WHO Global Network of Institutions for Scientific Advice on Nutrition

NUTRITIONPOLICY
ANDSCIENTIFICADVICE

Report of the first meeting

11–12 March 2010
WHO, Geneva, Switzerland

World Health Organization

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1. Introduction

In order to implement the recommendations of the programme review of the WHO Nutrition Programme in 2008, the Department of Nutrition for Health and Development is strengthening its role in providing scientific advice, evidence-informed policies and programme guidance. In December 2009, the Department established a Nutrition Guidance Steering Committee, consisting of the directors of relevant WHO departments, and in February 2010 it set up a WHO Nutrition Guidance Expert Advisory Group (NUGAG) in accordance with the new WHO guideline development process developed in response to a recommendation of the Fifty-eighth World Health Assembly for more rigorous, evidence-informed guidelines.

The Department has also established the Global Network of Institutions for Scientific Advice on Nutrition in order to bring together the main public institutions that set guidelines for diet and nutrition-related guidelines, thus creating synergy and avoiding duplication of effort. It is envisaged that the Network will operate mainly through teleconferences, video conferences and electronic communication, with occasional meetings. To launch the Global Network, WHO organized a first meeting, in Geneva on 11–12 March 2010. The objectives of the meeting were to:

- share information on each institution's planned work on guidelines for diet and nutrition-related guidelines; and
- explore possible collaboration, in order to harmonize the preparation and implementation of diet- and nutrition-related recommendations and guidelines.

The meeting was opened by Dr Ala Alwan, Assistant Director-General, Noncommunicable Diseases and Mental Health cluster, who described the challenges and perspectives of malnutrition in the world. Widespread undernutrition and micronutrient deficiency, especially among women and children, coexist with increasing levels of obesity and diet-related noncommunicable diseases. Noncommunicable diseases are now the most important causes of death in the world, with low- and middle-income countries accounting for most deaths, and these diseases rank higher than infectious diseases in the Global Risk Landscape (World Economic Forum, Global Risk 2010 Report). Nevertheless, the amount of official development assistance allocated to nutrition, a major risk factor for various noncommunicable diseases, is only a fraction of the total given to health. WHO's vision of how to proceed is stated in a number of strategy documents, including the *Global Strategy for the Prevention and Control of Noncommunicable Diseases* (2000), the *Global Strategy on Infant and Young Child Feeding* (2002), the *Global Strategy on Diet, Physical Activity and Health* (2004) and the *Action Plan on the Global Strategy for the Prevention and Control of Noncommunicable Diseases* (2008).

Dr Francesco Branca, Director, Department of Nutrition for Health and Development, said that organizaton of a global network of institutions had also been prompted by discussions at the Codex Alimentarius Commission, in particular the Codex Committee on Nutrition and Food for Special Dietary Uses, on strengthening the roles of the Food and Agricultural Organization (FAO) of the United Nations and WHO in providing scientific advice on nutrition. The challenges to global nutrition are enormous, and no single institution could cover all aspects. If action is to be effective, the efforts of the agencies and institutions that are preparing nutrition guidelines for their populations must be harmonized; by sharing their workplans and operations, they can identify synergies and areas for collaboration. Dr Branca said that he looked forward to the discussions on how this could be done and invited input on setting up the network, its workplan, activities, membership and possibilities for capacity-building in low- and middle-income countries.

2. WHO Department of Nutrition for Health and Development

Dr Branca briefly described the work of the WHO Department of Nutrition for Health and Development. He said that its strategic focus covered: the development and operationalization of integrated food and nutrition policies; 2) Intelligence of needs and responses; preparing evidence-informed programme guidance; and strengthening advocacy and technical assistance at country level.

The WHO nutrition agenda covers communicable and noncommunicable diseases, child and adolescent health, health systems, food safety, environment, social determinants and emergencies. While the Department consists of four units[1], the WHO nutrition network counts 131 full- and part-time staff in the WHO regional and country offices, thus providing global coverage.

Dr Branca outlined the major projects of the Department in nutrition policy, surveillance, programme guidance and effect at country level. Specific projects include the 'Landscape Analysis of countries' readiness to accelerate action in nutrition', the 'Global nutrition policy review', the 'WHO growth standards', the 'Nutrition landscape information system and related WHO nutrition databases' and the forthcoming WHO E-library of evidence for nutrition action which will contain WHO guidelines and recommendations, programme guidance, evidence and best practices.

