
child

Codex Code	Commodity	Processing	STMR or STMR-P mg/kg	HR or HR-P mg/kg	DCF	Coun try	Population group	n	Large portion, g/person	Unit weight, edible portion, g	Variability factor	Case	IESTI µg/kg bw/day	% acute RfD rounded	% acute RfD rounded	% acute RfD rounded
FB 0264	Blackberries (all commodities)	highest utilisation: Total	0.05	0.05	1.000	PRIMO-UK	toddler	P97.5	155.40	<25	NR	1	0.01 - 0.54	0% - 0%	0% - 0%	0% - 0%
FB 0266	Dewberries (incl Boysenberry, Loganberry) (all commodities)	highest utilisation: Total		0.05	1.000	PRIMO-UK	toddler	P97.5	25.50	<25	NR	1	0.09 - 0.09	0% - 0%	0% - 0%	0% - 0%
FB 0272	Raspberries, red, black (all commodities)	highest utilisation: juice (pasteurised)	0.05	0.05	1.000	PRIMO-DE	child	P95	188.96	NR	NR	3	0.02 - 0.59	0% - 0%	0% - 0%	0% - 0%
FB 0020	Blueberries (all commodities)	highest utilisation: Total	0.05	0.05	1.000	CA	Child, <6 yrs	189	176.21	<25	NR	1	0.01 - 0.57	0% - 0%	0% - 0%	0% - 0%
FB 0021	Currants, black, red, white (all commodities)	highest utilisation: juice (pasteurised)	0.05	0.05	1.000	PRIMO-NL	child	E	525.80	NR	NR	3	0.03 - 1.43	0% - 0%	0% - 0%	0% - 0%
FB 0268	Gooseberry (all commodities)	highest utilisation: Total	0.05	0.05	1.000	PRIMO-DE	child	P100	94.96	<25	NR	1	0.01 - 0.29	0% - 0%	0% - 0%	0% - 0%
FB 0273	Rose hips (all commodities)	highest utilisation: jam (incl jelly)	0.05	0.05	1.000	CA	Child, <6 yrs	443	78.10	NR	NR	3	0.03 - 0.25	0% - 0%	0% - 0%	0% - 0%
FB 0275	Strawberry (all commodities)	highest utilisation: Raw with skin	0.05	0.05	1.000	NL	toddler, 8-20 m	52	166.73	18	NR	1	0.03 - 0.82	0% - 0%	0% - 0%	0% - 0%
HH 0738	Mint (all commodities)	highest utilisation: raw	0.077	0.1	1.000	DE	Child, 2-4 yrs	138	11.10	<25	NR	1	0.01 - 0.07	0% - 0%	0% - 0%	0% - 0%

**SPIROTETRAMAT (234)**

Acute RfD= 1 mg/kg bw (1000 µg/kg bw)

IESTI

Maximum %ARfD:

0%

0%  
all gen pop

0%  
child

Codex Code	Commodity	Processing	STMR or STMR-P mg/kg	HR or HR-P mg/kg	DCF	Coun try	Population group	n	Large portion, g/person	Unit weight, edible portion, g	Varia-bility factor	Case	IESTI µg/kg bw/day	% acute RfD rounded	% acute RfD rounded	% acute RfD rounded
FB 0275	Strawberry (all commodities)	highest utilisation: Raw with skin	0,08	0,19	1.000	NL	toddler, 8-20 m	52	166.73	18	NR	1	0,05 - 3,11	0% - 0%	0% - 0%	0% - 0%
VR 0577	Carrot (all commodities)	highest utilisation: raw with skin	0,0545	0,114	1.000	CN	Child, 1-6 yrs	400	234.68	300	3	2b	0,01 - 4,97	0% - 0%	0% - 0%	0% - 0%
VR 0596	Sugar beet (all commodities)	highest utilisation: sugar	0,034 - 0,052	0,072	1.000	PRIMO-NL	child	P97.5	168.90	NR	NR	3	0,31 - 0,31	0% - 0%	0% - 0%	0% - 0%

**TEBUCONAZOLE (184)**

Acute RfD= 0.3 mg/kg bw (300 µg/kg bw)

IESTI

Maximum %ARfD:

1%

1%  
all gen pop

1%  
child

Codex Code	Commodity	Processing	STMR or STMR-P mg/kg	HR or HR-P mg/kg	DCF	Coun try	Population group	n	Large portion, g/person	Unit weight, edible portion, g	Varia-bility factor	Case	IESTI µg/kg bw/day	% acute RfD rounded	% acute RfD rounded	% acute RfD rounded
FC 0003	Subgroup of Mandarins (incl mandarin-like hybrids) (all commodities)	highest utilisation: raw, without peel	0.05 - 0.17	0.05	1.000	CN	Child, 1-6 yrs	151	586.75	124	3	2a	0.01 - 2.59	0% - 1%	0% - 0%	0% - 1%
FC 0004	Subgroup of Oranges, sweet, sour (incl orange-like hybrids) (all commodities)	highest utilisation: Total	0.05 - 6.6	0.05 - 1.2	1.000	AU	Child, 2-6 yrs	1735	800.83	156	3	2a	0.03 - 2.93	0% - 1%	0% - 1%	0% - 1%

**THIABENDAZOLE (65)**

Acute RfD= 1 mg/kg bw (1000 µg/kg bw)

IESTI

Maximum % ARfD:

20%

7%

20%

all

gen pop

child

Codex Code	Commodity	Processing	STMR or STMR-P mg/kg	HR or HR-P mg/kg	DCF	Coun try	Population group	n	Large portion, g/person	Unit weight, edible portion, g	Variability factor	Case	IESTI µg/kg bw/day	% acute RfD rounded	% acute RfD rounded	% acute RfD rounded
FI 0345	Mango (all commodities)	highest utilisation: raw without peel	0.0175	0.03	1.000	NL	toddler, 8-20 m	11	160.43	289	3	2b	0 - 1.42	0% - 0%	0% - 0%	0% - 0%
VP 0061	Beans with pods (Phaseolus spp): (immature pods + succulent seeds) (all commodities)	highest utilisation: Total	0	0	1.000	CA	Child, <6 yrs	261	203.31	<25	NR	1	0 - 0	0% - 0%	0% - 0%	0% - 0%
VP 0063	Peas with pods (Pisum spp) immature pods + succulent seeds) (all commodities)	highest utilisation: cooked/boiled	0	0	1.000	CN	Child, 1-6 yrs	1056	290.21	6	NR	1	0 - 0	0% - 0%	0% - 0%	0% - 0%
VP 0062	Beans without pods: (Phaseolus spp.) (succulent seeds) (all commodities)	highest utilisation: Total	0	0	1.000	PRIMO-IE	child	P97.5	157.79	<25	NR	1	0 - 0	0% - 0%	0% - 0%	0% - 0%
VP 0064	Peas without pods (Pisum spp) (succulent seeds) (all commodities)	highest utilisation: Total	0	0	1.000	PRIMO-UK	infant	P97.5	71.30	<25	NR	1	0 - 0	0% - 0%	0% - 0%	0% - 0%
VP 0520	Bambara groundnut without pods (succulent seeds) (Vigna subterranea)	Total		0	1.000	AU	Gen pop, > 2 yrs	22	186.07	<25	NR	1	0.000	0%	0%	-
VD 0071	Beans (dry) (Phaseolus spp) (all commodities)	highest utilisation: Total	0		1.000	PRIMO-UK	infant	P97.5	159.00	<25	NR	3	0 - 0	0% - 0%	0% - 0%	0% - 0%
VD 0072	Peas (dry) (Pisum spp) (all commodities)	highest utilisation: cooked/boiled	0		0.400	CN	Gen pop, > 1 yrs	268	1673.82	<25	NR	3	0 - 0	0% - 0%	0% - 0%	0% - 0%
VR 0508	Sweet potato (all commodities)	highest utilisation: Total	1.3	1.95	1.000	CA	Child, <6 yrs	91	358.61	546	3	2b	9.15 - 164.33	1% - 20%	1% - 7%	4% - 20%

**THIABENDAZOLE (65)**

Acute RfD= 0.3 mg/kg bw (300 µg/kg bw)

IESTI

Maximum % ARfD:

9%  
women

Codex Code	Commodity	Processing	STMR or STMR-P mg/kg	HR or HR-P mg/kg	DCF	Country	Population group	n	Large portion, g/person	Unit weight, edible portion, g	Variability factor	Case	IESTI µg/kg bw/day	% acute RfD rounded
FI 0345	Mango (all commodities)	highest utilisation: Total	0.0175	0.03	1.000	US	women, 13-49 yrs	105	641.44	139	3	2a	0 - 0.38	0% - 0%
VP 0061	Beans with pods (Phaseolus spp): (immature pods + succulent seeds) (all commodities)	highest utilisation: Total	0	0	1.000	US	women, 13-49 yrs	1193	262.45	<25	NR	1	0 - 0	0% - 0%
VP 0063	Peas with pods (Pisum spp) immature pods + succulent seeds) (all commodities)	highest utilisation: cooked/boiled	0	0	1.000	CN	gen pop, > 1 yrs	19757	505.96	6	NR	1	0 - 0	0% - 0%
VP 0062	Beans without pods: (Phaseolus spp.) (succulent seeds) (all commodities)	highest utilisation: Total	0	0	1.000	PRIMO-UK	vegetarian	P97.5	261.90	<25	NR	1	0 - 0	0% - 0%
VP 0064	Peas without pods (Pisum spp) (succulent seeds) (all commodities)	highest utilisation: Total	0	0	1.000	CA	women, 15-49 yrs	449	137.65	<25	NR	1	0 - 0	0% - 0%
VD 0071	Beans (dry) (Phaseolus spp) (all commodities)	highest utilisation: Total	0		1.000	PRIMO-UK	teenager, 15-18 yrs	P97.5	419.90	<25	NR	3	0 - 0	0% - 0%
VD 0072	Peas (dry) (Pisum spp) (all commodities)	highest utilisation: cooked/boiled	0		0.400	CN	Gen pop, > 1 yrs	268	1673.82	<25	NR	3	0 - 0	0% - 0%
VR 0508	Sweet potato (all commodities)	highest utilisation: cooked/boiled (without peel)	1.3	1.95	1.000	BR	Gen pop, > 10 yrs	880	600.00	145	3	2a	9.15 - 26.9	3% - 9%

