EXPERT GROUP CONSULTATION ON SUPPORTING THE INFANT AND YOUNG CHILD NUTRITION THROUGH IMPROVING FEEDING PRACTICES AND THE FOOD ENVIRONMENT, WHO SOUTH-EAST ASIA REGION

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World Health Organization
Regional Office for South-East Asia
Expert Group Consultation on supporting the Infant and Young Child Nutrition through Improving Feeding Practices and the Food Environment, WHO South-East Asia Region

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# Abbreviations and acronyms

- **BMS**: Breast Milk Substitutes
- **CAC**: Codex Alimentarius Commission
- **CCF**: Commercial complementary foods
- **CCFL**: The Codex Committee on Food Labeling
- **CCNFSU**: The Codex Committee on Nutrition and Foods for Special Dietary Uses
- **DHS**: Demographic and Health Survey
- **FNG**: Fill the Nutrient Gap
- **HKI**: Helen Keller International
- **IYCF**: Infant and young child feeding
- **MICS**: Multiple Indicator Cluster Survey
- **NNS**: National Nutrition Survey
- **NCD**: Noncommunicable Diseases
- **NPM**: Nutrient Profile Model
- **RDA**: Recommended Dietary Allowance
- **SSB**: Sugar sweetened beverages
- **UNICEF**: United Nations International Children’s Emergency Fund
- **WFP**: World Food Programme
- **WHA**: World Health Assembly
- **WHO**: World Health Organization
1. Introduction

The early years present a critical window of opportunity to protect and promote healthy dietary patterns and food intake. This period offers the greatest potential to promote optimal child growth and development, through preventing malnutrition and other morbidities which result in intergenerational consequences for the child. The foods and feeding experience also play an important role in establishing food preferences and eating behaviours.¹

Sub optimum diets in young children remain a persistent bottleneck for development of young children and to achieving the Global Nutrition Targets and 2030 Sustainable Development Goal nutrition targets for child stunting, wasting and overweight.² While nutritious and safe diets and appropriate feeding practices continue to be supported by governments in South-East Asia Region, the poor dietary indicators in many countries highlight the need for a heightened focus on young child diets. The covid-19 pandemic and resulting socio economic downturn is also likely to have affected young child feeding.³

In WHO South-East Asia Region countries, many children do not have access to nutritious and safe foods during this critical time period. Diets often lack diversity and adequacy. The barriers to optimum child feeding include the inability to access high quality diets due to socio economic circumstances, and poor feeding practices influenced by knowledge gaps, culture and the changing food environment, including aggressive of commercial complementary foods and other processed packaged food marketing by industry.⁴ Dietary patterns are changing in the last decade or more, and indicates an increasing intake of commercially prepared ultra-processed foods and snacks such as biscuits and noodles often high in saturated fat or sugar and salt by young children. Commonly consumed items include instant noodles, biscuits and flavoured milk drinks and beverages, which are high in fat, sugar or salt, have a range of food additives and lacking in vital nutrients.⁵ ⁶ Children’s preference, convenience and low cost, drive purchase and feeding of these foods.⁷ Early feeding of such foods can displace breastfeeding, cause inadequate intake of nutrient rich foods, and negatively influence food habits and preferences. The problem is compounded by the availability of low cost, nutrient-poor, street vended out of home foods, which are also consumed by young children, especially in lower socio economic households.⁸

Child diets also in recent years have increasingly included commercial complementary foods (CCF). These are the product category of ‘Formulated Complementary Foods for Older Infants and Young Children’, Processed Cereal-Based Foods for Infants and Young Children’(CVS 74-1981) and canned baby foods as

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³ Transforming food systems for food security, improved nutrition and affordable healthy diets for all. Rome, FAO. https://doi.org/10.6060/cb4474en
⁹ Inter Regional meeting on informal food sector. WHO. 2019.
given by the Codex Alimentarius standards/descriptions. CCF are widely marketed, accessible and convenient and, driven by urbanization and lifestyle changes in Asia.\(^9\)\(^10\) Their nutritional composition and consistency have variable levels of salt, sugar and fat, macro and micronutrients. While they offer convenience, and some products are likely to be of high dietary quality, others maybe less healthy. Like other commercial food preparations, such products also contain additives, for which there is a dearth of new data on consumption by young children. The effects of such ultra processed foods on the gut microbiome and other effects are not available at present.

The alignment of CCF with national dietary recommendations for infants and young children in terms of nutrient composition, texture and taste are largely unknown for many of the products marketed and consumed across South-East Asia.\(^11\) Unregulated marketing of CCFs are of concern,\(^12\) and their promotion may not be aligned to the WHO Guidance on Ending the inappropriate promotion of foods for Infants and Young Children’ which covers the age group 6-36 months. (WHA 69.9).\(^13\)

Both commercial snacks and meals, as well as CCF’s, if fed regularly may displace nutrient-rich locally available, home prepared foods which WHO recommends should be the primary source of foods for infants and young children. The current child diets, which include CCF, commercially prepared meals and snacks such as biscuits and instant noodles and out of home foods from vendors and markets are likely to contribute to undernutrition, micronutrient deficiencies and/or overweight/obesity. A double burden of malnutrition, characterized by undernutrition, micronutrient deficiencies and overweight and obesity in young children across the Region bears evidence to the poor diets in countries. (Fig 1.1)

Figure 1.1 Trends in overweight, stunting and wasting in children under 5 years of age in South-East Asia (1986–2019)

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\(^9\) Commercially produced food products are foods intended for consumption among the general population, these include instant noodles, commercial yogurt, and snack food products such as chips, crisps or salted biscuit, cakes or sweet biscuits, juice drinks, chocolate/malted milks.

\(^10\) WHO SEARO document on complementary foods


\(^12\) http://www.fao.org/ag/humannutrition/32444-09f5545b88abeb00c3baf01a4502a36e4.pdf

\(^13\) WHO. Guidance on ending the inappropriate promotion of foods for infants and young children: implementation manual, WHO 2017
Data sources: JME 2020, in addition to the most up-to-date national surveys not already in JME 2020 (Appendix 1)
1.1 The Expert group consultation on supporting the infant and young child nutrition through improving feeding practices and the food environment

1.1.1 Outputs and scope of the meeting

WHO SEARO organized a Regional Expert Group Consultation on supporting infant and young child feeding through promoting appropriate feeding practices and a healthy food environment. The objective of the consultation was to seek expert guidance on optimizing healthy food intake in infants and young children aged 6-36 months, through discussion of current food environment issues and possible solutions. The consultation resulted in specific directions to WHO on actions to support Member States to improve young child diets.

The consultation was limited to three key aspects of young child diets: (i) home based foods (ii) unhealthy commercial meals and snacks including out of home foods (iii) commercial complementary foods. The underlying cross cutting themes considered were food affordability and access, poor feeding practices, service delivery to support infant and young child feeding, the food environment, information and technical resource gaps and needs.

Experts discussed and provided recommendations on the way forward to promote healthy feeding practices and optimize the food environment for infants and young children in the Region.

The framework for discussion

Support from WHO
- Policy and strategic planning
- Advocacy and communication
- Reviews and evaluations
- Guidelines and protocols
- Data and information systems
- Training and capacity building
- Programme implementation support
- Research, surveillance and surveys

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14 The consultation did not focus on milk and other liquid products categorized as BMS substitutes (follow on formulas and growing up milks).
2. Presentations by experts and moderated dialogue

2.1 Food environment and consumption of commercially produced snacks and food products and commercial complementary foods among young children.

*Prof Upul Senarath, Professor of Community Medicine and Chair, Faculty of Medicine, University of Colombo and Member, South-Asia Infant Feeding Research Network*

The increasing availability, accessibility and promotion of low cost commercially processed or ultra-processed snack foods, which are not expressly meant for children but often given to children as snacks or main meals, impacts optimal child feeding. A desk review commissioned by WHO SEARO examined the data on availability, accessibility and consumption of ultra processed commercial snacks and foods including out of home foods and on the intake of commercial complementary foods (CCF) in children under five years of age in Bangladesh, India, Nepal, Sri Lanka, and Thailand. After screening for eligibility and assessment for quality resulted in a final 185 publications and reports published between 2005 and 2021 were included in the review. Data on Infant and Young Child feeding (IYCF) indicators were analyzed disaggregated by age, residence, household wealth quintile, and maternal education. Data on intake of snacks and specific foods were obtained from DHS in Bangladesh, Nepal, and Sri Lanka, National Family Health Surveys in India, and National Food Consumption Surveys in Thailand.

