

Food-Based Dietary Guidelines

A Review of National Guidance for Children, Adolescents, and Women



ACKNOWLEDGEMENTS

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SUMMARY

Food-based dietary guidelines (FBDGs) educate consumers on healthy diets and provide direction for programs and policies aiming to ensure healthy diets for all. Children of all ages have unique, age-specific nutritional needs, problems, and challenges, and healthy child growth and development also require adequate nutrition before conception and during pregnancy and lactation. Considering these needs and challenges across the life cycle, UNICEF is exploring the role of FBDGs specific to various age and physiological groups as part of a broader agenda to put children's nutrition rights first. Further, UNICEF has identified environmental sustainability of diets as a core concern, to protect children both now and in the future.

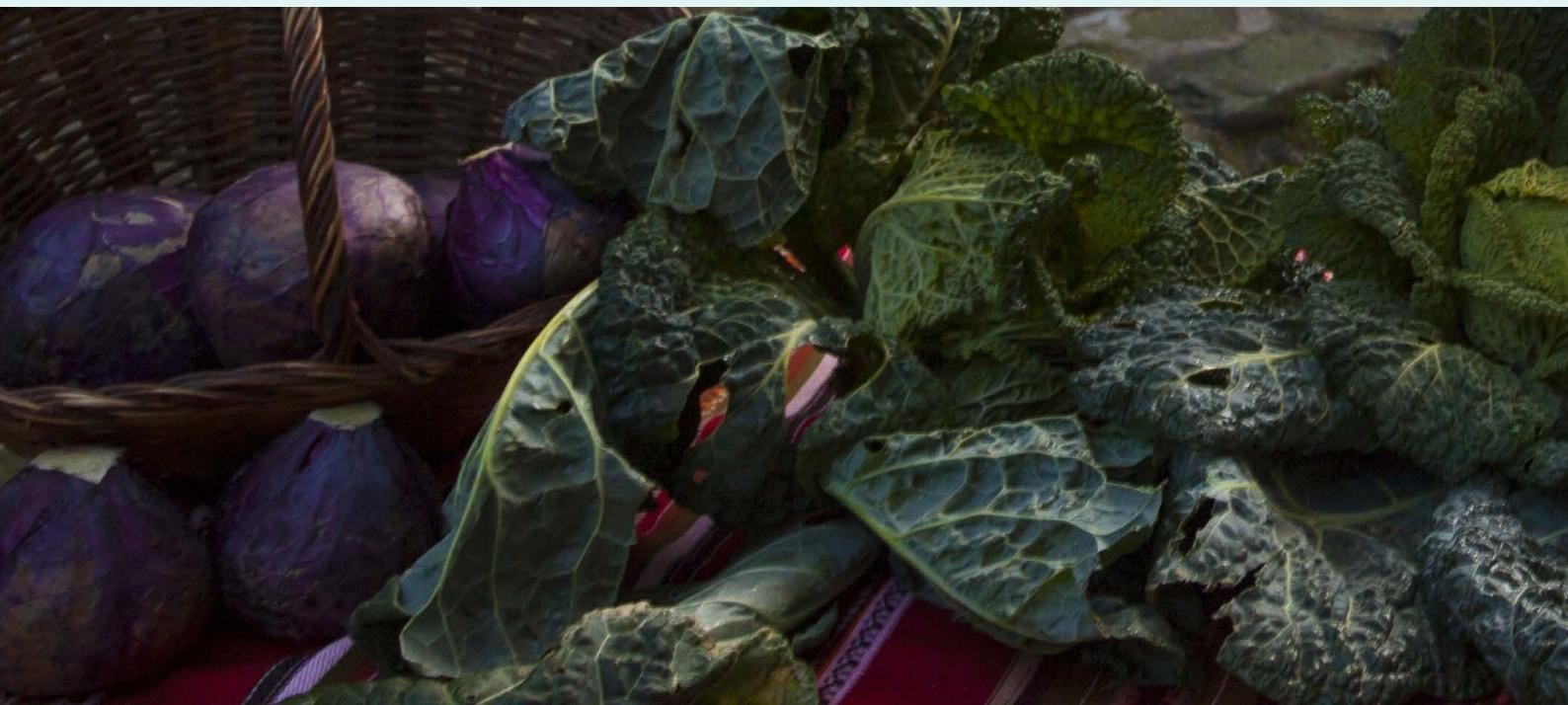
In this report, we survey the availability and content of current national FBDGs and associated guidance for pregnant and lactating women, infants, children and adolescents, and we also assess coverage of sustainability issues in current guidelines. Using the online repository of the Food and Agriculture Organization of the United Nations (FAO), we found that slightly fewer than half of all countries have FBDGs, and that low and lower middle income countries were least likely to have them (13% and 26% of these countries, respectively); FBDGs are particularly scarce in the Africa region. To date,

very few countries have integrated environmental sustainability concerns into FBDGs.

While dietary guidelines statements themselves (sometimes called 'key messages') are meant to be concise and few (typically, 8-12 statements), they are used to anchor more extensive guidance and are often elaborated during the implementation process in a range of print and web-based resources designed for a variety of audiences including consumers, health professionals, and policy-makers.

Among countries with FBDGs, about half have consolidated separate FBDGs or other associated guidance for one or more age or physiological groups. In many countries, group-specific guidance is available for all the groups noted above, but in other countries separate guidance is available only for infants and young children under 2 years of age. This means that many countries have little or no consolidated guidance that is specific to the needs of infants, children, adolescents, or pregnant or lactating women.

Among countries that do have consolidated guidance a very wide range of topics are covered for each age and physiological group. Broadly speaking, similar topics are covered across country income levels and across regions, but the level of specificity in



guidance varies greatly. Some countries go much further in elaborating not only what to eat, and how much, but also in providing the ‘how to’ – detailed and group-specific strategies for achieving healthy dietary patterns in context. This ‘how to’ guidance is more likely to be highly detailed for breastfeeding and for complementary feeding than it is for other ages and stages.

Based on our survey of current national guidance as well as on the UNICEF agenda, this report provides group-specific recommendations on topics that could be considered for inclusion in future FBDGs and associated guidance, and also makes several recommendations for the development, documentation and presentation of FBDGs. Key recommendations include:

1. When developing national FBDGs, do include specific guidance for age and physiological groups and consolidate it either in sections of a FBDGs document for the general population, or in separate FBDGs or other associated guidance.
2. Accompany technical documents detailing the evidence base and development of FBDGs messages with guidance for practitioners and for consumers.

3. Be clear and specific on how much animal-source food of different types (dairy, meat/poultry, fish, eggs) is ‘enough, but not too much’ for each age and physiological group, recognizing the specific nutritional needs and available nutrient sources for each group and balancing with sustainability concerns.
4. Be clear and specific on foods/types of foods and beverages to be minimized or avoided for various age groups and/or for everyone.
5. Go beyond ‘what’ and ‘how much’ to eat to **how** – give practical guidance on how healthy diets and healthy eating can be achieved for different age and physiological groups.
6. Include attention to developmental and psychosocial dimensions of feeding and eating for different ages.
7. Develop consumer-facing documents and webpages targeting older children and adolescents as well as women of reproductive age and parents; consider innovating with new media approaches for consumer-facing guidance.



1 / BACKGROUND AND OBJECTIVES



1.1 UNICEF's agenda

The 2019 State of the World's Children (SOWC) highlights the unique nutritional needs, problems and challenges faced at each stage across childhood and adolescence (*Box 1*).¹ In addition to these challenges, healthy child growth and development also depend on adequate nutrition before conception and during pregnancy and lactation, which presents different challenges.

The SOWC report highlights the necessity of food system transformation and the roles of diverse actors in achieving this. Further, UNICEF identifies sustainability as a core concern:

'....all food production and consumption must become sustainable if we are to protect children's nutrition today and tomorrow' (p. 23).

This core concern aligns with numerous global initiatives, including the framework for action from the Second International Conference on Nutrition (ICN2)² in 2014. More recently, the Food and Agriculture Organization (FAO) and the World Health

Organization (WHO) articulated a set of guiding principles for sustainable healthy diets (see *Box 2*).

The first three points in UNICEF's agenda for action (SOWC, p. 10) are:

1. Empower families, children and young people to demand nutritious food.
2. Drive food suppliers to do the right thing for children.
3. Build healthy food environments for all children.'

In this context, UNICEF and other organizations have been advocating for the development of food-based dietary guidelines (FBDGs) targeted to children as well as pregnant and lactating women, as an opportunity to improve nutrition outcomes for children. FBDGs have traditionally been designed to inform and empower consumers. But, when fully implemented and integrated in national food, agriculture, education and health policies and programs they also have the potential to contribute to food system transformation.

1 UNICEF (2019). *The State of the World's Children 2019. Children, Food and Nutrition: Growing well in a changing world*. UNICEF: New York.

2 FAO/WHO (2014). Second International Conference on Nutrition Rome, 19-21. Conference Outcome Document: Framework for Action. <http://www.fao.org/3/a-mm215e.pdf>.

BOX 1**Food and nutrition challenges across childhood****0-5 months – rapid growth and development**

- Poor breastfeeding practices (late initiation, lack of exclusive breastfeeding, continued breastfeeding)
- Social norms around breastfeeding
- Lack of support for breastfeeding mothers in the workplace
- Inappropriate marketing of breast milk substitutes

6 months to 2 years – rapid growth and development

- Poor breastfeeding practices (lack of continued breastfeeding)
- Social norms around breastfeeding
- Lack of support for breastfeeding mothers in the workplace
- Inappropriate marketing of breast milk substitutes
- Low dietary diversity – inadequate ‘first foods’ lacking in nutrients
- Low feeding frequency
- Consumption of sweet beverages and poor-quality snacks high in sugar, salt or unhealthy fat
- Lack of responsive care and feeding

3-4 years – continued growth/development, transition toward some eating outside the home (e.g. school)

- Poor quality diets, lacking in nutrients and including excess sugar, salt and fat
- Exposure to marketing of unhealthy, ultra-processed foods
- Consumption of sweet beverages and poor-quality snacks high in sugar, salt or unhealthy fat
- Lack of responsive care and feeding
- Lack of physical activity
- Emerging overweight and obesity

5-9 years – continued growth/development and transition towards more eating outside the home

- Poor quality diets, lacking in nutrients and including excess sugar, salt and fat
- Specifically, low intake of fruits and vegetables
- Hunger at school due to lack of breakfast
- Exposure to marketing of unhealthy, ultra-processed foods
- Consumption of sweet beverages and poor-quality snacks high in sugar, salt or unhealthy fat
- Availability of sweet beverages and poor-quality snacks in the school environment
- Lack of physical activity
- Emerging overweight and obesity

Adolescence: 10-19 years – rapid growth and development, increasing peer influence

- All of the issues identified for younger school-aged children still apply
- Nutrient needs are very high and iron deficiency is a risk, especially for girls but also for boys
- With increased autonomy and pocket money, may be more fast food consumption
- Body image concerns, and eating disorders
- Lack of concern with long-term health
- Strong influence of peers
- Pregnancy

^a These challenges are discussed in UNICEF (2019), Chapter 2 *Feeding a Child for Life*.

BOX 2**Sustainable Healthy Diets: Guiding Principles^a**

'Sustainable healthy diets...

1. ... start early in life with early initiation of breastfeeding, exclusive breastfeeding until six months of age, and continued breastfeeding until two years and beyond, combined with appropriate complementary feeding.
2. ... are based on a great variety of unprocessed or minimally processed foods, balanced across food groups, while restricting highly processed food and drink products.¹⁰
3. ... include wholegrains, legumes, nuts and an abundance and variety of fruits and vegetables.¹¹
4. ... can include moderate amounts of eggs, dairy, poultry and fish; and small amounts of red meat.
5. ... include safe and clean drinking water as the fluid of choice.
6. ... are adequate (i.e. reaching but not exceeding needs) in energy and nutrients for growth and development, and to meet the needs for an active and healthy life across the lifecycle.
7. ... are consistent with WHO guidelines to reduce the risk of diet-related NCDs, and ensure health and wellbeing for the general population.¹²
8. ... contain minimal levels, or none if possible, of pathogens, toxins and other agents that can cause foodborne disease.
9. ... maintain greenhouse gas emissions, water and land use, nitrogen and phosphorus application and chemical pollution within set targets.
10. ... preserve biodiversity, including that of crops, livestock, forest-derived foods and aquatic genetic resources, and avoid overfishing and overhunting.
11. ... minimize the use of antibiotics and hormones in food production.
12. ... minimize the use of plastics and derivatives in food packaging.
13. ... reduce food loss and waste.
14. ... are built on and respect local culture, culinary practices, knowledge and consumption patterns, and values on the way food is sourced, produced and consumed.
15. ... are accessible and desirable.
16. ... avoid adverse gender-related impacts, especially with regard to time allocation (e.g. for buying and preparing food, water and fuel acquisition).'

¹⁰ Food processing can be beneficial for the promotion of high quality diets; it can make food more available as well as safer. However, Some forms of processing can lead to very high densities of salt, added sugar and saturated fats and these products, when consumed in high amounts, can undermine diet quality. (Global Panel on Agriculture and Food Systems for Nutrition. 2016. Food systems and diets: Facing the challenges of the 21st century. London, UK. <http://elibrary.ifpri.org/utils/getfile/collection/p15738coll5/id/5516/filename/5517.pdf>)

¹¹ Potatoes, sweet potatoes, cassava and other starchy roots are not classified as fruits or vegetables.

¹² They include up to 30-35 percent of total energy intake from fats, with a shift in fat consumption away from saturated fats to unsaturated fats and towards the elimination of industrial trans fats; less than 10 percent of total energy intake from free sugars (possibly less than 5 percent) and not more than 5 g per day of salt (to be iodized). WHO. 2018. Healthy diet. WHO fact sheet No. 394 (updated August 2018). Geneva, World Health Organization, 2018. https://www.who.int/nutrition/publications/nutrientrequirements/healthydiet_factsheet/en/

a FAO and WHO. 2019. Sustainable healthy diets – Guiding principles. Rome, pages 10-11.

BOX 3**A description of food-based dietary guidelines^a**

'National food-based dietary guidelines (FBDGs) provide context-specific advice and principles on healthy diets and lifestyles, which are rooted on sound evidence, and respond to a country's public health and nutrition priorities, food production and consumption patterns, sociocultural

influences, food composition data, and accessibility, among other factors.

Typically, FBDGs propose a set of recommendations in terms of foods, food groups and dietary patterns to provide the required nutrients to promote overall health and prevent chronic

diseases. Yet, many countries are now moving towards more holistic perspectives by addressing food combinations (meals), eating modalities, food safety considerations, lifestyle and sustainability aspects in their FBDGs.'

^a Source: <http://www.fao.org/nutrition/education/food-dietary-guidelines/background/en/> accessed 24 September 2019.

1.2 Food-based dietary guidelines

While dietary recommendations from governments have a far longer history, a structured process for developing FBDGs was first provided in 1998 by WHO and FAO (WHO/FAO 1998).³ This process was more recently and concisely described by the European Food Safety Authority as follows (EFSA 2010):⁴

- Identify diet-health relationships
- Identify country specific diet-related health problems
- Identify nutrients of public health importance
- Identify foods relevant for FBDGs
- Identify food consumption patterns
- Test and optimize FBDGs
- Develop graphical representations of FBDGs

The development of FBDGs requires synthesis and analysis of a wide range of evidence and contextual information; the process also calls for the involvement of multiple stakeholders from relevant sectors and can be both a technical and political process.

Developing and testing FBDGs messages should be followed by implementation and, later, evaluation of effectiveness. Full implementation includes not only development of a variety of targeted consumer education strategies and materials, but also

integration within a range of sectoral policies and programs to help ensure that sustainable healthy diets are available, accessible, and affordable.⁵

Historically, dietary guidance was at first solely focused on assuring adequacy in intakes of energy and macro- and micronutrients.⁶ In the latter part of the 20th century, guidance evolved to include moderation messages reflecting concerns with growing levels of obesity and noncommunicable diseases, particularly in high income countries. In the 21st century, rapid nutrition transitions in low and middle income countries mean they face double burdens of persistent undernutrition caused by inadequate intakes, coupled with rising overweight, obesity and comorbidities. Dietary guidelines are evolving as a response to these public health challenges and, more recently, to reflect concerns with environmental sustainability. *Box 3* presents the FAO's description of FBDGs.

FAO is currently revising the global methodology for developing FBDGs to ensure that they are responsive to modern food-related development challenges and able to fulfil their potential to support positive changes in food systems for the promotion of sustainable healthy diets. The ongoing process builds on the Organization's experience in supporting countries with developing and implementing their FBDGs, the challenges identified, and lessons learned. It also benefits from the input of a range of experts in various relevant fields including nutrition,

3 WHO/FAO. 1998. Preparation and Use of Food Based Dietary Guidelines. Report of a joint FAO/WHO consultation Nicosia, Cyprus. WHO Technical Report Series 880. WHO: Geneva.

4 European Food Safety Authority Panel on Dietetic Products, Nutrition and Allergies (2010) Scientific opinion on establishing Food-Based Dietary Guidelines. European Food Safety Authority Journal; 8(3):1460.

5 For more information on implementation of FBDGs, see: <http://www.fao.org/nutrition/education/food-dietary-guidelines/background/implementation/en/>, accessed 13 February 2020.

6 For a brief history see: Harper AE. Contributions of women scientists in the U.S. to the development of Recommended Dietary Allowances. J Nutr. 2003;133(11):3698–3702. doi:10.1093/jn/133.11.3698

agriculture, food policy, food consumption, food composition, nutrition education and behavioural science, epidemiology, economics, communication, sociology, diet modeling, and environmental science, among others. Complementary efforts are also being made to develop guidance on the processes of implementation, monitoring and evaluation, which are incipient in the most countries with FBDGs.

A recent analysis by Herforth et al. (2019)⁷ provided a global review of FBDGs and assessed the alignment of these guidelines with key elements of a healthy diet for the general (adult) population as articulated by WHO.⁸ These key elements include consumption of fruits and vegetables (at least 400 g or 5 portions/day), legumes, nuts and whole grains, and moderation in intake of free sugars, fats and salt. The review did not summarize guidance for special groups such as children or pregnant or lactating women.

1.3 Guidelines and guidance

According to WHO/FAO (1998, *op cit.*) FBDGs are '*the expression of the principles of nutrition education mostly as foods*' (p. 3) and are intended for use by the general public. EFSA (2010, *op cit.*) accordingly note that FBDGs '*should be comprehensible, short, simple, clear and easily memorable*' (p. 10). However, most countries accompany simple guidelines statements or messages with more detailed behavioral guidance on how desired food intakes and dietary patterns can be achieved. The guidelines statements are a concise expression of priorities and anchor the more detailed guidance. Such additional guidance may be provided in FBDGs documents, or in other associated guidance pieces developed for practitioners and/or consumers.

1.4 Objectives

The objectives of this review are to:

- Build on the previous global review by identifying availability of FBDGs and other associated guidance for specific age and physiological groups, as well as gaps in availability;
- Summarize and describe national FBDGs and associated guidance for infants, children, adolescents, and pregnant and lactating women;
- Identify the extent to which sustainability concerns are currently reflected in FBDGs; and
- Recommend desirable features for new efforts to develop FBDGs for these groups.

1.5 Structure of the report

The sections of this report are as follows:

2. Data sources and approach to analysis
3. Availability of FBDGs and integration of environmental sustainability
4. A typology of countries
5. Summary of group-specific key messages in FBDGs
6. Summary of group-specific topics addressed in general FBDGs documents
7. Country case studies
8. Discussion and recommendations

By 'group-specific', we refer to messages or topics that provide guidance for the following age and physiological groups: infants; young children/toddlers; preschoolers; school-aged children; adolescents; women of reproductive age/pre-conception; pregnant women; and/or lactating women.

7 Herforth A., Arimond M., Alvarez-Sanchez C., Coates J., Christianson K. and Muehlhoff E. 2019. A Global Review of Food-Based Dietary Guidelines. Open access article published by the American Society for Nutrition 2019. *Adv. Nutr.* 2019.