## **Annex 5: Reports and other documents resulting from previous joint meetings of the FAO panel of experts on pesticide residues in food and the environment and the WHO core assessment group on pesticide residues.**

1. Principles governing consumer safety in relation to pesticide residues. Report of a meeting of a WHO Expert Committee on Pesticide Residues held jointly with the FAO Panel of Experts on the Use of Pesticides in Agriculture. FAO Plant Production and Protection Division Report, No. PL/1961/11; WHO Technical Report Series, No. 240, 1962.
2. Evaluation of the toxicity of pesticide residues in food. Report of a Joint Meeting of the FAO Committee on Pesticides in Agriculture and the WHO Expert Committee on Pesticide Residues. FAO Meeting Report, No. PL/1963/13; WHO/Food Add./23, 1964.
3. Evaluation of the toxicity of pesticide residues in food. Report of the Second Joint Meeting of the FAO Committee on Pesticides in Agriculture and the WHO Expert Committee on Pesticide Residues. FAO Meeting Report, No. PL/1965/10; WHO/Food Add./26.65, 1965.
4. Evaluation of the toxicity of pesticide residues in food. FAO Meeting Report, No. PL/1965/10/1; WHO/Food Add./27.65, 1965.
5. Evaluation of the hazards to consumers resulting from the use of fumigants in the protection of food. FAO Meeting Report, No. PL/1965/10/2; WHO/Food Add./28.65, 1965.
6. Pesticide residues in food. Joint report of the FAO Working Party on Pesticide Residues and the WHO Expert Committee on Pesticide Residues. FAO Agricultural Studies, No. 73; WHO Technical Report Series, No. 370, 1967.
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9. 1967 Evaluations of some pesticide residues in food. FAO/PL:1967/M/11/1; WHO/Food Add./68.30, 1968.
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19. 1972 Evaluations of some pesticide residues in food. AGP:1972/M/9/1; WHO Pesticide Residue Series, No. 2, 1973.
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## Annex 6: Livestock dietary burdens

### ACETOCHLOR (280)

ESTIMATED MAXIMUM DIETARY BURDEN													
BEEF CATTLE													MAX
Commodity	CC	Residue (mg/kg)	Basis	DM (%)	Residue dw (mg/kg)	Diet content (%)				Residue Contribution (ppm)			
						US/CAN	EU	AU	JP	US-CAN	EU	AU	JP
Alfalfa forage	AL	5.8	HR	35	16.57		70	100			11.6	16.57	
Alfalfa hay	AL	13	HR	89	14.61	15			10	2.191			1.461
Beet, sugar tops	AM/AV	0.554	HR	23	2.41		20				0.482		
Wheat forage	AF/AS	0.47	HR	25	1.88		10				0.188		
Oat straw	AF/AS	0.254	HR	90	0.28	10				0.028			
Potato culls	VR	0.04	HR	20	0.20	30				0.060			
Soybean meal	SM	0.18	STMR	92	0.20	5			65	0.010			0.127
Oat hay	AF/AS	0.156	HR	90	0.17	5				0.009			
Soybean seed	VD	0.15	STMR	89	0.17	5			15	0.008			0.025
Soybean hulls	SM	0.108	STMR	90	0.12	10				0.012			
Wheat grain	GC	0.02	STMR	89	0.02	20			10	0.004			0.002
Total						100	100	100	100	2.323	12.27	16.57	1.615

DAIRY CATTLE													MAX
Commodity	CC	Residue (mg/kg)	Basis	DM (%)	Residue dw (mg/kg)	Diet content (%)				Residue Contribution (ppm)			
						US/CAN	EU	AU	JP	US-CAN	EU	AU	JP
Alfalfa forage	AL	5.8	HR	35	16.57	20	40	60		3.314	6.629	9.943	
Alfalfa hay	AL	13	HR	89	14.61				25				3.652
Beet, sugar tops	AM/AV	0.554	HR	23	2.41		30				0.723		
Corn, sweet forage	AF/AS	0.97	HR	48	2.02	45		40		0.909		0.808	
Wheat forage	AF/AS	0.47	HR	25	1.88		20				0.376		
Oat forage	AF/AS	0.12	HR	30	0.40		10		5		0.04		0.02
Potato culls	VR	0.04	HR	20	0.20	10				0.020			
Soybean meal	SM	0.18	STMR	92	0.20	10			60	0.020			0.117
Soybean seed	VD	0.15	STMR	89	0.17	10			10	0.017			0.017
Oat grain	GC	0.035	STMR	89	0.04	5				0.002			

DAIRY CATTLE													MAX
Commodity	CC	Residue (mg/kg)	Basis	DM (%)	Residue dw (mg/kg)	Diet content (%)				Residue Contribution (ppm)			
						US/CAN	EU	AU	JP	US-CAN	EU	AU	JP
Total						100	100	100	100	4.282	7.767		3.806

POULTRY BROILER													MAX
Commodity	CC	Residue (mg/kg)	Basis	DM (%)	Residue dw (mg/kg)	Diet content (%)				Residue Contribution (ppm)			
						US/CAN	EU	AU	JP	US-CAN	EU	AU	JP
Potato culls	VR	0.04	HR	20	0.20		10				0.02		
Soybean meal	SM	0.18	STMR	92	0.20	25	40	25	35	0.049	0.078	0.049	0.068
Soybean seed	VD	0.15	STMR	89	0.17	20	20	15		0.034	0.034	0.025	
Oat grain	GC	0.035	STMR	89	0.04	55	30	15		0.022	0.012	0.006	
Bean seed	VD	0.02	STMR	88	0.02			45				0.01	
Wheat grain	GC	0.02	STMR	89	0.02				10				0.002
Total						100	100	100	45	0.10	0.144	0.09	0.071

POULTRY LAYER													MAX
Commodity	CC	Residue (mg/kg)	Basis	DM (%)	Residue dw (mg/kg)	Diet content (%)				Residue Contribution (ppm)			
						US/CAN	EU	AU	JP	US-CAN	EU	AU	JP
Beet, sugar tops	AM/AV	0.554	HR	23	2.41		5				0.12		
Clover forage	AL	0.57	HR	30	1.90		10				0.19		
Wheat forage	AF/AS	0.47	HR	25	1.88		10				0.188		
Potato culls	VR	0.04	HR	20	0.20		10				0.02		
Soybean meal	SM	0.18	STMR	92	0.20	25	25	25	30	0.049	0.049	0.049	0.059
Soybean seed	VD	0.15	STMR	89	0.17	20	15	15		0.034	0.025	0.025	
Oat grain	GC	0.035	STMR	89	0.04	55	25	15		0.022	0.01	0.006	
Bean seed	VD	0.02	STMR	88	0.02			45				0.01	
Total						100	100	100	30	0.10	0.602	0.09	0.06

### ACETOCHLOR (280)

ESTIMATED MEAN DIETARY BURDEN													
BEEF CATTLE													MEAN
Commodity	CC	Residue (mg/kg)	Basis	DM (%)	Residue dw (mg/kg)	Diet content (%)				Residue Contribution (ppm)			
						US/CAN	EU	AU	JP	US-CAN	EU	AU	JP
Alfalfa forage	AL	2.2	STMR/STMR-P	35	6.29		70	100			4.4	6.286	
Alfalfa hay	AL	4.55	STMR/STMR-P	89	5.11	15			10	0.766854			0.511
Wheat forage	AF/AS	0.06	STMR/STMR-P	25	0.24		20				0.048		
Potato culls	VR	0.04	STMR/STMR-P	20	0.20	30	10			0.06	0.02		
Soybean meal	SM	0.18	STMR/STMR-P	92	0.20	5			65	0.009783			0.127
Soybean seed	VD	0.15	STMR/STMR-P	89	0.17	5			15	0.008427			0.025
Soybean hulls	SM	0.108	STMR/STMR-P	90	0.12	10				0.012			
Oat hay	AF/AS	0.039	STMR/STMR-P	90	0.04	15				0.0065			
Wheat grain	GC	0.02	STMR/STMR-P	89	0.02	20			10	0.004			0.002
Total						100	100	100	100	0.868	4.468	6.286	0.666

DAIRY CATTLE													MEAN
Commodity	CC	Residue (mg/kg)	Basis	DM (%)	Residue dw (mg/kg)	Diet content (%)				Residue Contribution (ppm)			
						US/CAN	EU	AU	JP	US-CAN	EU	AU	JP
Alfalfa forage	AL	2.2	STMR/STMR-P	35	6.29	20	40	60		1.257143	2.514	3.771	
Alfalfa hay	AL	4.55	STMR/STMR-P	89	5.11	0			25	0			1.278
Corn, sweet forage	AF/AS	0.12	STMR/STMR-P	48	0.25	45		40		0.1125		0.1	
Wheat forage	AF/AS	0.06	STMR/STMR-P	25	0.24	0	20			0	0.048		
Potato culls	VR	0.04	STMR/STMR-P	20	0.20	10	30			0.02	0.06		
Soybean meal	SM	0.18	STMR/STMR-P	92	0.20	10	10		60	0.019565	0.02		0.117
Soybean seed	VD	0.15	STMR/STMR-P	89	0.17	10			10	0.016854			0.017
Oat forage	AF/AS	0.039	STMR/STMR-P	30	0.13	0			5	0			0.007
Oat grain	GC	0.035	STMR/STMR-P	89	0.04	5				0.001966			
Total						100	100	100	100	1.428028	2.642	3.871	1.419