3. WHO guideline development process

Dr Regina Kulier described the process of preparing WHO guidelines by the newly established Guideline Development Committee. The guidelines are intended to assist providers and recipients of health care and other to make informed decisions, through recommendations on clinical interventions, public health activities and government policies. The Committee, which meets monthly, has 21 members, with representatives from all WHO clusters and regional offices and external members. Its role is to give both initial and final approval to WHO guidelines. The Committee's secretariat supports the respective departments.

Preparation of WHO guidelines involves planning to determine why a guideline is necessary, who has requested it and its relation to existing guidelines and to the programme of the department. The scope of the guideline is determined by setting priorities for topics, in terms of controversy, usefulness and feasibility of implementation, and is expressed by answering key questions and the use of population, intervention, comparator, outcome, time-frame (PICOT) tables to formulate a structured research question. Plans are made for implementation, updating, form of publication and translations. Three consultation groups are established: a steering group of WHO staff, a group of 15–20 experts who will be actively involved in the guideline and an external review group that consults on the scope and choice of questions and reviews the draft. The Guideline development group includes
experts on content and methods as well as representatives of potentially interested groups and users, with an attempt to establish regional and gender balance. The role of the Guideline development group is to advise on the priorities and scope of the guideline and the

[1] Growth assessment and nutrition surveillance, headed by Dr Mercedes de Onis; Micronutrients, headed by Dr Juan-Pablo Peña-Rosas; Nutrition in the life course, headed by Mrs Randa Saadeh; and Nutrition policy and scientific advice, headed by Dr Chizuru Nishida.

choice of outcomes for decision-making and recommendations; to comment on the evidence used as the basis of the guideline; to advise on interpretation of the evidence, with consideration of the balance of risks and benefits; and to formulate recommendations, taking into account diverse values and preferences. Declaration and management of conflicts of interest is carried out based on potential conflicting personal or family financial interests, academic interests or public statements or other activities relevant to the meeting or guideline. The declarations are reviewed by the respective WHO department and, if necessary, by the WHO Legal Counsel, which may decide exclusion or partial or full participation of the expert.

4. Programmes of WHO and institutions participating in preparing and updating guidelines and recommendations on diet and nutrition

4.1 WHO

Dr Branca described the way in which nutrition guidelines are drawn up by WHO, the recently established WHO Guideline Steering Committee for nutrition, the WHO Nutrition Guidance Expert Advisory Group (NUGAG), and the key nutrition stakeholders and experts panel. The WHO Guideline Steering Committee for nutrition consists of the directors of WHO departments that are making joint recommendations on nutrition. NUGAG, established for a 2-year period (2010–2011), is a multidisciplinary group of 40–50 experts in nutrition, epidemiology, paediatrics, methodology and other related fields, with balanced gender and geographical distribution and as few conflicts as possible. Its membership includes experts from various WHO expert advisory panels and experts from larger roster, with a diversity of views, experience and priorities. NUGAG meets twice yearly to implement its biannual programme of work. The first meeting was held in Geneva on 22–25 February 2010, and the second is scheduled to take place in Amman, Jordan, on 15–19 November 2010. NUGAG has three subgroups, covering micronutrients; diet and health; nutrition in the life course and undernutrition. The first two subgroups met in February 2010 to review identified priorities. The members of NUGAG advise WHO on the scope of guidelines and priority questions for which systematic reviews of evidence will be commissioned; the choice of important outcomes for decision-making and developing recommendations; interpretation of the evidence, with consideration of the balance of risks and benefits; and the final drafting of recommendations, taking into account both the evidence and diverse values and preferences. Full consensus is desired but not essential.

Priorities for preparing WHO nutrition guidelines are usually based on requests from Member States and their partners; or they may be set in order to establish WHO's position in current debates and issues. The requests are followed up by an examination and scoping of the issues which the guidelines should address in consultation with interest groups and experts, revision of the guidelines and calls for comments, such as that between December 2009 and early February 2010 before the first NUGAG meeting. This resulted in 43 comments from governments, interest groups, nongovernmental organizations, civil society, the private sector and individual practitioners. The open call was announced through the 'SCN Email Update' of the United Nations System Standing Committee on Nutrition, which has some 3000 subscribers; the WHO Micronutrients Mailing List, with over 1000 practitioners; the International Union of Nutrition Societies (IUNS) network; and professional journals.