2.1.1 Complementary feeding indicators

The complementary feeding indicators in the five countries show a wide variation (Fig 2.1). The situation with regard to the food environment and sub optimum foods is concerning.

Figure 2.1 Complementary feeding indicators in five countries.

15 The recently published indicators for assessing infant and young child feeding practices were not used as the data from countries was collected prior to 2021.
The lack of dietary diversity was a problem in countries, with data indicating a higher consumption of grains and roots, and less of legumes, nuts, eggs and flesh foods. (Fig 2.2)\textsuperscript{17}

Figure 2.2. Consumption patterns by food group

\textbf{2.1.2 Evidence of consumption of commercial snacks, foods and beverages}

Across all countries, children’s consumption of snack foods and beverages rose between 6-11 months, after the exclusive breastfeeding period, and a more rapid rise was seen between 2-3 years of age. Commercially produced foods typically eaten between meals or as the main meal included sugary foods such as chocolates, sweets, candies, pastries, cakes or sweet biscuits and the savoury foods were fried chips, crisps or salted biscuits and instant noodles. Biscuits were the most highly consumed food item in Bangladesh, India, Nepal and Sri Lanka. In Thailand, flavoured jellies and ice creams were among the top 10 commercial products consumed. Comparison of data between national surveys between 2005 to 2019 indicated an increasing trend in the intake of sugary snacks (biscuits and sweets) and salty snack foods (salty crackers), commercial complementary food (fortified cereals), and sugar sweetened beverages (carbonated drinks, fruit juices).

\textit{Description of foods consumed by young children}

\textbf{India:} consumption of sugary milk tea was high across the country. 78% of young children in the slums of Delhi consumed sugary foods such as halwa, candies, and other confectionary, and 64% consumed packaged snack foods like biscuits (Houghton et al., 2020). In a Mumbai low income area, 79.7% caregivers fed children with locally manufactured, ready-to-use, ultra-processed snacks like chips, puffed rice, biscuit, or a crispy puff (Palwala et al., 2009).

\textbf{Nepal:} Sugar Sweetened Beverages (SSB) were consumed by 14% of children and aged 6-23 months and 25.1% of children aged 24-59 months (NDHS 2016). 62.6% and 80.6% children aged 6-23 months and 24-59 months respectively ate sweet foods, (NDHS 2016).

\textbf{Sri Lanka:} no infants under six months had soda or cola drinks. SSB consumption was reported in about 7.6%, and colas in 2.8% of older children. (DHS 2016). 14.4 % children aged 6-12 months consumed sugary foods such as chocolates, toffee or cakes, in 12-59 month children the level of consumption was a high 43% - 54% (SL DHS 2016). Biscuits were introduced during the first half of infancy (4.5%), and the consumption rates increased by more than 10-fold by the second half of infancy (52.9%) and further increased in the subsequent years (75%-80%). (SL DHS 2016)

\textbf{Thailand:} approximately 25 % of children consumed cola-flavoured carbonated drinks at 0-2.9 years. Thai children consumed more savoury snacks than sugary snacks. The consumption rates for flavoured jellies and ice creams were 27.2% and 60.7%, respectively (NTFCS 2016)

\textsuperscript{17} Report
Sugar sweetened beverage intake was high in preschool children in all countries, especially after the 2nd year, often consuming sweetened fruit juice, a home-made preparation popular in South-Asia. Child demand, taste and thirst were reasons provided for intake.

Mothers with lower education were more likely to provide commercial snack foods such as biscuits and noodles and beverages to their children. Child preference, keeping child calm, the influence of older children, easiness to feed, easy access and availability were reasons for feeding such foods. Some studies reported that industries’ aggressive marketing strategies and enticing advertisements tempted mothers/caregivers to feed commercial foods.

2.1.3 Consumption of commercial complementary foods-
Commercial complementary foods (CCF) refers to commercial products targeting infants and young children aged 0–36 months and those that are in any other way presented as suitable for children under the age of 36 months. Most CCFs in the South-East Asia Region were cereals. Consumption was low among infants aged 0-5 months, increased in the 6-11 months age group, was sustained up to two years and declined thereafter. Socio-economic and environmental factors influenced consumption of CCF—consumption was higher in urban than rural areas, and children of working mothers. Most national surveys have not distinguished CCF from non-commercial cereal-based foods, and thus reported rates may include both, and also include supplementary food provided through government programmes.

Commercial and non-commercial complementary food consumption

<table>
<thead>
<tr>
<th>Country</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Bangladesh</td>
<td>Consumption of commercial cereal products peaked during the 6-11 months period (BDHS 2017-18).</td>
</tr>
<tr>
<td>India</td>
<td>Fortified baby foods were consumed by 13.9%-17.0% of breast-fed infants aged 6-11 months (NFHS 2015).</td>
</tr>
<tr>
<td>Nepal</td>
<td>Consumption of fortified baby food increased to 11.4% during 6-12 months and 5.9% during the age 12-23 months, which also included supplementary foods provided by programmes. These included cerelac, sarbottam pitho/lito, unilito, nutrimix (Nepal DHS 2016)</td>
</tr>
<tr>
<td>Sri Lanka</td>
<td>Intake of fortified baby food increased (39.2%) at 6-11 months and maintained during the subsequent years. (SL DHS 2016). The specific food items included Thriposha given to underweight, UW, MAM and long standing growth faltering children are given (National Programme on food supplement for undernourished &lt;5 years olds), Corn Soya Blend (CSB), and Samaposha (commercial product not specifically targeting young children).</td>
</tr>
<tr>
<td>Thailand</td>
<td>13.6% of children aged 0-2.9 years consumed pre-packaged infant cereals, and 13.3% pre-packaged corn flakes. (NTFCS 2016)</td>
</tr>
</tbody>
</table>

18 Implementation Guidance on Ending the Inappropriate Promotion of foods to young children
2.2 Nutrition content, accessibility and affordability of young child diets

Britta Schumacher, World Food Programme Regional Bureau for Asia and the Pacific

Many children in South-East Asia don’t achieve a minimum acceptable diet. Children from urban areas, wealthier and high socioeconomic status tend to do better. Inequalities exist in Asia with regard to infant and young child food intake and with support provided to caregivers. Information was presented using data from the WFP’s Fill the Nutrient Gap (FNG) surveys in 12 countries in Asia. The FNG analysis combines secondary data analysis with linear programming to assess the affordability of a nutritious diet for households or an individual.19

2.2.1 Drivers of dietary choices: information from the fill the nutrient gap (FNG) surveys of WFP

Drivers of dietary choices are many and include access, affordability and seasonal availability, resource constraints and other practical elements such as caretaker knowledge and feeding practices, women’s workload and time, cultural practices, storage and cooking processes. The relative influence of these varies between and within countries. Child preference is an important driver of selecting snacks, as is affordability as evidenced by formative research.

2.2.2 Affordability of energy sufficient vs nutrient adequate diets.

Affordability of a nutrient adequate diet is a major constraint reported by the Fill the Nutrient Gap (FNG) data from multiple countries. For households, nutritious diets costs 2 - 3 times more than starchy diets low in vital nutrients. As diet diversity increases, the costs escalate. Timor Leste’s FNG data shows that the additional cost to meet the nutrient requirements is a significant gap for families. Most of the cost and affordability are driven by costs of fruits, vegetables and animal source foods, but in some instances, overconsumption of rice and snacks also increase the cost of diets.