8 WHO. 2018. Healthy diet. WHO fact sheet No. 394 (updated August 2018). Geneva, World Health Organization, 2018.

2 / DATA SOURCES AND APPROACH TO ANALYSIS



2.1 Sources

This review is based primarily on material available at the FAO's global online repository for FBDGs,⁹ which currently includes 92 countries. This repository (website) is continually updated as FBDGs are developed or revised by countries. Only those FBDGs that are endorsed by a governmental entity are published in the repository. The website includes a page for each country that has contributed materials. Each country page usually includes, in English:

- The official name of the national FBDGs;
- The publication year for the most recent revision (and sometimes for earlier versions);
- A brief description of the process of development and stakeholders involved;
- A statement of the intended audience and/or target group(s) (e.g. age groups) for guidelines;
- A food guide (a graphic representation of dietary advice) and a verbal interpretation of the food guide; and
- A set of key messages provided by the responsible country authorities.

Generally, the key messages are equivalent to the main dietary guidelines 'statements' and are directed at consumers and are then further elaborated in various professional- and consumer-facing documents.

Some country pages also include links to downloadable documents, including full FBDGs documents and any available communication resources or learning materials provided by the countries. Examples of consumer-facing documents available through links at the FAO website include posters, tri-fold pamphlets and other brief pamphlets and brochures, as well longer documents. Many of these longer documents are organized around the key messages presented at the FAO website. Some countries also provide technical and scientific background documents upon which the guideline statements are based. See Annex 1 for a description and examples of diverse types of dietary guidelines documents.

All materials on the website have been sourced and verified by the responsible government authority

⁹ <http://www.fao.org/nutrition/education/food-dietary-guidelines/en/>, accessed 24 September 2019.

at country level. Finally, some country pages have additional links to government ministries or other agencies that provide additional dietary guidance to professionals and/or consumers. Some countries have extensive web-based resources for professionals and consumers, while for others, these links provide only another way to download the same guideline documents available at the FAO website.

2.2 Scope and limitations

Except for analysis of key messages – which are available in English for all countries at the FAO website – analysis was restricted to countries with documents available in English, French, Spanish or Portuguese.

Except for case study countries, analysis is limited to documents either downloadable at the FAO website, or found through direct links at the FAO website. All documents available as of 24 September 2019 were downloaded.

For the case study countries, more extensive searches were made. Additional documents and web content available through links to government ministries or agencies were accessed during October 2019 and downloaded for analysis. The additional documents and web content were either referred to within FBDGs documents or linked to from web-pages associated with the FBDGs. The review did not consider documents that provide guidance for planners or staff in institutional settings (meal programs in pre-schools or schools, for example).

This review does not evaluate the quality of the country FBDGs development processes nor the quality/strength of evidence cited by countries as the rationale for specific guidance. However, when information on the development process is available, these processes are described for the case study countries. This review also does not describe or assess implementation or evaluation plans and processes.

2.3 Approach to summary and analysis

The approach is descriptive and comparative. We begin by summarizing the availability of FBDGs by World Bank income classification within UNICEF regions (**Section 3**). FAO recently summarized the extent to which sustainability concerns have been reflected in FBDGs, globally (FAO 2016).¹⁰ In Section

3, we provide a brief summary of their findings and augment with information on countries with FBDGs published or revised during 2017-2019.

For these countries, we examined key messages to identify any that explicitly related to sustainability and examined available documents if they were published in English, French, Spanish or Portuguese.

All country pages were examined with particular attention to the statement of audiences/target groups and key messages. Statements on audiences sometimes identify whether separate guidelines documents are available for age or physiological groups, or alternatively sometimes indicate whether and how guidance for special groups is incorporated into FBDGs documents for the general population. This is the basis for **Section 4**, which provides a typology of countries.

Section 5 provides a summary of group-specific key messages in FBDGs. Key messages were directly cut-and-pasted from the country pages at the FAO website, and are presented in Table format, organized by UNICEF region. That is, this section summarizes only those messages selected by countries for presentation at the FAO website.

Section 6 summarizes the most common types of group-specific content that may be found ‘embedded’ in FBDGs documents that cover the general population. Many countries that do not provide separate guidelines for age or physiological groups nevertheless note special needs of specific groups in a scattered fashion throughout FBDGs documents covering the general population.

For this Section, due to time limitations we did not aim to do a comprehensive search of all documents, but searched FBDGs documents available in English and published after 2010. Depending on what was available for each country, these included consumer-facing FBDGs documents and/or more technical documents targeting health professionals and/or policy-makers. See **Annex 2** for a list of documents searched for this section, and for their intended audiences or uses.

Keywords were: *infan**; *baby*; *child**; *teen**; *adolescen**; *school**; *preg**; *lact**; and *breast**. In addition, documents in French, Spanish and Portuguese were skimmed to check if there were additional topics not represented in the English-

¹⁰ FAO and Food Climate Research Network (2016). *Plates, pyramids, planet - Developments in national healthy and sustainable dietary guidelines: a state of play assessment*. FAO: Rome.

language documents. However, documents in other languages were not systematically searched with multiple keywords.

The objective of this Section is to provide an indicative and qualitative summary identifying topics for the relevant groups that are frequently noted or addressed across countries, situated within guidance for the general population.

Section 7 presents country case studies and compares across countries. Countries were selected for case studies based on the following criteria:

1. Countries that either:

- a. Present guidance for age and/or physiological groups in a consolidated way (e.g. in separate chapters) within their main FBDGs document; or
- b. Have separate FBDGs documents for one or more age or physiological groups; or
- c. Have separate guidance (not formally identified as 'dietary guidelines') for one or more groups that is directly linked to within dietary guidelines documents or websites;

2. Countries where guidance is relatively recent.

Guidelines published before 2010 were excluded, and preference was given to the most recent guidelines that met other criteria;

3. Countries from diverse geographic regions.

In addition to these criteria, due to time limitations case studies were restricted to countries with materials available in English, Spanish, and Portuguese.

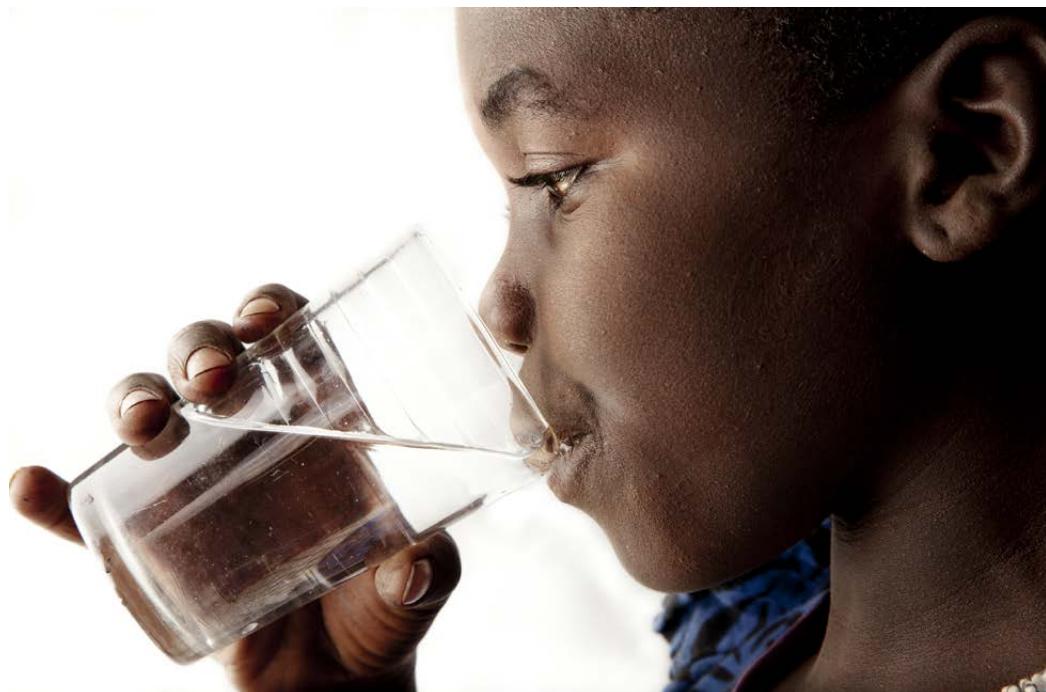
For case study countries, all documents available directly at the FAO country page or through links provided at the page were examined. In addition, any other documents that were mentioned within the guidelines documents as providing guidance for special groups were also searched for and examined.

For countries with web-based interfaces for disseminating FBDGs-related materials, we examined the relevant pages (i.e. age or physiological group-specific resources) and also downloaded any available guidance. We followed cross-links when they led to other government guidance that was clearly linked to from the dietary guidelines webpages but did not otherwise search (e.g. we did not do a content search starting from a Ministry of Health main page, or similar).

For each case study country, we extracted information on the development process and intended audiences for the available documents and resources. We collated a list of topics covered for each age and physiological group and extracted guidance for most topics. Section 7 includes a narrative and comparative summary of the guidance, and detailed comparative tables are provided in an Annex.

We conclude in **Section 8** with a brief narrative synthesis of the 'state of FBDGs' for infants, children and pregnant and lactating women, and with recommendations for future FBDGs for these groups.

3 / AVAILABILITY OF FBDGS AND INTEGRATION OF ENVIRONMENTAL SUSTAINABILITY



Based on their inclusion in the FAO online repository as of September 2019, FBDGs are available for 92 countries. As previously reported by Herforth et al. (2019, *op cit.*), slightly more than half of all countries with FBDGs have developed or revised them since 2010. *Figure 1* shows the availability of FBDGs at the FAO repository, globally.

For some countries, it is possible that there are FBDGs not reported in response to the FAO survey that was the basis for the repository. However, it is certain that to date, FBDGs are particularly scarce for the Africa region.

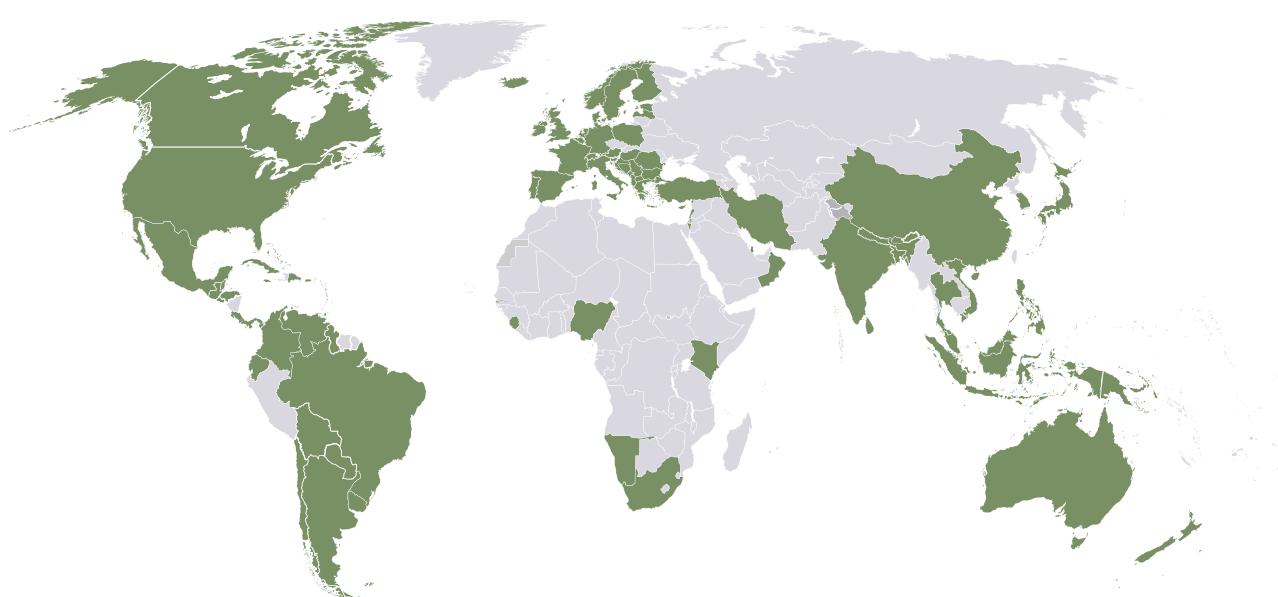


Figure 1: Availability of FBDGs

Table 1: Availability of FBDGs by UNICEF region

| UNICEF Region | Number of countries |
|---------------------------------|---------------------|
| Sub-Saharan Africa | |
| West and Central Africa | 3 |
| Eastern and Southern Africa | 4 |
| Middle East and North Africa | 5 |
| Europe and Central Asia | |
| Eastern Europe and Central Asia | 8 |
| Western Europe | 24 |
| South Asia | 5 |
| East Asia and Pacific | 13 |
| Latin America and Caribbean | 28 |
| North America | 2 |

Table 2: Availability of FBDGs by income

| World Bank income classification* | Number of countries |
|-----------------------------------|---------------------|
| Low income | 4 (of 31) |
| Lower middle income | 12 (of 47) |
| Upper middle income | 34 (of 60) |
| High income | 42 (of 80) |

*As of 1 July 2019

Table 1 shows availability of FBDGs by UNICEF region, and **Table 2** shows availability by World Bank income classification. **Annex 3** provides a table listing all countries with FBDGs by income level within each UNICEF region.

Considering availability as a percent of all countries at each income level, FBDGs are available for only 13% of low income countries and 26% of lower middle income countries, compared to 57% of upper middle income countries and 53% of high income countries.

Concerning the integration of environmental sustainability into FBDGs, FAO's (2016, *op cit.*) recent report reviewed FBDGs for 83 countries and reported that among these, only 4 had incorporated attention to sustainability: Brazil, Germany, Sweden and Qatar.

For all except Germany, full guidelines documents are available in English; see *Box 4* for brief summaries. FAO also noted that environmental sustainability was considered during recent guidelines development processes in Australia and the United States but that these concerns ultimately were not incorporated into the guidelines, although they are addressed in an Annex to the Australian guidelines.¹¹

¹¹ National Health and Medical Research Council. 2013. *Australian Dietary Guidelines*. National Health and Medical Research Council: Canberra, Annex G, pp. 130-134.

BOX 4

Integration of environmental sustainability in FBDGs of Brazil, Sweden, and Qatar

Brazil

Ministry of Health. 2014. Dietary Guidelines for the Brazilian Population. MOH: Brasília.

The Brazilian Dietary Guidelines begin with a set of principles that inform and underlie the rest of the guidelines; one of these establishes environmental sustainability as a fundamental concern of the guidelines:

'Healthy diets derive from socially and environmentally sustainable food systems. Dietary recommendations need to take into account the impact of the means of production and distribution of food on social justice and environmental integrity' (p. 18).

This concern is woven throughout the document and informs guidance on foods within food groups and guidance around processing levels, among others. Sustainability is referenced in the detailed guidance for the following three messages:

'Make natural or minimally processed foods the basis of your diet'

'Avoid consumption of ultra-processed foods'

'Shop in places that offer a variety of natural or minimally processed foods'

Sweden

National Food Agency. 2015. Find your way to eat greener, not too much and be active. National Food Agency: Uppsala.

Environmental concerns are a central focus of the Swedish Dietary Guidelines. The Guidelines are introduced and framed as benefiting both health and the environment. The Guidelines identify choices with greater and lesser environmental impacts within each food group and highlight the energy costs of processed foods and beverages that are high in sugar.

Qatar

Public Health Department. 2015. Qatar Dietary Guidelines. Supreme Council of Health: Doha.

The Qatari Guidelines include a guideline statement with an explicit focus on environmental sustainability.

- Eat healthy while protecting the environment

Key recommendations for this Guideline (p. 32) are:

- Emphasize a plant-based diet, including vegetables, fruit, whole grain cereals, legumes, nuts and seeds
- Reduce leftovers and waste
- When available, consume foods produced locally and regionally
- Choose fresh, home-made foods over highly processed foods and fast foods
- Conserve water in food preparation
- Follow the recommendations of the Qatar Dietary Guidelines

The following countries had FBDGs published in 2017–2019:

2017: Barbados; Belgium (Flemish Food Guide only); Cambodia (school-aged children only); Estonia; Kenya

2018: Ecuador; Panama (children under two years of age)

2019: Canada

In Barbados, Cambodia, and Kenya, there were no key messages explicitly related to sustainability, and no focus on sustainability in the full FBDGs documents. In Panama, there were no key messages related to sustainability, but in the technical FBDGs document the stated benefits of breastfeeding (first key message) include that it contributes to environmental protection, because it does not generate waste (e.g. packaging). In Estonia there were no explicit messages on sustainability, and full documents were available only in Estonian.

For the other countries there were no explicit messages reflecting sustainability considerations but one or more key messages that could be motivated by both health and environmental concerns; for example:

Flemish: *Make foods derived from plants the basis of every meal*

Ecuador: *Choose fresh products from local producers*

Canada: *Choose protein foods that come from plants more often*

For the first, documents were available only in Flemish; using Google translate for the main web page of the Food Guide suggests that sustainability was considered in the process:

*'We want to provide guidelines that are feasible for everyone in the long term. And that ensure that there is also enough healthy food for our children and grandchildren. The result is a realistic and sustainable model that takes into account the current eating habits in Flanders'*¹²

(source: <https://www.gezondleven.be/themas/voeding>; accessed 19 November 2019).

The technical document for Ecuador's FBDGs¹³ indicates that they defined 4 guiding principles, based on those of Brazil and Uruguay, including:

'Healthy eating comes from socially just and environmentally sustainable food systems' (p. 71)

They provide tables mapping various technical recommendations and principles to their guidelines statements and confirm that the guideline on fresh and local food derives from this principle.

Canada is one of the case study countries and we reviewed all available materials. Environmental sustainability is not a central focus of the new Canadian Dietary Guidelines, but there is some minor attention to this issue. The Guidelines authors identify health as the primary focus of the Guidelines but note that adherence to the new Guidelines could also have environmental benefits, as this would shift Canadians towards diets '*higher in plant-based foods and lower in animal-based foods*'.¹⁴ Further, the Guidelines have a strong focus on food skills and identify better food skills as playing a role in reducing food waste, which in turn reduces environmental impacts.

In summary, in the vast majority of countries concerns with environmental sustainability are not yet integrated into FBDGs. This may be due in part to the complexities of assessing and measuring the impacts of food choices, as noted in the Canadian and Australian guidelines documents. However, this is an area of rapidly evolving knowledge and high global interest, and it is possible that more countries will integrate these concerns in the near future. In the meantime, even with no explicit focus on sustainability, adherence to recent guidelines in many high income countries could shift diets towards increased sustainability, because many high income country guidelines suggest levels of red meat consumption lower than current patterns.¹⁵

12 Source: <https://www.gezondleven.be/themas/voeding>; accessed 19 November 2019.

13 Ministerio de Salud Pública del Ecuador y Organización de las Naciones Unidas para la Alimentación y la Agricultura (2018). *Documento Técnico de las Guías Alimentarias Basadas en Alimentos (GABA) del Ecuador*. GABA-ECU 2018: Quito.

14 Health Canada. 2019. *Canada's Dietary Guidelines for Health Professionals and Policy Makers*. Health Canada: Ottawa, p. 15.

15 For impacts of changes in food group consumption, see for example: Clark MA, Springmann M, Hill J, Tilman D. Multiple health and environmental impacts of foods. *Proc Natl Acad Sci U S A*. 2019 Nov 12;116(46):23357-23362. doi: 10.1073/pnas.1906908116. Epub 2019 Oct 28.

4 / TYPOLOGY OF COUNTRIES



Based on review of country page statements about audiences/target groups, and/or on available documents,¹⁶ countries were classified into the following simple typology:

1. Countries with FBDGs that do not mention age or physiological groups;
2. Countries with FBDGs that provide advice on portions and portion sizes for age or physiological groups, but provide no other dietary guidance for these groups;
3. Countries with FBDGs that include scattered references to the needs of age and/or physiological groups (found in FBDGs documents covering the general population, or occasionally found only in key messages);
4. Countries with FBDGs documents that include specific sections or sub-sections focused on the needs of age and/or physiological groups;
5. Countries with FBDGs, or other separate guidance (documents or web-based guidance) for any or all of:
 - a. Infants
 - b. Young children under 2 years of age
 - c. Preschool children
 - d. School-aged children
 - e. Adolescents
 - f. Pregnant women
 - g. Lactating women

Regarding ‘type 5’ countries, it is important to note that there are two ‘sub-types’;

1. Countries where the guidance for some or all age and physiological groups is provided within separate official FBDGs documents;
2. Countries where government guidance is provided, but was either clearly developed through separate processes, or where the link between the dietary guidelines development process and the ‘other guidance’ is not explicit or transparent based on information available from the source document or webpage.