The programme for 2010 includes developing and updating guidelines for iron supplementation, food fortification and multiple micronutrient powders in the area of micronutrients; for sugars, total fat, nutrient profiling and sodium in the area of diet and health; for severe malnutrition, moderate malnutrition, nutrition support for tuberculosis patients and nutrition support for HIV-infected patients in the area of nutrition in the life

course and undernutrition. The Department of Nutrition for Health and Development (NHD) is also developing a WHO E-library of Evidence for Nutrition Action (E-LENA) to provide comprehensive programme guidance and support to Member States and their partners for implementing safe and effective interventions. The E-LENA will, thus, become an exhaustive resource for the latest nutrition-related guidelines and other information.

4.2 National Health and Medical Research Council, Australia

Dr Clive Morris, Deputy Head, National Health and Medical Research Council (NHMRC) of Australia, described the statutory functions of the Council, which include public health, standard setting, fostering medical research and training and consideration of ethical issues in health and medical research. The NHMRC is a research-funding body and is responsible for developing various health guidelines for Australia.

The National Health and Medical Research Council Act requires the NHMRC to undertake public consultation on all draft guidelines and to take into account all submissions in finalizing guidelines. Public consultations are conducted through newspapers, websites and stakeholder contact lists, and the NHMRC receives up to 200 submissions, depending on the topic. All guideline development committees have community and consumer representation. In addition, targeted consultations are always undertaken with professional organizations and interest groups.

Setting 'nutrient reference values' (NRVs) for Australia and New Zealand was a joint initiative of the NHMRC and the New Zealand Ministry of Health, begun in 2006. The NRVs are a set of recommendations for nutritional intake based on the available scientific knowledge. They correspond to the 'dietary reference intakes' (DRIs) of the United States, and are different from the NRVs of the Codex Committee on Nutrition and Food for Special Dietary Uses (CCNFSDU). The NRVs for Australia and New Zealand will be published and will also be available on a web site (www.nrv.gov.au), with a calculator that makes it possible to obtain a list of recommendations for each nutrient for a person of a particular age and gender.

The NHMRC is in a process of revising dietary guidelines, including:

- *Core Food Groups* (1994)
- *The Australian Guide to Healthy Eating* (1998)
- *Dietary Guidelines for Older Australians* (1999)
- *Dietary Guidelines for Children and Adolescents in Australia incorporating the Infant Feeding Guidelines for Health Workers* (2003)
- *Dietary Guidelines for Australian Adults* (2003), and
- new guidelines for pregnant and breastfeeding women.

The NHMRC has also released *A new food guidance system for Australia—foundation and total diets* (a revision of the 1994 Core Food Groups) for public consultation. This will be the basis for revision of the guidelines listed above. A systematic literature review was undertaken as a basis for this work, and the NHMRC is considering releasing the review publicly. Issues emerging from the review include the effects of soft drinks on children's weight and the health benefits of breastfeeding for infants.

4.3 Health Canada

Dr Hasan Hutchinson, Director General, Office of Nutrition Policy and Promotion, described the branches and offices involved in nutrition initiatives within three Canadian public health agencies: Health Canada, the Canadian Institutes of Health Research and the Public Health Agency of Canada. Within Health Canada, three bodies are responsible for nutrition policies and programmes. The Office of Nutrition Policy and Promotion, the Food Directorate and the First Nations and Inuit Health Branch have complementary functions to support the nutritional health of Canadians, including regulations, guidelines, research, surveillance, public education and community-based programmes on reserves and in the north. The Public Health Agency of Canada is responsible for broader disease-specific strategies, while the Canadian Institutes of Health Research (specifically the Institute of Nutrition, Metabolism and Diabetes) provides and promotes research opportunities in nutritional sciences.

The 'dietary reference intakes' (DRIs) of Canada and the United States are established by an independent, third-party process overseen by the United States Institute of Medicine, in line with an agreement in 1994 that it would be desirable to achieve a unified set of nutrient reference values. The Canadian and United States governments jointly sponsored the scientific process. However, although the values are harmonized, their implementation into policies and programmes is country-specific. The DRIs for vitamin D and calcium are under review, on the basis of systematic evidence-informed reviews of the relations between vitamin D and calcium intake and nutrient status indicators and health outcomes, jointly funded by the Canadian and United States governments. The Government of Canada will ask the Canadian Academy of Health Sciences for advice in including the revised DRIs appropriately into policies, guidelines and programmes.