While the overall cost of a nutritious diet for young children is very small compared to other household members, young children’s food intake is related to knowledge and practices of caregivers on child diets and feeding. Also, since foods are sourced for the household and not just for the young child, there may be difficulties faced in overall affordability. The limiting nutrients for young children and lactating women are often vitamin B1, B12, Iron, Calcium and Zinc. Variations in the cost of young child diets from Nepal and Indonesia provides important evidence that several practices are important enablers or disablers of a nutritious diet.

- When breastfeeding, the cost of the nutritious diet is on average* 1/3 less for adequately breastfed children compared to those who are not breastfed, underscoring the importance of continued breastfeeding up to 23 months and beyond.
- In Nepal, consumption of salty biscuits, sugary drinks and crisps raises the cost of the diet, as households need to purchase other nutrient dense foods to fill gaps.
- Modelling the cost of diet and risks in Indonesia showed that adding unhealthy or non-recommended foods markedly increases the cost of diet and risk of overweight.
  - if the child consumes one portion of cookie or SSB, the cost of meeting -their daily nutrient needs increases 50% 105%.

19 The FNG engages stakeholders from different sectors throughout the analytical process to provide input and discuss findings to collectively identify and prioritize context-specific strategies.
- “Growing Up Milks*,” which have a sugar content similar to SSB, increase the cost of the nutritious diet up to 131%. If a child consumes both cookie and SSB in the same day, it becomes impossible to meet her/his nutrient needs without exceeding their calorie target, and thereby increasing the risk of overweight.

- Indonesia’s data show that recipes for complementary feeding can meet nutrient needs, but some recipes cost more. Meals with diverse vegetables and nuts can deliver nutrients at a low price.
- Modelling data from Nepal show that social transfers, fortified foods, multiple micronutrients or other fortified supplementary foods can increase affordability of diets for vulnerable households and family members.

2.2.3 Considerations for Actions

Maternal, infant and young child nutrition

When promoting healthy complementary feeding recipes using locally available foods, consideration of cost of foods/meals and affordability by varying groups (urban/rural etc) is vital. Caregiver time, practical constraints and convenience must also be considered when promoting nutritious complementary feeding choices. Investing in formative research to understand the varying constraints and the practices of caregivers and wider social influences and use tailored evidence based social behavior change communication (SBCC) to encourage the purchase and consumption of nutritious foods and discourage unhealthy snacks is essential.

Improving diets of the most vulnerable through social/public transfers

Ensure social cash transfers covers the cost of a nutritious diet for children under 2 years. Social assistance or health programmes could be a platform for the provision of nutrition interventions (such as in-kind food/cash transfers, SBCC) tailored to the needs of -- pregnant and lactating women and children aged under 2 year).

Food value chains

Provide incentives and training to value chain actors to produce healthy fortified staple foods at affordable prices

Use regulations and governance to disincentivize the production, promotion and retail of unhealthy foods. Developing and enforcing food safety and quality standards in retail outlets is also important.
2.3 Commercial complementary foods.
Angela de Silva WHO RO, Larry Grummer Strawn WHO HQ

Across WHO South-East Asia Region (WHO SEA Region) countries, commercial complementary foods (CCF) are increasingly available and widely marketed. There is little evidence regarding the nutrient composition and labelling practices of CCFs in most countries in the Region. Composition and labelling for CCFs are usually guided by Codex standards.

2.3.1 Increasing consumption trends for commercial complementary foods (CCF)

Year wise sales volumes for the 10 year period from 2015-2024, with 2021-2024 being predicted, of baby food in four countries (Bangladesh, India, Indonesia and Thailand) show a slow rise in sales volumes of CCF. (Fig 2.3)

Figure 2.3 Sales volumes of baby foods and milk formula

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**Bangladesh Sales Volume in 000 Tonnes**

<table>
<thead>
<tr>
<th>Year</th>
<th>Sales Volume</th>
</tr>
</thead>
<tbody>
<tr>
<td>2015</td>
<td>3.27</td>
</tr>
<tr>
<td>2016</td>
<td>3.44</td>
</tr>
<tr>
<td>2017</td>
<td>3.59</td>
</tr>
<tr>
<td>2018</td>
<td>3.75</td>
</tr>
<tr>
<td>2019</td>
<td>3.91</td>
</tr>
<tr>
<td>2020</td>
<td>4.08</td>
</tr>
<tr>
<td>2021</td>
<td>4.25</td>
</tr>
<tr>
<td>2022</td>
<td>4.42</td>
</tr>
<tr>
<td>2023</td>
<td>4.59</td>
</tr>
<tr>
<td>2024</td>
<td>4.76</td>
</tr>
</tbody>
</table>

**India Sales Volume in 000 Tonnes**

<table>
<thead>
<tr>
<th>Year</th>
<th>Sales Volume</th>
</tr>
</thead>
<tbody>
<tr>
<td>2015</td>
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</tr>
<tr>
<td>2016</td>
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<tr>
<td>2022</td>
<td>47.0</td>
</tr>
<tr>
<td>2023</td>
<td>48.2</td>
</tr>
</tbody>
</table>

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24. WHO EURO Nutrient Profile Model for Commercial Complementary Foods


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Euromonitor defines Baby Food as ‘aggregation of milk formula, prepared, dried and other baby food’. Therefore, for reporting sales data of Breast Milk Substitutes (BMS) and complementary food (CF) the same definition. In Euromonitor, Milk Formula is considered as BMS while prepared, dried and other baby food together forms CF.
2.3.2 The Guidance on inappropriate promotion of foods for infants and young children (The Guidance)

WHO’s Guidance on ending the inappropriate promotion of foods for young children (2017) was in response to the ongoing inappropriate promotion of foods to young children that undermines optimal IYCF. Unhealthy food and drinks are being marketed for consumption by young children, and greater protection is needed against marketing of such products. The purpose of The Guidance is to protect breastfeeding, prevent obesity and NCDs, promote a healthy diet and provide accurate and clear information on feeding. The term “foods” in the Guidance refers to all commercially produced food or beverage products (including complementary foods) that are specifically marketed as suitable for feeding infants and children from 6-36 months of age and includes foods provided through government and non-profit programmes. Inappropriate promotion of CCF can confuse caregivers about their nutrition and health-related qualities, age-appropriateness and safe use and mislead caregivers into thinking that family foods are inadequate, and thereby create a dependence on expensive commercial products. The Guidance complements the International Code of Marketing of Breast-milk Substitutes (referred to as ‘The Code’) and subsequent relevant World Health Assembly (WHA) resolutions (WHO, 1981).

The main recommendations of The Guidance are summarized below:

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27 Such programmes make a meaningful contribution to the diets of children and do not simply induce the families to buy more of the product. Only officially sanctioned health programmes* must supply such products, and unbranded packaging (or a brand created just for the programme) is used to prevent the use of the programme as means of brand promotion, and/or product introduction onto the market.
Promotion of foods for infants and young children is considered inappropriate if:

- it undermines recommended breastfeeding practices, contributes to obesity and NCDs, creates a dependency on commercial products, or otherwise is misleading.
- it does not make an appropriate contribution to infant and young child nutrition in the country
- the product fails to adhere to all applicable standards for safety and nutrient composition
- it undermines the use of suitable home-prepared and/or local foods and discourages a diverse diet based on a wide variety of foods, including minimally processed fruits, vegetables, and animal-source foods.
- it is misleading, confusing, or could lead to inappropriate use, for instance through health and nutrition claims.
- Nutrition and health claims or endorsements shall not be permitted for foods for infants and young children except where specifically provided for in relevant Codex standards or national legislation.

Promotional claims idealize the product, imply that it is better than family foods, and mask the risks of consumption, and disadvantage unprocessed, nutritious family foods.