POULTRY BROILER													MEAN
Commodity	CC	Residue (mg/kg)	Basis	DM (%)	Residue dw (mg/kg)	Diet content (%)				Residue Contribution (ppm)			
						US/CAN	EU	AU	JP	US-CAN	EU	AU	JP
Potato culls	VR	0.04	STMR/STMR-P	20	0.20		10				0.02		
Soybean meal	SM	0.18	STMR/STMR-P	92	0.20	25	40	25	35	0.05	0.078	0.049	0.068
Soybean seed	VD	0.15	STMR/STMR-P	89	0.17	20	20	15		0.03	0.034	0.025	
Oat grain	GC	0.035	STMR/STMR-P	89	0.04	55	30	15		0.02	0.012	0.006	
Bean seed	VD	0.02	STMR/STMR-P	88	0.02			45				0.01	
Wheat grain	GC	0.02	STMR/STMR-P	89	0.02				10				0.002
Total						100	100	100	45	0.10	0.144	0.09	0.071

POULTRY LAYER													MEAN
Commodity	CC	Residue (mg/kg)	Basis	DM (%)	Residue dw (mg/kg)	Diet content (%)				Residue Contribution (ppm)			
						US/CAN	EU	AU	JP	US-CAN	EU	AU	JP
Clover forage	AL	0.1	STMR/STMR-P	30	0.33		10				0.033		
Wheat forage	AF/AS	0.06	STMR/STMR-P	25	0.24		10				0.024		
Potato culls	VR	0.04	STMR/STMR-P	20	0.20		10				0.02		
Soybean meal	SM	0.18	STMR/STMR-P	92	0.20	25	25	25	30	0.048913	0.049	0.049	0.059
Beet, sugar tops	AM/AV	0.041	STMR/STMR-P	23	0.18		5				0.009		
Soybean seed	VD	0.15	STMR/STMR-P	89	0.17	20	15	15		0.033708	0.025	0.025	
Oat grain	GC	0.035	STMR/STMR-P	89	0.04	55	25	15		0.021629	0.01	0.006	
Bean seed	VD	0.02	STMR/STMR-P	88	0.02			45				0.01	
Total						100	100	100	30	0.104	0.170	0.090	0.06



### CHLORANTRANILIPROLE (230)

ESTIMATED MAXIMUM DIETARY BURDEN													
BEEF CATTLE													MAX
Commodity	CC	Residue (mg/kg)	Basis	DM (%)	Residue dw (mg/kg)	Diet content (%)				Residue Contribution (ppm)			
						US/CAN	EU	AU	JP	US-CAN	EU	AU	JP
Alfalfa hay	AL	38	HR	100	38.00	15		80	10	5.700		30.4	3.8
Alfalfa forage	AL	28.7	HR	100	28.70		70	20			20.09	5.74	
Wheat forage	AF/AS	4.6	HR	25	18.40		20				3.68		
Barley hay	AF/AS	15	HR	88	17.05	15				2.557			
Barley straw	AF/AS	15	HR	89	16.85		10				1.685		
Cotton gin byproducts	AM/AV	13	HR	90	14.44	5				0.722			
Corn, field asp gr fn	CM/CF	0.34	STMR	85	0.40	5				0.020			
Rice bran/pollard	CM/CF	0.196	STMR	90	0.22	10			20	0.022			0.044
Rice grain	GC	0.115	STMR	88	0.13	20				0.026			
Cotton hulls	SM	0.1029	STMR	90	0.11	10				0.011			
Potato culls	VR	0.004	HR	20	0.02	20				0.004			
Barley grain	GC	0.01	STMR	88	0.01				70				0.008
Total						100	100	100	100	9.062	25.46	36.14	3.852

DAIRY CATTLE													MAX
Commodity	CC	Residue (mg/kg)	Basis	DM (%)	Residue dw (mg/kg)	Diet content (%)				Residue Contribution (ppm)			
						US/CAN	EU	AU	JP	US-CAN	EU	AU	JP
Alfalfa hay	AL	38	HR	100	38.00	20	40	60	25	7.600	15.2	22.8	9.5
Wheat forage	AF/AS	4.6	HR	25	18.40	20	20	40		3.680	3.68	7.36	
Rye straw	AF/AS	15	HR	88	17.05				5				0.852
Barley straw	AF/AS	15	HR	89	16.85		10				1.685		
Oat hay	AF/AS	15	HR	90	16.67	10				1.667			
Trefoil hay	AL	14	HR	85	16.47	20				3.294			
Corn, field forage/silage	AF/AS	5.7	HR	40	14.25	30	30		45	4.275	4.275		6.413
Sorghum, grain forage	AF/AS	4.6	HR	35	13.14				25				3.286
Total						100	100	100	100	20.516	24.84	30.16	20.05

POULTRY BROILER													MAX
Commodity	CC	Residue (mg/kg)	Basis	DM (%)	Residue dw (mg/kg)	Diet content (%)				Residue Contribution (ppm)			
						US/CAN	EU	AU	JP	US-CAN	EU	AU	JP
Carrot culls	VR	0.046	HR	12	0.38		10				0.038		
Rice bran/pollard	CM/CF	0.196	STMR	90	0.22	10	10	20	5	0.022	0.022	0.044	0.011
Rice grain	GC	0.115	STMR	88	0.13	20		50		0.026		0.065	
Cotton meal	SM	0.0368	STMR	89	0.04	20	5	10		0.008	0.002	0.004	
Bean seed	VD	0.0305	STMR	88	0.03		20	20			0.007	0.007	
Cowpea seed	VD	0.0305	STMR	88	0.03	10				0.003			
Pea seed	VD	0.0305	STMR	90	0.03	10				0.00			
Barley grain	GC	0.01	STMR	88	0.01	30	55		10	0.003	0.006		0.001
Corn, field grain	GC	0.01	STMR	88	0.01				60				0.007
Total						100	100	100	75	0.066	0.075	0.12	0.019

POULTRY LAYER													MAX
Commodity	CC	Residue (mg/kg)	Basis	DM (%)	Residue dw (mg/kg)	Diet content (%)				Residue Contribution (ppm)			
						US/CAN	EU	AU	JP	US-CAN	EU	AU	JP
Pea vines	AL	6.4	HR	25	25.60		10				2.56		
Wheat forage	AF/AS	4.6	HR	25	18.40		10				1.84		
Cabbage heads, leaves	AM/AV	1.1	HR	15	7.33		5				0.367		
Carrot culls	VR	0.046	HR	12	0.38		10				0.038		
Rice bran/pollard	CM/CF	0.196	STMR	90	0.22	10	5	20	20	0.022	0.011	0.044	0.044
Rice grain	GC	0.115	STMR	88	0.13	20		50		0.026		0.065	
Cotton meal	SM	0.0368	STMR	89	0.04	20	5	10		0.008	0.002	0.004	
Bean seed	VD	0.0305	STMR	88	0.03		20	20			0.007	0.007	
Cowpea seed	VD	0.0305	STMR	88	0.03	10				0.00			
Pea seed	VD	0.0305	STMR	90	0.03	10				0.003			
Barley grain	GC	0.01	STMR	88	0.01	30	35			0.003	0.004		
Corn, field grain	GC	0.01	STMR	88	0.01				80				0.009
Total						100	100	100	100	0.066	4.829	0.12	0.053

### CHLORANTRANILIPROLE (230)

ESTIMATED MEAN DIETARY BURDEN													
BEEF CATTLE													MEAN
Commodity	CC	Residue (mg/kg)	Basis	DM (%)	Residue dw (mg/kg)	Diet content (%)				Residue Contribution (ppm)			
						US/CAN	EU	AU	JP	US-CAN	EU	AU	JP
Pea vines	AL	4.4	STMR/STMR-P	25	17.60		20	60			3.52	10.56	
Alfalfa hay	AL	17.3	STMR/STMR-P	100	17.30	15		40	10	2.595		6.92	1.73
Wheat forage	AF/AS	4.3	STMR/STMR-P	25	17.20		20				3.44		
Alfalfa forage	AL	17	STMR/STMR-P	100	17.00		60				10.2		
Sorghum, grain forage	AF/AS	4.3	STMR/STMR-P	35	12.29	15				1.842857			
Cotton gin byproducts	AM/AV	4.1	STMR/STMR-P	90	4.56	5				0.227778			
Corn, field asp gr fn	CM/CF	0.34	STMR/STMR-P	85	0.40	5				0.02			
Rice bran/pollard	CM/CF	0.196	STMR/STMR-P	90	0.22	10			20	0.021778			0.044
Rice grain	GC	0.115	STMR/STMR-P	88	0.13	20				0.026			
Cotton hulls	SM	0.1029	STMR/STMR-P	90	0.11	10				0.011			
Potato culls	VR	0.003	STMR/STMR-P	20	0.02	20				0.003			
Barley grain	GC	0.01	STMR/STMR-P	88	0.01				70				0.008
Total						100	100	100	100	4.748	17.16	17.48	1.782

DAIRY CATTLE													MEAN
Commodity	CC	Residue (mg/kg)	Basis	DM (%)	Residue dw (mg/kg)	Diet content (%)				Residue Contribution (ppm)			
						US/CAN	EU	AU	JP	US-CAN	EU	AU	JP
Pea vines	AL	4.4	STMR/STMR-P	25	17.60	10	20	40		1.76	3.52	7.04	
Alfalfa hay	AL	17.3	STMR/STMR-P	100	17.30	10	20	20	25	1.73	3.46	3.46	4.325
Wheat forage	AF/AS	4.3	STMR/STMR-P	25	17.20	20	20	40		3.44	3.44	6.88	
Barley forage	AF/AS	4.3	STMR/STMR-P	30	14.33	0	10			0	1.433		
Oat forage	AF/AS	4.3	STMR/STMR-P	30	14.33	10			5	1.433333			0.717
Sorghum, grain forage	AF/AS	4.3	STMR/STMR-P	35	12.29	10			35	1.228571			4.3
Corn, field forage/silage	AF/AS	2.4	STMR/STMR-P	40	6.00	40	30		35	2.4	1.8		2.1