For example, many countries state that their dietary guidelines are for healthy individuals aged two

¹⁶ For this section, ‘available documents’ include documents in English, Spanish, Portuguese or French and: 1. Available for direct download from the country page at FAO; or 2. Available through links at the country page; or 3. Identified on the country page, but with broken links, if the documents were available through searching on the document name or at links provided at the FAO website.

and older yet also disseminate – sometimes from the same FBDG website and sometimes through linked sites or pages – separate professional and/or consumer guidance on feeding infants and young children under two years of age.

Some countries where children and adolescents are identified as being covered by the FBDGs and key messages for the general population also provide separate consumer-facing resources for these age groups with additional targeted guidance. However, this additional age-specific guidance may not clearly indicate a concise set of messages. All of these different types of guidance were considered in the case studies, regardless of whether there were

guidelines statements or key messages that cover the specific population groups.

Table 3 summarizes the number of countries of each type by region and by country income classification. Separate guidance (type 4 or type 5 countries) is available in around half of the 92 countries with FBDGs (47 countries). One third (31 countries) do not provide such guidance; ‘type’ could not be determined for nearly 1 in 5 (14 countries) mainly due to language barriers (11 countries in Europe/Central Asia and 1 country in East Asia); in several other countries, there were broken links to guidance.

Table 3 Types of guidance for age and/or physiological groups by region and income classification

| UNICEF Region | Number of countries with each type of guidance ^b | | | | | | |
|-------------------------------------|---|----------|-----------|-----------|-----------|----------------------|-----------|
| | Type 1 | Type 2 | Type 3 | Type 4 | Type 5 | Unknown ^c | Total |
| Sub-Saharan Africa | | | | | | | |
| West and Central Africa | 0 | 1 | 0 | 2 | 0 | 0 | 3 |
| Eastern and Southern Africa | 0 | 0 | 3 | 1 | 0 | 0 | 4 |
| Middle East and North Africa | 0 | 0 | 3 | 0 | 1 | 1 | 5 |
| Europe and Central Asia | | | | | | | |
| Eastern Europe and Central Asia | 0 | 0 | 2 | 2 | 1 | 3 | 8 |
| Western Europe | 1 | 0 | 3 | 1 | 11 | 8 | 24 |
| South Asia | 1 | 0 | 0 | 4 | 0 | 0 | 5 |
| East Asia and Pacific | 1 | 0 | 0 | 3 | 7 | 2 | 13 |
| Latin America and Caribbean | 13 | 0 | 3 | 3 | 9 | 0 | 28 |
| North America | 0 | 0 | 0 | 0 | 2 | 0 | 2 |
| Total | 16 | 1 | 14 | 16 | 31 | 14 | 92 |
| Low income | 1 | 1 | 0 | 1 | 0 | 1 | 4 |
| Lower-middle income | 2 | 0 | 1 | 6 | 2 | 1 | 12 |
| Upper-middle income | 8 | 0 | 5 | 7 | 9 | 5 | 34 |
| High income | 5 | 0 | 7 | 2 | 19 | 9 | 42 |

a UNICEF regions, and World Bank income classification as of 1 July 2019.

b Typology: 1. Countries with no guidance for age or physiological groups; 2. Guidance on varying portions and portion sizes only; 3. Scattered references to needs of groups in FBDGs covering the general population; 4. FBDGs with separate sections for groups; 5. Separate FBDGs and/or other official guidance for groups.

c Countries in this column either had broken links, or the type could not be determined because the relevant documents and web pages were in languages other than English, Spanish, Portuguese, or French.

Annex 3 lists all countries and identifies which fall into each of the 5 categories. For type 4 and type 5 countries, the Table in the Annex further indicates for which age and/or physiological groups guidance is available, and notes when the type could not be determined, and why.

The likelihood of providing entirely separate guidance (type 5) increases with country income classification. Low and lower middle income countries are more likely to include age and physiological groups in separate focused sections within the main dietary guidelines document (type 4).

Considering both FBDGs and other types of guidance, there was wide variety in which age and/or physiological groups were covered by countries in Europe, Central Asia, and the East Asia and Pacific region. In South Asia, most countries provide at least some minimum guidance for each life stage. In Latin America, many countries provide guidance for infants and children under two years of age, but not for older

children or adolescents, nor for women. In North America, there is guidance for most (U.S.) or all age and physiological groups (Canada).

The scope of the guidance also varies widely, with some countries providing guidance narrowly focused on foods and food groups (how much to eat daily or weekly from the food groups on the national food guide) while other countries (e.g. Brazil and Canada) provide extensive guidance around many behaviors related to obtaining and cooking food, evaluating marketing of food, and sharing food and skills with family. Similarly, considering both FBDGs and other guidance for infants and children, some countries emphasize what to feed and when or how frequently to feed, while other countries emphasize how to feed – feeding and parenting behaviors and skills – and provide more context on developmental and/or socio-emotional aspects of feeding and eating. See the case studies (Section 7) for examples of different types of guidance.

5 / SUMMARY OF GROUP-SPECIFIC KEY MESSAGES IN FBDGs



For each country with a page at the FAO repository, the relevant authority provided a set of key messages. As noted, these are generally equivalent to the main dietary guidelines statements and are messages for consumers. Many countries organize their longer guidelines documents and/or web resources around these messages.

When there are separate group-specific sections of guidelines documents, or when there are linkages out to other guidance for age or physiological groups there may be additional group-specific key messages; however, in this Section we summarize only key messages on the FAO country pages.

Table 4 provides *verbatim* group-specific messages as found at the FAO country pages. Thirty of the 92 countries included one or more key messages that either addressed the needs of a specific group or were messages that implicitly include children (for example, encouraging family meals).

The most common messages are about breastfeeding (19 countries) and complementary feeding (11 countries). All 5 South Asian countries included multiple messages about life stages, highlighting the needs of children, adolescents

and pregnant and lactating women, in addition to encouraging breastfeeding and appropriate complementary feeding. There were no other notable regional patterns.

In addition to the group-specific key messages in Table 4 note that in separate group-specific guidance, many countries emphasize that their dietary guidelines messages for the general population also apply. So, for example, in countries where guidelines are meant to cover all healthy people over two years of age, general messages all apply to pre-schoolers, school-aged children, adolescents, and pregnant and lactating women.

In Table 4 below Cambodia provides an example of typical messages for the general population, because their entire dietary guidelines document targets school-aged children. The messages in **Table 4** for Cambodian children are similar to many general population messages: a message on dietary diversity; several food-group-specific messages on dairy, protein foods, fruits and vegetables, and starchy foods; a moderation message for sugar, salt and fats; and a message on body weight.

Table 4 Key messages for age and physiological groups

| UNICEF Region | Country | Key messages |
|--------------------------------|----------------|---|
| Sub-Saharan Africa | | |
| West and Central Africa | | [none] |
| Eastern and Southern Africa | Seychelles | <ul style="list-style-type: none"> • Breastfeed your child exclusively up to 6 months • Take care of your family: |
| Middle-East & North Africa | Qatar | <ul style="list-style-type: none"> • Breastfeed your baby exclusively for the first six months of their life, and continue until your child is two years old • Build and model healthy patterns for your family |
| Europe and Central Asia | | |
| Eastern Europe & Central Asia | Albania | <ul style="list-style-type: none"> • Encourage exclusive breastfeeding for the first 6 months of a baby's life • Breastfeeding should be continued up to the first year |
| | Georgia | <ul style="list-style-type: none"> • Babies should be exclusively breastfed up to the 6th month and then breastfeeding plus complementary feeding up to 2 years of age |
| | Turkey | <ul style="list-style-type: none"> • During the first 6 months, only breast milk should be given to a baby and then other complementary foods should be started in adequate type and quantity |
| Western Europe | Italy | <ul style="list-style-type: none"> • Pay attention to specific advice for special people |
| | Malta | <ul style="list-style-type: none"> • Avoid drinking [alcohol] completely if you are pregnant or breastfeeding • Avoid soft and sweetened drinks especially in children |
| | Netherlands | <ul style="list-style-type: none"> • Nutrient supplements are not needed, except for specific groups for which supplementation applies |
| | Portugal | <ul style="list-style-type: none"> • Alcoholic beverages are not recommended for children, adolescents, pregnant and lactating women |
| South Asia | | |
| Afghanistan | | <ul style="list-style-type: none"> • Pregnant and lactating women should increase intake of all the food groups daily, especially foods that are rich in iron |
| | | <ul style="list-style-type: none"> • Give infants only breast milk for the first 6 months of life |
| | | <ul style="list-style-type: none"> • From 6 months onward, feed infants and young children different nutritious foods in addition to breast milk and continue breastfeeding until 24 months |
| | | <ul style="list-style-type: none"> • Eat additional food during pregnancy and lactation |
| | | <ul style="list-style-type: none"> • Practise exclusive breastfeeding for 6 months and start adequate complementary foods in time |
| Bangladesh | | <ul style="list-style-type: none"> • Ensure provision of extra food and health care to pregnant and lactating women |
| | | <ul style="list-style-type: none"> • Promote exclusive breastfeeding for 6 months and encourage breastfeeding until 2 years or as long as possible |
| | | <ul style="list-style-type: none"> • Feed home-based semi-solid foods to the infant after 6 months |
| India | | <ul style="list-style-type: none"> • Ensure adequate and appropriate diets for children and adolescents, both in health and sickness |
| | | <ul style="list-style-type: none"> • Eat additional and especially nutritious food during pregnancy and lactation |
| | | <ul style="list-style-type: none"> • Exclusively breastfeed your baby for 6 months and continue up to 2 years |
| Nepal | | <ul style="list-style-type: none"> • Infants should be getting appropriate complementary feeding at 6 months |
| | | <ul style="list-style-type: none"> • Provide special nutritional care for adolescents |
| | | <ul style="list-style-type: none"> • Eat additional food during pregnancy and lactation |
| Sri Lanka | | <ul style="list-style-type: none"> • Exclusively breastfeed for 6 months |
| | | <ul style="list-style-type: none"> • Start complementary feeding at the completion of 6 months |
| | | <ul style="list-style-type: none"> • Children and adolescents should take an adequate and nutritious diet |

| UNICEF Region | Country | Key messages |
|--------------------------------------|-------------------|--|
| East Asia and Pacific | | |
| | Australia | <ul style="list-style-type: none"> • Encourage, support and promote breastfeeding <p>Entire Dietary Guidelines document is for school-aged children; key messages are:</p> <ul style="list-style-type: none"> • Eat foods from all food groups everyday as part of a well-balanced diet • Consume calcium-rich foods such as whole small fish, milk, and milk products • Eat protein-rich foods such as fish, meat, eggs or beans at least 2 to 3 times a day |
| | Cambodia | <ul style="list-style-type: none"> • Eat plenty of fruits and vegetables regularly • Eat cereals and starchy foods such as rice, noodles, bread and its alternatives in an adequate amount • Reduce foods high in salt, sugar and fat • Measure your body weight and height regularly to track your growth |
| | Fiji | <ul style="list-style-type: none"> • Breastfeed your baby exclusively for the first 6 months • Give children healthy meals and snacks |
| | Malaysia | <ul style="list-style-type: none"> • Practice exclusive breastfeeding from birth until 6 months and continue to breastfeed until 2 years of age |
| | Mongolia | <p>Not directly, but a key message alludes to groups:</p> <ul style="list-style-type: none"> • Choose healthy food and beverages and consume the amounts recommended for your physical features |
| | Philippines | <ul style="list-style-type: none"> • Breastfeed infants exclusively from birth up to 6 months, then give appropriate complementary foods while continuing breastfeeding for 2 years and beyond for optimum growth and development |
| | Republic of Korea | <p>Not directly, but there is a key message about family meals; in longer consumer-facing document they note the importance of this for decreased risk of obesity for children, and for learning manners and sharing, and promoting happiness:</p> <ul style="list-style-type: none"> • Have frequent family meals |
| | Thailand | <p>Not directly, but there is a key message stating:</p> <ul style="list-style-type: none"> • Drink in appropriate quality and quantity for one's age |
| | Viet Nam | <ul style="list-style-type: none"> • Initiate breastfeeding right after birth, exclusively breastfeed during the first 6 months, then start proper complementary feeding and continue breastfeeding until 24 months • Children over 6 months of age and adults are recommended to consume milk and dairy products appropriate to their age |
| Latin America & Caribbean | | |
| | Antigua / Barbuda | <ul style="list-style-type: none"> • Feed your baby breast milk only for the first 6 months of the baby's life |
| | Argentina | <ul style="list-style-type: none"> • Children, adolescents and pregnant women should not drink alcohol |
| | Bahamas | <ul style="list-style-type: none"> • Breast milk is the best choice for infants to start a healthy life |
| | Brazil | <p>Brazil has '10 Steps to Healthy Eating' and chose to include the text elaborating each of these in their messages at the FAO website. In the elaboration of several messages, role of family or children is mentioned:</p> <ul style="list-style-type: none"> • Whenever possible, eat in company, with family, friends, or colleagues..... Share household activities that precede or succeed the consumption of meals • If you have cooking skills, develop them and share them, especially with boys and girls • Share with family members the responsibility for all activities related to meals. Make the preparation and eating of meals privileged times of conviviality and pleasure • Be critical and teach children to be critical of all forms of food advertising and marketing |

| UNICEF Region | Country | Key messages |
|------------------------------------|----------------|---|
| Colombia | | <ul style="list-style-type: none"> To prevent anaemia, schoolchildren, adolescents and young women should eat offal once per week. |
| Dominican Republic | | <ul style="list-style-type: none"> Exclusively breastfeed infants from birth up to 6 months because it is the first and the best food for them |
| Venezuela (Bolivarian Republic of) | | <ul style="list-style-type: none"> Introduce adequate complementary foods (as shown in the food guide) starting at 6 months of age Breast milk is the best food for infants under 6 months of age |

6 / SUMMARY OF GROUP-SPECIFIC TOPICS ADDRESSED IN GENERAL FBDGS DOCUMENTS



This section summarizes group-specific topics that are found in FBDGs documents covering the general population. Frequently, references to the needs of age and/or physiological groups are embedded within general guidelines documents. This can be the case both when no other specific guidance is available, but also when separate guidance is available, but country authorities choose to also integrate and highlight messages for groups within the general guidelines document.

As noted above, for the purposes of this section we identified dietary guidelines documents covering the

general population, in English, and published after 2010. We searched these documents using key words (see Section 2.3) and also did quick scans of documents in Spanish, Portuguese and French, to ensure that the list of topics found in the English-language documents was comprehensive. **Table 5** lists countries with recent and available documents in English and indicates the year of publication. **Annex 2** provides a list of documents consulted for this Section. As noted in the methods section and detailed in the Annex, the documents consulted for this section were a mix of professional-facing and consumer-facing FBDGs documents.

Table 5 Countries with recent general population guidelines documents in English

| UNICEF Region | Country | Year of publication |
|------------------------------|----------------|---------------------|
| Sub-Saharan Africa | Kenya | 2017 |
| | Sierra Leone | 2016 |
| | South Africa | 2012 |
| Middle East and North Africa | Lebanon | 2013 |
| | Qatar | 2015 |
| Europe and Central Asia | Ireland | 2012–2016 |
| | Malta | 2016 |
| | Sweden | 2015 |
| | United Kingdom | 2016 |

| | | |
|--|-------------------|-----------|
| South Asia | Bangladesh | 2013 |
| | India | 2011 |
| | Sri Lanka | 2011 |
| East Asia and Pacific^a | Australia | 2012-2013 |
| | New Zealand | 2015 |
| Latin America & Caribbean | Antigua / Barbuda | 2013 |
| | Barbados | 2017 |
| | Belize | 2012 |
| | Brazil | 2014 |
| | Jamaica | 2015 |
| North America | Canada | 2019 |
| | United States | 2016 |

a In addition to these, dietary guidelines for the Philippines were updated in 2012, but the link at the FAO country page did not lead to the guidelines, and we could not find them through a search at the linked government website.

6.1 Sub-Saharan Africa: Kenya, Sierra Leone, South Africa

Kenya and Sierra Leone provide recent examples from Africa where the main dietary guidelines documents have a strong focus on the life cycle. In both cases guidance for age and physiological groups is presented separately within the main guidelines document i.e. they are both ‘type 4’ countries in our typology. The separate guidance is found in Section 3 of the Kenyan dietary guidelines, and in a series of Annexes for Sierra Leone. In addition, in Sierra Leone the life cycle focus is woven throughout the main sections of the general dietary guidelines documents. In contrast, in the Kenyan guidelines the guidance for age and physiological groups is nearly entirely

consolidated in Section 3.

In the South Africa dietary guidelines document, there is a separate section for pediatric guidelines. However, these are described as ‘proposed guidelines’, and were not yet tested at the time of publication. The status of these guidelines in relation to current national uses is therefore not clear, without additional sources of information.

Table 6 lists topics addressed in the Sierra Leone guidelines within the sections of the document covering the general population. There is additional detailed group-specific guidance on many topics in the Annexes. See Section 7 (case studies), for more details on Chapter 3 of the Kenyan guidelines.

Table 6 Topics integrated within general population guidelines: Sierra Leone

| Topic | Age and/or physiological group(s) |
|--|---|
| Number of meals and snacks | Young children, children, adolescents, pregnant & lactating women |
| Portions and portion sizes | Pregnant and lactating women |
| Animal-source foods As sources of micronutrients, especially iron | Young children, pregnant women |
| Prioritizing vulnerable groups | Children under five years of age, pregnant & lactating women |
| Folate sources | Pregnant women |
| Folic acid supplements | Pregnant women |
| Fish oils | Young children |
| Sugar intake | Children |
| Sweet drinks in bottles | Infants, young children |
| Food taboos | Pregnant and lactating women |
| Water needs | Infants, young children, lactating women |
| Food safety | Infants, young children |
| Handwashing | Children; before feeding children |
| Oral hygiene | Infants, children |
| Physical activity | Infants, children, adolescents, pregnant and lactating women |
| Clean air and ventilation | Children, women |

6.2 Middle East and North Africa: Lebanon, Qatar

Lebanon is a 'type 3' country, and the only guidance for age and physiological groups are brief mentions in a guidelines document that is targeted towards adults (full title: *The Food-Based Dietary Guideline Manual for Promoting Healthy Eating in the Lebanese Adult Population*). There is no guidance for feeding infants and young children. The needs of 'Special Population Groups' other than infants and young children are clearly highlighted in Boxes, as relevant, in sections that elaborate each main dietary guideline message.

The *Qatar Dietary Guidelines* cover ages 2 to 65 and are also 'type 3' guidelines in our typology. Similarly to Lebanon, the Qatari document highlights the needs of specific groups in the text elaborating on each guideline. Further, the last guideline 'Take care of your family' has two sub-messages, one on breastfeeding and one instructing to 'Build and model healthy patterns for your family'; the latter covers topics such as family meals, with many parenting tips for feeding children.

Table 7 combines topics from these two countries to show the range of brief advice incorporated into guidelines for the general population.

Table 7 Topics integrated within general population guidelines: Lebanon, Qatar

| Topic | Age and/or physiological group(s) |
|--|---|
| Milk and dairy consumption, and alternatives; requirements, sources and tips for children | Children, adolescents, pregnant women |
| Vegetables and fruit; tips for feeding | Children |
| Folate sources | Women of childbearing age, pregnant women |
| Folic acid supplements | Preconception, and pregnant women |
| Iron supplements | Women of childbearing age, pregnant women |
| Fish and seafood; targets and cautions | Preconception, and pregnant women |
| Need for higher fat diet | Young children under two years |
| Salt and salty foods | Children |
| Fluid/water needs | Pregnant and breastfeeding women |
| Food safety, including specific foods to be avoided by vulnerable groups | Infants, children, pregnant women |
| Pre-pregnancy BMI ^a and weight gain | Preconception, and pregnant women |
| Physical activity | Children, adolescents, pregnant women |
| Supporting an overweight child - how | Children |
| Breastfeeding 'tips' | Lactating women |
| 'Build and model healthy patterns'; parenting around food <ul style="list-style-type: none"> • Set regular times for meals and snacks • Eat at least one meal daily with family • Be a role model for healthy eating and physical activity • Teach children food skills • Limit sodas • Offer healthy treats • Offer new foods multiple times • Division of labor in feeding – parent is responsible for what, children are responsible for how much • Suitable portion sizes | Parents/families |

a BMI = body mass index

6.3 Europe and Central Asia: Ireland, Malta, Sweden, United Kingdom

Ireland is a ‘type 4/5’ country, both providing guidance in sections within a general document, and also providing separate web-based guidance for different groups. Sweden is a ‘type 5’ country, providing separate guidance. Malta and the United Kingdom provide limited and brief guidance throughout their guidelines for the general population (i.e. they are ‘type 3’ countries).