Provisions for all complementary foods:

- Only promote foods meeting all the relevant national, regional and global standards for composition, safety, quality and nutrient levels and are in line with national dietary guidelines. Develop nutrient profile models to guide decisions especially focusing on salt, sugar, saturated fat, and trans fatty acids.
- Messages should include a statement on for the importance of breastfeeding through 2 years and no complementary foods to be given to a child under 6-months of age. The recommended age of introduction should be stated in in easily understood form.
- Messages should not discourage breastfeeding or imply that the product is nutritionally equivalence to breast milk; nor should the messages promote bottle feeding or convey endorsements. No cross promotion of BMS should take place using other products, and there should be a differentiation of designs, labels, slogans, logos between BMS and CCFs.
- The implementation manual for The Guidance provides -information on identification of products, scope, situation assessment of current regulations, political commitment, government-led coordination mechanisms, strengthening legal, regulatory frameworks, monitoring and enforcement, and the periodic evaluation of products to assess alignment with the guidance.

The Guidance recognizes that application of current Codex standards on nutrient composition, particularly for added sugars and salt, are inadequate for defining whether a particular food is appropriate for promotion for infants and young children. Therefore, one recommendation emphasizes that relevant Codex standards should be updated, or new standards and guidelines developed where needed, to be in full alignment with current WHO guidance. Implementation of the Guidance by countries has been slow.
2.3 Nutrient profiling/benchmarking of selected products from South-East Asian countries.
Prof Nazli Khatib, Prof Abhay Gaidhane, and Prof. Quazi Syed Zahiruddin, Center for Global Evidence Synthesis Initiative (GESI), and Division of Evidence Synthesis, School of Epidemiology and Public Health Datta Meghe Institute of Medical Sciences, India & South Asia Infant Feeding Research Network

A preliminary collection of labelling and promotional information of CCF products marketed as appropriate for 6-36 months old children was done in India, Sri Lanka and Thailand in 2019/2020. Data was also collected from the Maldives but not analyzed completely. The data was examined, and CCF products were categorized into 5 food categories including 15 subcategories as per the WHO EURO Nutrient profile model (WHO EURO NPM). The data from the labels were examined and compared against the nutritional composition standards and labelling and promotional criteria of the WHO EURO NPM. Some aspects of marketing were not assessed since information was not collected.

2.3.1 Overview of products and their characteristics and benchmarking

<table>
<thead>
<tr>
<th>Country</th>
<th>India</th>
<th>Sri Lanka</th>
<th>Thailand</th>
<th>Maldives</th>
</tr>
</thead>
<tbody>
<tr>
<td>Data available for</td>
<td>279</td>
<td>121</td>
<td>156</td>
<td>79</td>
</tr>
<tr>
<td>Total products that could be evaluated using EURO criteria</td>
<td>242</td>
<td>81</td>
<td>156</td>
<td>69</td>
</tr>
<tr>
<td>No of products (imported and local)</td>
<td>Local: 70% Imported 18%</td>
<td>Local: 31 % Imported -69 %</td>
<td>Information not provided by collected data</td>
<td>All products imported- mostly South-Africa</td>
</tr>
<tr>
<td>Company with maximum brands</td>
<td>Heinz (28), Nestle (23), Gerber (23),</td>
<td>Only organic: 27% Belly bees: 18%</td>
<td>Peachy: 17% Heinz: 10%</td>
<td>Purity 60% Nestle 05%</td>
</tr>
<tr>
<td>Food containers- pouches with spouts</td>
<td>India: 8.26%,</td>
<td>Sri Lanka: 38.2%,</td>
<td>Thailand: 20.5%</td>
<td>02%</td>
</tr>
<tr>
<td>Nutrient panel information present in most products</td>
<td>+</td>
<td>+</td>
<td>+</td>
<td>+</td>
</tr>
<tr>
<td>Nutrient content panel details</td>
<td>Some CCFs did not provide nutritional information per 100g or 100ml, and provided per serve information</td>
<td>All CCFs provided nutritional information per 100ml or 100g and two thirds provided serving sizes</td>
<td>All CCFs provided nutritional information per 100ml and 100mg and approximately 70 % gave serving sizes</td>
<td>All CCFs provided nutrition information per 100ml and 100mg, and approximately 85 % provided serving size.</td>
</tr>
<tr>
<td>Product cost</td>
<td>Mean ±SD: 308.11±167.93 INR</td>
<td>SRL Mean± SD: 753.45±507.30 LKR</td>
<td>Mean ±SD: 81.92±40.67 THB</td>
<td>IQR: 37</td>
</tr>
</tbody>
</table>

28 Different categories of physical retailers selling CCF were identified and a flexible purposive sampling of products, targeting infants and young children (6-36 months), was conducted in the most populous cities Delhi, Bangkok and Colombo. Online sites were also searched for products. Labels were photographed from all sides and details documented.

29 The NHD unit at WHO SEARO in 2019, collected CCF product labelling information for CCFs marketed and available in retail settings from three SE Asian countries: India, Sri Lanka, and Thailand. This data, though incomplete, was used to evaluate the available CCF products, and their nutrient composition and labelling and marketing practices against the WHO EURO criteria, and characterize the CCFs available in the three countries.

30 Missing data, not possible to categorize
2.3.2 **Products meeting nutrient composition criteria**

According to the thresholds set by the WHO EURO NPM, and through the preliminary analysis, only 17% of products from India, 20% from Sri Lanka and 48% from Thailand met all nutrient composition criteria. Data for added sugar or sweetening agent was not available for many CCFs from India and Thailand, and hence, could not be assessed if they met the nutritional requirement. Details of CCF’s benchmarked against the nutrient composition criteria proposed in the EURO NPM are given below.

**India – proportion of products meeting NPM criteria for sweetening agent, energy density, total fats, sodium thresholds.**

<table>
<thead>
<tr>
<th>Category</th>
<th>Added Sugar or sweetening agent</th>
<th>Energy Density</th>
<th>Total Fats</th>
<th>Proteins</th>
<th>Sodium</th>
<th>All nutrient criteria (except added sugars)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Dry, powdered, and instant cereal/starchy food (n=143)</td>
<td>Data not available for 63.88% of products. 36.12% products had added sugars.</td>
<td>No threshold recommendations provided</td>
<td>75 (53%)</td>
<td>43 (30%)</td>
<td>34 (24%)</td>
<td>23 (16%)</td>
</tr>
<tr>
<td>2. Soft-wet spoonable, ready-to-eat foods (n=35)</td>
<td>Data not available for 80% of products. 20% products had added sugars.</td>
<td>15 (43%)</td>
<td>11 (31%)</td>
<td>4 (11%)</td>
<td>20 (57%)</td>
<td>7 (20%)</td>
</tr>
<tr>
<td>3. Dry finger foods and snacks (n=46)</td>
<td>Data not available for 52.17% of products. 47.83% products had added sugars.</td>
<td>10 (22%)</td>
<td>18 (41%)</td>
<td>No threshold recommendations provided</td>
<td>18 (39%)</td>
<td>8 (17%)</td>
</tr>
<tr>
<td>Total (n=212)</td>
<td>Data not available for 63.96% of products. 36.04% products had added sugars.</td>
<td>25 (11%)</td>
<td>54 (60%)</td>
<td>47 (21%)</td>
<td>72 (32%)</td>
<td>38 (17%)</td>
</tr>
</tbody>
</table>

**Sri Lanka - proportion of products meeting NPM criteria for sweetening agent, energy density, total fats, sodium thresholds.**

<table>
<thead>
<tr>
<th>Category</th>
<th>Added Sugar or sweetening agent</th>
<th>Energy Density</th>
<th>Total Fats</th>
<th>Proteins</th>
<th>Sodium</th>
<th>All nutrient criteria</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Dry, powdered, and instant cereal/starchy food (n=19)</td>
<td>7 (37%)</td>
<td>No threshold recommendations provided</td>
<td>7 (37%)</td>
<td>7 (37%)</td>
<td>7 (37%)</td>
<td>5 (26%)</td>
</tr>
<tr>
<td>2. Soft-wet spoonable, ready-to-eat foods (n=52)</td>
<td>30 (58%)</td>
<td>31 (63%)</td>
<td>33 (63%)</td>
<td>9 (17%)</td>
<td>31 (60%)</td>
<td>8 (15%)</td>
</tr>
<tr>
<td>4. Dry finger foods and snacks (n=10)</td>
<td>10 (100%)</td>
<td>3 (30%)</td>
<td>10 (100%)</td>
<td>No threshold recommendations provided</td>
<td>10 (100%)</td>
<td>3 (30%)</td>
</tr>
<tr>
<td>Total (n=81)</td>
<td>47 (58%)</td>
<td>36 (44%)</td>
<td>50 (61.73%)</td>
<td>16 (20%)</td>
<td>48 (59%)</td>
<td>16 (20%)</td>
</tr>
</tbody>
</table>

**Thailand - proportion of products meeting NPM criteria for sweetening agent, energy density, total fats, sodium thresholds.**
2.3.3 Micronutrient fortification of products

Most CCFs that were fortified were cereal-based products. Nearly half of the products from India were fortified with iron and calcium, a quarter with folic acid, zinc and vitamin D. Very few (only 2%) were vitamin A fortified. 35-45% of the CCFs from Sri Lanka were fortified with micro-nutrients including Vitamin A. In Thailand, most (88%) of the CCFs were fortified with vitamin D, 75% with iron and calcium, and over 50% with vitamin A. Very few were fortified with folic acid (5%) or zinc (9%).