Canada's *Food Guide* defines and promotes a healthy eating pattern for Canadians, recommending the types and amounts of foods that should be eaten. The pattern was devised to meet nutrient standards (i.e. DRIs) and to be consistent with evidence linking diet to reduced risks for certain chronic diseases. The *Food Guide* also includes age- and gender-specific guidance and practical tips and acknowledges the changing ethnic constitution of Canada. It is available in 12 languages. In revising the *Food Guide*, Health Canada worked with two expert advisory groups, one for scientific issues and the other for communication, and conducted consultations with 7000 stakeholders.

Guidelines on diet and nutrition are revised and implemented on the basis of evidence from various groups and stakeholders. For instance, a Sodium Working Group was established to devise a comprehensive sodium reduction strategy.

4.4 Food and Drug Administration, United States of America

Dr Barbara Schneeman, Director, Office of Nutrition, Labeling and Dietary Supplements, described the process of developing and updating of dietary guidelines in the United States. The *Dietary Guidelines for Americans*, prepared jointly by the Department of Health and Human Services (HHS) and the Department of Agriculture (USDA), are scientifically based advice for people aged 2 years and older, used to create Federal policies and programmes, establish national health objectives and nutrition monitoring and research and set standards in food labelling, fortification and product development. The first edition was published in 1980, and revisions have been issued every 5 years, alternately by the Department of Health and Human Services and the Department of Agriculture. In view of the 5-year revision period, subsequent revisions are begun shortly after the current edition has been published.

Revision begins with a scientific report from the Dietary Guidelines Advisory Committee, composed of external experts. In 2005, stakeholders were given the opportunity to comment on the report, and their comments were considered in preparing policy documents. These

documents are used by Federal agencies to establish policies and recommendations for preparing consumer messages and policy directions. Components of the 2005 *Dietary Guidelines* were presented, with a description of how the guidelines changed between 1980 and 2005. The review for the 2010 *Dietary Guidelines* is under way, and the revised edition (7th) is expected to be published in autumn 2010. A 'nutrition evidence library' has been created to facilitate the review.

Dr Schneeman described the Food and Drug Administration's initiatives to update nutrition labelling and to address declaration of certain types of information on the principal display panel (referred to as 'front-of-pack labelling'). Nutrition labelling (e.g. 'nutrition facts') has been required by law since 1994, but certain aspects are being reviewed for updating, including serving size, more prominent mention of calories and the reference values used to calculate daily values. In addition, the agency is examining front-of-pack labelling systems to determine those that are effective in helping consumers to make more informed choices. Target (nine experimental, two control) and existing (three experimental, two control) schemes are being studied to identify that which best improves the accuracy and speed of choosing healthier products; perceptions of a product's nutrient levels, overall healthiness, health benefits and taste; viewing of the 'nutrition facts' label; and the perceived credibility and helpfulness of the scheme.

During the discussion, it was noted that the Food and Drug Administration has published guidance on the scientific review process used to evaluate evidence for health claims.

4.5 European Food Safety Authority

Dr Juliane Kleiner, Head of Unit, Dietetic Products, Nutrition and Allergies, discussed the role of the European Food Safety Authority (EFSA) in nutrition legislation within the European Union. The EFSA provides advice on nutrition legislation and application of legislation as well as scientific guidance for European Union policies on food and food safety. The EFSA also offers assistance in improving risk assessment methodologies through providing guidance documents on methodology for assessing risks for food-related matters. The Dietetic Products, Nutrition and Allergies panel addresses issues in human nutrition, dietetic products and food allergies, assisted by working groups on the safety of novel foods, infant formula and dietetic food safety and suitability, the safety of tolerable upper intake levels, food allergies, dietary reference values and evaluation of scientific substantiation of claims.

Dietary reference values (DRVs) are reviewed on the basis of advice and opinions on the principles for deriving such values. DRVs for fats, carbohydrates, fibres and water, and food-based dietary guidelines were adopted in December 2009 and are being published. Establishment of DRVs requires EFSA to review scientific evidence on nutrients, conduct research on nutrients and health-related outcomes and give scientific advice on nutrient–health relationships. The EFSA also gives advice for the establishment of food-based dietary guidelines (FBDGs), which are science-based recommendations for healthy eating policies. FBDGs serve as the basis for recommendations for each country's needs, habits and public health.

The EFSA is involved in evaluating health claims, according to Regulation (EC) No. 1924/2006 of the European Parliament and of the Council of 20 December 2006, which affirms that claims should be assessed scientifically. The EFSA provided scientific advice on nutrient profiles and participated in compilation of a tailored database for testing nutrient profile scenarios. The EFSA also commented on proposed reference intake values for energy, fat, saturated fatty acids, carbohydrates, sugars, salt and n-3 and n-6 polyunsaturated fatty acids for labelling purpose.