The separate guidance for Ireland and Sweden is not included in this section (see a case study for Ireland in Section 7). However, the general guidelines documents for Ireland and Sweden were searched for ‘special group’ topics that were integrated with general population guidance, as above. **Table 8** summarizes the group-specific guidance topics embedded in general dietary guidelines documents for Ireland, Malta, Sweden, and the United Kingdom.

Table 8 Topics integrated within general population guidelines: Ireland, Malta, Sweden, the United Kingdom

| Topic | Age and/or physiological group(s) |
|---|--|
| ‘Breast is best’ | Lactating women/infants |
| General diet, move towards adult pattern | Children 2 to 5 |
| Fish, omega-3 fatty acids | Children, pregnant women |
| Fish, toxins | Children, adolescents, women of reproductive age, pregnant women |
| Fiber-rich fortified cereals | Children, adolescents |
| Need for good calcium intake | Children, adolescents |
| Iron needs | Children, adolescents, women of reproductive age |
| Liver, kidney – not consuming | Infants, pregnant women |
| Vitamin D supplements | Infants and young children under five years of age |
| Folic acid supplements | Preconception, and pregnant women |
| Need for higher fat diet | Children under five years of age |
| Sugary drinks, or sugar-sweetened beverages | Children |
| Salt and salty foods | Children |
| Water | Children, adolescents, pregnant and lactating women |
| Caffeine | Pregnant women |
| Alcohol | Pregnant and lactating women |
| Physical activity | Children |

6.4 South Asia: Bangladesh, India, Sri Lanka

Similar to Sierra Leone and Kenya, the FBDGs for these three South Asian countries have a strong life cycle focus and they are all ‘type 4’ countries. All three guidelines documents are organized around key messages, and these include messages focused on infancy, childhood, adolescence and pregnancy and lactation (see Table 4). As in Kenya and Sierra Leone, this means there are sections of the main dietary guidelines document devoted to these concerns.

Table 9 summarizes only topics where the needs of age or physiological groups are addressed elsewhere in the document, under other dietary guidelines for the general population. See the India case study (Section 7) for more details on their guidelines

sections focused on infants, children, adolescents, and pregnant and lactating women.

In the South Asian context, where both undernutrition (wasting, thinness) and overweight and obesity are significant public health concerns, guidance on fat and energy density may be challenging. Both concerns are reflected in the guidance but communicating clearly to support consumers to understand and consume ‘enough, but not too much’ is challenging. In addition to encouraging the use of oils for increasing energy density for the general population, the Indian guidelines also encourage adding sugar (or jaggery) to complementary foods; this is generally not encouraged elsewhere.

Table 9 Topics integrated within general population guidelines: Bangladesh, India, Sri Lanka

| Topic | Age and/or physiological group(s) |
|------------------------------|--|
| Animal-source foods | Children, pregnant and lactating women |
| Protein foods | Infants, children, pregnant women |
| Fruits and vegetables | Infants, children, adolescents |
| Folate sources | Pregnant women |
| Dairy, needs | Infants, children, adolescents, pregnant and lactating women |
| Dairy, types (% fat) | Undertwos, overweight and obese children |
| Fat needs and energy density | Infants, children, adolescents, pregnant and lactating women |
| Fat, moderation | General message, immediately following guidance on needs – enough but not too much |
| Fat types | Infants, young children |
| Sugary foods | Children |
| Salt | Infants, young children |
| Water or fluid needs | Infants, children, adolescents, pregnant and lactating women |
| Physical activity | Children, adolescents, pregnant and lactating women |
| Managing overweight | Children |
| Portions, portion sizes | Infants, children, adolescents, pregnant and lactating women |

6.5 East Asia and Pacific: Australia, New Zealand

In Australia, the FBDGs for the general population include specific information for pregnant women and children and are summarized for consumers in: Eat for Health: Australian Dietary Guidelines Summary. There are separate and detailed infant feeding guidelines covering breastfeeding and complementary feeding. However, in addition, Guideline #4 in the general guidelines is: ‘Encourage, support and promote breastfeeding’ and a section of the general document also briefly covers this, so Australia is a ‘type 4/5’ country in our typology.

New Zealand (type 5) provides separate background papers and consumer-facing guidance for the following groups: pregnant and breastfeeding women, infants and toddlers (0–2 years), and children and young people (2–18 years). The general population guidelines document is the *Eating and Activity Guidelines for New Zealand Adults*. **Table 10** summarizes those topics addressing age and physiological groups that are covered in Australia and New Zealand’s general documents (excluding Australia’s separate section for Guideline #4). See Section 7 (case studies) for more details on New Zealand’s separate guidance for age and physiological groups.

Table 10 Topics integrated within general population guidelines: Australia, New Zealand

| Topic | Age and/or physiological group(s) |
|---------------------------|--|
| Meat | Infants, children, pregnant women |
| Milk, very little | Infants |
| Dairy, needs | Children, adolescents |
| Dairy, types (% fat) | Undertwos, over 2 years of age |
| Fat needs | Infants |
| Fat types | Children, adolescents |
| Fruit juice | Infants |
| Tea, coffee | Young children |
| Sugar-sweetened beverages | Children |
| Water/fluid needs | Infants, young children |
| Alcohol | Adolescents, preconception, pregnant and lactating women |
| Food safety | Infants, pregnant women |
| Choking | Young children under 3 years of age |
| Physical activity | Children, adolescents |
| ‘Serves’ and serve sizes | Infants, toddlers, children, adolescents, pregnant and lactating women |

6.6 Latin America and Caribbean: Antigua and Barbuda, Barbados, Belize, Brazil, Jamaica

The FBDGs for Antigua and Barbuda, Barbados, Belize and Jamaica are all directed at the general public over 24 months of age, and with no separate guidelines for age or physiological groups. The guidelines documents are relatively brief and consumer-facing. In Brazil, the main guidelines apply to all Brazilians over 24 months of age and are written for professionals engaged in health promotion and disease prevention. There is separate dietary guidance for children under 2 years of age; this guidance is also addressed to a professional audience, thus Brazil is a 'type 5' country.

In Antigua and Barbuda, the only group-specific message is a guideline on exclusive breastfeeding. Barbados, Belize, and Jamaica have no mention of age or physiological groups in their FBDGs documents (i.e. they are 'type 1' countries).

The Brazilian FBDGs represent a departure from the types of messages found in most earlier FBDGs, and include a much stronger focus on selecting minimally processed foods, gaining and sharing food skills, and understanding constraints to healthy choices including marketing, among other topics. Searching on key words, we found no specific topics related to pregnancy, infants or breastfeeding, but found a number of topics related to children, youth and families:

- Encouraging family meals, and eating in company more generally
- Teaching children and adolescents food skills, including gardening, and shopping for, preparing and cooking food
- Educating children and adolescents about the purposes of food marketing, and limiting screen time for children to reduce their exposure to marketing
- Recognizing the needs of children and adolescents for more than 3 meals a day; other eating occasions were described as 'small meals' rather than snacks
- Promoting bringing healthy 'small meals' from home to school, to avoid purchasing processed snacks

Many other advocacy actions were also encouraged, including around food in schools.

6.7 North America: Canada, United States

Both the Canadian and the U.S. guidelines provide guidance for the population two years of age and older. The Canadian guidelines document provides a link to separate guidance for nutrition during infancy, including breastfeeding. In the U.S., guidance for infants and young children under 2 and additional guidance for pregnant women is currently under development for the next revision of the FBDGs (2020–2025).

However, in both countries there are also extensive web-based resources, including resources addressing the needs of all age and physiological groups (making them 'type 5' countries). See Section 7 (case studies) for more information on extensive additional guidance available in Canada. For this Section, we searched only the two main FBDGs documents for the general population.

In the Canadian general guidance, as in Brazil, there were no topics related to infants or to pregnant or breastfeeding women, but a strong focus on the benefits of family meals and of teaching food skills to children and adolescents. In addition, there was brief guidance on physical activity for children and 'youth'.

While there was no specific guidance in this document for foods or beverages for children or adolescents, the evidence considered in developing the general guidance included evidence for children and adolescents, for example in relation to intake of saturated fat and trans fatty acids, sodium, free sugars, and sugar-sweetened or sugar-containing beverages. So the general population guidelines were explicitly informed by evidenced-based concerns for children and adolescents.

Table 11 summarizes topics addressing age and physiological groups that are covered in the general U.S. guidelines document.

Table 11 Topics integrated within general population guidelines: United States

| Topic | Age and/or physiological group(s) |
|------------------------------------|---|
| Dairy needs | Children, adolescents |
| Iron sources | Adolescent girls, women |
| Heme iron | Young children, women of reproductive age, pregnant women |
| Iron supplements | Pregnant women |
| Seafood, needs and cautions | Young children, pregnant and lactating women |
| Folate sources | Women of reproductive age, pregnant women |
| Folic acid fortified foods | Women of reproductive age |
| Folic acid supplements | Women of reproductive age, pregnant women |
| Fruit juice | Young children |
| Sodium intake | Children, adolescents |
| Food borne illness, foods to avoid | Infants, young children, pregnant women |
| Physical activity | Children, adolescents |
| Managing overweight and obesity | Children, adolescents |
| BMI and weight gain | Preconception, pregnancy |
| Servings per food group | Children, adolescents |

In this Section we have presented results separately by region to allow clarity on which topics were included in any particular region, but not in others. In Section 7 (case studies), topics as described in this Section will be grouped and combined with additional topics addressed in the case study countries,

creating a comprehensive list of topics that could be considered for inclusion in future FBDGs and associated guidance targeting age and physiological groups.

7 / COUNTRY CASE STUDIES



7.1 Overview

Following the criteria listed in Section 2.3, the following countries were identified as potential case studies:

| | |
|-----------------------------------|--|
| Sub-Saharan Africa: | Kenya, Sierra Leone |
| Europe: | Belgium, France, Ireland, Spain, Sweden, Switzerland |
| South Asia: | India |
| East Asia and the Pacific: | New Zealand |
| Latin America: | Argentina, Bolivia, Brazil, Chile, Colombia, Mexico, Panama, Paraguay |
| North America: | Canada, United States |

However, due to time limitations we needed to select a subset of countries, bolded in the list above.¹⁷ Source documents and websites for case study countries are listed in **Annex 4**.

The case studies for Kenya and India were very straightforward because there is only one source document, and because they each included clear and

concise messages for age and physiological groups. The case studies for Spain and Latin America and the Caribbean were also relatively straightforward with one or two source documents per country, and with many countries providing concise messages for age and physiological groups.

For the other high income countries (Ireland, New Zealand and Canada) case studies are more complex because professional and consumer-facing resources are numerous, sometimes overlapping in content, and accessible through numerous cross-linkages in web applications. In New Zealand, however, there is clear navigation to a page collating all consumer-facing resources in one place.

The breadth of the guidance was not associated with country income level. For example, Kenya and India (both lower-middle income countries) have an explicit life cycle focus in the main FBDGs document and cover all age and physiological groups. However, the depth and level of detail in the guidance was generally highest in high income countries.

¹⁷ Selections were made as follows: For Africa and North America, we selected the most recent guidelines (Kenya, Canada); for Europe, we excluded countries where some group-specific materials were available only in French, Flemish or German (Belgium, France, Switzerland); we selected Ireland and Spain over Sweden because they had materials for more of the specific age groups. For Latin America, we prioritized countries with guidance for school-aged children and adolescents (Bolivia, Chile) and those with the most recent guidance for infants and young children under two years of age (Colombia, Panama). Mexico also has recent guidance covering the full life cycle but was excluded due to time constraints, as the volume of materials for Mexico is very large.

7.2 Availability of group-specific guidance in case study countries

In this section, we identify which age groups are covered in each case study country. **Tables 12** and **13** show availability of group-specific guidance for the case study countries, by age and physiological group and indicate age groupings. The countries are organized by region.

Age groupings were not always clear in all guidance documents; in some cases, age groupings are only clearly delineated in guidance on number of portions per day or week, and other behavioral guidance covered broader age ranges across, for example across childhood, or all of childhood and adolescence.

Globally, there are inconsistencies in age groupings. In a majority of the case study countries age

groupings for young children do not align with UNICEF's groupings (see Box 1), with many countries (particularly in Latin America) providing guidance for infants and young children under 2 years of age but not for children in their third year. Ireland provides web-based guidance for 'toddlers' but the age range is not defined. India provides serving sizes for children 1-3 years of age but provides no other guidance specific to this age range. Except for Kenya's, the age ranges for teenagers (or adolescents) also do not align with UNICEF's.

Table 14 identifies the groups covered by the FBDGs, as stated on each FAO country page. For countries where other government guidance was identified that covered ages not mentioned at the FAO country page (Ireland and Canada), we indicate the source and the relationship to the dietary guidelines.

Table 12 Coverage of specific groups in case studies from Africa, Europe, the Pacific and North America

| | Kenya | Ireland ^a | Spain | India ^b | New Zealand ^c | Canada ^d |
|----------------|----------------------------|----------------------------|---------|--------------------|----------------------------|---------------------|
| Groups | 2017 | 2011-2018 | 2010 | 2011 | 2013-2017 | 2019 |
| Pregnant | X | X | | X | X | X |
| Lactating | X | X | | X | X | |
| Infants < 6 mo | X | X | | X | X | X |
| 6-11 mo | ~6 mo 6-8 mo 9-11 mo | ~6 mo 6-9 mo 9-12 mo | | 6-12 mo | ~6 mo 7-8 mo 8-12 mo | 6-12 mo 12-24 mo |
| 12-23 mo | X | Toddlers | | 1-3 y | X | X |
| Pre-school | 24-59 mo | | 3-6 y | 4-6 y | 24-59 mo | Children |
| School-aged | 5-9 y | 5-12 y | 7-12 y | 7-9 y | 5-12 y | |
| | | | | 10-12 y | | |
| Adolescents | 10-19 y | 13-18 y | 13-16 y | 13-15 y 16-18 y | 13-18 y | Teenagers |

- a Much of the consumer-facing guidance in Ireland is web-based. There are web pages with guidance for toddlers, children and teenagers. The general population food guide covers ages 5 and older and differentiates portions for some food groups for ages 5-12 and 13-18. Web pages are not dated; documents were published, revised or reviewed from 2011-2018.
- b The Indian Dietary Guidelines document has chapters on: 1) breastfeeding; 2) feeding home-based solids starting from 6 months; and 3) adequate feeding for children and adolescents in health and sickness. Exact age groupings are not clear in the chapters; the age groupings shown here are from Annex 4 which provides portion sizes and number of portions by age.
- c New Zealand has separate technical documents and corresponding consumer-facing documents for various age groups. The most recent updates were in 2013 for infants and toddlers under 2 years of age and for lactating women and 2017 for pregnant women, older children and adolescents.
- d Similarly to Ireland, Canada provides some web-based consumer-facing guidance that does not clearly delineate age groups. Under 'life stages', there are pages for parents of children of all ages (young children through teenagers) and a page directed at teenagers. Canada's revised guidelines are very new, and there is no guide to portions though this may be forthcoming. Most web pages are associated with the new 2019 guidelines for the general population over 2 years of age, but some pages for pregnancy and infancy refer to older publications (see Annex 4 for details).

Table 13 Coverage of specific groups in case studies from Latin America

| | Bolivia | Chile | Colombia | Panama |
|----------------|-----------------|---------|----------------------|-------------------|
| Groups: | 2013 | 2013 | 2018 | 2018 |
| Pregnant | X | | 14-17 yr 18-49 yr | |
| Lactating | X | | X | |
| Infants < 6 mo | | X | X | X |
| 6-11 mo | | X | 6-8 mo 9-11 mo | 6-8 mo 9-11 mo |
| 12-23 mo | | X | X | X |
| Pre-school | | 2-5 y | | |
| School-aged | 6-7 y 8-10 y | 6-10 y | | |
| Adolescents | 11-18 y | 11-18 y | | |



A community health volunteer in Kenya, gives nutrition counselling on home visits. © UNICEF/UN0259535/Ndinda

Table 14 Target groups and location of group-specific guidance for case study countries

| Country | Statement of target groups from FAO website | Location of group-specific guidance |
|-------------|--|--|
| Kenya | The recommendations are targeted at the general population with key messages provided for each stage of the life cycle. | Guidance with separate messages for all life stages is in the main dietary guidelines document. |
| Ireland | The messages of the guidelines are intended for adults and children over 5 years of age. | Guidance for infants and children under 5 years of age was developed separately but is linked to from the Irish dietary guidelines website. Guidance for ages 5-12 and 13-18 was also found in several documents and webpages linked to from the main dietary guidelines page. |
| Spain | There are two sets of guidelines – one for children and adolescents 3–16 years old, and a second one for the general public. | Separate document for children and adolescents 3–16 years of age, identified as part of the dietary guidelines at FAO country page. |
| India | The guidelines are directed at the general public. The document includes recommendations for different population groups. | Guidance with separate messages for all life stages is in the main dietary guidelines document. |
| New Zealand | There are background papers for five population groups: adults, pregnant and breastfeeding women, infants and toddlers (0–2 years), children and young people (2–18 years), and older people. Health education resources are developed for use by the general public to accompany each guideline background paper. | The FAO country page provides a link to the age-specific guidelines at the New Zealand Ministry of health website. Currently these are termed ‘food and nutrition guidelines’ but New Zealand in the process of transitioning to ‘eating and activity guidelines’. |
| Canada | Canada’s food guide provides dietary guidance for members of the Canadian population two years of age and older. | Guidance for infants is not at the FAO country page but is linked to through a hyperlink on page 1 of the main dietary guidelines document and through various links at the Health Canada website. Canada has developed a mobile-responsive web application for dissemination of guidance; guidance for children and adolescents 2–18 years of age is available as life stage ‘tips’ and ‘resources’ linked to from the main webpage of Canada’s Food Guide. |
| Bolivia | The guidelines are aimed at the healthy general population over 2 years of age, with a focus on different age and physiological status groups: school-aged children; adolescents; adults aged 20–59 years; pregnant and breastfeeding women; adults aged 60+ years | Three separate documents for: school-aged children; adolescents; and pregnant and breastfeeding women, identified as part of the dietary guidelines at FAO country page. |
| Chile | The guidelines are aimed at the general public 2 years and older. Based on these guidelines, the INTAa has developed educational materials, including meal plans, for different age groups: adults; children under 2 years of age; children 2–5 years of age; children 6–10 years of age; adolescents and the elderly. | Separate document for children and adolescents 0–18 years of age, identified as part of the dietary guidelines at FAO country page. |
| Colombia | The two sets of guidelines are directed at the healthy population over 2 years of age, and at pregnant and breastfeeding women and children under 2 years of age. | Separate document covering pregnant and lactating women and infants and children under 2 years of age, identified as part of the dietary guidelines at FAO country page. |
| Panama | Panama has two guidelines which are aimed at the healthy population 2 years and older, and at healthy children under 2 years of age. | Separate for infants and children under 2 years of age, identified as part of the dietary guidelines at FAO country page. |

a INTA = Institute of Nutrition and Food Technology (INTA) of the University of Chile.

7.3 Development of FBDGs in case study countries

Some case study countries (Ireland, New Zealand, Canada and Colombia) provide detailed descriptions of their FBDGs development processes. Other countries stated they followed the process in the WHO/FAO (1996) document without providing further description, or briefly described consultative processes involving a range of national stakeholders. One country also identified previously developed program guidance as a source (e.g. from infant and young child feeding programs).

To illustrate several different approaches, this section provides a summary of FBDGs development processes for the case study countries where details were available to us.

Ireland

The main guidelines for the general population aged 5 and over were developed by the Department of Health, working in partnership with other nutrition experts in Ireland. The guidelines are based on a 2011 scientific document published by the Food Safety Authority of Ireland (FSAI).¹⁸ Guidance for pre-conception through infancy was developed through by a separate Expert Working Group and was reviewed by the Scientific Committee and the Nutrition Sub-committee of the FSAC.¹⁹

For the main guidelines, after identifying nutrients of concern and setting calorie and nutrient goals by age group and gender, the previous FBDGs were evaluated by modeling the implied daily dietary patterns and comparing to the new goals. New patterns (servings per food group) were developed iteratively. Specific issues such as perceptions of serving sizes and best images for identifying portions were explored through qualitative research with consumers.