2.3.4 Labelling and promotions benchmarks of the WHO EURO NPM

Visual information

Most CCFs had visual information which ranged from cartoon images, picture of a baby as logo, and images/picture of foods. Additionally, Thailand had visual images in the form of a claim of endorsement by a professional body and carried a comparative claim.

Product statements
- unsuitability for infants < 6 months was well adhered to except few products which had messages such as “For growing kids”, “For little ones who are ready for all grains and nuts”, “For little ones who are ready for solids”.
- importance of continued breastfeeding for up to 2 years and beyond – No data available.
- importance of not introducing complementary feeding before 6 months of age – No data available. 31

Permissible statements

CCF labels statements relating to common allergens (such as gluten-free or contains gluten; dairy/lactose-free or contains dairy/lactose; nut-free or contains nuts), religious or cultural food requirements (such as meat-free, or vegetarian, or contains meat; Kosher; Halal), and descriptive words within the ingredient list (such as organic carrots and wholegrain wheat flour). Most products carried a range of claims on nutrients and health.

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<table>
<thead>
<tr>
<th>Criteria description</th>
<th>India</th>
<th>Sri Lanka</th>
<th>Thailand</th>
</tr>
</thead>
<tbody>
<tr>
<td>Visual information present</td>
<td>98 %</td>
<td>94%</td>
<td>100 %</td>
</tr>
</tbody>
</table>

---

31
Age restrictions | 59% | 86% | 72%
Nutrient claims | 97% | 38% | 84%
Health claims | 28% | 38% | 26%
Promotions | 9% | 17% | 12%

While the WHO EURO NPM was useful to carry out an initial benchmarking, there are several challenges which complicates its use, and a revised model would be best for implementing regulatory actions in South-East Asia.

2.3.5: WHO EURO NPM and its applicability to SEAR to address the inappropriate promotion of CCFs

Food categories
Many food categories in the NPM were not aligned with codex food categories, which would cause product identification problems. The five main food categories and 15 sub-categories were also excessive, especially considering the product range was narrow in the countries assessed. Some products such as dry, non-powdered cereal foods (noodles) or dried meats in Asian markets) could not be categorized.

Micronutrient thresholds
Since the current addition of micronutrients is based on Codex standards, it may not be necessary to set micronutrient thresholds. However, further discussion is needed on inclusion or exclusion of micronutrients in the NPM criteria for SEA Region, since it may lead to spurious value addition claims. The capacity of countries to monitor micronutrient levels also needs consideration.

Scoring type of nutrient profile
Since a double burden of malnutrition exists in Asian countries, a scoring type of nutrient profiling could be considered, including nutrients of concern and those that are important to consume.

Labelling information
Categorization of labelling information was subjective, and based on perception. Nutrient content claims and multiple health claims, as well as quasi health claims were common. Guidance on claims specific to CCF could be considered in a future NPM.

2.4 Commercial Complementary Food (CCF) Standard for Nepal: Going Beyond Codex

Nisha Sharma, Helen Keller International

Usually countries consider Codex standards as the benchmark, but there are some gaps and policy incoherence when considering WHO ‘s Guidance on inappropriate promotion and new product standards and guidelines developed where needed.

For example, the Codex Guidelines on Formulated Complementary Foods for Older Infants and Young Children do not have a compositional requirement for total sugar, added/free sugar, sodium/salt, total fat, saturated fat or trans-fatty acids.

Evidence from nutrient profiling of CCF could be used in advocating for the need of the standards and other regulatory mechanism for commercial food products, lack of which may have implication on child growth and development.

Helen Keller International (HKI) provided technical support to the Govt of Nepal to set compositional criteria for CCF’s.

Some identified gaps in Codex compositional standards are shown below.
Other considerations - included if there is a need for more age specific standards and also if the country had capacity to assess any standards that maybe set.
UNICEF provides a systems based action framework to improving complementary feeding in South-East Asia.

UNICEF has been working on regional and national initiatives to improve complementary feeding with a focus on strengthening country implementation of the WHO Guidance on ending the inappropriate promotion of foods for infants and young children. The Consortium for Improving Complementary Foods in Southeast Asia (COMMIT) initiative led by UNICEF is in response to the call to ensure the quality of Commercial Complementary Foods through development of nutrient profile models to guide decisions on which foods are inappropriate for promotion.

2.5.1 Strengthening the implementation of the Breast-milk Substitutes Code in Southeast Asia

A high proportion of countries in Southeast Asia include CCF under their national Code legislation. There is momentum in the Region to further strengthen national Code legislations and to develop binding legal measures to protect children from the marketing of unhealthy foods and nonalcoholic beverages. In order to do so, countries are reviewing their code legislation to ensure it includes the recommendations of The Guidance.

2.5.2 Major challenges to implementing The Guidance

- Recommendation 3 of -The Guidance that are not BMS and their promotion is not widely adopted due to lack of clarity on its interpretation and on how to approach its implementation.
- While the Recommendations of The Guidance are increasingly under review for national legislation, links to ongoing efforts to update The Code legislation are often weak or missing and there is an unclear focus on children 6-36 months of age.
- The WHO set of recommendations on the marketing of foods and non-alcoholic beverages to children should be fully implemented, as alluded to in The Guidance. While foods marketed to
children may not be specifically intended for infants and young children, they may, nevertheless, be consumed by them.

Even among countries with robust national legal measures for implementing The Code, only few have well functioning monitoring and enforcement systems. Challenges to a well-functioning monitoring and enforcement system were reviewed in five South-East Asian countries (and included the existence of a complicated monitoring system, inadequate human resources, lack of sustainable government allocated financial resources for monitoring and enforcement. A strong leadership, commitment, and coordination of government bodies is needed to ensure strong monitoring and enforcement of The Code legislation and subsequent relevant WHA Resolutions.

Going forward, nutrient profile models for complementary foods need to be easily interpreted and CCFs monitored for inappropriate promotion. Development of legislation should be alongside behavior change communication campaigns to improve caregiver and wider society awareness on what constitutes an unhealthy commercial complementary food and types of appropriate complementary foods. Multiple strategies should be implemented to limit the consumption by infants and young children of foods that are unsuitable for them.

2.6 Codex standards and Guidelines applicable to infants, older infants and young children

Chizuru Nishida, WHO HQ

The Codex standards & guidelines on foods for infants and young children describes the complementary feeding period as 6 months with continued breast feeding up to 2 years or beyond, (formulated complementary foods guideline).32

<table>
<thead>
<tr>
<th>Age group categories as in Codex Alimentarius Guidelines on formulated complementary foods...</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Infants</strong> – persons not more than 12 months of age</td>
</tr>
<tr>
<td><strong>Older infants</strong> – persons from the age of 6 months and not more than 12 months of age</td>
</tr>
<tr>
<td><strong>Young children</strong> – persons who are more than 12 months up to the age of 3 years (36 months)</td>
</tr>
</tbody>
</table>

Many of the Codex standards and guidelines, in the preamble or as part of the text or a footnote, refers to WHO Guidance and resolutions, which provides countries with a mandate to bring in specific standards and provisions related to the WHO resolution. The Codex Alimentarius document on Nutrition and Health Claims CAC/GL23- 1997 state that “Nutrition and health claims shall not be permitted for foods for infants and young children”, except when such a provision is allowed in the country’s own food and packaging regulations.