DAIRY CATTLE													MEAN
Commodity	CC	Residue (mg/kg)	Basis	DM (%)	Residue dw (mg/kg)	Diet content (%)				Residue Contribution (ppm)			
						US/CAN	EU	AU	JP	US-CAN	EU	AU	JP
Total						100	100	100	100	11.9919	13.65	17.38	11.44

POULTRY BROILER													MEAN
Commodity	CC	Residue (mg/kg)	Basis	DM (%)	Residue dw (mg/kg)	Diet content (%)				Residue Contribution (ppm)			
						US/CAN	EU	AU	JP	US-CAN	EU	AU	JP
Rice bran/pollard	CM/CF	0.196	STMR/STMR-P	90	0.22	10	10	20	5	0.02	0.022	0.044	0.011
Carrot culls	VR	0.02	STMR/STMR-P	12	0.17		10				0.017		
Rice grain	GC	0.115	STMR/STMR-P	88	0.13	20		50		0.03		0.065	
Cotton meal	SM	0.0368	STMR/STMR-P	89	0.04	20	5	10		0.01	0.002	0.004	
Bean seed	VD	0.0305	STMR/STMR-P	88	0.03		20	20			0.007	0.007	
Cowpea seed	VD	0.0305	STMR/STMR-P	88	0.03	10				0.00			
Pea seed	VD	0.0305	STMR/STMR-P	90	0.03	10				0.00			
Barley grain	GC	0.01	STMR/STMR-P	88	0.01	30	55		10	0.003409	0.006		0.001
Corn, field grain	GC	0.01	STMR/STMR-P	88	0.01				60				0.007
Total						100	100	100	75	0.066448	0.054	0.12	0.019

POULTRY LAYER													MEAN
Commodity	CC	Residue (mg/kg)	Basis	DM (%)	Residue dw (mg/kg)	Diet content (%)				Residue Contribution (ppm)			
						US/CAN	EU	AU	JP	US-CAN	EU	AU	JP
Pea vines	AL	4.4	STMR/STMR-P	25	17.60		10				1.76		
Wheat forage	AF/AS	4.3	STMR/STMR-P	25	17.20		10				1.72		
Cabbage heads, leaves	AM/AV	0.385	STMR/STMR-P	15	2.57		5				0.128		
Rice bran/pollard	CM/CF	0.196	STMR/STMR-P	90	0.22	10	5	20	20	0.021778	0.011	0.044	0.044
Carrot culls	VR	0.02	STMR/STMR-P	12	0.17		10				0.017		
Rice grain	GC	0.115	STMR/STMR-P	88	0.13	20		50		0.026136		0.065	
Cotton meal	SM	0.0368	STMR/STMR-P	89	0.04	20	5	10		0.00827	0.002	0.004	
Bean seed	VD	0.0305	STMR/STMR-P	88	0.03		20	20			0.007	0.007	

<b>POULTRY LAYER</b>													MEAN
Commodity	CC	Residue (mg/kg)	Basis	DM (%)	Residue dw (mg/kg)	Diet content (%)				Residue Contribution (ppm)			
						US/CAN	EU	AU	JP	US-CAN	EU	AU	JP
Cowpea seed	VD	0.0305	STMR/STMR-P	88	0.03	10				0.003			
Pea seed	VD	0.0305	STMR/STMR-P	90	0.03	10				0.003389			
Barley grain	GC	0.01	STMR/STMR-P	88	0.01	30	35			0.003409	0.004		
Corn, field grain	GC	0.01	STMR/STMR-P	88	0.01				80				0.009
Total						100	100	100	100	0.066448	3.649	0.12	0.053

## CYPRODINIL (207)

ESTIMATED MAXIMUM DIETARY BURDEN													
BEEF CATTLE													MAX
Commodity	CC	Residue (mg/kg)	Basis	DM (%)	Residue dw (mg/kg)	Diet content (%)				Residue Contribution (ppm)			
						US/CAN	EU	AU	JP	US-CAN	EU	AU	JP
Kale leaves	AM/AV	8	HR	15	53.33		20				10.67		
Barley straw	AF/AS	5.8	HR	100	5.80	10	30	100		0.580	1.74	5.8	
Apple pomace, wet	AB	1.8	STMR	40	4.50		20				0.9		
Carrot culls	VR	0.4	HR	12	3.33		15				0.5		
Barley grain	GC	0.58	STMR	88	0.66	50	15		70	0.330	0.099		0.461
Soybean seed	VD	0.085	STMR	89	0.10	5			15	0.005			0.014
Total						65	100	100	85	0.914	13.91	5.8	0.476

ESTIMATED MAXIMUM DIETARY BURDEN													
DAIRY CATTLE													MAX
Commodity	CC	Residue (mg/kg)	Basis	DM (%)	Residue dw (mg/kg)	Diet content (%)				Residue Contribution (ppm)			
						US/CAN	EU	AU	JP	US-CAN	EU	AU	JP
Kale leaves	AM/AV	8	HR	15	53.33		20	40			10.67	21.33	
Barley straw	AF/AS	5.8	HR	100	5.80	10	30	20		0.580	1.74	1.16	
Apple pomace, wet	AB	1.8	STMR	40	4.50	10	10	10		0.450	0.45	0.45	
Carrot culls	VR	0.4	HR	12	3.33	10	15	5		0.333	0.5	0.167	
Barley grain	GC	0.58	STMR	88	0.66	45	25	25	40	0.297	0.165	0.165	0.264
Soybean seed	VD	0.085	STMR	89	0.10	10			10	0.010			0.01
Almond hulls	AM/AV	0.05	STMR	90	0.06	10				0.006			
Total						95	100	100	50	1.675	13.52	23.27	0.273

POULTRY BROILER													MAX
Commodity	CC	Residue (mg/kg)	Basis	DM (%)	Residue dw (mg/kg)	Diet content (%)				Residue Contribution (ppm)			
						US/CAN	EU	AU	JP	US-CAN	EU	AU	JP
Carrot culls	VR	0.4	HR	12	3.33		10				0.333		
Barley grain	GC	0.58	STMR	88	0.66	75	70	15	10	0.494	0.461	0.099	0.066
Soybean seed	VD	0.085	STMR	89	0.10	20	20	15		0.019	0.019	0.014	
Bean seed	VD	0.03	STMR	88	0.03			55				0.019	
Total						95	100	85	10	0.513	0.814	0.132	0.066

POULTRY LAYER													MAX
Commodity	CC	Residue (mg/kg)	Basis	DM (%)	Residue dw (mg/kg)	Diet content (%)				Residue Contribution (ppm)			
						US/CAN	EU	AU	JP	US-CAN	EU	AU	JP
Barley straw	AF/AS	5.8	HR	100	5.80		5				0.29		
Wheat straw	AF/AS	5.8	HR	100	5.80		5				0.29		
Carrot culls	VR	0.4	HR	12	3.33		10				0.333		
Barley grain	GC	0.58	STMR	88	0.66	75	80	15		0.494	0.527	0.099	
Soybean seed	VD	0.085	STMR	89	0.10	20		15		0.019		0.014	
Bean seed	VD	0.03	STMR	88	0.03			55				0.019	
Total						95	100	85		0.513	1.441	0.132	

### CYPRODINIL (207)

ESTIMATED MEAN DIETARY BURDEN													
BEEF CATTLE													MEAN
Commodity	CC	Residue (mg/kg)	Basis	DM (%)	Residue dw (mg/kg)	Diet content (%)				Residue Contribution (ppm)			
						US/CAN	EU	AU	JP	US-CAN	EU	AU	JP
Apple pomace, wet	AB	1.8	STMR/STMR-P	40	4.50		20	20			0.9	0.9	
Kale leaves	AM/AV	0.37	STMR/STMR-P	15	2.47		20				0.493		
Carrot culls	VR	0.09	STMR/STMR-P	12	0.75		15	5			0.113	0.038	
Barley grain	GC	0.58	STMR/STMR-P	88	0.66	50	45	75	70	0.329545	0.297	0.494	0.461
Barley straw	AF/AS	0.395	STMR/STMR-P	100	0.40	10				0.0395			

ESTIMATED MEAN DIETARY BURDEN													
BEEF CATTLE													MEAN
Commodity	CC	Residue (mg/kg)	Basis	DM (%)	Residue dw (mg/kg)	Diet content (%)				Residue Contribution (ppm)			
						US/CAN	EU	AU	JP	US-CAN	EU	AU	JP
Soybean seed	VD	0.085	STMR/STMR-P	89	0.10	5			15	0.004775			0.014
Total						65	100	100	85	0.373821	1.802	1.432	0.476

DAIRY CATTLE													MEAN
Commodity	CC	Residue (mg/kg)	Basis	DM (%)	Residue dw (mg/kg)	Diet content (%)				Residue Contribution (ppm)			
						US/CAN	EU	AU	JP	US-CAN	EU	AU	JP
Apple pomace, wet	AB	1.8	STMR/STMR-P	40	4.50	10	10	10		0.45	0.45	0.45	
Kale leaves	AM/AV	0.37	STMR/STMR-P	15	2.47	0	20	40		0	0.493	0.987	
Carrot culls	VR	0.09	STMR/STMR-P	12	0.75	10	15	5		0.075	0.113	0.038	
Barley grain	GC	0.58	STMR/STMR-P	88	0.66	45	40	40	40	0.296591	0.264	0.264	0.264
Barley straw	AF/AS	0.395	STMR/STMR-P	100	0.40	10	15	5		0.0395	0.059	0.02	
Soybean seed	VD	0.085	STMR/STMR-P	89	0.10	10			10	0.009551			0.01
Almond hulls	AM/AV	0.05	STMR/STMR-P	90	0.06	10				0.005556			
Total						95	100	100	50	0.876197	1.379	1.758	0.273