New Zealand

New Zealand publishes separate FBDGs for different population groups. In addition to those for adults, New Zealand has separate FBDGs for four other population groups:

- Infants and toddlers (0–2 years)
- Children and young people (2–18 years)
- Pregnant and breastfeeding women
- Older people (age 65 and older)

Guideline development is briefly described in a technical document that presents the FBDGs for adults.²⁰ In addition, New Zealand's web interface is exceptionally clear and transparent regarding the process of FBDGs development and revision.²¹ One webpage lists the specific previous reviews and reports that were considered for each 'eating and activity evidence statement' (which map directly to guidelines) and provides hyperlinks to access each cited report.

In addition to this documentation for adults, there is a separate technical background paper describing the evidence base for the guidance for each group listed above.²²

Finally, New Zealand goes farther than many other countries in also providing clarity and transparency on graded evidence statements backing many other aspects of behavioral guidance, not only evidence for relationships between foods/dietary patterns and health outcomes.²³ The statements cover support for breastfeeding, parental feeding practices and parenting style, adult role modelling, responsive eating, mealtimes and food skills and food literacy.

These evidence statements are presented in detail in **Annex 5**, because they encompass many of the topics that are the subject of newer guidance in other countries. New Zealand provides a positive model of transparency for the development of FBDGs.

¹⁸ Food Safety Authority of Ireland. 2011. *Scientific Recommendations for Healthy Eating in Ireland*. FSAC: Dublin, available at: https://www.fsai.ie/science_and_health/healthy_eating.html

¹⁹ Food Safety Authority of Ireland. 2011. *Scientific Recommendations for a National Infant Feeding Policy*, 2nd Ed. FSAC: Dublin, available at: https://www.fsai.ie/resources_publications.html

²⁰ Ministry of Health. 2015. *Eating and Activity Guidelines for New Zealand Adults*. MOH: Wellington. Available at: https://www.health.govt.nz/system/files/documents/publications/eating-activity-guidelines-for-new-zealand-adults-oct15_0.pdf

²¹ The overall revision process is graphically described in a flow diagram at this page: Process for developing the eating and activity guidelines: <https://www.health.govt.nz/our-work/eating-and-activity-guidelines/process-developing-eating-and-activity-guidelines>. For the 2015 Guidelines for New Zealand Adults, the evidence review process is described at: *Evidence for the Eating and Activity Statements*: <https://www.health.govt.nz/our-work/eating-and-activity-guidelines/evidence-eating-and-activity-statements>

²² See: <https://www.health.govt.nz/our-work/eating-and-activity-guidelines/current-food-and-nutrition-guidelines>

²³ See: Gerritsen S and Wall C. 2017. *How We Eat: Reviews of the evidence on food and eating behaviours related to diet and body size*. Wellington: Ministry of Health and: <https://www.health.govt.nz/our-work/eating-and-activity-guidelines/issue-based-documents-eating-and-activity/summary-evidence-statements-food-and-eating-behaviours>

Canada

The Canadian FBDGs messages apply to adults and children 2 years of age and older.²⁴ The technical document also includes a hyperlink to a separate guidance document for infants and young children under 2 years of age, and also directs readers to a variety of online resources for specific age and physiological groups.

Canada's Dietary Guidelines are developed by Health Canada through a structured, multi-step and well-documented process, with three main sets of considerations:

- Scientific basis, including nutrient standards and the effects of food and nutrients on health;
- Canadian context, including demographics and health status; food skills, habits and behaviors; attitudes and beliefs about healthy eating; food and nutrient intakes; the food supply; the policy environment; and the nutrition information environment; and
- Evidence around use of existing dietary guidance, including awareness and understanding; confidence and acceptance; and integration and use.

Evidence was graded and diet-health associations with 'convincing' evidence were identified as relevant for inclusion (while also considering other factors including stakeholder needs). In compiling evidence, the Canadian process primarily considered existing reviews from leading scientific organizations or federal agencies as well as health claims assessments from Health Canada.

Guidance for infants and young children was developed separately by the Infant Feeding Joint Working Group, which is a collaboration between Health Canada and national organizations (Canadian Paediatric Society's Nutrition and Gastroenterology Committee; Dietitians of Canada; Breastfeeding Committee for Canada; Public Health Agency of Canada). The process was also supported by an Infant Feeding Expert Advisory Group and was informed by input from stakeholders in open consultations.

Colombia

Colombia provides separate FBDGs covering pregnant and lactating women and infants and young children under 2 years of age.²⁵ In 2017, the Colombian Family Welfare Institute and FAO established an agreement related to reviewing and updating dietary guidelines for these groups.

An interdisciplinary National Technical Committee for Food Based Food Guidelines (CTNGA) was reformed, including delegates from different ministries and government agencies, academia, and the National Association of Nutritionists, among others. The revision process was led by ICBF, with technical support from FAO as technical secretariat and CTNGA.

The revision process followed the methodology adapted by FAO for their member countries. The process started with a technical review of the food guides published in 2004; then, research topics and questions were formulated and prioritized and subsequently resolved through the review of scientific evidence and consultation of experts.

24 Source: Health Canada. 2019a. *Canada's Dietary Guidelines for Health Professionals and Policy Makers*. Health Canada: Ottawa. Available at: <https://food-guide.canada.ca/static/assets/pdf/CDG-EN-2018.pdf>.

25 Source: Instituto Colombiano de Bienestar Familiar. 2018. *Guías Alimentarias Basadas en Alimentos para mujeres Gestantes, Madres en Período de Lactancia y Niños y Niñas menores de dos años de Colombia*. Documento Técnico. ICBF: Bogotá. Available at: https://www.icbf.gov.co/sites/default/files/gabasmenor2anos_documentotecnico_2018.pdf

7.4 Summary of topics in group-specific guidance

In this section, we summarize all the topics addressed for age and physiological groups, whether embedded within guidelines for the general population (Section 6) or in documents reviewed for the case studies. We have organized the many topics into broader categories, presented below in outline form. Not all topics are relevant for all population groups, but many are present in guidance for all groups.

In addition to the topics below, depending on the age range for the country's general guidance, in many cases the general guidance applies. Some countries mention this in group-specific consumer-facing guidance, but do not elaborate (e.g. Irish guidance for pregnancy: 'follow the basic healthy eating guidelines') while others incorporate the general guidance into the consumer guidance for groups (e.g. the New Zealand booklets consolidating guidance for age and physiological groups).

Topics in the group-specific guidance are:

- 1. Meal patterns and frequency of eating/feeding**
 - a. Number of meals and snacks
 - b. Importance of breakfast
 - c. Discouraging 'grazing'; encouraging regularity for meals and snacks (or 'mini-meals')
- 2. Portions/servings**
 - a. Portions sizes for different ages
 - b. Portions or servings for each food group per day or week
 - c. Size of plates and cups (e.g. smaller for small children)
 - d. Additional portions during pregnancy (from X weeks) and while breastfeeding
- 3. Animal-source foods and/or protein-rich foods**
 - a. When scarce: Prioritizing vulnerable groups for any available animal-source foods
 - b. Guidance on portions of various types, and for plant- and animal-sources
 - c. Guidance on red meat and/or processed meat
 - d. Guidance on liver (pregnancy – limit, or encourage)
 - e. Guidance on eggs (may be encouraged as complementary foods)
 - f. Guidance on iron sources, heme and non-heme
 - g. Guidance on inhibitors/enhancers (tea, coffee, vitamin-C sources)
- 4. Dairy (also an animal-source food, but often treated as a separate group)**
 - a. Extra needs for age and physiological groups
 - b. Milk types – Percent fat at different ages
 - c. Milk in infancy
 - d. Other calcium-rich foods and alternatives for vegans, lactose-intolerance, or when dairy is unavailable or unaffordable
 - e. Maximum amount for toddlers (several countries indicate 500 ml/day)
 - f. Food safety for certain products; unpasteurized, certain types of cheeses (Listeria risk)
- 5. Vegetables and fruits**
 - a. Guidance on portions of each, per group
 - b. Variety within vegetables and fruits
 - c. Folate sources
- 6. Fortified foods and ingredients**
 - a. Folic acid fortified foods
 - b. Iodized salt
- 7. Supplements**
 - a. Vitamins: Vitamin B12, folic acid, vitamin D – when needed, dosage, duration
 - b. Minerals: Calcium, iron, iodine – when needed, dosage, duration
 - c. Multiple micronutrients – pills or powders, content, indications, duration
 - d. Vitamin A supplements/cod liver oil – limiting during pregnancy
 - e. Vitamin D sources/sun exposure/sun safety
 - f. Use of antacids during pregnancy
- 8. Fat**
 - a. Fat types and sources
 - b. Sources of omega-3 fatty acids
 - c. Fat needs and energy-density for infants and young children under two
 - d. Moderation for other groups
 - e. Lower fat cooking methods
- 9. Sugar (see also beverages)**
 - a. Limit added sugar; don't add to complementary food
- 10. Salt**
 - a. Limit salt; don't add to complementary food
 - b. Use iodized salt
- 11. Foods high in fat, sugar and salt**
 - a. Discourage consumption of country-specific examples; 'occasional foods'; define and describe these (often, foods high in fat, sugar or salt; certain highly processed foods)

12. Beverages

- a. Avoidance of sweet beverages in bottles
- b. Use of cup from early age (in infancy)
- c. Sugary drinks/sugar-sweetened beverages/ sweet drinks – guidance for all ages
- d. Clear guidance on 100% juice
- e. Energy drinks, energy shots, other caffeinated drinks
- f. Tea and coffee (see also iron above); guidance for all groups
- g. Water and/or fluid needs, including additional needs during lactation
- h. Alcohol (avoidance or limits)

13. Food taboos

- a. Address as needed for age and physiological groups

14. Vegetarians/vegans

- a. Special care needed with diet and specific nutrient needs for ages and physiological groups
- b. Guidance on supplements (e.g. B12 for vegans)

15. Food safety

- a. Household hygiene and handwashing
- b. Selecting and preparing/processing/cooking/ storing food safely
- c. Specific food safety risks during pregnancy and for infants and young children; foods to avoid
- d. Choking hazards; foods to avoid for infants and young children; food processing to reduce hazards; supervision

16. Allergies and intolerance

- a. Consuming and introducing potential allergens, also gluten – updated guidance for pregnancy and infancy

17. Oral hygiene and dental health

- a. In pregnancy
- b. Care of infant teeth and use of pacifiers/ dummies

18. Weight, height and BMI

- a. Tracking growth
- b. Pre-pregnancy BMI
- c. Tracking pregnancy weight gain
- d. Managing overweight and obesity
- e. Supporting an overweight child

19. ‘Lifestyle’/environment

- a. Physical activity
- b. Smoking
- c. Non-prescription drugs and herbs; some are dangerous during pregnancy or lactation
- d. Illegal drugs
- e. Indoor air quality

- f. ‘Screen time’ – limiting for children, adolescents
- g. Sleep

20. Special topics for pregnant women

- a. Dealing with ‘pregnancy symptoms’: nausea, vomiting, heartburn, constipation
- b. Anticipatory guidance on breastfeeding including early initiation, skin-to-skin contact
- c. Counseling against weight loss

21. Special topics for breastfeeding

- a. Recommended practices: early initiation, feeding colostrum, feeding on demand, exclusive breastfeeding, duration of breastfeeding
- b. ‘How-to’ guidance (e.g. positioning, latching on, maintaining supply) and where to find practical help
- c. How to know if baby is getting enough; normal number of wet diapers
- d. What to expect: stools, spitting up
- e. Dealing with colic
- f. Enlisting family support
- g. Don’t ‘cut calories’ during breastfeeding
- h. How to express breast milk; how to safely store and use expressed milk
- i. Introducing cups

22. Special topics for formula feeding

- a. Choice of formula; current advice on use of soy formulas
- b. How to safely make up and store infant formula
- c. How to bottle feed; not forcing infant to finish the bottle
- d. Infant formula until 12 months of age, and no need for follow-on formula
- e. Introducing cups

23. Special topics for complementary feeding

- a. Detailed guidance at each stage, e.g. on frequency, quantity, texture, variety, adequacy, responsive feeding, and/or hygiene
- b. Several countries provide guidance on feeding practices separately for age sub-groups (or ‘stages’) such as ~6 months, 7-8 months, 9-11 months, 12+ months
- c. How to tell when child is ready for each stage
- d. Introducing new foods one-by-one
- e. Anticipatory guidance: young children may need to be offered new foods many times before they will accept
- f. Iron sources
- g. How to make homemade complementary foods, including (as needed) how to reduce bulk; introduce whole grains gradually

- h. Do not give low-fat diet
- i. No added sugar or salt
- j. Other foods, drinks and ingredients to avoid (due to safety, sugar/salt content)
- k. Responsive feeding practices: recognizing hunger and satiety cues, no forcing, allow child to indicate when full, engaging with child
- l. Managing constipation

24. Special topics for feeding young children

- a. Portion sizes and frequency of meals and snacks
- b. Best beverages – water and milk; beverages to limit or to avoid, including specific guidance on juice
- c. Role of ‘treats’; foods to limit – specific examples and country-specific foods/food categories to avoid
- d. Healthy snacks/ ‘mini-meals’
- e. What to do when children have consistently poor appetite
- f. Parenting around feeding; dealing with picky eaters, what to do when children refuse entire food groups, ‘division of responsibility’ in feeding – caregiver to provide variety of healthy choices at meals and snacks but child chooses how much to eat

25. Feeding infants and children during illness

- a. Types of foods
- b. Small amounts but frequent
- c. Fluids, breastfeeding and oral rehydration salts
- d. Extra feeding after illness

26. Promoting healthy dietary patterns for children and adolescents

- a. See also practices for the whole family
- b. Parents/caregivers set a good example
- c. Teach children and teens food skills, including (as age appropriate) planning meals, shopping, cooking, and gardening; make learning fun
- d. Offer suitable portion sizes for age
- e. Limit treats and other less healthy choices; as for young children identify foods and beverages high in fat, sugar or salt - country-specific foods/food categories to avoid

27. Practices for the whole family

- a. Family meals
- b. Developing and sharing/teaching food skills (e.g. growing, shopping for, processing and cooking food)
- c. No television or electronic devices during meals
- d. Read nutrition labels
- e. Healthier cooking practices (e.g. less frying/ deep frying)

- f. Keep healthy snacks available at home and do not keep a regular stock of less healthy choices/foods to avoid
- g. Plan for healthy snacks and drinks away from home

7.5 Comparison of selected topics across countries, by groups

Specific guidance for each age and physiological group is detailed and compared across countries in tables in **Annex 6**. Here, we describe similarities and differences in guidance across countries for each age and physiological group.

For the purposes of this section (and Annex 6) we are focusing on guidance on behaviors related to food and beverage consumption, and do not compare guidance on the following: food safety practices; growth or weight monitoring and monitoring of weight gain during pregnancy; physical activity; and a diverse set of other non-food-related lifestyle issues (e.g. smoking, drug use, indoor air quality, sleep).

Guidance for pregnant women

Seven of the case study countries provide separate guidance for pregnant women (Kenya, Ireland, India, New Zealand, Canada, Bolivia and Colombia). All countries encourage a varied diet, and all provide guidance on: additional quantities of food during pregnancy; food groups to consume; food groups to moderate; folic acid supplementation, and total abstinence from alcohol.

Most countries indicate the number of daily portions per food group. The number of portions per food group varies by country, but this is not a meaningful comparison because standard portion sizes also vary. However, there is more consistency with recommendations for ample dairy consumption and most countries recommend 3-5 portions (e.g. 3-5 X 100 ml fluid milk). Most countries also encourage ample water, but only some give guidance in terms of glasses per day. Most countries advise to limit caffeinated beverages and most highlight that tea and coffee reduce absorption of iron; some advise they should be consumed between meals and not with meals. Finally, most countries provide guidance on dietary management of nausea, vomiting, heartburn and constipation.

Guidance that varies most by country includes:

- Nature of guidance on extra food – extra meals and snacks vs. extra portions of specific food groups; the food groups for which extra portions are recommended; total additional kilocalories implied by the guidance; and whether the extra food is recommended throughout pregnancy, or in the second and third trimester
- Guidance on liver – consumption is encouraged in some countries and discouraged in others to avoid overconsumption of vitamin A
- Guidance on fish – consumption is encouraged in most countries, but some countries do not mention it; among those who encourage fish consumption, some but not all give detailed guidance on types of fish to consume, and avoiding mercury contamination
- Extent of guidance on iron, calcium, and folate sources, and specifically on non-dairy sources of calcium
- Extent of guidance for vegetarians/vegans during pregnancy
- Guidance on supplementation varies widely by context, as would be expected
 - Folic acid is the only supplement recommended in all countries, but the recommended dosage and duration of supplementation varies
 - Iron supplements are recommended in most countries but not in New Zealand, and Ireland advises that the ‘physician may recommend iron supplements for some women’; among countries recommending, the dosage varies
 - Other supplements recommended in some countries include iodine, vitamin B12, vitamin D, and calcium
- Some countries encourage consumption of fortified salt (singly- or doubly-fortified)²⁶ while a few countries encourage consumption of other fortified foods
- Some countries provide guidance on sugary beverages
- While all countries include moderation messages for foods high in sugar, fat, and/or salt, some do not address all three, and the level of detail in the guidance varies widely with some countries providing long lists of foods to avoid and other strategies to reduce consumption of sugar, salt and saturated and/or trans- fats; only some countries frame moderation in relation to level of food processing
- Only a few countries address the issue of avoiding

unnecessarily restrictive diets during pregnancy (whether due to cultural food taboos, or due to unwarranted concerns about potential allergens)

India, Colombia and Bolivia provide multiple messages on fats, sugar and salt (India only), with both positive messages to consume sufficiently (or not restrict) and also moderation messages to avoid excess.

Guidance for lactating women

Except for Canada, the case study countries with separate guidance for pregnant women also provide separate guidance for lactating women (Kenya, Ireland, India, New Zealand, Bolivia and Colombia). Canadian guidance for the breastfed infant notes the fluid needs of the mother, but there is no dietary guidance.

For the 6 countries providing guidance, all encourage a varied diet and all provide guidance on: additional quantities of food during lactation; food groups to consume; and food groups to moderate. As for pregnancy, most countries indicate the number of daily portions per food group including ample dairy consumption of 3-5 portions. Some countries emphasize increased fluid intake for lactating women.

The areas of difference between countries are generally similar to those for pregnant women:

- Nature of guidance on extra food – extra meals and snacks, vs. extra portions of specific food groups; the food groups for which extra portions are recommended; total additional kilocalories implied by the guidance; and whether the extra food is recommended (implicitly) throughout lactation, or explicitly only in the first 6-12 months
- Extent of guidance on iron, calcium, and folate sources, and specifically on non-dairy sources of calcium
- Extent of guidance for vegetarians/vegans during lactation
- Guidance on supplementation varies widely by context; there is no consistency across countries
- Some countries encourage consumption of fortified salt (singly- or doubly-fortified) while a few countries encourage consumption of other fortified foods
- Some countries provide guidance on sugary beverages
- Guidance on caffeinated beverages and alcoholic beverages varies across countries; some countries

26 Singly fortified salt is fortified with iodine; doubly fortified salt is fortified with iodine and iron.

advise abstaining from alcohol while others allow but provide guidance on expressing breastmilk before drinking alcohol and not breastfeeding for 2-3 hours after consuming alcohol

- Guidance for foods high in fat, sugar and salt is the same as for pregnant women and there is the same wide variation in level of detail
- One country cautioned women against unsupervised elimination diets and recommended seeking medical advice if the mother is concerned that something she is eating is affecting the baby

Infants 0-6 months of age

All case study countries except for Spain and Bolivia provide separate guidance for infants under 6 months of age (Kenya, Ireland, India, New Zealand, Canada, Chile, Colombia, and Panama).