2.5.1 Clarification on breast milk substitutes
Toddler milks and growing up milks are heavily promoted and sold. While in some countries, these products come under the scope of The Code, and are strictly regulated- depending on the age groups covered by The Code legislation such as in India, in others it is not so. The Guidance considers any milks specifically marketed for feeding infants and young children up to the age of 3 years (including follow-up formula and growing-up milks) as Breast Milk Substitutes (BMS). While the Codex standards and guidelines do not directly state that follow on formulas and growing up milks beyond 12 months are BMS, the new revisions contain a footnote which alludes to the WHO resolutions, where countries who wish to do so can classify these under BMS. (see below)

2.5.2 The Codex standards and guidelines pertaining to formula milks and Formulated complementary foods (CCF’s) are mandated under the following codex committees and functions.

The Codex Committee on Nutrition and Foods for Special Dietary Uses (CCNFSDU) is mandated to study specific nutritional problems and advise on general nutrition issues, draft provisions as appropriate and develop standards and amendments for foods for special dietary uses: follow up formula, formulated complementary foods, Ready-To-Use-Therapeutic Foods (RUTF) and harmonized nutrient profiles for front of pack labelling fall under this committee.

The Codex Committee on Food Labelling (CCFL) is mandated to draft provisions of labelling to consider, amend if necessary, and to endorse -specific provisions on labelling prepared by the Codex Committees drafting standards, codes of practice and guidelines; to study specific labelling problems assigned to it by the Commission; and those associated with the advertisement of food with particular reference to claims and misleading descriptions. Nutrition labelling of prepackaged foods; Front-of-pack-labelling; Food allergen labelling; Labelling of alcoholic beverages; Labelling of Non-Retail Containers; Internet sales / e-commerce are under this committee.

Codex standards and guidelines on foods for infants and young children, and how they relate to formula milks and complementary foods are given below:

- The Standard for Infant Formula and Formulas for Special Medical Purposes Intended for Infants (CVS 72-1981) was last updated in 2020.
- Standard for Follow-up formula (CXS 156-1987) – currently being revised and updated and the discussion is moving towards dividing the standards into 2 sections.

Section A will remain as before. Follow-up formula for older infants (6-12 months). Product manufactured for use as a BMS, as a liquid part of a diet for older infants when progressively diversified complementary feeding is introduced.

Section B will be revised (for young children aged 12-36 months)
Product manufactured for use as a liquid part of the diversified diet of young children [which may contribute to the nutritional needs of young children]. The product name ‘Drink/Product for young children with added nutrients’ and ‘Drink for young children’ are being proposed. (while there was a discussion to include this under the BMS category, it was not agreed to. However, a compromise was reached on a footnote in order to resolve issues of different usage of products in diverse jurisdictions.)
Footnote: “In some countries these products are regulated as breast-milk substitutes”33
Therefore, the footnote allows the right for countries to continue to designate these products as BMS for the 12-36 months age group.

- Standard for Canned Baby Foods (CXS 73-1981) - last updated in 2017 (consequential amendment) Foods intended for use during weaning period and also for the progressive adaptation to ordinary food. Either in ready-to-eat form or in dry form requiring reconstitution with water only.34

Processed cereal-based foods intended as a complementary food from the age of 6 months onwards as part of a progressively diversified diet.

In accordance with the Global Strategy for Infant and Young Child Feeding and World Health Assembly Resolution WHA54.2, 2001,
Product definition: Four categories are distinguished:
- Cereals which are or have to be prepared for consumption with milk or other appropriate nutritious liquids
- Cereals with an added high protein food which are or have to be prepared for consumption with water or other appropriate protein-free liquid
- Pasta which are to be used after cooking in boiling water or other appropriate liquids
- Rusks and biscuits which are to be used either directly or, after pulverization, with the addition of water, milk or other suitable liquids.

These are defined as Foods that are suitable for use during the complementary feeding period. Specifically formulated with appropriate nutritional quality to provide additional energy and nutrients to complement the family foods derived from the local diet by providing those nutrients which are lacking or are present in insufficient quantities. Include but are not limited to porridges containing cereals, ready-to-use products and food-based home fortificants.
Micronutrient supplements, processed cereal based foods, and canned baby foods are not covered here.
This Guideline provides- some standards for salt and fat, but there is no specific reference to sugars (only vague wording-). However, due to the reference included to WHO’s Global Strategy and WHA 54.2, (below) it will be permissible for countries to set standards for these nutrients, based on public health concerns.

These should be used in accordance with the Global Strategy for Infants and Young Child Feeding and World Health Assembly Resolution WHA54.2 (2001).

- Guideline for RUTF -For children from age 6 to 59 months with severe acute malnutrition. (Under development)

All the above provide compositional standards.

33 Though discussion is not completed, this is stated in the Report of the commission (2019) and would be considered as final.
Other ‘horizontal Codex standards exist and feed into all guidelines. Those affect young child foods include
- General standard for labelling of prepackaged foods,
- Guidelines on nutrition Labelling,
- Guidelines for the use of nutrition and health claims, general standard for food additives and
general principles of food hygiene.

Industry influence through Codex drives some regulations. Codex committees at regional level are
important and specific regional concerns can be brought up to the main committee from there. Therefore,
Member States need to be more active in Codex regional committees to drive the agenda towards healthier
diets. Codex is moving on to develop nutrient ref values for 6-36 months so that nutritional composition
can be included in the nutritional labelling.

3. Synthesis of discussions leading to recommendations

3.1 Current status of infant and young child feeding

Young children’s diets have seen little improvement over the last decade or more. Timeliness, adequacy,
meal frequency and dietary diversity of complementary feeding remain problematic in most countries.
While the determinants of poor feeding varied by local context, many barriers are common to all settings.
Poverty is a major cause, with issues of affordability, contributing to difficulties in accessing nutritious
foods, but poverty is not the only cause. Customs, beliefs and taboos regarding feeding practices also
impede optimum young child feeding. The lack of practical knowhow on feeding young children, demands
on caregiver time and changing lifestyles are some of the other drivers of sub-optimum dietary intake by
young children. Insufficient attention to - changing food patterns and lifestyles by service providers is
another important aspect. Food safety and water and sanitation issues also need attention. While children
from poorer families are more commonly affected by undernutrition and micronutrient deficiencies in
every country, this is by no means universal; sub-optimum diets span across the entire socio-economic
strata. Urbanization and associated changes cause a shift from traditional whole-food diets to processed
foods that are higher in salt, sugar and fat and low in essential nutrients. The rapid rise in availability and
access to unhealthy processed foods and beverages, the changing lifestyles and socio-cultural barriers
compound the problem of poor diets in young children. There appears to be a dearth of data on the various
additives – which are considered “safe”, and allowed for processed CCF’s. There are some concerns about
their regular consumption by growing/developing children and child’s health.

Where overweight and obesity in young children are concerned, the higher income groups are reported to
be more affected in South-East Asia, but is beginning to be reported in low income children as well.
Optimum food intake by young children is interlinked with their development, and therefore strategies to
improve feeding practices need to be supported in the context of parenting skills and early childhood
development. Parenting skills will influence the feeding style – whether indulgent, authoritative,
authoritarian etc, which in turn will determine food intake by the child. Gaps in current policies, strategies,
guidelines and regulations to address emerging issues must be identified and addressed on a regular basis.
There has been inadequate engagement with professional organizations, who have many resources to
support young child diets through high level advocacy and service delivery support; this needs attention.
3.2 Refocusing the narrative in low and middle income countries on filling nutrient gaps with foods and concerns regarding estimating nutrient gaps.