4.6 Food Standards Agency, United Kingdom

Dr Clair Bayton, Head of Nutrition Division, and Dr Alison Tedstone gave an overview of the Food Standards Agency (FSA) by telephone from London. The FSA has recently engaged in work to reduce the intakes of salt, fat and sugar. Salt intake in the United Kingdom is high, at an average of 8.6 g/day. The FSA works in many different ways, including consumer awareness campaigns, partnerships with industry for healthier products and through international work, such as hosting a WHO conference on salt reduction at the end of June 2010 in order to share national experiences.

In the area of labelling, FSA is developing principles for stating the number of calories on labels, so that consumers can make informed choices in both supermarkets and restaurants. Front-of-pack labelling with traffic lights indicating the content of unhealthy components, such as fat and saturated fat, has been used for some time. Some companies are using FSA standards, whereas others use modified versions, e.g. with traffic lights in pastel colours. A consumer survey was conducted to assess what was useful as front-of-pack labelling.

In relation to risk assessment and risk management, FSA is undertaking systematic reviews based mainly of the results of randomized controlled trials rather than observational studies. All the reviews are subject to public consultation. Recent topic areas include folic acid, folic acid and cancer, iron and health, carbohydrates and vitamin A. In these reviews, the FSA most recent work of other agencies.

In the area of research, FSA aims to align its research agenda with other research published in the United Kingdom, by monitoring national dietary surveys and studies on food composition and food choices.

4.7 Institute of Medicine, United States of America

Dr Linda Meyers, Director, Food and Nutrition Board, Institute of Medicine (IOM) of the National Academies, described the work of the Institute on science, policy and nutrition. The IOM conducts ‘consensus committee studies’, which follow a set process, including public sessions, assessment of scientific advice and a rigorous review of the draft report, in order to ensure that the procedure is unbiased, authoritative and evidence-informed.

The Food and Nutrition Board focuses on diet, nutrients, health, food quality and food safety both domestically and internationally. The IOM also works on developing Dietary Reference Intakes (DRIs), primarily as scientific standards for Federal nutrition guidance and for various nutritional standards and programmes. Dietary guidelines are prepared, for instance, for recommendations for school meals. With the support of local government, the IOM has also supported consensus studies and models for obesity prevention, providing data that are easy to adopt and use. The IOM is initiating work on front-of-package nutrition rating systems and icons, to offer different approaches, recommend systems and aid in maximizing their use and effectiveness.

4.8 National Food Administration, Sweden

Professor Wulf Becker, Chief Nutritionist, Nutrition Department, described work in the Nordic countries—a cooperation that has extended to the Baltic countries, which have collaborated for several years in setting reference values for recommended intakes of nutrients. The current edition (4th) of the *Nordic Nutrition Recommendations* was published in 2004. Each revision has hitherto taken about 4 years and has been supported by the Nordic Council of Ministers. The *Recommendations* provide guidelines for the nutritional composition of a diet

that provides a basis for good health (i.e. satisfies nutritional needs) and contributes to reducing the risk for diet-associated diseases. The *Recommendations* are based on the current nutritional situation in the Nordic countries and are valid mainly for groups of healthy individuals. They also provide recommendations on physical activity and are used as the basis for national recommendations adopted by each of the Nordic countries. For more information, see http://www.norden.org/da/publikationer/publikationer/2004-013.

The fifth revision was initiated in 2009, mainly to revise text on those areas in which new scientific knowledge has emerged, such as energy balance, fat and carbohydrate quality, vitamin D, folate, calcium, iodine, food-based dietary guidelines and interaction between diet and physical activity. Chapters on nutrition for specific groups (children, the elderly, overweight people) will be incorporated, and new chapters (on overweight and obesity, groups in dietary transition and environmental aspects) will be considered. Systematic literature reviews will be conducted to minimize potential reporting bias through comprehensive, reproducible searches with clearly defined and described selection and reporting protocols. Established criteria will be used to evaluate the methodological quality of the studies that are included and the overall strength of the scientific evidence; this work will involve several stakeholders in a transparent process. The decision-making will be documented in detail and will involve a scientific reference group, which will be consulted for a general overview and on specific matters; a working group nominated by the Nordic Council of Ministers, which will lead the review and make the final proposal for the 5th edition; and a project steering group, which will monitor progress and ensure adherence to the project plan. The systematic literature review will be evaluated by external reviewers nominated by the working group. For more information, see the website of the Nordic Council of Ministers (www.norden.org).