Most or all countries provide guidance on:

- Early initiation of breastfeeding; only some of these mention value of giving colostrum specifically
- Feeding on demand; fewer countries specifically mention night feeds
- Exclusive breastfeeding for 6 months; India states 'for a minimum of 6 months'
- How to tell if the breastfed baby is getting enough
- Expressing breastmilk; while all mention this, only a few provide detailed practical guidance on expressing and safe storage and use of expressed breastmilk; one covers use of banked milk

All countries provide some mention or guidance on the following topics, but the guidance is heterogeneous:

- Breastfeeding skills and 'how to'; examples range from brief mention of the value of time spent skin-to-skin to detailed guidance on recognizing hunger cues, positioning, latching on, how to tell if baby is sucking well, breaking suction, alternating breasts, etc.
- Support for the breastfeeding mother; some countries provide mothers with lists of government and community resources (public health agencies and community support groups), whereas others advocate for and detail practical roles for spouses, families and communities

Topics where there is a pattern related to country income level:

- Four of the five high income countries (Ireland,

New Zealand, Canada, Chile) provide guidance on choice of infant formula and safe use of formula

- The two lower middle income countries (Kenya and India) provide guidance on exclusive breastfeeding in the first few days of life, through specifying what not to give

Other topics covered by only one or several countries include:

- Recognizing hunger cues (including newborn)
- Dealing with breastfeeding problems (infant refusing, tender nipples, engorgement)
- Colic
- Use of cups
- Vitamin D supplementation
- Breastfeeding and HIV+ women
- Contraindications to breastfeeding

Infants and young children 6-23 months of age

All case study countries except for Spain and Bolivia provide separate guidance for infants under 6-23 months of age (Kenya, Ireland, India, New Zealand, Canada, Chile, Colombia, and Panama). Age ranges and sub-groupings varied by country, with India providing guidance for 6-12 months of age and all other countries covering 6-23 months, dividing into various sub-groupings or stages (see Table 12 above). More extensive guidance is provided for this age group than for any other.

Most countries provide guidance on the following and the guidance is reasonably consistent:

- Continued breastfeeding/duration of breastfeeding
- First foods – what foods and textures, and how much to offer in baby's first meals
- Detailed guidance on textures for the different age sub-groups/stages
- Menus or recipes, some divided by age sub-groups/stages
- Timing of introduction of food groups, with some inconsistencies (for example, age to introduce fish and eggs)
- Frequency of meals and snacks, although with some minor variation in the recommendations
- Examples of healthy snacks
- Descriptions of diverse diets and foods groups, without specifying portions per day or portion sizes; only a few countries (India, Panama) specifies precise portion sizes and number of portions for this age group

- Guidance on infant formula – what type, and safe use of formula. Several countries specify that follow-on formula is not needed. India provides guidance for giving animal milks to non-breastfed infants

Some countries provide guidance on:

- Guidance on choking hazards; only a few countries mention other foods to avoid for safety reasons (e.g. honey before 12 months, unpasteurized dairy, bran, liver)
- Role of the parent and role of the child in feeding/eating, and responsive feeding practices
- Importance of family meals
- Use of cups

There were only a few patterns for country income levels:

- Both lower-middle income countries (Kenya and India) provided guidance on feeding during illness, while only one high income country did so (Panama)
- Only Kenya and India included the concept of adding oil (both countries) and sugar (India) to complementary foods to increase energy. Both also gave examples of energy-dense foods to add to complementary foods (e.g. in Kenya, avocado and groundnut paste). Chile recommends adding vegetable oil to porridge but does not connect this to the issue of energy intake or energy density
- Only the high income countries (Ireland, New Zealand and Canada) provided guidance around introducing potential allergens, and this guidance varied among the three countries

There were a few topics that most or all countries included, but where the guidance was highly varied, including:

- Guidance on supplements
- Guidance on fortified foods and ingredients
- Guidance on beverages, where the five high income countries had detailed guidance on many types of drinks to avoid, as well as positive guidance on milk and water. Kenya and India focused on milk intake, while Kenya noted to avoid coffee or tea made with sugar
- Guidance on sugar, salt and fat: As noted Kenya and India include positive messages on adding oil to complementary foods; India has recommended portions and portion sizes for sugar and oil; only about half of the countries commented on not adding salt to baby's food

- Guidance on foods high in sugar, salt and fat: Ireland and several countries in Latin America had detailed lists of foods and ingredients that should not be given to infants; Canada had a positive message on the need for nutritious higher fat foods for this age group, and other countries did not address

Finally, there were a number of topics mentioned in the guidance of only one or two countries:

- Detailed guidance on signs of developmental readiness for first foods
- Detailed guidance on the 'how to' of giving babies their first foods
- What to do if a child refuses certain foods or food groups
- Issues around appetite
- As noted above, only a few countries provided specific portions/portion sizes per food group for this age range
- Advice to use a separate bowl for the child's food
- Guidance on dietary management of constipation

Young children 2-4 years of age/toddlers/preschoolers

Seven of the case study countries provide separate guidance for young children over 2 years of age (Kenya, Ireland, Spain, India, New Zealand, Canada, and Chile). As noted, the age ranges vary by country, and in some countries, guidance covers a wider age range (e.g. all children and adolescents 2-18).

Most of the 7 countries provide guidance on:

- Food groups, portions, and portion sizes – though quantities per food group vary.
- All countries with portion information recommend ample dairy (generally, ~500-750 ml/day); one country notes that children who drink too much milk (more than 500 ml/day) may not eat enough food (New Zealand)
- Beverages – but the guidance varies, with some countries only providing positive messages about milk, or milk and water, (Kenya, India) and other countries providing moderation messages about sweet or sweetened drinks, and on certain beverages to avoid (e.g. coffee, tea, energy drinks). Advice on 100% juice varies.
- Healthy snacks – and most countries give examples

- Parenting around food/feeding and/or responsive feeding: Most countries include this topic, and several provide very detailed guidance (see Tables A6.10 and A6.11 in Annex 6)
- Family meals
- Moderation in foods high in fat, sugar and salt; the level of detail in the guidance varies, and in some countries the moderation message is only for sweet foods and beverages, not for high fat or high sodium/salty foods

Topics where there is more variation in guidance include:

- Frequency of meals and snacks: some guidance suggests very structured meal patterns, with specific numbers of meals and snacks, while other guidance is more flexible 'If your toddler can't manage set 'meals', then offer a number of nutritious snacks throughout the day instead.' (Ireland); a few countries emphasize the importance of establishing the habit of eating breakfast. Two countries discourage 'pecking' or 'grazing' (Spain, New Zealand)
- Similarly, while most countries specify portion sizes, some put a stronger emphasis on allowing the child to choose the quantity
- Guidance on milk fat varies across countries for this age group with several countries advising a transition to reduced fat or low-fat milk; most mention that nonfat (skim/skimmed) milk is not appropriate for underfives; some countries do not specify the type of milk
- Sugar and oil – a few countries have recommended portions of these (e.g. India advises 15-20 g of sugar a day for this age group) whereas others have moderation messages

Some topics are addressed by only one or a few countries:

- Food skills – starting early to involve young children in shopping, cooking, gardening, etc.
- Dealing with picky eaters
- Children with poor appetite
- Children in vegetarian families
- Supplements for this age group
- Fortified foods and ingredients
- Choking hazards
- Feeding during illness

While overweight is not necessarily addressed directly, it is addressed indirectly through the

guidance on healthy eating, foods and beverages to moderate, and most importantly in guidance on the role of the parent in feeding this age group.

School-aged children

Eight of the case study countries provide separate guidance for school-aged children (Kenya, Ireland, Spain, India, New Zealand, Canada, Bolivia and Chile). As noted, the age ranges for school-aged children vary by country, and in some countries, guidance covers a wider age range (e.g. all children and adolescents 2-18). Groupings include: 5-9 years; 5-12 years; 6-10 years; and 7-12 years. For this age group, the general population guidance also applies in a majority of the case study countries; i.e. school-aged children are covered by the general dietary guidelines, but the countries have supplemented with age-specific guidance.

Many of the consistencies and inconsistencies just described for young children follow a similar pattern in guidance for school-aged children.

For this age group, all countries provide guidance on moderation in foods high in fat, sugar and salt and/or highly processed foods; as for younger children the level of detail in the guidance varies. However there tends to be more detail because the general population guidelines apply, and these often have key messages (and sections of guidelines documents) detailing this.

All countries also provide guidance on beverages – as for younger children the guidance varies in terms of the number of types of beverages to avoid and for which to moderate intake, and some countries specify recommended quantities for water intake while others do not.

Most of the 8 countries provide guidance on:

- Food groups, portions, and portion sizes – though quantities per food group vary
- Several countries emphasize appropriate/smaller portion sizes for children (Ireland, New Zealand) while Kenya emphasizes allowing the child to choose his/her own portion size from preferred foods, 'provided they are adequate, wholesome and nutritious'
- All countries with portion information recommend ample dairy for this age group as for younger children (generally, ~500-750 ml/day)
- For countries where the general population guidance applies, there is more emphasis on whole grains and fish

- Healthy snacks – and most countries give examples
- Parenting around food/feeding: As for younger children, most countries include this topic. There is more of an emphasis on parents (and other adults) as role models
- Family meals are encouraged, and several countries also specifically advise to turn off television and other devices during meals
- Teaching children food skills is more commonly mentioned and described for this age group

Topics where there is more variation in guidance include:

- Frequency of meals and snacks: some guidance suggests very structured meal patterns, with specific numbers of meals and snacks, while other guidance is more flexible; a few countries emphasize the importance of establishing the habit of eating breakfast. Two countries discourage 'pecking' or 'grazing' (Spain, New Zealand)
- Sugar and oil – a few countries have recommended portions of these (e.g. India advises 20-30 g of sugar a day for this age group whereas others have moderation messages

Some topics are addressed by only one or a few countries:

- Children in vegetarian families
- Supplements for this age group
- Fortified foods and ingredients
- Feeding during illness

Adolescents

The same eight case study countries that provided separate guidance for school-aged children also provide guidance for adolescents (Kenya, Ireland, Spain, India, New Zealand, Canada, Bolivia and Chile). As for younger children, the age ranges vary by country, and in some countries, guidance covers a wider age range (e.g. all children and adolescents 2-18). Groupings include: 10-19 years; 11-18 years; 13-16 years; and 13-18 years. For this age group, the general population guidance also applies in a majority of the case study countries; i.e. adolescents are covered by the general dietary guidelines, but the countries have supplemented with age-specific guidance.

For adolescents, several countries provide consumer-facing guidance directed to the teen him/herself, in

addition to or instead of consumer-facing guidance for parents.

All countries provide guidance on moderation in foods high in fat, sugar and salt and/or highly processed foods and as for school-aged children there is a fair amount of detail in many countries. All countries also provide guidance on beverages, and there are often detailed lists of beverages to prefer and those to moderate. Several countries advise against alcohol.

Most of the 8 countries provide guidance on:

- Food groups, portions, and portion sizes – though quantities per food group vary. Some differentiate number of portions or portion size by sex and/or activity level
- All countries with portion information recommend ample dairy for this age group as for younger children (generally, ~500-800 ml/day)
- Number of meals and snacks, and the importance of breakfast
- Healthy snacks; countries with 'teen-facing' guidance provide many examples and strategies for healthy snacking at home and elsewhere
- Family meals – and the teen's own role
- Sugar, fat and salt: Most countries provide moderation messages, but some countries also provide quantitative recommendations for intakes of oil and sugar

Some countries provide guidance on:

- The role of the parent or other adults. Several countries emphasize new concerns and roles at this age, such as being observant for signs of eating disorders or unhealthy dieting
- Half of the countries address body weight, body image, dietary and/or eating disorders, but the level of detail in the guidance or messages is generally low. Messages are also diverse with some emphasizing caution about weight gain, whereas Canada, for example, provides a different message for adolescents: 'Working on building healthy eating habits and focusing on your overall health can be more important than focusing on your body weight'
- In countries with 'adolescent-facing' guidance, many roles are suggested for the adolescent him/herself as a role model, and in encouraging parents and schoolmates to make healthy choices
- Half of the countries emphasize teaching (or learning) a variety of food skills at this age

- Half have nutrient-focused messages (generally, on iron and calcium; rarely, on fiber and vitamin B12 for vegetarians); other countries without nutrient-focused messages cover the topic of high micronutrient needs in background information and through emphasis on iron-rich foods and calcium sources
- Half of the countries have messages on fortified foods and ingredients, mostly from the applicable general population guidelines
- Some countries provide additional messages about variety and types of fruits and vegetables

Some topics are addressed by only one or a few countries:

- Additional needs for athletes
- Meeting micronutrient needs of adolescents who are vegetarians
- Meeting needs of pregnant adolescents

8 / DISCUSSION AND RECOMMENDATIONS



8.1 Overview of FBDGs for age and physiological groups

FBDGs are available for slightly fewer than half of all countries, globally, and availability is associated with country income level, with FBDGs available for only 13% and 26% of low income and lower middle income countries, respectively. Among the 92 countries with FBDGs at the FAO repository, half provide separate guidance for age and/or physiological groups. In Africa, the Middle East, South Asia, Europe, and North America, when such guidance is provided it is more likely to cover many or all of the groups in this review (infants, young children, preschoolers, school-aged children, adolescents and pregnant and lactating women). In Latin America, there are a larger number of countries that provide separate guidance only for infants and young children under two years of age.

There is wide variability in the scope and specificity of the guidance. At minimum, the FBDGs provide messages only, or messages accompanied by a brief rationale (**'why'**) and focus on **'what, how much, and how often'** to eat a variety of foods, along with common moderation messages for foods high in sugar, salt, and/or fat. These may or may not be accompanied by messages on consuming adequate amounts of water, avoiding or limiting alcohol, encouraging physical activity, and/or practicing food safety.

More extensive guidance may include detailed suggestions for **how** population groups can meet guidelines. For example, some countries provide very detailed guidance on how to initiate and maintain breastfeeding, how to express milk, how to choose and safely use infant formula, and how to introduce complementary foods. Some country FBDGs have also begun to address a wider range of behavioral issues around food and diets, including responsive feeding, parenting to help children develop healthy habits and a healthy relationship to foods and eating, and addressing the developmental stage of adolescence. Relatedly, some newer FBDGs also focus on the social role of meals in the family and the community, on transmission of food skills to children and adolescents, and on the role of marketing and the need to limit exposure but also to educate children and adolescents on this issue.

8.2 Development of FBDGs for age and physiological groups

Only some of the guidance for specific groups is clearly developed and disseminated as part of the national FBDGs. In other cases, and particularly in high income countries government guidance for specific groups (most commonly, infants, young children, and pregnant and lactating women) may be developed through parallel processes.

There is a structured process for development of FBDGs that has been followed by many countries, but there is large variation in the nature and scope of available evidence (and gaps) at country level, and in how countries develop and review evidence, which may sometimes be related to available resources. Some countries commission new systematic reviews during the guidelines development process, but most countries rely on a mix of available reviews (for example from WHO, the International Agency for Research on Cancer, the U.S., and certain other high income countries). Some countries (e.g. Canada) also incorporate evidence from government reviews related to health claims. Often, countries also incorporate expert consensus processes.

Some countries are explicitly aiming to broaden the range of evidence considered acceptable as a basis for FBDG. Brazil highlights this in one of the five principles that inform and underlie the rest of their guidelines: '*Different sources of knowledge inform sound dietary advice*'.²⁷ They note that in addition to experimental, clinical, and population studies, qualitative studies are also powerful and traditional dietary patterns themselves are 'vital evidence', representing a natural experiment and resulting in well-adapted dietary patterns and enjoyable meals.

Following Brazil, Ecuador also articulated principles including that the guidelines should reflect a dialogue among different types of knowledge. They also articulate principles related to broader concerns with well-being (physical, emotional, sociocultural) and with sustainability. They map certain key messages (guidelines) to these principles, rather than to systematic evidence reviews.²⁸

There is also variation in available description and documentation for evidence reviews. In some cases, it is possible to clearly 'map' evidence and evidence statements to guidelines relating to intake of foods/food groups and food substances (e.g. trans fats) and dietary patterns, and for evidence related to physical activity. It is far less common for countries to describe and provide the evidence base for many other types of behavioral guidance, such as guidance encouraging responsive feeding and family meals.

In addition to the variation in developing and documenting the evidence base for guidelines statements, there is variation in the process of testing

and refining messages, and in documenting these processes.

Finally, all countries face the challenge of keeping FBDGs and all associated consumer resources up to date, especially for topics where evidence has shifted in recent years or is highly contextual. Even in high income countries with more resources to support websites, documents with conflicting information were found, and many consumer-facing documents did not have version or revision dates. This makes it difficult to know if they reflect the most recent revision of technical documents.

8.3 General recommendations

Section 7.4 provided an extensive list of topics that countries could consider for inclusion when developing FBDGs for age and physiological groups. Decisions on what to include will depend on national public health and food system priorities, but certain 'core' topics for each age and physiological group are suggested for consideration in the next section. Before focusing on each group, we propose a set of general recommendations on: 1. What to include at a minimum; 2. Some issues that may be in tension in some guidelines; and 3. Documentation and presentation of guidelines and of processes and evidence. These general recommendations are followed by group-specific recommendations.

Include:

1. Whether in separate documents/webpages (type 5) or separately within the main FBDGs document (type 4), do include specific guidance for age and physiological groups.
2. Develop both professional and consumer-facing guidance. For professionals, in addition to technical documents with the evidence base or rationale for the FBDGs, shorter guides to 'best practice' are useful; see, for example, best practice guidance for pre-conception through infancy from Ireland.²⁹
3. When the general population FBDGs also apply to the population sub-group (for example, diversity across and within food groups, moderation messages) communicate this clearly in consumer-facing guidance; that is, consolidate the guidance for that sub-group so it is accessible in one place/

27 Ministry of Health. 2014. *Dietary Guidelines for the Brazilian Population*. MOH: Brasília, p. 20.

28 Ministerio de Salud Pública del Ecuador y Organización de las Naciones Unidas para la Alimentación y la Agricultura (2018). *Documento Técnico de las Guías Alimentarias Basadas en Alimentos (GABA) del Ecuador*. GABA-ECU 2018: Quito, pp. 71-74.

29 Food Safety Authority of Ireland (FSAI). 2012. *Best Practice for Infant Feeding in Ireland - A Guide for Healthcare Professionals*. FSAL: Dublin.

- one source; see New Zealand (Annex 4) for an example.
4. At a minimum, include guidance on ‘what’ foods/beverages and ‘how much’, including for various animal-source foods.
 5. Include clarity and as much specificity as possible on foods/types of foods and beverages to be minimized or avoided for various age groups and/or for everyone.
 6. To the extent that resources allow and evidence supports, go beyond ‘what’ and ‘how much’ to ‘how’ – how can healthy diets be achieved for different age and physiological groups.
- Address tensions:**
7. *Defining quantities vs. emphasizing learning to recognize satiety*

Particularly for infants and young children, there can be some inherent tension between defining portion sizes and number of portions per age/physiological group, vs. a focus on attention to hunger and satiety cues, normal variations in appetite from day-to-day, and parenting that leaves responsibility for ‘how much’ to the child. If they are included, it can be emphasized that portion sizes help guide how much to offer and make available to the child but are not to be ‘enforced’. Guidance on ‘what’ and ‘how much’ can be accompanied by guidance on responsive feeding and the respective roles of parents and children at different stages of development.
 8. *Communicating on adequacy and excess for the same foods/food groups/ingredients*

In countries facing double-burdens, where continued undernutrition co-exists with increasing levels of overweight and obesity, there are inherent tensions when communicating about energy intakes and energy-density. The Indian guidance (Section 7.5) illustrates this where, for example, caregivers are advised to add sugar to complementary foods.

More broadly, in the Indian guidance for the general population for Guideline 1 (*‘Eat a variety of foods to ensure a balanced diet’*) there is a bullet indicating: *‘Include jaggery or sugar and cooking oils to bridge the calorie or energy gap’*,³⁰ while at the same time Guideline 7 advises moderation in intake of oils, and Guideline 14 advises to minimize the consumption of processed foods high in salt, sugar and fats.

Increasingly, in countries undergoing rapid nutrition transitions, there is a similar tension in communicating on ‘enough, but not too much’ for animal-source foods.³¹ There are no easy solutions, but these issues warrant very careful communication.
- Documentation and presentation:**
9. Clearly identify the audience for each resource (document or webpage); if possible, develop separate (but clearly linked) professional and consumer-facing resources; they should be linked in the sense that when the technical rationale is updated, the consumer-facing resource is also updated.
 10. Provide sufficient detail so that health professionals and other technical staff involved in using FBDGs in programmatic or policy contexts can clearly understand how each guideline was developed, including what systematic and/or narrative reviews were considered, and what parts of guidelines are based on expert consensus, etc. Transparency could also benefit other countries during their guidelines development processes, as many countries rely on previous national guidelines from elsewhere in their evidence reviews.
 11. When possible, also describe the evidence for broader behavioral guidance, not only, for example, for relationships between foods/food patterns and health outcomes. New Zealand (Section 7.4 and Annex 5) provides one positive example of transparency about the evidence base for broader behavioral guidance.
 12. Include publication and revision dates on all documents, even those that are consumer-facing, and where relevant (e.g. professional practice resources) clearly identify the associated documents presenting the technical evidence base.
 13. Innovate with new media approaches for consumer-facing guidance, particularly when designing for children and adolescents; this may require new partnerships.