Improvement in home-based meals (home foods) should be the primary focus, as stated in all WHO recommendations including the IYCF Guidelines and The Guidance on ending the inappropriate promotion of foods to young children. Home-based foods for young children don’t include home based vendor foods which are increasingly popular in urban areas, and tends to mislead caregivers who assume that its part of healthy diets. There is little information on the nutrient quality of such foods. Home based food intake should be supported for nutrient adequacy through continued breastfeeding for up to 2 years of age and beyond. Countries must ensure that they use the correct standards to assess nutrient gaps in the population. (e.g. note that the use of Recommended Dietary Allowances (RDA) can overestimate requirements). WFP uses Estimated Average Requirements (EAR), which gives a much more realistic assessment of nutrient gaps. However, nutrient needs, especially for micronutrients, must be tailored to the country context, with country data considered to ensure that a proper estimation of micronutrient needs is carried out. The need for fortification of foods as a policy option must be based on accurate evidence from countries.

The messaging to communities regarding existing nutrient gaps and how to fill them needs to be carefully crafted. The current narrative that nutrient gaps should be replaced by micronutrient supplements, fortification or other commercial products needs to be changed, but supported by evidence. Therefore, practical support must be provided in terms of modelling diets, advising on cost effective sources of nutrients, food exchange lists and simple, time saving cooking methods. The WFP’s FNG modelling studies indicate the unnecessary and excessive cost of additional food supplements promoted through marketing and other means. Food based guidelines must prioritize locally relevant nutritious home foods and culturally appropriate practices rather than product centric guidelines. While the use of local food is recommended in many countries, there is limited education on how to use local food adequately and it often maybe poor in nutrients. Many local foods may not be nutritious unless given in combination with a variety of other foods. For example, in Indonesia, a child’s diet may just be a combination of mashed steamed rice and banana. Therefore, guidance is essential on selecting and preparing local foods to provide optimum nutrition.

Ultra-processed foods are reported to have negative effects on the infant gut microbiome, and a scoping review is underway by WHO HQ to support the new complementary feeding guidelines. Even in food supplementation, though logistically difficult, countries should explore making whole foods (fruits/vegetables/pulses) available. Food technology initiatives are important to develop preserved/ready to eat “whole” food rather than ultra-processed foods which could be taken up by the food industry e.g. minimally processed dried vegetables cut in to small pieces which makes it easy for caregivers.

Government policies to ensure availability of safe -whole foods at affordable prices could explore enabling access to healthy food at low cost through pricing subsidies and other means and increased taxes for unhealthy foods – SSBs, sugary/salty snacks. Formative research to identify local and culturally appropriate diverse foods, practical recipes to address time constraints foods would support the addressing of nutrient gaps through foods. In some instances, foods such as dried and powdered fish, dried vegetables, liver
powder are already used to add diversity – these should be explored at country level. Information on good practices such as these could be shared widely. Developing Food-Based Dietary Guidelines (FBDGs) to address food choices for young children and utilizing them in supporting optimal diets for young children would also support home-based nutritious food consumption.

3.3 Addressing access, availability and affordability

Governments must address poverty, the most pervasive barrier to optimum young child diets. The pandemic is reported to have worsened the situation for some communities. Supporting access to affordable, diverse foods, within the context of the changing lifestyles, food environment and ongoing economic challenges is difficult but possible through careful designing and planning of interventions. Another issue is maternal leave in the informal sector – for many women in the labour force across South-East Asia, maternity leave is not provided, and strategies must examine how best to address this situation. Poor execution of government welfare schemes and insufficient investment in the nutrition sector are some questions requiring urgent action. Good coordination between health, agriculture, and social welfare programmes are vital to ensure delivery of appropriate interventions to address affordability and access and support vulnerable mothers, infants and young children. Programmes need to ensure healthy take home rations, and options for increasing diversity of food provision (fruit, vegetables, animal source foods or eggs) through food safety net activities. The type of foods provided by some social protection schemes should be evaluated in the context of the current nutrition situation. The transfer values of cash or food-based social assistance programs must take into account the cost of a nutritious diet; and include SBCC to inform healthy choices favorable to young children. Ensuring that food supplements given through social welfare and other programmes are healthy, and meet dietary guidelines is another important aspect of food assistance that needs further focus. While these multisectoral actions and coordinated mechanisms are difficult to achieve, if addressed they will enhance affordability and access to healthy diets.

3.4 Supporting feeding practices through acceptable service delivery

The factors influencing caregiver behavior must be understood and addressed through supportive service delivery. The coverage and quality of nutrition services, including skilled caregiver counselling on child growth and feeding, remain inadequate on many fronts. IYCF guidelines should promote locally available and home prepared healthy food for IYC over commercial products and highlight adverse health impacts of such products. Capacity development in IYCF training and counselling materials should include food environment issues, industry marketing, information on CCF and commercial snack foods and skill development on how to convey the relevant knowledge and skills to caregivers. Capacity of field workers and others providing institutional service delivery to convey appropriate messages must be evaluated and addressed. The key message on the importance of feeding whole foods to children must be reinforced regularly and be prioritized in all settings. The health system must address the multitude of gaps in service delivery of IYCF. Adequate financing is a must, as is better coverage of IYCF support. Human resources are

needed with investments in developing knowledge and good practical skills on counselling and supervision. Identifying and utilizing opportunities for counselling on complementary feeding within service platforms are vital as are the availability of appropriate tools for use in counseling. SBCC strategies based on revised IYCF guidance to bring about behaviour change of caregivers are required; practical, evidence based guidance on IYCF for caregivers are missing from current programmes and need to be developed. The use of varied and innovative communication channels is important, including digital media, to reach caregivers with factual information and advice on young child feeding and increasing the desirability of nutritious and safe foods. These channels could be utilized to spread IYCF messaging, including to reach the wider community, with less resource cost. Community empowerment through nutrition communication/BCC for families and communities needs more attention. During the Covid-19 pandemic, many countries invested in different modes of communications for health service delivery and these could be sustained. Some of the IYCF support especially in the case of working mothers is likely to be through private sector professionals and workers, and their capacity development should be supported.

3.5 Involvement of the family and the community in infant and young child feeding.

To ensure optimal diets for infants and young children, promoting the involvement of both parents and extended family in infant and young child feeding is vital and would facilitate good infant and young child feeding. Broader household and community support is needed and therefore, BCC to other family members/caregivers of the working mothers is also important. Such aspects have not been adequately focused upon in current programmes. Infant and young child feeding has to be looked at in the wider context of early childhood development, parenting and household food habits as well. Responsive feeding helps children self-regulate food intake, supports the transition to eating independently and healthy growth.

3.6 Ultra processed and processed commercial snacks and foods

Ultra-processed and processed commercial snacks and foods are cheap, available and heavily marketed, and are being used as complementary foods mainly by the poorer economic groups. Their consumption can displace nutrient dense foods and breast milk, with risk of nutritional deficiencies. IYCF counseling must discuss such products. From a regulatory perspective, more clarity in labelling regarding unsuitability for young children essential. Since most nutrient profiling for Front-of-Package Labels (FoPL) and for marketing of foods are based on older children’s or adult energy intakes, consumption of such products by young children are also likely to result in excess salt, sugar and fat intake. These foods can also negatively influence child food preferences, causing dental caries and lead to obesity in later life. Very often, the reason why these foods are purchased for young children is convenience and affordability hence nutrition sensitive social protection measures play an important part. Policy level changes are needed as well. IYCF strategies must specifically reference and address commercial snack foods and meals or out of home foods and CCFs, and also address the issue of dealing with child demand for unhealthy snacks which are often influenced by marketing tactics. Strategies to manage time and convenience of caregivers (such as improving care givers knowledge on nutritious foods/ meals requiring low preparation time and skills) would also help curb the growing use of unhealthy snack foods and beverages.
3.7 Commercial complementary foods