Sweden has used ‘keyhole labelling’ for some time, whereas Norway and Denmark began to do so last year. This is a simple system based on the *Nordic Nutrition Recommendations*, which shows both a healthy alternative within a particular food group (e.g. bread) and healthy choices in general (e.g. fresh fruit and vegetables, fresh fish). The criteria include fat content and quality, sugars and salt. This labelling system is used extensively in Sweden, is well known to consumers (90–95% are aware of it) and is used by supermarkets (20–25% of food items sold are labelled). The system is voluntary and is the responsibility of retailers, food manufacturers and restaurants. Misleading labelling revealed during spot checks results in reclassification of an establishment.

4.9 Food Safety Agency, France

Professor Irene Margaritis, Head, Nutritional Risk Assessment Unit, presented the science-based dietary and nutrition guidelines of the French Food Safety Agency, which is responsible for scientific advice on nutrition. Various types of expertise are required at different stages of guideline development. Requests can come from the Ministry of Health, the Ministry of Agriculture and Fisheries, the Ministry of Economy, Finance and Industry, consumer associations or the Food Safety Agency itself. The resulting recommendations concern nutrient or food intake. The French dietary reference values were updated in 2001, and a number of recommendations for specific nutrients have been updated subsequently.

The first phase of the French National Programme on Nutrition and Health was 2001–2005 and the second was 2006–2010. The Programme formulates objectives for consumers and industry and for research or regional action. Targets are set in the areas of food, nutrients, physical activity, alcohol and obesity. The Agency's role is to provide the scientific background for food-based dietary guidelines (FBDGs) for health professionals and special groups. A series of related publications have been issued, including FBDGs for the general population and subgroups, for health workers for use in patient counselling and for special groups, such as adolescents, infants and young children.

The Food Safety Agency attempts to improve children's diets and reduce their consumption of unhealthy food. It has issued opinions on snacks in schools, vending machines and food marketing to children. Like food marketing to adults, commercials must include one of four health messages.

The Agency has devised a model to classify foods on the basis of qualifying (e.g. fibre, vitamin C, calcium) and disqualifying nutrients (e.g. fat, sugar, salt) in order to obtain a 'nutrient density score' and a 'limited nutrient score', both of which take into account a comparison with dietary reference values. The two scores are used to categorize foods in a two-dimensional system to validate their eligibility for health claims.

4.10 Food Standards Australia New Zealand

Ms Janine Lewis, Principal Nutritionist and Manager, Risk Assessment, Public Health Nutrition Section, and Dr Dorothy Mackerras, Chief Public Health Nutrition Advisor, described the system for providing advice on nutrition in the Food Standards Australia New Zealand (FSANZ), the regulatory agency responsible for all advice on food regulation and setting food regulations in Australia and New Zealand. Examples of such advice are substantiation of health claims, nutrient profiling as a tool for disqualifying health claims and a review of trans fatty acids.

'High-level' health claims are those for a food or property that affects health, resulting in serious disease or a biomarker. Seven possible relationships were examined. Some, such as sodium or salt intake and reduced risk for elevated blood pressure and folic acid and reduced risk for neural tube defects, were accepted, whereas relationships for which there was considered to be insufficient evidence were rejected, such as sodium and reduced risk for stroke and folate and reduced risk for neural tube defects.

The FSANZ has adopted nutrient profiling scoring criteria to assess the characteristics of a food vehicle that might substantiate a health claim. The system is based on the model of the United Kingdom Office of Communications (OfCom), and there have been four versions to date. The most recent version of the 'nutrient profiling scoring calculator' is described in detail elsewhere.[2] A technical report on the various versions is being prepared.

The FSANZ is examining the intake of saturated fatty acids and unsaturated fats with trans-isomers (trans fatty acids). As the intake of trans fatty acids is low (< 1% energy), the problem lies mainly in a high intake of saturated fatty acids. The goal is to reduce heart disease by reducing intake of trans fatty acids without increasing that of saturated fatty acids. If campaigns are conducted to reduce intake of trans fatty acids, there is a risk that people will replace margarine with butter. This is not desirable, as studies show a better lipid profile with margarine than with butter, although butter has less trans fatty acids. The FSANZ has therefore decided not to implement any regulation on labelling of food; instead, the two governments are working with industry to improve products.