30 National Institute of Nutrition. *Dietary Guidelines for India - A manual*. NIN: Hyderabad, p. 17.

31 This challenge was articulated in the South African guidelines: Vorster HH, Badham JB, Venter CS. 2013. *An introduction to the revised food-based dietary guidelines for South Africa*. S Afr J Clin Nutr 2013;26(3): S1-S164, p. S74.

8.4 Recommendations for FBDGs for specific age and physiological groups

In this section, we propose topics to consider for inclusion in group-specific FBDGs and associated guidance that reflect the concerns identified in UNICEF's SOWC as well as examples found during our review of existing guidelines and guidance. For all topics below, brief guidelines statements could be accompanied by more detailed guidance on 'how' to achieve, in the national context.

As noted, there is a difference between concise FBDGs messages and the more detailed guidance that countries and other actors within countries can provide when elaborating them. However, the guideline messages themselves anchor the more detailed guidance and provide a 'space' for elaborating the additional behavioral guidance. This can be considered when crafting a set of guidelines statements. For example, Australia's broad guideline statement '*Encourage, support and promote breastfeeding*' points toward and can anchor specific guidance on a range of actions in families and communities, rather than focusing solely on maternal behavior or practices.

In the lists below, we indicate more specific types of guidance, that would be subsumed under or 'pointed to' by much more concise guidelines statements or messages.

In addition to the group-specific topics below, various food skills and/or food literacy have been emphasized in some general population guidance, and sometimes in age group-specific guidance, for example encouraging caregivers to teach and help children gain age-appropriate food skills. Relevant capacities include any or all of: food production/gardening, shopping, reading labels, recognizing the influence of marketing, making best selections when eating outside the home, meal planning, home processing of ingredients, cooking, avoiding waste, storing food and using leftovers safely, and composting.

Women of reproductive age

This group is covered by general population FBDGs, but some countries also address women of reproductive age (generally, 15-49 years of age) in guidance for pregnancy. This is because there are additional risks for mothers and infants when women enter pregnancy underweight, overweight or obese, or with micronutrient deficiencies. Adequate intake of folate/folic acid is required before conception, to lower risk of neural tube defects. Topics to consider include:

- Achieving and maintaining a healthy body weight
- Consuming a diverse diet adequate in micronutrients, and specifically including adequate amounts of folate-rich foods
- Practices that enhance (or do not inhibit) absorption of iron
- Depending on context, there may be guidance on folic acid supplements

Pregnancy

This group is also covered by general population guidelines in most countries, where general population guidance covers healthy diets and other behaviors (e.g. water intake; food safety; physical activity; smoking; etc.). Additional topics to consider for pregnant women include:

- Appropriate weight gain during pregnancy
- Additional food during pregnancy – recommended amounts, types, and timing (throughout pregnancy, 2nd and 3rd trimester, etc.) may vary by context
- In some contexts: Need for additional dairy and/or alternate calcium sources
- Guidance on organ meats and fish, including safety concerns in context (mercury, excess of vitamin A)
- Practices that enhance (or do not inhibit) absorption of iron
- In some contexts: guidance for vegetarians and vegans
- In some contexts: Additional food safety guidance (e.g. to avoid listeriosis)
- Context-specific guidance on micronutrient supplements
- Guidance on caffeinated drinks and alcohol
- Dietary management of nausea, vomiting, heartburn, and constipation
- Avoiding unnecessary dietary restrictions (whether due to cultural food taboos, fear of potential allergens, etc.)
- Appropriate levels and types of physical activity during pregnancy
- Anticipatory guidance for initiating breastfeeding

Nutrition for the mother during breastfeeding

As above, this group is also covered by general population guidelines. Among countries that provide detailed guidance on breastfeeding practices most also cover nutrition for the mother, but some provide little or no guidance on the mother's diet. In addition

to general population guidance, additional topics to consider for breastfeeding women include:

- Weight management/avoiding restrictive weight loss diets while breastfeeding
- Additional food during breastfeeding – recommended amounts, types, and duration (e.g. first 6 months, longer, etc.) may vary by context
- Practices that enhance (or do not inhibit) absorption of iron
- In some contexts: guidance for vegetarians and vegans
- Context-specific guidance on micronutrient supplements
- Guidance on sufficient extra fluids/water
- Guidance on caffeinated drinks and alcohol
- Avoiding unnecessary dietary restrictions (whether due to taboos, fear of potential allergens, etc.)
- Here and/or in the guidance for breastfeeding infants, include guidance on how other family and community members can support the breastfeeding mother

Infants 0-5 months of age

Infants and young children are not covered by general population guidelines in any country. Topics to consider for this age group include:

- Early initiation of breastfeeding/feeding colostrum
- Exclusive breastfeeding
- Feeding on demand and at night
- Practical support for breastfeeding mothers
- ‘How-to’ guidance as needed, also including dealing with common breastfeeding problems
- Guidance on expressing breast milk and safely storing and using it
- Guidance on selection and safe use of infant formula
- Context-specific guidance on micronutrient supplements
- Context-specific guidance on breastfeeding for HIV+ women

Complementary feeding period 6-23 months of age

This age grouping differs from UNICEF’s (see Box 1) but follows from the age grouping in most of the available guidance. Guidance for this age group was generally among the most extensive of any group. As noted, the long list of topics below could be

‘pointed to’ with one or several concise guidelines on complementary feeding.

Topics to consider for this age group include:

- Continued breastfeeding
- Developmental readiness and age of introduction of complementary food
- For 6-12 months, stages in transitioning to family food, and for each stage appropriate: foods, textures, quantities to offer, frequency of feeding, responsive feeding and roles of the caregiver and the child; example menus and/or recipes
- Timing of introduction of food groups (particularly various animal-source foods) and of fluid milk
- Practical ‘how to’ for feeding, including dealing with food refusal/‘picky eaters’
- Dealing with poor appetite
- Feeding during illness
- Frequency of meals and snacks in the 2nd year of life
- Portions and portion sizes to offer in the 2nd year of life
- Responsive feeding/feeding styles in the 2nd year of life and beyond
- Other ‘food parenting’ issues such as providing a role model, and use of food as reward, and creating pleasant mealtimes
- Healthy snacks
- Recommended beverages (including guidance on type of milk), and those to avoid
- Guidance on sugar and salt, and on unhealthy foods high in sugar, salt and/or unhealthy fats
- Context specific guidance on micronutrient supplements and home fortification
- Use of cups
- Hygiene and safe feeding (including choking hazards)

Toddlers/preschoolers – 24-59 months

Age groupings among young children are not consistent across different countries’ guidance and often this age group is grouped with older school children. Countries also vary regarding the age range for the general population guidance, with many indicating the general guidance applies to all individuals 2 years of age or older, while others restrict to 5 years or older or to adults. The topics listed here for consideration for this age group are in addition to typical general population guidance on food groups.

- Responsive feeding and roles of parent/caregiver and of child
- Family meals
- Teaching age-appropriate food skills
- Limiting exposure to food/beverage marketing (e.g. limiting screen time)
- Recommended number of meals and snacks; establishing a breakfast habit
- Age-appropriate portion sizes and portions per day or week for each food group
- Along with general population guidance on food groups, specific guidance for this age group on all types of animal-source foods, including guidance on milk fat (%)
- Healthy snacks
- Foods to limit or avoid (e.g. foods high in sugar, salt, and/or fat; ultra-processed foods)
- Hygiene and safe feeding (including choking hazards)
- Clear and specific guidance on beverages, including on a variety of sweetened beverages and 100% juice, and on beverages to avoid (e.g. caffeinated beverages, sports and energy drinks)
- Strategies for dealing with 'picky eaters'
- Context-specific guidance on micronutrient supplements
- Feeding during illness
- Age-appropriate physical activities
- Two other topics that were rarely addressed but may warrant special attention are:
 - Dealing with poor appetite
 - Supporting and parenting overweight children

School children 5-9 years of age

UNICEF's SOWC divides children aged 5-9 years from adolescents aged 10-19 years. As with younger children, age groupings in country guidance may vary from this, particularly in how each end of the adolescent age range is defined. In most countries, general population guidance on healthy eating/healthy dietary patterns applies to children in this age group. Additional topics for this age group are very similar to those listed above for preschoolers, but the specific details can vary.

For example, 'age appropriate food skills' will be different for these older children and limiting exposure to food marketing may require parents and others to advocate for changes to school environments. As children are now more autonomous, 'responsive feeding' might be better described as age-appropriate parenting around food, for example, allowing children to serve themselves at 'family-style' meals.

In addition to those listed above for preschoolers, topics to consider for school children include:

- Providing a healthy breakfast
- Depending on context, providing healthy snacks and beverages to take along to school
- Additional strategies to increase fruit and vegetable intake for this age group

Adolescents 10-19 years of age

For this age group, consumer-facing guidance should be designed targeting the adolescent him/herself. Again, with few exceptions most of the topics identified for younger children are also relevant for adolescents. The specific details for some topics again differ for adolescents. For example, age-appropriate food skills could now cover a wide range (meal planning, budgeting, shopping, cooking, etc). Additional considerations and guidance topics could include:

- Importance of a healthy breakfast and options for quick and healthy breakfasts
- Recognizing the influence of marketing
- Eating outside the home: best choices and strategies for healthy eating
- Carrying water and healthy snacks
- Specific guidance on meeting high iron and calcium needs – food sources, alternatives for vegetarians/vegans, inhibitors and enhancers
- Addressing body image concerns
- Dietary and lifestyle guidance for the pregnant teenager



8.5 Conclusion

This review has summarized relevant FBDGs and a wide range of associated behavioral guidance that countries currently provide for infants, children, adolescents, and for pregnant and lactating women. Based on current concerns as articulated in UNICEF's SOWC and on examples from countries, we have provided recommendations and a set of topics that could be considered for inclusion in future group-specific FBDGs and associated guidance.

It is widely recognized that even in high-income countries with a long history of developing, communicating, and otherwise implementing evidence-based FBDGs, dietary patterns are far from ideal. It is important to acknowledge that while development and implementation of FBDGs is necessary – to inform consumers as well as program and policy design– it is very far from sufficient. The recommendations provided here should be viewed in the context of much broader calls for food system transformation to make diets nutritious, safe, affordable, and sustainable.



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Annex 1.

Types of dietary guidelines documents available at the FAO website

Country institutions have developed a wide range of resources and outputs that are part of their FBDGs, ranging from one-page posters to 100+-page technical documents. Some documents are clearly intended to be consumer-facing, based on the language used (i.e., document is clearly addressing the reader as a consumer) and visual design. The longest and most technical documents may be intended for use by health professionals and technical staff e.g. of government agencies. In some cases, audiences for a document are explicitly identified, for example in a preface, but in many cases they are not. Some longer and quite technical documents are nevertheless directed at consumers. Examples from countries illustrate the diversity.

| Country | Title of document | Description |
|----------------------|--|---|
| Dominica | Dominica Food Based Dietary Guidelines | Poster with graphic food guide and key messages. |
| Benin | Guide Alimentaire du Bénin | Tri-fold brochure with graphic food guide, key messages, descriptions of food groups and recommended portions by age, sex and physiological group. |
| Guyana | Food Based Dietary Guidelines for Guyana | 20-page pamphlet presenting 7 dietary guidelines (= key messages) and providing an explanations of each guideline, and suggestions for how to implement. |
| Denmark | The official dietary guidelines (Danish: De officielle kostråd) | 27-page pamphlet presenting the key messages and tips for consumers. Highly visual, with limited text. |
| Thailand | Food Based Dietary Guideline for Thai | 40-page document targeted to consumers (stated in preface). Organized around 9 'rules' (= key messages) and providing detailed explanations of each guideline, and a self-evaluation tool for consumers. |
| Sierra Leone | Food Based Dietary Guidelines for Healthy Eating | 80-page technical document that includes a situation analysis, description of the process of developing the FBDGs, a section explaining each guideline, a section on implementation, and annexes covering needs of special populations. |
| United States | Dietary Guidelines for Americans 2015-2020 | 122-page technical document including description of the development of the guidelines, an overview of the new guidelines, and detailed supporting information and suggestions for implementing the guidelines. |
| Argentina | Guías alimentarias para la población Argentina: Documento técnico metodológico | 262-page technical document describing the objectives, development, testing, and implementation plan for the guidelines. |

Annex 2.

Information sources for Section 6

| UNICEF Region | Country | Year of publication | Title of publication(s) | Intended audiences or uses |
|------------------------------|--------------|---------------------|--|---|
| Sub-Saharan Africa | Kenya | 2017 | Ministry of Health. <i>National Guidelines for Healthy Diets and Physical Activity</i> . Government of Kenya: Nairobi. 100 pages. | 'The Guidelines....are intended for use across sectors by professionals including health managers, health care workers, implementing partners, training institutions, agriculture extension workers among others in all their efforts to promote optimal nutrition and health.' P iii. |
| | Sierra Leone | 2016 | <i>Sierra Leone Food-based Dietary Guidelines for Healthy Eating</i> (document does not indicate how to cite). 80 pages. | '...the Guidelines are designed to influence not only individual food choices but also provide coherent policy guidance on the production of nutrient-dense foods, social protection programmes, school meals, nutrition standards, health and agriculture interventions that involve the commitment of diverse sectors influencing the health and nutritional well-being of the nation.' P. i. |
| | South Africa | 2013 | Vorster HH, Badham JB, Venter CS. <i>An introduction to the revised food-based dietary guidelines for South Africa</i> . S Afr J Clin Nutr 2013;26(3): S1-S164. 165 pages. | 'This special supplement in the current issue of the SAJCN publishes the technical support papers which motivate and explain each of the recently revised South African FBDGs messages.' P. S3. |
| Middle East and North Africa | Lebanon | 2013 | The Faculty of Agricultural and Food Sciences. <i>The Food-Based Dietary Guideline Manual for Promoting Healthy Eating in the Lebanese Adult Population</i> . The American University of Beirut: Beirut. 79 pages. | 'This manual has been adopted by the Ministry of Public Health for its dissemination to policy makers, health-care providers, nutritionists, and dietitians in Lebanon.' Preface. |
| | Qatar | 2015 | Public Health Department. <i>Qatar Dietary Guidelines</i> . Supreme Council of Health: Doha. 42 pages. | 'The Qatar Dietary Guidelines will direct both individual behavior change and the development of health and food policies in Qatar. They also provide consistent information for the development of new education and social marketing resources in Qatar.' P. 5. |

| UNICEF Region | Country | Year of publication | Title of publication(s) | Intended audiences or uses |
|--------------------------------|----------------|----------------------------|---|---|
| Europe and Central Asia | Ireland | 2019 | Food Safety Authority of Ireland. 2019. <i>Healthy Eating, Food Safety, and Food Legislation – A Guide Supporting the Healthy Ireland Food Pyramid</i> . FSAI: Dublin. 90 pages. | 'This guide...is designed to help health professionals, catering services, and food businesses provide safe food and trustworthy information to consumers, so that they can make informed decisions about the foods they choose to eat.' P. 5. |
| | Malta | 2016 | <i>Dietary guidelines for Maltese adults: Healthy eating the Mediterranean Way!</i> Government of Malta: Valletta. Ministry for Health. 16 pages. <i>Dietary Guidelines For Maltese Adults: Information for Professionals involved in Nutrition Education.</i> Government of Malta: Valletta; Ministry for Health. 32 pages. | Audience and uses not stated but based on communication style and language, consumer-facing. As stated in title, for professionals. No further description of uses. |
| | Sweden | 2015 | National Food Agency. <i>Find your way to eat greener, not too much and be active.</i> National Food Agency: Uppsala. 26 pages. | Audience and uses not stated but based on communication style and language, consumer-facing. |
| | United Kingdom | 2018 | Public Health England. 2018. <i>A Quick Guide to the Government's Healthy Eating Recommendations</i> , 12 pages, and <i>The Eatwell Guide.</i> Public Health England: London. 12 pages. | 'This document is aimed at catering providers to support healthier catering provision, health professionals (including dietitians and nutritionists), teachers, university students, academics, industry and is also a source of information for the general population.' P. 4. Audience and uses not stated but based on communication style and language, consumer-facing. |

| UNICEF Region | Country | Year of publication | Title of publication(s) | Intended audiences or uses |
|------------------------------------|-------------|---------------------|---|--|
| South Asia | Bangladesh | 2013 | Bangladesh Institute of Research and Rehabilitation in Diabetes, Endocrine and Metabolic Disorders (BIRDEM). <i>Dietary Guidelines for Bangladesh</i> . BIRDEM: Dhaka. 53 pages. | 'The dietary guidelineswill serve as an educational tool to express nutrition principles in terms of foods and dietary practices.... In addition, they will contribute to the improvement of nutrition behavior in the population and serve as a tool to guide health, agriculture and food policies.' P. v-vi. |
| | India | 2011 | National Institute of Nutrition. <i>Dietary Guidelines for India - A manual</i> . NIN: Hyderabad. 139 pages. | 'This updated version of DGI...should serve as a valuable source of concise, accurate and accessible information, both for members of the general public and those who are involved in dissemination of nutrition and health education....This book makes an attempt to inform us on matters of everyday nutrition in a user friendly manner and thus, aims to influence our dietary behavior.' PP i-ii. |
| | Sri Lanka | 2011 | Ministry of Health. <i>Food Based Dietary Guidelines for Sri Lankans</i> . MOH: Colombo. 99 pages. | 'These guidelines will be made available to the health workers and general public in all three languages and simpler messages will be developed for the use of media targeting the general public. The grass-root level health and nutrition workers may make use of these tools effectively in the effort of improving health and wellbeing of all Sri Lankans.' P. v. |
| East Asia and Pacific ^a | Australia | 2013 | National Health and Medical Research Council. <i>Eat for Health: Australian Dietary Guidelines Summary</i> . Commonwealth of Australia: Canberra. 53 pages. | Audience and uses not stated but based on communication style and language, consumer-facing. |
| | New Zealand | 2015 | Ministry of Health. <i>Eating and Activity Guidelines for New Zealand Adults: Summary of Guidelines Statements and Key Related Information</i> . MOH: Wellington. 6 pages, and Ministry of Health. <i>Eating and Activity Guidelines for New Zealand Adults</i> . MOH: Wellington. 87 pages. | Audience and uses not stated but based on communication style and language, consumer-facing. <i>This document...is written for health practitioners and others who provide health advice on nutrition and physical activity for New Zealand adults. P. 2.</i> |

| UNICEF Region | Country | Year of publication | Title of publication(s) | Intended audiences or uses |
|--|-------------------|----------------------------|---|--|
| Latin America and Caribbean | Antigua / Barbuda | 2013 | Ministry of Health. <i>Food-Based Dietary Guidelines: Antigua & Barbuda</i> . MOH: St. John's. Tri-fold pamphlet. | 'The Food-Based Dietary Guidelines ... is an important educational tool that converts scientific information on nutritional requirements and food composition into simple, population language.' |
| | Barbados | 2017 | Ministry of Health. <i>Food-Based Dietary Guidelines for Barbados</i> . MOH: St. Michael. 8 pages. | 'The National Nutrition Centre has produced the Food Based Dietary Guidelines for Barbados with the aim of providing simple dietary information to assist individuals in making wise food and lifestyle choices.' P. 2. |
| | Belize | 2012 | Ministry of Health. <i>Food-Based Dietary Guidelines for Belize</i> . MOH: Belmopan. 38 pages. | 'A National Food Based Dietary Guideline (FBDG) is an important educational tool that converts scientific information on nutritional requirements and food composition into simple, population-based language. The guidelines provide technical advice about ways to improve diets and health in a manner that is easy for the public to understand ... can be used by health care providers, policy makers, community leaders, educators and the public at large.' P. 4. |
| | Brazil | 2014 | Ministry of Health. <i>Dietary Guidelines for the Brazilian Population</i> . MOH: Brasília. 80 pages. | 'These Guidelines are for all Brazilians. Some of these Brazilians will be workers whose jobs involves health promotion activities, such as health professionals, community workers, educators, capacity building trainers, as well as other professionals....The hope is that these Guidelines will be used in people's homes, in health facilities, in schools, and in all other places concerned with health and its promotion, such as community centres, social assistance reference centres, and headquarters of social movements.' P. 11. |
| | Jamaica | 2015 | Ministry of Health. <i>Food-Based Dietary Guidelines for Jamaica 2015</i> . MOH: Kingston. 15 pages. | Audience and uses not stated but based on communication style and language, consumer-facing. |
| | Canada | 2019 | Health Canada. <i>Canada's Dietary Guidelines for Health Professionals and Policy Makers</i> . Health Canada: Ottawa. 62 pages. | 'The intended audience is health professionals and policy makers. The guidelines are a resource for developing nutrition policies, programs, and educational resources for members of the Canadian population two years of age and older.' P. 1. |
| North America | | | | |

| UNICEF Region | Country | Year of publication | Title of publication(s) | Intended audiences or uses |
|----------------------|---------------|---------------------|---|--|
| | United States | 2016 | U.S. Department of Health and Human Services and U.S. Department of Agriculture. 2015–2020 <i>Dietary Guidelines for Americans. 8th Edition.</i> HHS/USDA: Washington. 144 pages. | 'The main purpose of the Dietary Guidelines is to inform the development of Federal food, nutrition, and health policies and programs. The primary audiences are policymakers, as well as nutrition and health professionals.... The Dietary Guidelines also may be used to inform the development of programs, policies, and communication by audiences other than the document's principal audiences. These...include businesses, schools, community groups, media, the food industry, and State and local governments.' PP 5-6. |
| North America | | | | |

Annex 3.