POULTRY BROILER													MEAN
Commodity	CC	Residue (mg/kg)	Basis	DM (%)	Residue dw (mg/kg)	Diet content (%)				Residue Contribution (ppm)			
						US/CAN	EU	AU	JP	US-CAN	EU	AU	JP
Carrot culls	VR	0.09	STMR/STMR-P	12	0.75		10				0.075		
Barley grain	GC	0.58	STMR/STMR-P	88	0.66	75	70	15	10	0.49	0.461	0.099	0.066
Soybean seed	VD	0.085	STMR/STMR-P	89	0.10	20	20	15		0.02	0.019	0.014	
Bean seed	VD	0.03	STMR/STMR-P	88	0.03			55				0.019	
Total						95	100	85	10	0.51	0.555	0.132	0.066



<b>POULTRY LAYER</b>													MEAN
Commodity	CC	Residue (mg/kg)	Basis	DM (%)	Residue dw (mg/kg)	Diet content (%)				Residue Contribution (ppm)			
						US/CAN	EU	AU	JP	US-CAN	EU	AU	JP
Carrot culls	VR	0.09	STMR/STMR-P	12	0.75		10				0.075		
Barley grain	GC	0.58	STMR/STMR-P	88	0.66	75	90	15		0.494318	0.593	0.099	
Soybean seed	VD	0.085	STMR/STMR-P	89	0.10	20		15		0.019101		0.014	
Bean seed	VD	0.03	STMR/STMR-P	88	0.03			55				0.019	
Total						95	100	85		0.513419	0.668	0.132	

## DICAMBA (240)

ESTIMATED MAXIMUM DIETARY BURDEN													
BEEF CATTLE													MAX
Commodity	CC	Residue (mg/kg)	Basis	DM (%)	Residue dw (mg/kg)	Diet content (%)				Residue Contribution (ppm)			
						US/CAN	EU	AU	JP	US-CAN	EU	AU	JP
Grass forage (fresh)	AF/AS	35	HR	25	140.00		50	100	5		70	140	7
Barley straw	AF/AS	30	HR	100	30.00	10				3.000			
Grass hay	AF/AS	19	HR	100	19.00	5			35	0.950			6.65
Sugarcane molasses	DM	4	STMR	75	5.33	10	10			0.533	0.533		
Wheat asp gr fn	CM/CF	2.3	STMR	85	2.71	5				0.135			
Barley grain	GC	1.6	STMR	88	1.82	50	40		60	0.909	0.727		1.091
Cotton hulls	SM	0.548	STMR	90	0.61	10				0.061			
Corn, field stover	AF/AS	0.33	HR	100	0.33	10				0.033			
Total						100	100	100	100	5.622	71.26	140	14.74

DAIRY CATTLE													MAX
Commodity	CC	Residue (mg/kg)	Basis	DM (%)	Residue dw (mg/kg)	Diet content (%)				Residue Contribution (ppm)			
						US/CAN	EU	AU	JP	US-CAN	EU	AU	JP
Grass forage (fresh)	AF/AS	35	HR	25	140.00	45	60	100	10	63.000	84	140	14
Soybean hay	AL	68	HR	85	80.00	20				16.000			
Grass hay	AF/AS	19	HR	100	19.00				60				11.4
Sugarcane molasses	DM	4	STMR	75	5.33	10	10			0.533	0.533		
Barley grain	GC	1.6	STMR	88	1.82	25	30		30	0.455	0.545		0.545
Total						100	100	100	100	79.988	85.08	140	25.95

POULTRY BROILER													MAX
Commodity	CC	Residue (mg/kg)	Basis	DM (%)	Residue dw (mg/kg)	Diet content (%)				Residue Contribution (ppm)			
						US/CAN	EU	AU	JP	US-CAN	EU	AU	JP
Barley grain	GC	1.6	STMR	88	1.82	75	70	15	10	1.364	1.273	0.273	0.182
Sorghum, grain grain	GC	1	STMR	86	1.16			55	55			0.64	0.64
Wheat milled bypds	CM/CF	0.26	STMR	88	0.30	25	20	20	5	0.074	0.059	0.059	0.015
Wheat grain	GC	0.22	STMR	89	0.25			10				0.025	
Cotton meal	SM	0.151	STMR	89	0.17		5				0.008		
Soybean meal	SM	0.084	STMR	92	0.09		5		30		0.005		0.027
Total						100	100	100	100	1.44	1.345	0.996	0.864

POULTRY LAYER													MAX
Commodity	CC	Residue (mg/kg)	Basis	DM (%)	Residue dw (mg/kg)	Diet content (%)				Residue Contribution (ppm)			
						US/CAN	EU	AU	JP	US-CAN	EU	AU	JP
Soybean hay	AL	68	HR	85	80.00		10				8		
Barley straw	AF/AS	30	HR	100	30.00		5				1.5		
Barley grain	GC	1.6	STMR	88	1.82	75	85	15		1.364	1.545	0.273	
Sorghum, grain grain	GC	1	STMR	86	1.16			55	55			0.64	0.64
Wheat milled bypds	CM/CF	0.26	STMR	88	0.30	25		20	30	0.074		0.059	0.089
Wheat grain	GC	0.22	STMR	89	0.25			10				0.025	
Soybean meal	SM	0.084	STMR	92	0.09				15				0.014
Total						100	100	100	100	1.438	11.05	0.996	0.742

**DICAMBA (240)**

<b>ESTIMATED MEAN DIETARY BURDEN</b>													
<b>BEEF CATTLE</b>													MEAN
Commodity	CC	Residue (mg/kg)	Basis	DM (%)	Residue dw (mg/kg)	Diet content (%)				Residue Contribution (ppm)			
						US/CAN	EU	AU	JP	US-CAN	EU	AU	JP
Grass forage (fresh)	AF/AS	11	STMR/STMR-P	25	44.00		50	100	5		22	44	2.2
Grass hay	AF/AS	6.3	STMR/STMR-P	100	6.30	15			35	0.945			2.205
Sugarcane molasses	DM	4	STMR/STMR-P	75	5.33	10	10			0.533333	0.533		
Wheat asp gr fn	CM/CF	2.3	STMR/STMR-P	85	2.71	5				0.135294			
Barley grain	GC	1.6	STMR/STMR-P	88	1.82	50	40		60	0.909091	0.727		1.091
Cotton hulls	SM	0.548	STMR/STMR-P	90	0.61	10				0.060889			
Corn, field forage/silage	AF/AS	0.4	STMR/STMR-P	100	0.40	10				0.04			
Total						100	100	100	100	2.623607	23.26	44	5.496

<b>DAIRY CATTLE</b>													MEAN
Commodity	CC	Residue (mg/kg)	Basis	DM (%)	Residue dw (mg/kg)	Diet content (%)				Residue Contribution (ppm)			
						US/CAN	EU	AU	JP	US-CAN	EU	AU	JP
Grass forage (fresh)	AF/AS	11	STMR/STMR-P	25	44.00	45	60	100	10	19.8	26.4	44	4.4
Soybean hay	AL	35	STMR/STMR-P	85	41.18	20				8.235294			
Grass hay	AF/AS	6.3	STMR/STMR-P	100	6.30	0			60	0			3.78
Sugarcane molasses	DM	4	STMR/STMR-P	75	5.33	10	10			0.533333	0.533		
Barley grain	GC	1.6	STMR/STMR-P	88	1.82	25	30		30	0.454545	0.545		0.545
Total						100	100	100	100	29.02317	27.48	44	8.725

POULTRY BROILER													MEAN
Commodity	CC	Residue (mg/kg)	Basis	DM (%)	Residue dw (mg/kg)	Diet content (%)				Residue Contribution (ppm)			
						US/CAN	EU	AU	JP	US-CAN	EU	AU	JP
Barley grain	GC	1.6	STMR/STMR-P	88	1.82	75	70	15	10	1.36	1.273	0.273	0.182
Sorghum, grain grain	GC	1	STMR/STMR-P	86	1.16			55	55			0.64	0.64
Wheat milled bypdts	CM/CF	0.26	STMR/STMR-P	88	0.30	25	20	20	5	0.07	0.059	0.059	0.015
Wheat grain	GC	0.22	STMR/STMR-P	89	0.25			10				0.025	
Cotton meal	SM	0.151	STMR/STMR-P	89	0.17		5				0.008		
Soybean meal	SM	0.084	STMR/STMR-P	92	0.09		5		30		0.005		0.027
Total						100	100	100	100	1.44	1.345	0.996	0.864

POULTRY LAYER													MEAN
Commodity	CC	Residue (mg/kg)	Basis	DM (%)	Residue dw (mg/kg)	Diet content (%)				Residue Contribution (ppm)			
						US/CAN	EU	AU	JP	US-CAN	EU	AU	JP
Soybean hay	AL	35	STMR/STMR-P	85	41.18		10				4.118		
Barley straw	AF/AS	3.65	STMR/STMR-P	100	3.65		5				0.183		
Barley grain	GC	1.6	STMR/STMR-P	88	1.82	75	85	15		1.363636	1.545	0.273	
Sorghum, grain grain	GC	1	STMR/STMR-P	86	1.16			55	55			0.64	0.64
Wheat milled bypdts	CM/CF	0.26	STMR/STMR-P	88	0.30	25		20	30	0.073864		0.059	0.089
Wheat grain	GC	0.22	STMR/STMR-P	89	0.25			10				0.025	
Soybean meal	SM	0.084	STMR/STMR-P	92	0.09				15				0.014
Total						100	100	100	100	1.4375	5.846	0.996	0.742

**FENAZAQUIN (297)**

<b>ESTIMATED MAXIMUM DIETARY BURDEN</b>													
<b>BEEF CATTLE</b>													MAX
Commodity	CC	Residue (mg/kg)	Basis	DM (%)	Residue dw (mg/kg)	Diet content (%)				Residue Contribution (ppm)			
						US/CAN	EU	AU	JP	US-CAN	EU	AU	JP
Almond hulls	AM/AV	1.2	STMR	90	1.33			10				0.133	
Total								10				0.133	

<b>DAIRY CATTLE</b>													MAX
Commodity	CC	Residue (mg/kg)	Basis	DM (%)	Residue dw (mg/kg)	Diet content (%)				Residue Contribution (ppm)			
						US/CAN	EU	AU	JP	US-CAN	EU	AU	JP
Almond hulls	AM/AV	1.2	STMR	90	1.33	10		10		0.133		0.133	
Total						10		10		0.133		0.133	

<b>POULTRY BROILER</b>													MAX
No feed items applicable!													
<b>POULTRY LAYER</b>													MAX
No feed items applicable!													