CCFs can supplement nutritious home-based foods and may have a role in child diets, especially in urban areas and for young children with working mothers. However, they should be secondary to nutritious home-based foods. Therefore, intensifying knowledge on how to select and prepare nutritious home-based food is very important. In South-East Asia, CCF are heavily marketed, and purchase appears to be in the higher socio-economic group. Until the recent benchmarking by the WHO project, there was little information on their product composition, marketing and appropriateness to be promoted to young children. There is also little information to date on the ultra-processed nature of such foods and their effects on gut health and other aspects of child health which should be explored further. As per the criteria of WHO EURO NPM, most CCF’s would not be considered suitable for promotion, both in terms of nutrient composition and product messaging. The WHO Guidance on inappropriate promotion calls for an end to advertising, promotions, labelling, packaging and claims. These products are largely aligned to the codex guidelines and standards and national guidelines, and since there are gaps in the Codex guidance in terms of nutrient composition of CCFs, these are exploited by the food industry in production and marketing CCFs. Current marketing practices are likely to expose caregivers to persuasive, misleading and unethical marketing practices and influence purchase, which may displace breastfeeding and consumption of nutritious home-based foods. Though CCFs in some countries are covered by The Code legislation, implementation is weak and therefore CCF are freely marketed. Therefore, more efforts are needed to address the knowledge and practices of caregivers regarding CCFs and to ensure that inappropriate promotion is prevented through regulatory means. Countries need to also strengthen national level regulations on CCFs.

3.8 Data gaps and solutions
Data and information gaps span across the above areas and must be identified and addressed. Implementation and formative research needs are contextual to countries and regions and should be identified and addressed.

3.9 Addressing commercial interests
Mechanisms to ensure that nutritional interventions are not influenced by commercial interests is vital. For CCFs, the role of government agencies, funding agencies, civil society, media and industry should be transparent.
4. Directions to WHO Regional and country offices on support to Member States

4.1 Advocate with high level policymakers to increase commitments to improve young child diets
- Carry out high level policy advocacy to promote further government commitments, including regulatory policies to improve young child diets
- Advocate to professional organizations to promote and support appropriate actions to optimize diets for infants and young children.

4.2 Policies, action plans and guidelines on infant and young child feeding.
- Provide technical assistance to countries to review and revise if necessary, nutrition, maternal and child health and NCD policies and plans including multi sectoral nutrition action plans to ensure policy coherence on young child diets.
- Support reviews of infant and young child feeding (IYCF) strategies and food based dietary guidelines for young children to ensure they include explicit information on unhealthy diets.
- Explore policy mechanisms to address inappropriate promotion of CCF according to country context.

4.3 Home based/prepared, locally sourced nutritious foods for filling nutrient gaps.
- Advocate the importance and feasibility of using nutritious home-based foods as the primary choice for filling nutrient gaps in young child diets.
- Provide technical support to countries to use nutritious, culturally appropriate, food-based solutions to meet nutrient gaps/excesses when feasible.
  - Identify relevant technical tools to model diets, using home based diets to address nutrient gaps and their costing, design low cost nutritious meals, local food exchange lists and meal plans.
  - Identify, collate and share good practices from other countries on successful use of home based foods in filling nutrient gaps in young children, and on addressing the unhealthy food environment.
- Discuss and develop in-country strategies to address out of home foods and young child diets.

4.4 Regulatory actions and standard setting for commercial complementary foods, to drive product reformulation
- Support nutrition compositional standards for formulated complementary foods to address the gaps in current codex compositional standards.
- Develop a practical, implementable nutrient profile model, with consensus from Member States to support the benchmarking of CCFs which would support improved product composition and labelling, and prevent inappropriate marketing of products and drive reformulation.
- Deliver technical support to countries to review the policy and legislative environment on CCF, including their existing compositional standards, and advocate and explore developing/revising existing country standards based on public health interest.
- Advocate and provide technical support to countries for enacting robust monitoring and enforcement of BMS code legislation with WHO Netcode protocols.
4.5 Regulatory actions to address the consumption of other commercial products and snacks

- Advocate and support identification of regulatory options based on country context, to ensure implementation of The Guidance on Inappropriate promotion of foods to young children. Options could include pre marketing approvals, prohibition of marketing to children, dedicated labelling regulations on claims.
- Advocate and provide technical support for regulatory policies on front of pack labelling and on implementing the recommendations on marketing of foods and non-alcoholic beverages to children.
- Explore and coordinate with other agencies, to advocate and provide technical support for messaging on food products that are unsuitable for consumption by young children < 36 months of age.
- Advocate and deliver technical support to countries to explore fiscal policies to restrict intake of unhealthy foods and help intake of healthy, safe whole foods.

4.6 Service delivery actions to improve young child diets

- Promote countries to assess coverage and quality of growth monitoring and promotion programmes and identify and address gaps in service delivery, including utilizing the multiple contact points in child services to provide counseling on IYCF.
- Support countries to review and revise existing materials and trainings on IYCF and ensure they target clinicians, public health staff and other service providers with accurate and up to date information and messaging, including necessary attitudes and skills to impart behavior change.
  - Review and revise existing dietary counseling guidance tools and protocols to include practical approaches including information on CCF, food safety, filling nutrient gaps with nutrition whole foods and on unhealthy commercial meals and snacks.
  - Advance regional level coordination with professional collages and bodies and promote country coordination with these organizations for policy advocacy and technical support on IYCF.
  - Advocate with countries to sensitize and capacitate private service delivery providers to align with national standards on IYCF support.
  - Explore and utilize innovative modes of communication to caregivers and the community.

4.7 Data gaps

- Update countries on the new IYCF indicators and advocate for their use in national surveys (DHS/MICS/NNS) and in research projects.
- Support countries to improve routine monitoring information systems to include nutrition indicators.
- Promote use of standard indicators/tools and data collection methodologies to obtain comparable data on food consumption patterns and other young child feeding indicators across countries.
- Provide technical support as needed on dietary assessment tools, laboratory analysis.
- Promote disaggregation of data on cereal and other food consumption as home made, CCF, other commercial products, or for out of home foods in national surveys, in order to gain better insight into food consumption information and behaviour.
4.8 Information gaps in young child diets

- Promote and provide technical support for formative research on drivers of food behaviours in children and households including barriers to optimum IYCF practices, family dynamics and food distribution, availability and access to local foods and commercial food products, their costs/impact on household budgets, purchase behaviours and information on marketing and labelling practices of CCF and other food products.
- Support countries to carry out formative research on food technology solutions using whole foods with minimum processing to fill nutrient gaps to address time constraints of caregivers.
- Advocate and provide technical support to collate information on CCF (formulated complementary foods, canned baby foods and cereal based products), their nutrient composition and labelling practices, sales trends and consumption patterns and ensure the use of accurate product nomenclature to support future regulatory actions.
- Support formative research at country or sub national level on cost benefit comparisons - home based nutritious foods vs unhealthy commercial snacks and foods to inform the community.
- Advocate for implementation research on nutrition sensitive social protection schemes and dissemination of results.
- Advocate and provide technical support at country level for evidence generation on responsive approaches to feeding, recognizing and addressing parenting styles, modeling eating behaviours and food acceptance to design improved guidance and skill development of caregivers.
- Promote implementation research on incorporating IYCF support within nurturing care processes in formal child care settings.
- Explore information generation on ultra-processed food products including CCF, and their impact on short or long term health outcomes if any.
- Design means of improving community label literacy and knowledge on foods.

4.9 Coordination with other sectors and partners- codex activities, nutrition sensitive social protection.

- Discuss and coordinate with FAO, UNICEF and WFP on enabling countries to raise issues of concern on CCF at Codex Regional Committees.
- Coordinate with other development agencies and advocate for evidence informed social protection schemes in countries including cash transfer schemes that account for cost of a nutritious diet for young children, and for including SBCC to improve food purchases and dietary habits.
- Provide technical support to review the criteria/standards for foods and nutrients provided by current food supplementation schemes (food groups, nutritional composition standards (salt, sugar, total fat), and explore the opportunities and feasibility for improvements.
- Collate and share best practices of social protection/food schemes and implementation mechanisms that have optimized young child diets.
- Join advocacy initiatives with other agencies to promote agricultural processes that promote healthy diets.