[2] Food Standards Australia New Zealand. Proposal P293 Nutrition, Health & Related Claims Consultation Paper for First Review, 20 March 2009. (http://www.foodstandards.gov.au/_srcfiles/P293%20Health%20Claims%20Cons%20Paper%20FINAL.pdf)

5. Global Network of Institutions for Scientific Advice on Nutrition

The review of the activities and planned work of the participating institutions showed that there is a wealth of experience in giving scientific advice on nutrition and that a number of common priorities could benefit from synergy and collaboration. Each agency clearly plays an important role in public health leadership in nutrition, in which it is urgently needed, including attending Codex Alimentarius meetings. The Codex has repeatedly asked WHO to strengthen its provision of scientific advice on nutrition, and WHO is responding to this challenge by reviewing the WHO Nutrition Programme and setting new WHO guideline development process. The proposed establishment of the Global Network is also part of WHO's response. In the context of increasing globalization of the food market, greater synergy is needed in nutrition recommendations and guidance, especially to harmonize the methods for assessing evidence and concepts for both scientific (e.g. dietary reference values, health claims) and for policy (e.g. translating science into policy) purposes. Some agencies and institutions are already—although not always systematically—consulting and building on each other's work, and many expressed the will to increase cooperation, which should also benefit low- and middle-income countries.

In the discussion on the potential role and working mechanisms of the Global Network, the participants also addressed its membership and modus operandi and other topics of common interest.

5.1 Scope and roles

The main role of the Network would be to provide public health leadership in nutrition. Its scope would include risk assessment, followed possibly by some aspects of risk management. Dr Jørgen Schlundt, Director, Department of Food Safety, Zoonoses and Foodborne Diseases, WHO, explained that this path had been taken in the area of food safety, which had started as science-based advice for the Codex and expanded to include other activities, such as monitoring food and surveillance of disease and disease burden.

The participants discussed the activities listed below as potential areas for cooperation:

- ***Information exchange***. A first step will be to establish mechanisms for information exchange and dissemination, to secure a rapid, comprehensive flow of the wealth of information that exists within the Network of Institutions and possibly also to low- and middle-income countries. Documents to be shared include policy documents, legislation, reports (evidence assessments), research methods, certain types of data like food composition tables and possibly some surveillance data, environmental scans and other literature, in addition to a registry of guidelines. A second immediate step will be to establish a list of contact persons in the various agencies, with the Codex contacts. Guidance will be needed in the use or application of information from other countries or regions.

- ***Harmonization and synergy***. It will be important to explore how agencies assess and use evidence and the methods they use for assessing evidence. Thus, the methods used for analysing evidence for scientific purposes (e.g. dietary reference values, claims) should be harmonized, especially concepts such as acceptable ranges and appropriate cut-off points, like upper limits and tolerable upper limits, methods like extrapolation and functional outcomes, as well as research needs. The difficulty in evaluating the strength of evidence for nutrition with systems such as the Grading of Recommendations, Assessment, Development and Evaluation (GRADE) was acknowledged. Nutrition is a complex field, with a gap between efficacy and

effectiveness, as the context and delivery systems are often as important as the intervention itself; thus, randomized controlled trials are seldom feasible.

Many agencies, such as those in Canada and the United States, are already working together and have collaborated on setting dietary reference intakes (DRIs) and their scientific basis. The work of the United Nations University, in collaboration with FAO, WHO and UNICEF in 2007, coordinated by Dr Janet King and Dr Cutberto Garza, on harmonization of nutrient intake values was acknowledged as a valuable step.

It was further acknowledged that harmonization for policy, i.e. conversion of scientific advice into policy or translating risk assessment into risk management, might be more challenging when it had to be applied in all countries. Consultations, conflicts and bias disclosure could also be harmonized. The participants reached the conclusion that harmonization and synergy should be explored on a case-by-case basis. Harmonization is also called for in surveillance (i.e. indicators, biomarkers and their validation, methods, design and priorities), conversion of scientific advice into policy decisions (i.e. the logical progression from a health issue or exposure to a risk factor to a supply or demand measure) and policy development.

- ***Emerging issues.*** The possibility that the Network could address emerging issues was discussed. Such issues could include gaps in global projects, such as the 'Comprehensive Framework for Action' in relation to the food and financial crisis. While most research is donor-driven, the Network could act as a think tank to leverage focus and funding. The mechanisms into which the Network would feed should be defined; they might include the Codex Alimentarius Commission, the World Health Assembly and the FAO Committee on World Food Security. New topics of potential common interest are described in section 5.3, in order of priority.