### FENAZAQUIN (297)

ESTIMATED MEAN DIETARY BURDEN													
BEEF CATTLE													MEAN
Commodity	CC	Residue (mg/kg)	Basis	DM (%)	Residue dw (mg/kg)	Diet content (%)				Residue Contribution (ppm)			
						US/CAN	EU	AU	JP	US-CAN	EU	AU	JP
Almond hulls	AM/AV	1.2	STMR/STMR-P	90	1.33			10				0.133	
Total								10				0.133	

DAIRY CATTLE													MEAN
Commodity	CC	Residue (mg/kg)	Basis	DM (%)	Residue dw (mg/kg)	Diet content (%)				Residue Contribution (ppm)			
						US/CAN	EU	AU	JP	US-CAN	EU	AU	JP
Almond hulls	AM/AV	1.2	STMR/STMR-P	90	1.33	10	0	10		0.133333	0	0.133	
Total						10		10		0.133333		0.133	

POULTRY BROILER													MEAN
No feed items applicable!													
POULTRY LAYER													MEAN
No feed items applicable!													

## FOSETYL-AI (302)

ESTIMATED MAXIMUM DIETARY BURDEN													
BEEF CATTLE													MAX
Commodity	CC	Residue (mg/kg)	Basis	DM (%)	Residue dw (mg/kg)	Diet content (%)				Residue Contribution (ppm)			
						US/CAN	EU	AU	JP	US-CAN	EU	AU	JP
Grape pomace, wet	AB	22	STMR	15	146.67			20				29.33	
Apple pomace, wet	AB	15	STMR	40	37.50		20				7.5		
Citrus dried pulp	AB	15	STMR	91	16.48	10		10		1.648		1.648	
Pineapple process waste	AB	11.5	STMR	87	13.22			30				3.966	
Cabbage heads, leaves	AM/AV	0.2	HR	15	1.33		20				0.267		
Total						10	40	60		1.648	7.767	34.95	

ESTIMATED MAXIMUM DIETARY BURDEN													
DAIRY CATTLE													MAX
Commodity	CC	Residue (mg/kg)	Basis	DM (%)	Residue dw (mg/kg)	Diet content (%)				Residue Contribution (ppm)			
						US/CAN	EU	AU	JP	US-CAN	EU	AU	JP
Grape pomace, wet	AB	22	STMR	15	146.67			20				29.33	
Apple pomace, wet	AB	15	STMR	40	37.50	10	10			3.750	3.75		
Citrus dried pulp	AB	15	STMR	91	16.48		10	10			1.648	1.648	
Cabbage heads, leaves	AM/AV	0.2	HR	15	1.33		20				0.267		
Kale leaves	AM/AV	0.2	HR	15	1.33			40				0.533	
Total						10	40	70		3.750	5.665	31.52	

ESTIMATED MAXIMUM DIETARY BURDEN													
POULTRY BROILER													MAX
No feed items applicable													



POULTRY LAYER													
Commodity	CC	Residue (mg/kg)	Basis	DM (%)	Residue dw (mg/kg)	Diet content (%)				Residue Contribution (ppm)			
						US/CAN	EU	AU	JP	US-CAN	EU	AU	JP
Cabbage heads, leaves	AM/AV	0.2	HR	15	1.33		5				0.067		
Total							5				0.067		

### FOSETYL-AI (302)

ESTIMATED MEAN DIETARY BURDEN													
BEEF CATTLE													
Commodity	CC	Residue (mg/kg)	Basis	DM (%)	Residue dw (mg/kg)	Diet content (%)				Residue Contribution (ppm)			
						US- CAN	EU	AU	JP	US-CAN	EU	AU	JP
Grape pomace, wet	AB	22	STMR/STMR-P	15	146.67			20				29.33	
Apple pomace, wet	AB	15	STMR/STMR-P	40	37.50		20				7.5		
Citrus dried pulp	AB	15	STMR/STMR-P	91	16.48	10		10		1.648352		1.648	
Pineapple process waste	AB	11.5	STMR/STMR-P	87	13.22			30				3.966	
Cabbage heads, leaves	AM/AV	0.2	STMR/STMR-P	15	1.33		20				0.267		
Total						10	40	60		1.648352	7.767	34.95	

DAIRY CATTLE													MEAN
Commodity	CC	Residue (mg/kg)	Basis	DM (%)	Residue dw (mg/kg)	Diet content (%)				Residue Contribution (ppm)			
						US- CAN	EU	AU	JP	US-CAN	EU	AU	JP
Grape pomace, wet	AB	22	STMR/STMR-P	15	146.67		0	20			0	29.33	
Apple pomace, wet	AB	15	STMR/STMR-P	40	37.50	10	10			3.75	3.75		
Citrus dried pulp	AB	15	STMR/STMR-P	91	16.48	0	10	10		0	1.648	1.648	
Cabbage heads, leaves	AM/AV	0.2	STMR/STMR-P	15	1.33	0	20			0	0.267		
Kale leaves	AM/AV	0.2	STMR/STMR-P	15	1.33	0		40		0		0.533	
Total						10	40	70		3.75	5.665	31.52	

POULTRY BROILER													MEAN
No feed items applicable													

POULTRY LAYER													MEAN
Commodity	CC	Residue (mg/kg)	Basis	DM (%)	Residue dw (mg/kg)	Diet content (%)				Residue Contribution (ppm)			
						US/CAN	EU	AU	JP	US-CAN	EU	AU	JP
Cabbage heads, leaves	AM/AV	0.2	STMR/STMR-P	15	1.33		5				0.067		
Total							5				0.067		

## METAFLUMIZONE (236)

ESTIMATED MAXIMUM DIETARY BURDEN													
BEEF CATTLE													
Commodity	CC	Residue (mg/kg)	Basis	DM (%)	Residue dw (mg/kg)	Diet content (%)				Residue Contribution (ppm)			
						US-CAN	EU	AU	JP	US-CAN	EU	AU	JP
Grape pomace, wet	AB	2.45	STMR	15	16.33			20				3.267	
Apple pomace, wet	AB	0.97	STMR	40	2.43		20				0.485		
Corn, field grain	GC	0.02	STMR	88	0.02	80	80	80	75	0.018	0.018	0.018	0.017
Soybean seed	VD	0.02	STMR	89	0.02	5			15	0.001			0.003
Citrus dried pulp	AB	0.0066	STMR	91	0.01	10				0.001			
Total						95	100	100	90	0.020	0.503	3.285	0.02

DAIRY CATTLE													
Commodity	CC	Residue (mg/kg)	Basis	DM (%)	Residue dw (mg/kg)	Diet content (%)				Residue Contribution (ppm)			
						US-CAN	EU	AU	JP	US-CAN	EU	AU	JP
Grape pomace, wet	AB	2.45	STMR	15	16.33			20				3.267	
Apple pomace, wet	AB	0.97	STMR	40	2.43	10	10			0.243	0.243		
Corn, field grain	GC	0.02	STMR	88	0.02	45	30	20	80	0.010	0.007	0.005	0.018
Soybean seed	VD	0.02	STMR	89	0.02	10	10	20	10	0.002	0.002	0.004	0.002
Citrus dried pulp	AB	0.0066	STMR	91	0.01		10	10			7E-04	7E-04	
Total						65	60	70	90	0.255	0.252	3.276	0.02

POULTRY BROILER													MAX
Commodity	CC	Residue (mg/kg)	Basis	DM (%)	Residue dw (mg/kg)	Diet content (%)				Residue Contribution (ppm)			
						US-CAN	EU	AU	JP	US-CAN	EU	AU	JP
Corn, field grain	GC	0.02	STMR	88	0.02	75	70		70	0.017	0.016		0.016
Soybean seed	VD	0.02	STMR	89	0.02	20	20	15		0.004	0.004	0.003	
Total						95	90	15	70	0.022	0.02	0.003	0.016

POULTRY LAYER													MAX
Commodity	CC	Residue (mg/kg)	Basis	DM (%)	Residue dw (mg/kg)	Diet content (%)				Residue Contribution (ppm)			
						US-CAN	EU	AU	JP	US-CAN	EU	AU	JP
Corn, field grain	GC	0.02	STMR	88	0.02	75	70		80	0.017	0.016		0.018
Soybean seed	VD	0.02	STMR	89	0.02	20	15	15		0.004	0.003	0.003	
Total						95	85	15	80	0.022	0.019	0.003	0.018

### METAFLUMIZONE (236)

ESTIMATED MEAN DIETARY BURDEN													
BEEF CATTLE													MEAN
Commodity	CC	Residue (mg/kg)	Basis	DM (%)	Residue dw (mg/kg)	Diet content (%)				Residue Contribution (ppm)			
						US-CAN	EU	AU	JP	US-CAN	EU	AU	JP
Grape pomace, wet	AB	2.45	STMR/STMR-P	15	16.33			20				3.267	
Apple pomace, wet	AB	0.97	STMR/STMR-P	40	2.43		20				0.485		
Corn, field grain	GC	0.02	STMR/STMR-P	88	0.02	80	80	80	75	0.018182	0.018	0.018	0.017
Soybean seed	VD	0.02	STMR/STMR-P	89	0.02	5			15	0.001124			0.003
Citrus dried pulp	AB	0.0066	STMR/STMR-P	91	0.01	10				0.000725			
Total						95	100	100	90	0.020031	0.503	3.285	0.02

DAIRY CATTLE													MEAN
Commodity	CC	Residue (mg/kg)	Basis	DM (%)	Residue dw (mg/kg)	Diet content (%)				Residue Contribution (ppm)			
						US-CAN	EU	AU	JP	US-CAN	EU	AU	JP
Grape pomace, wet	AB	2.45	STMR/STMR-P	15	16.33		0	20			0	3.267	
Apple pomace, wet	AB	0.97	STMR/STMR-P	40	2.43	10	10			0.2425	0.243		
Corn, field grain	GC	0.02	STMR/STMR-P	88	0.02	45	30	20	80	0.010227	0.007	0.005	0.018
Soybean seed	VD	0.02	STMR/STMR-P	89	0.02	10	10	20	10	0.002247	0.002	0.004	0.002
Citrus dried pulp	AB	0.0066	STMR/STMR-P	91	0.01	0	10	10		0	7E-04	7E-04	
Total						65	60	70	90	0.254974	0.252	3.276	0.02

POULTRY BROILER													MEAN
Commodity	CC	Residue (mg/kg)	Basis	DM (%)	Residue dw (mg/kg)	Diet content (%)				Residue Contribution (ppm)			
						US-CAN	EU	AU	JP	US-CAN	EU	AU	JP
Corn, field grain	GC	0.02	STMR/STMR-P	88	0.02	75	70		70	0.02	0.016		0.016
Soybean seed	VD	0.02	STMR/STMR-P	89	0.02	20	20	15		0.00	0.004	0.003	
Total						95	90	15	70	0.02	0.02	0.003	0.016

POULTRY LAYER													MEAN
Commodity	CC	Residue (mg/kg)	Basis	DM (%)	Residue dw (mg/kg)	Diet content (%)				Residue Contribution (ppm)			
						US-CAN	EU	AU	JP	US-CAN	EU	AU	JP
Corn, field grain	GC	0.02	STMR/STMR-P	88	0.02	75	70		80	0.017045	0.016		0.018
Soybean seed	VD	0.02	STMR/STMR-P	89	0.02	20	15	15		0.004494	0.003	0.003	
Total						95	85	15	80	0.02154	0.019	0.003	0.018

**METHOPRENE (147)**

<b>ESTIMATED MAXIMUM DIETARY BURDEN</b>													
<b>BEEF CATTLE</b>													MAX
Commodity	CC	Residue (mg/kg)	Basis	DM (%)	Residue dw (mg/kg)	Diet content (%)				Residue Contribution (ppm)			
						US- CAN	EU	AU	JP	US-CAN	EU	AU	JP
Rice hulls	CM/CF	22.3	STMR	90	24.78			5				1.239	
Wheat milled bypds	CM/CF	13.6	STMR	88	15.45	40	30	35	55	6.182	4.636	5.409	8.5
Corn gluten feed	CM/CF	4.85	STMR	40	12.13	60				7.275			
Peanut meal	SM	5	STMR	85	5.88		20	10			1.176	0.588	
Sorghum, grain grain	GC	4.85	STMR	86	5.64		40	50	35		2.256	2.82	1.974
Barley grain	GC	4.85	STMR	88	5.51		10		10		0.551		0.551
Total						100	100	100	100	13.457	8.62	10.06	11.02

<b>DAIRY CATTLE</b>													MAX
Commodity	CC	Residue (mg/kg)	Basis	DM (%)	Residue dw (mg/kg)	Diet content (%)				Residue Contribution (ppm)			
						US- CAN	EU	AU	JP	US-CAN	EU	AU	JP
Rice hulls	CM/CF	22.3	STMR	90	24.78			10				2.478	
Wheat milled bypds	CM/CF	13.6	STMR	88	15.45	30	30	30	45	4.636	4.636	4.636	6.955
Peanut meal	SM	5	STMR	85	5.88	10	10	15		0.588	0.588	0.882	
Sorghum, grain grain	GC	4.85	STMR	86	5.64	45	40	45	30	2.538	2.256	2.538	1.692
Barley grain	GC	4.85	STMR	88	5.51				25				1.378
Corn, field hominy meal	CM/CF	4.85	STMR	88	5.51	15				0.827			
Brewer's grain dried	SM	4.85	STMR	92	5.27		5				0.264		
Cotton undelinted seed	SO	2	STMR	88	2.27		10				0.227		
Flaxseed/linseed meal	SM	2	STMR	88	2.27		5				0.114		
Total						100	100	100	100	8.589	8.085	10.53	10.02

POULTRY BROILER													MAX
Commodity	CC	Residue (mg/kg)	Basis	DM (%)	Residue dw (mg/kg)	Diet content (%)				Residue Contribution (ppm)			
						US-CAN	EU	AU	JP	US-CAN	EU	AU	JP
Wheat milled bypds	CM/CF	13.6	STMR	88	15.45	50	20	20	5	7.727	3.091	3.091	0.773
Peanut meal	SM	5	STMR	85	5.88	25	10	10		1.471	0.588	0.588	
Corn, field milled bypds	CM/CF	4.85	STMR	85	5.71	25	40			1.426	2.282		
Sorghum, grain grain	GC	4.85	STMR	86	5.64		30	70	65		1.692	3.948	3.666
Corn, field grain	GC	4.85	STMR	88	5.51				30				1.653
Total						100	100	100	100	10.624	7.653	7.627	6.092

POULTRY LAYER													MAX
Commodity	CC	Residue (mg/kg)	Basis	DM (%)	Residue dw (mg/kg)	Diet content (%)				Residue Contribution (ppm)			
						US-CAN	EU	AU	JP	US-CAN	EU	AU	JP
Wheat milled bypdt	CM/CF	13.6	STMR	88	15.45	50	20	20	30	7.727	3.091	3.091	4.636
Peanut meal	SM	5	STMR	85	5.88	25	10	10		1.471	0.588	0.588	
Corn, field milled bypdt	CM/CF	4.85	STMR	85	5.71	25	30			1.426	1.712		
Sorghum, grain grain	GC	4.85	STMR	86	5.64		40	70	55		2.256	3.948	3.102
Corn, field grain	GC	4.85	STMR	88	5.51				15				0.827
Total						100	100	100	100	10.624	7.647	7.627	8.565

**METHOPRENE (147)**

<b>ESTIMATED MEAN DIETARY BURDEN</b>													
<b>BEEF CATTLE</b>													MEAN
Commodity	CC	Residue (mg/kg)	Basis	DM (%)	Residue dw (mg/kg)	Diet content (%)				Residue Contribution (ppm)			
						US-CAN	EU	AU	JP	US-CAN	EU	AU	JP
Rice hulls	CM/CF	22.3	STMR/STMR-P	90	24.78			5				1.239	
Wheat milled bypds	CM/CF	13.6	STMR/STMR-P	88	15.45	40	30	35	55	6.181818	4.636	5.409	8.5
Corn gluten feed	CM/CF	4.85	STMR/STMR-P	40	12.13	60				7.275			
Peanut meal	SM	5	STMR/STMR-P	85	5.88		20	10			1.176	0.588	
Sorghum, grain grain	GC	4.85	STMR/STMR-P	86	5.64		40	50	35		2.256	2.82	1.974
Barley grain	GC	4.85	STMR/STMR-P	88	5.51		10		10		0.551		0.551
Total						100	100	100	100	13.45682	8.62	10.06	11.02

<b>DAIRY CATTLE</b>													MEAN
Commodity	CC	Residue (mg/kg)	Basis	DM (%)	Residue dw (mg/kg)	Diet content (%)				Residue Contribution (ppm)			
						US-CAN	EU	AU	JP	US-CAN	EU	AU	JP
Rice hulls	CM/CF	22.3	STMR/STMR-P	90	24.78		0	10			0	2.478	
Wheat milled bypds	CM/CF	13.6	STMR/STMR-P	88	15.45	30	30	30	45	4.636364	4.636	4.636	6.955
Peanut meal	SM	5	STMR/STMR-P	85	5.88	10	10	15		0.588235	0.588	0.882	
Sorghum, grain grain	GC	4.85	STMR/STMR-P	86	5.64	45	40	45	30	2.537791	2.256	2.538	1.692
Barley grain	GC	4.85	STMR/STMR-P	88	5.51	0			25	0			1.378
Corn, field hominy meal	CM/CF	4.85	STMR/STMR-P	88	5.51	15				0.826705			
Brewer's grain dried	SM	4.85	STMR/STMR-P	92	5.27	0	5			0	0.264		
Cotton undelinted seed	SO	2	STMR/STMR-P	88	2.27	0	10			0	0.227		
Flaxseed/linseed meal	SM	2	STMR/STMR-P	88	2.27	0	5			0	0.114		
Total						100	100	100	100	8.589094	8.085	10.53	10.02



<b>POULTRY BROILER</b>													MEAN
Commodity	CC	Residue (mg/kg)	Basis	DM (%)	Residue dw (mg/kg)	Diet content (%)				Residue Contribution (ppm)			
						US-CAN	EU	AU	JP	US-CAN	EU	AU	JP
Wheat milled bypds	CM/CF	13.6	STMR/STMR-P	88	15.45	50	20	20	5	7.73	3.091	3.091	0.773
Peanut meal	SM	5	STMR/STMR-P	85	5.88	25	10	10		1.47	0.588	0.588	
Corn, field milled bypds	CM/CF	4.85	STMR/STMR-P	85	5.71	25	40			1.43	2.282		
Sorghum, grain grain	GC	4.85	STMR/STMR-P	86	5.64		30	70	65		1.692	3.948	3.666
Corn, field grain	GC	4.85	STMR/STMR-P	88	5.51				30				1.653
Total						100	100	100	100	10.62	7.653	7.627	6.092

<b>POULTRY LAYER</b>													MEAN
Commodity	CC	Residue (mg/kg)	Basis	DM (%)	Residue dw (mg/kg)	Diet content (%)				Residue Contribution (ppm)			
						US-CAN	EU	AU	JP	US-CAN	EU	AU	JP
Wheat milled bypds	CM/CF	13.6	STMR/STMR-P	88	15.45	50	20	20	30	7.727273	3.091	3.091	4.636
Peanut meal	SM	5	STMR/STMR-P	85	5.88	25	10	10		1.470588	0.588	0.588	
Corn, field milled bypds	CM/CF	4.85	STMR/STMR-P	85	5.71	25	30			1.426471	1.712		
Sorghum, grain grain	GC	4.85	STMR/STMR-P	86	5.64		40	70	55		2.256	3.948	3.102
Corn, field grain	GC	4.85	STMR/STMR-P	88	5.51				15				0.827
Total						100	100	100	100	10.62433	7.647	7.627	8.565