- ***Common projects****.* As risk management must be country-specific, the participants agreed that, in areas for which there is a high degree of synergy, common projects could be explored with appropriate adaptation in order not to replicate work.

- ***Proposed establishment of joint FAO/WHO Expert Meetings on Nutrition (JEMNU)****.* As a concrete action, the Network would stimulate further development of this mechanism.

- ***Research agenda***. The Network could formulate a common research agenda, by identifying commonalities in existing agency research agendas and gaps at global level. WHO is sometimes asked to define a research agenda. Thus, while funding is an important aspect, the agenda should be formulated independently of such considerations.

- ***Capacity-building in low- and middle-income countries****.* The development and implementation of food and nutrition guidelines must be sound, as we live in a globalized world where food is a major trade item. Many of the agencies are already active in this area; some have regional offices that are building capacity (e.g. the United States Food and Drug Administration), arrange yearly training sessions (e.g. Health Canada), conduct on-the-job training (e.g. the French Food Safety Agency) or fund in-country training (e.g. Food Standards Australia New Zealand via AusAid).

5.2 Membership and modus operandi

Only some agencies that are major public institutions and exert a certain influence in discussions at the Codex attended this first meeting of the Network, and the participants recognized the importance of broader regional representation and representation of low- and middle-income countries, especially for capacity-building. They decided to involve a small group of active agencies, that had participated in the first meeting as the 'founding members' and to add additional agencies to secure better regional balance. Membership should be voluntary and could include several institutions in one country. The second stage would see expansion to more members, through the Codex with links to the International Food Safety Authorities Network (INFOSAN), which involves some of the same agencies as those in the Global Network of Institutions for Scientific Advice on Nutrition.

The Global Network should rely on a minimal secretariat and make the best use of modern technology, such as websites, 'share-points' and 'webinars'. Annual meetings could be arranged at opportunities such as meetings of Codex committees (i.e. the Committee on Food Labelling or the Committee on Nutrition and Food for Special Dietary Uses).

5.3 Topics of common interest

The participants discussed and ranked current and potential new topics of common interest for research and policy implementation. The most relevant current topics were considered to be prevention of obesity, marketing of foods to children and labelling and reformulation, followed by nutrient profiling, school nutrition and school meals, information to consumers and health claims. The most relevant new areas for cooperation were considered to be the effects of agricultural and health policy on health and nutrition, social protection such as social welfare and inequalities, and economic tools such as taxation and incentives, followed by procurement policies and food standards for trade.

6. Conclusions and next steps

The Network should start with risk assessment, with possible expansion into risk management, especially at the interface of nutrition and food safety where better risk assessment is needed. A clear role for the Network will be in knowledge management, with more sharing of information on methods for assessing evidence, new reports and a registry of guidelines. A mapping of agencies and contacts beyond the Codex should be conducted.
While there is much potential for harmonization and synergy, the scope and principles must be agreed upon and implemented according to country needs. There is also potential for common projects, but they will depend on the topic.

The next steps are to establish the Network, summarize the discussion and obtain feedback. Concrete actions include establishment of the founders' group, setting up an information platform for communication, and linking with the Codex and the proposed Joint FAO/WHO Expert Meetings on Nutrition (JEMNU).

In a second phase, projects for harmonization, synergy and collaboration could be pursued, for example in nutrient profiling, for which WHO is developing guidance.

WHO will provide a meeting report within 1 week for comments from the Network agencies and will arrange a telephone conference within a few weeks, with a possible meeting at the next meeting of the Codex Committee on Food Labelling in Quebec City, Canada, in May 2010.

Annex 1. List of participants

Members[1]

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Ms Chrystal Cheng, Intern, Nutrition Policy and Scientific Advice, Nutrition for Health and Development

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[1] Unable to attend: Mrs Nina Lødrup, Senior Adviser, Section for Consumers Affairs, Department of Legislation, Norwegian Food Safety Authority, Oslo, Norway; Dr Arnhild Haga Rimestad, Director, Norwegian Directorate of Health, Oslo, Norway; Dr Jenny Reid, Assistant Director, Joint Food Standards, New Zealand Food Safety Authority, Wellington, New Zealand; Mrs Merethe Steen, Head of Section, Consumers Affairs, Department of Legislation, The Norwegian Food Safety Authority, Oslo, Norway

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