**SPIROTETRAMAT (234)**

<b>ESTIMATED MAXIMUM DIETARY BURDEN</b>													
<b>BEEF CATTLE</b>													<b>MAX</b>
Commodity	CC	Residue (mg/kg)	Basis	DM (%)	Residue dw (mg/kg)	Diet content (%)				Residue Contribution (ppm)			
						US- CAN	EU	AU	JP	US-CAN	EU	AU	JP
Rice hulls	CM/CF	22.3	STMR	90	24.78			5				1.239	
Wheat milled bypds	CM/CF	13.6	STMR	88	15.45	40	30	35	55	6.182	4.636	5.409	8.5
Corn gluten feed	CM/CF	4.85	STMR	40	12.13	60				7.275			
Peanut meal	SM	5	STMR	85	5.88		20	10			1.176	0.588	
Sorghum, grain grain	GC	4.85	STMR	86	5.64		40	50	35		2.256	2.82	1.974
Barley grain	GC	4.85	STMR	88	5.51		10		10		0.551		0.551
Total						100	100	100	100	13.457	8.62	10.06	11.02

<b>DAIRY CATTLE</b>													<b>MAX</b>
Commodity	CC	Residue (mg/kg)	Basis	DM (%)	Residue dw (mg/kg)	Diet content (%)				Residue Contribution (ppm)			
						US- CAN	EU	AU	JP	US-CAN	EU	AU	JP
Rice hulls	CM/CF	22.3	STMR	90	24.78			10				2.478	
Wheat milled bypds	CM/CF	13.6	STMR	88	15.45	30	30	30	45	4.636	4.636	4.636	6.955
Peanut meal	SM	5	STMR	85	5.88	10	10	15		0.588	0.588	0.882	
Sorghum, grain grain	GC	4.85	STMR	86	5.64	45	40	45	30	2.538	2.256	2.538	1.692
Barley grain	GC	4.85	STMR	88	5.51				25				1.378
Corn, field hominy meal	CM/CF	4.85	STMR	88	5.51	15				0.827			
Brewer's grain dried	SM	4.85	STMR	92	5.27		5				0.264		
Cotton undelinted seed	SO	2	STMR	88	2.27		10				0.227		
Flaxseed/linseed meal	SM	2	STMR	88	2.27		5				0.114		
Total						100	100	100	100	8.589	8.085	10.53	10.02

POULTRY BROILER													MAX
Commodity	CC	Residue (mg/kg)	Basis	DM (%)	Residue dw (mg/kg)	Diet content (%)				Residue Contribution (ppm)			
						US-CAN	EU	AU	JP	US-CAN	EU	AU	JP
Wheat milled bypdt	CM/CF	13.6	STMR	88	15.45	50	20	20	5	7.727	3.091	3.091	0.773
Peanut meal	SM	5	STMR	85	5.88	25	10	10		1.471	0.588	0.588	
Corn, field milled bypdt	CM/CF	4.85	STMR	85	5.71	25	40			1.426	2.282		
Sorghum, grain grain	GC	4.85	STMR	86	5.64		30	70	65		1.692	3.948	3.666
Corn, field grain	GC	4.85	STMR	88	5.51				30				1.653
Total						100	100	100	100	10.624	7.653	7.627	6.092

POULTRY LAYER													MAX
Commodity	CC	Residue (mg/kg)	Basis	DM (%)	Residue dw (mg/kg)	Diet content (%)				Residue Contribution (ppm)			
						US-CAN	EU	AU	JP	US-CAN	EU	AU	JP
Wheat milled bypdt	CM/CF	13.6	STMR	88	15.45	50	20	20	30	7.727	3.091	3.091	4.636
Peanut meal	SM	5	STMR	85	5.88	25	10	10		1.471	0.588	0.588	
Corn, field milled bypdt	CM/CF	4.85	STMR	85	5.71	25	30			1.426	1.712		
Sorghum, grain grain	GC	4.85	STMR	86	5.64		40	70	55		2.256	3.948	3.102
Corn, field grain	GC	4.85	STMR	88	5.51				15				0.827
Total						100	100	100	100	10.624	7.647	7.627	8.565

**SPIROTETRAMAT (234)**

<b>ESTIMATED MEAN DIETARY BURDEN</b>													
<b>BEEF CATTLE</b>													MEAN
Commodity	CC	Residue (mg/kg)	Basis	DM (%)	Residue dw (mg/kg)	Diet content (%)				Residue Contribution (ppm)			
						US-CAN	EU	AU	JP	US-CAN	EU	AU	JP
Rice hulls	CM/CF	22.3	STMR/STMR-P	90	24.78			5				1.239	
Wheat milled bypds	CM/CF	13.6	STMR/STMR-P	88	15.45	40	30	35	55	6.181818	4.636	5.409	8.5
Corn gluten feed	CM/CF	4.85	STMR/STMR-P	40	12.13	60				7.275			
Peanut meal	SM	5	STMR/STMR-P	85	5.88		20	10			1.176	0.588	
Sorghum, grain grain	GC	4.85	STMR/STMR-P	86	5.64		40	50	35		2.256	2.82	1.974
Barley grain	GC	4.85	STMR/STMR-P	88	5.51		10		10		0.551		0.551
Total						100	100	100	100	13.45682	8.62	10.06	11.02

<b>DAIRY CATTLE</b>													MEAN
Commodity	CC	Residue (mg/kg)	Basis	DM (%)	Residue dw (mg/kg)	Diet content (%)				Residue Contribution (ppm)			
						US-CAN	EU	AU	JP	US-CAN	EU	AU	JP
Rice hulls	CM/CF	22.3	STMR/STMR-P	90	24.78		0	10			0	2.478	
Wheat milled bypds	CM/CF	13.6	STMR/STMR-P	88	15.45	30	30	30	45	4.636364	4.636	4.636	6.955
Peanut meal	SM	5	STMR/STMR-P	85	5.88	10	10	15		0.588235	0.588	0.882	
Sorghum, grain grain	GC	4.85	STMR/STMR-P	86	5.64	45	40	45	30	2.537791	2.256	2.538	1.692
Barley grain	GC	4.85	STMR/STMR-P	88	5.51	0			25	0			1.378
Corn, field hominy meal	CM/CF	4.85	STMR/STMR-P	88	5.51	15				0.826705			
Brewer's grain dried	SM	4.85	STMR/STMR-P	92	5.27	0	5			0	0.264		
Cotton undelinted seed	SO	2	STMR/STMR-P	88	2.27	0	10			0	0.227		
Flaxseed/linseed meal	SM	2	STMR/STMR-P	88	2.27	0	5			0	0.114		
Total						100	100	100	100	8.589094	8.085	10.53	10.02

<b>POULTRY BROILER</b>													MEAN
Commodity	CC	Residue (mg/kg)	Basis	DM (%)	Residue dw (mg/kg)	Diet content (%)				Residue Contribution (ppm)			
						US-CAN	EU	AU	JP	US-CAN	EU	AU	JP
Wheat milled bypds	CM/CF	13.6	STMR/STMR-P	88	15.45	50	20	20	5	7.73	3.091	3.091	0.773
Peanut meal	SM	5	STMR/STMR-P	85	5.88	25	10	10		1.47	0.588	0.588	
Corn, field milled bypds	CM/CF	4.85	STMR/STMR-P	85	5.71	25	40			1.43	2.282		
Sorghum, grain grain	GC	4.85	STMR/STMR-P	86	5.64		30	70	65		1.692	3.948	3.666
Corn, field grain	GC	4.85	STMR/STMR-P	88	5.51				30				1.653
Total						100	100	100	100	10.62	7.653	7.627	6.092

<b>POULTRY LAYER</b>													MEAN
Commodity	CC	Residue (mg/kg)	Basis	DM (%)	Residue dw (mg/kg)	Diet content (%)				Residue Contribution (ppm)			
						US-CAN	EU	AU	JP	US-CAN	EU	AU	JP
Wheat milled bypds	CM/CF	13.6	STMR/STMR-P	88	15.45	50	20	20	30	7.727273	3.091	3.091	4.636
Peanut meal	SM	5	STMR/STMR-P	85	5.88	25	10	10		1.470588	0.588	0.588	
Corn, field milled bypds	CM/CF	4.85	STMR/STMR-P	85	5.71	25	30			1.426471	1.712		
Sorghum, grain grain	GC	4.85	STMR/STMR-P	86	5.64		40	70	55		2.256	3.948	3.102
Corn, field grain	GC	4.85	STMR/STMR-P	88	5.51				15				0.827
Total						100	100	100	100	10.62433	7.647	7.627	8.565





The annual Joint Meeting of the FAO Panel of Experts on Pesticide Residues in Food and the Environment and the WHO Core Assessment Group on Pesticide Residues was held in Ottawa, Canada, from 07 to 17 May 2019. The Meeting was held in pursuance of recommendations made by previous Meetings and accepted by the governing bodies of FAO and WHO that studies should be undertaken jointly by experts to evaluate possible hazards to humans arising from the occurrence of pesticide residues in foods. During the meeting the FAO Panel of Experts was responsible for reviewing pesticide use patterns (use of good agricultural practices), data on the chemistry and composition of the pesticides and methods of analysis for pesticide residues and for estimating the maximum residue levels that might occur as a result of the use of the pesticides according to good agricultural use practices. The WHO Core Assessment Group was responsible for reviewing toxicological and related data and for estimating, where possible and appropriate, acceptable daily intakes (ADIs) and acute reference doses (ARfDs) of the pesticides for humans. This report contains information on ADIs, ARfDs, maximum residue levels, and general principles for the evaluation of pesticides. The recommendations of the Joint Meeting, including further research and information, are proposed for use by Member governments of the respective agencies and other interested parties.

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