Countries with FBDGs at the FAO repository and a typology of guidance for age and physiological groups

| UNICEF Region | Countries ^a | World Bank income classification ^b | Typology ^c | For type 4 & type 5 countries, which age/physiological groups are covered; if not in English, language ^d |
|------------------------------|------------------------|---|-----------------------|---|
| Sub-Saharan Africa | | | | |
| West and Central Africa | Benin | Low | 2 | |
| | Sierra Leone | Low | 4 | All age and physiological groups, in Annex of the DGs document |
| | Nigeria | Lower middle | 4 | |
| Eastern and Southern Africa | Kenya | Lower middle | 4 | All age and physiological groups in Section 3 of DGs document (lifecycle) |
| | Namibia | Upper middle | 3 | |
| | South Africa | Upper middle | 3/4 | Guidelines for underfives are proposed in the DGs document, but are identified as not yet tested |
| | Seychelles | High | 3 | |
| Middle East and North Africa | Iran | Upper middle | ? | Broken link from FAO to documents; website in Persian |
| | Lebanon | Upper middle | 3 | |
| | Israel | High | 5 | All age and physiological groups, in a range of consumer-facing guides |
| | Oman | High | 3 | |
| | Qatar | High | 3 | |

^a At FAO repository as of 24 September 2019.

^b World Bank classification as of 1 July 2019.

^c Typology: Countries with no guidance for age or physiological groups; Guidance on varying portions and portion sizes only; Scattered references to needs of groups in DGs for general population; DG with separate sections for groups; Separate DGs and/or other official guidance for groups

^d DGs = dietary guidelines.

| UNICEF Region | Countries ^a | World Bank income classification ^b | Typology ^c | For type 4 & type 5 countries, which age/physiological groups are covered; if not in English, language ^d |
|---------------------------------|------------------------|---|-----------------------|--|
| Europe and Central Asia | | | | |
| Eastern Europe and Central Asia | Albania | Upper middle | 4 | All age and physiological groups, in Section 3 of DGs document (lifecycle) |
| | Bosnia Herzegovina | Upper middle | ? | Cannot determine 'type'; document in Bosnian |
| | Bulgaria | Upper middle | 3 | |
| | FYRM | Upper middle | ? | Cannot determine 'type'; document in Macedonian |
| | Georgia | Upper middle | 4 | Infants, children and adolescents in a life cycle section of the DGs document |
| | Romania | Upper middle | ? | Cannot determine 'type'; document in Romanian |
| | Turkey | Upper middle | 3 | |
| | Croatia | High | 5 | Children 7–10 years and children and adolescents 11–15 years of age; Croatian |
| | Austria | High | 5 | Pregnant and breastfeeding women, undertwos; guidelines for children 1–3 years are being prepared; German |
| | Belgium | High | 5 | 0–3 year-old children, 3–12 year-old children, 12–18 year-old adolescents; French, Flemish |
| Western Europe | Cyprus | High | 5 | Children 6–12 years; Greek |
| | Denmark | High | ? | Cannot determine 'type'; document in Danish |
| | Estonia | High | ? | Cannot determine 'type'; document in Estonian |
| | Finland | High | ? | Cannot determine 'type'; document in Finnish |
| | France | High | 5 | Pregnant and lactating women, children 0–3 years, children 3–18 years directed to parents, and a separate guide directed to teenagers; French |
| | Germany | High | ? | Cannot determine 'type'; document in German |
| | Greece | High | 5 | All age and physiological groups, in separate guides for women (pregnant, breastfeeding) and infants, children and adolescents; documents in Greek |
| | Hungary | High | ? | Cannot determine 'type'; document in Hungarian |

| UNICEF Region | Countries^a | World Bank income classification^b | Typology^c | For type 4 & type 5 countries, which age/physiological groups are covered; if not in English, language^d |
|-------------------------------|------------------------------|---|-----------------------------|---|
| Western Europe (cont.) | Iceland | High | ? | Cannot determine 'type'; document in Icelandic |
| | Ireland | High | 5 | All age and physiological groups, in a range of consumer-facing guides |
| | Italy | High | 4 | Pregnant and lactating women, children and adolescents; Italian |
| | Latvia | High | 5 | Undertwos, children and adolescents 2-18 years; Latvian |
| | Malta | High | 3 | |
| | Netherlands | High | 1 | |
| | Norway | High | ? | Cannot determine 'type'; document in Norwegian |
| | Poland | High | 5 | School-aged children and adolescents; Polish |
| | Portugal | High | 3 | |
| | Slovenia | High | ? | Cannot determine 'type'; document in Slovenian |
| | Spain | High | 5 | Children and adolescents 3-16 years old; Spanish |
| | Sweden | High | 5 | Pregnant and lactating women, infants < 1 year and 1-2 year olds |
| | Switzerland | High | 5 | All age and physiological groups, in a range of consumer-facing guides; some documents available in English; others only in French and German |
| | United Kingdom | High | 3 | |

| UNICEF Region | Countries ^a | World Bank income classification ^b | Typology ^c | For type 4 & type 5 countries, which age/physiological groups are covered; if not in English, language ^d |
|---------------------------|------------------------|---|-----------------------|--|
| South Asia | Afghanistan | Low | 4 | Guidelines document forthcoming; per FAO website there are specific recommendations for pregnant and lactating women and infants and young children |
| | Nepal | Low | 1 | |
| | Bangladesh | Lower middle | 4 | Pregnancy and lactation, 0-6 months and limited attention to 6-23 (timely introduction) |
| | India | Lower middle | 4 | All age and physiological groups, in sections on guidelines per each life cycle stage |
| | Sri Lanka | Upper middle | 4 | All age and physiological groups, in sections on guidelines per each life cycle stage |
| | Cambodia | Lower middle | 5 | 6-17 years; document describing development in English; consumer-facing document in Khmer |
| | Indonesia | Lower middle | 4 | Unknown which groups are covered; government website is 'under maintenance'; per FAO country page, guide includes specific advice for groups through the life cycle |
| | Mongolia | Lower middle | 1 | |
| | Philippines | Lower middle | ? | Broken link, and could not find guidelines documents online |
| East Asia and the Pacific | Viet Nam | Lower middle | 4 | Undertwos (breastfeeding and complementary feeding messages); dairy message for children and adults; Vietnamese |
| | China | Upper middle | 5 | Most or all groups; Chinese |
| | Fiji | Upper middle | 4 | 0-6 months (exclusive breastfeeding) and children (snacks) |
| | Malaysia | Upper middle | 5 | Separate guidance for children and adolescents; other groups covered in main DGs document; broken link at Ministry website so documents not obtained |
| | Thailand | Upper middle | 5 | Underfives; could not locate this online |
| | Australia | High | 5 | Undertwos in a separate DGS document; all other age/physiological groups covered in main DGs and in many consumer-facing resources |
| | Japan | High | ? | Cannot determine 'type'; documents in Japanese |
| | New Zealand | High | 5 | All age and physiological groups, in separate consumer-facing documents per each life cycle stage |
| | Republic of Korea | High | 5 | Broken link at FAO website; search for DGs led to an Asia Pac J Clin Nutr article on revision of DGs indicating there are 'dietary action guides' for: Infants and toddlers; pregnant and lactating women; children; adolescents. Could not locate these online. |

| UNICEF Region | Countries ^a | World Bank income classification ^b | Typology ^c | For type 4 & type 5 countries, which age/physiological groups are covered; if |
|---------------------------------|------------------------|---|-----------------------|---|
| | | | | not in English, language ^d |
| Latin America and the Caribbean | Bolivia | Lower middle | 5 | 6-10 years, 11-18 years, pregnant and breastfeeding women; Spanish |
| | El Salvador | Lower middle | 3 | |
| | Honduras | Lower middle | 1 | |
| | Argentina | Upper middle | 4 | Pregnant women, infants and young children, in a section on life cycle stages; Spanish |
| | Belize | Upper middle | 1 | |
| | Brazil | Upper middle | 5 | Undertwos; Portuguese |
| | Colombia | Upper middle | 5 | Undertwos, pregnant and breastfeeding women; Spanish |
| | Costa Rica | Upper middle | 1 | |
| | Cuba | Upper middle | 5 | Undertwos; Spanish |
| | Dominica | Upper middle | 1 | |
| | Dominican Republic | Upper middle | 4 | 0-6 months (exclusive breastfeeding), and limited attention to complementary feeding (timely introduction); Spanish |
| | Ecuador | Upper middle | 3 | |
| | Grenada | Upper middle | 1 | |
| | Guatemala | Upper middle | 5 | Undertwos; Spanish |
| | Guyana | Upper middle | 1 | |
| | Jamaica | Upper middle | 1 | |
| | Mexico | Upper middle | 5 | All age and physiological groups, in main DGs and in numerous group-specific consumer-facing resources; Spanish |
| | Paraguay | Upper middle | 5 | Undertwos; Spanish |
| | St Lucia | Upper middle | 1 | |
| | St Vincent/ Grenadines | Upper middle | 1 | |
| | Venezuela | Upper middle | 4 | 0-6 months (exclusive breastfeeding); Spanish |

| UNICEF Region | Countries ^a | World Bank income classification ^b | Typology ^c | For type 4 & type 5 countries, which age/physiological groups are covered; if |
|---|------------------------|---|-----------------------|---|
| | | | | not in English, language ^d |
| Latin America and the Caribbean (cont.) | Antigua / Barbuda | High | 1 | |
| | Bahamas | High | 1 | |
| | Barbados | High | 1 | |
| | Chile | High | 5 | Under twos; children 2–5 years of age; children 6–10 years of age; adolescents; Spanish |
| | Panama | High | 5 | Under twos; Spanish |
| | St Kitts and Nevis | High | 1 | |
| | Uruguay | High | 3 | |
| North America | Canada | High | 5 | All age and physiological groups |
| | United States | High | 5 | All groups except undertwos |

Annex 4

References for country case studies

Kenya

- Ministry of Health. 2017. *National Guidelines for Healthy Diets and Physical Activity*. Government of Kenya. Nairobi. Available at: <http://hak.or.ke/wp-content/uploads/2017/12/NATIONAL-GUIDELINES-FOR-HEALTHY-DIETS-AND-PHYSICAL-ACTIVITY-2017-NEW-EDIT.pdf>

Ireland

The Department of Health leads the 'Healthy Ireland' initiative, and the dietary guidance is situated within this (<https://www.gov.ie/en/campaigns/healthy-ireland/>). Many consumer-facing web-based resources for the general population are available through the 'Eat Well' section the Healthy Ireland website (<https://www.gov.ie/en/publication/da7f19-eat-well/#healthy-eating-guidelines>).

In addition to the DoH, two other authorities were linked to via the Eat Well page and provide a range of resources. These are the Food Safety Authority of Ireland (FSAI), and 'safefood'.

Resources from the Food Safety Authority of Ireland (FSAI)

These documents are available for download and are targeted to health professionals and policy-makers.

- Food Safety Authority of Ireland. 2011. *Scientific Recommendations for Healthy Eating in Ireland*. FSAI: Dublin. Available at: https://www.fsai.ie/resources_publications.html
- Food Safety Authority of Ireland. 2019. *Healthy Eating, Food Safety, and Food Legislation – A Guide Supporting the Healthy Ireland Food Pyramid*. FSAI: Dublin. Available at: https://www.fsai.ie/science_and_health/healthy_eating.html
- Food Safety Authority of Ireland. 2011. *Scientific Recommendations for a National Infant Feeding Policy, 2nd Ed.* FSAI: Dublin, available at: https://www.fsai.ie/resources_publications.html
- Food Safety Authority of Ireland. 2012. *Best Practice for Infant Feeding in Ireland – A Guide for Healthcare Professionals*. FSAI: Dublin. Available at: https://www.fsai.ie/resources_publications.html

Consumer-facing resources from the 'Eat Well' page of the 'Healthy Ireland' initiative

Most resources are available for download, but the first is provided via the web interface only.

- ~One-half page of text on 'Healthy Eating for Kids': <https://www.gov.ie/en/publication/da7f19-eat-well/#healthy-eating-guidelines>. Within this brief advice there are links to recipes.
- A 7-page consumer-facing food pyramid information leaflet titled 'Healthy Food for Life', providing a 'guide to everyday food choices for adults, teenagers and children aged five and over': <https://assets.gov.ie/7649/3049964a47cb405fa20ea8d96bf50c91.pdf>
- A food pyramid poster and an expanded pyramid poster, with examples detailed per food group: <https://www.gov.ie/en/publication/70a2e4-the-food-pyramid/>

All three of the above provide details on food groups, serving sizes and servings for different age groups (5 years and older).

- A poster with an example daily meal plan for a 10-year old girl: <https://assets.gov.ie/7567/d52712b9e9fa4f30a471bc当地ca0337dbca.pdf>
- A poster with an example daily meal plan for a 30-year old breastfeeding mother: <https://assets.gov.ie/7569/f05dd9cd4c0d4453b476d1e16d77fd5c.pdf>

There are also posters with example daily meal plans for men and older women.

There is a series of ‘food guide’ posters for the food groups shown on the Irish food pyramid. These posters provide information on serving sizes, and tips on how to eat/drink well within the food group; the guidance is not specific to any age or physiological group:

- Vegetables, salad and fruit: <https://assets.gov.ie/7577/78bdb3e0e9f648f1ae3c4d74657f5673.pdf>
- Milk, yogurt and cheese: <https://assets.gov.ie/7578/aa59fb9287714f1fb91c42f19c998d1c.pdf>
- Cereals, bread, potatoes, pasta and rice: <https://assets.gov.ie/7576/6cb96c2de5794ad2af0b5d88048d55fa.pdf>
- Meat, poultry, fish, eggs, beans and nuts: <https://assets.gov.ie/7579/b44458be78574701a5e674cdb1d826ff.pdf>
- Fats, oils and spreads: <https://assets.gov.ie/7574/71bfc2250ab247b3a1db853b05e62a2e.pdf>
- Foods and drinks high in fat, sugar and salt: <https://assets.gov.ie/7575/2b30a99b2f2f494a935cb34bdd9c3680.pdf>

Consumer-facing resources from the ‘safefood’ website

Some resources are available for download and others are provided via the web interface only.

- Pregnancy: <https://www.safefood.eu/Healthy-Eating/Food-Diet/Life-Stages/Pregnancy.aspx> and downloadable at: https://www.safefood.eu/SafeFood/media/SafeFoodLibrary/Documents/Consumer/Healthy%20Living/Healthy_eating_for_pregnancy.pdf
- Infancy: <https://www.safefood.eu/Healthy-Eating/Food-Diet/Life-Stages/Infants.aspx> and downloadable at: <https://www.safefood.eu/SafeFood/media/SafeFoodLibrary/Documents/Healthy%20Eating/Feeding-your-baby-HSE-2018.pdf>
- The page for infancy links to additional detailed advice on breastfeeding topics and support, with different links for the Republic of Ireland and Northern Ireland: (<https://www2.hse.ie/babies-and-toddlers/breastfeeding/> and <https://www.breastfedbabies.org/>).
- Weaning: <https://www.safefood.eu/Healthy-Eating/Food-Diet/Life-Stages/Weaning.aspx> and downloadable at: <https://www.safefood.eu/SafeFood/media/SafeFoodLibrary/Documents/Healthy%20Eating/Weaning-made-easy-0518.pdf>
- Toddlers: <https://www.safefood.eu/Healthy-Eating/Food-Diet/Life-Stages/Toddlers.aspx>
- Children: <https://www.safefood.eu/Healthy-Eating/Food-Diet/Life-Stages/School-children.aspx>; the section for children also includes a resource on growing a vegetable patch: <https://www.safefood.eu/Healthy-Eating/Food,-Diet-and-Health/Life-Stages/Children/Growing-your-own-vegetable-patch.aspx>
- Teenagers: <https://www.safefood.eu/Healthy-Eating/Food-Diet/Life-Stages/Teens.aspx>
- For pregnant women, children and teenagers, there are also links to the Eat Well healthy eating guidance for the general population, for information on food groups and other messages.
- How to get children to eat healthy food: <https://www.safefood.eu/Healthy-Eating/Food-Diet/Eating-In/How-to-get-children-to-eat-healthy-food.aspx>
- Food hacks for students: <https://www.safefood.eu/Healthy-Eating/Food,-Diet-and-Health/Eating-In/Food-hacks-for-students.aspx>
- Why family meals matter: <https://www.safefood.eu/Healthy-Eating/Food,-Diet-and-Health/Eating-In/Why-family-meals-matter.aspx>

Spain

- Madrid 2010. Nutricion Saludable de la Infancia y la Adolescencia. La Alimentacion de tus Niños y Niñas (Healthy Nutrition of Childhood and Adolescence. The Feed of your Children). Available at FAO website: http://www.aecosan.msssi.gob.es/AECOSAN/docs/documentos/nutricion/educanaos/alimentacion_ninos.pdf

India

- National Institute of Nutrition. 2011. *Dietary Guidelines for Indians – A Manual*. NIN: Hyderabad. Available at: <http://ninindia.org/DietaryGuidelinesforNINwebsite.pdf>

New Zealand

Documents

- Ministry of Health. 2015. *Eating and Activity Guidelines for New Zealand Adults*. MOH: Wellington. Available at: https://www.health.govt.nz/system/files/documents/publications/eating-activity-guidelines-for-new-zealand-adults-oct15_0.pdf
- Ministry of Health. 2008. *Food and Nutrition Guidelines for Healthy Infants and Toddlers (Aged 0–2): A background paper (4th Ed) – Partially Revised December 2012*. MOH: Wellington. Available at: <https://www.health.govt.nz/publication/food-and-nutrition-guidelines-healthy-infants-and-toddlers-aged-0-2-background-paper-partially>
- Ministry of Health. 2013. *Eating for Healthy Babies and Toddlers from Birth to 2 Years Old*. MOH: Wellington. Available at: <https://www.healthed.govt.nz/resource/eating-healthy-babies-and-toddlersngā-kai-tōtika-mō-te-hunga-kōhungahunga>
- Ministry of Health. 2012. *Food and Nutrition Guidelines for Healthy Children and Young People (Aged 2–18 years): A background paper. Partial revision February 2015*. MOH: Wellington. Available at: <https://www.health.govt.nz/publication/food-and-nutrition-guidelines-healthy-children-and-young-people-aged-2-18-years-background-paper>
- Source: Ministry of Health. 2017. *Eating for Healthy Children Aged 2 to 12*. MOH: Wellington. Available at: <https://www.healthed.govt.nz/resource/eating-healthy-children-aged-2-12ngā-kai-tōtika-mō-te-hunga-kōhungahunga>
- Source: Ministry of Health. 2017. *Healthy Eating for Young People*. MOH: Wellington. Available at: <https://www.healthed.govt.nz/resource/healthy-eating-young-people>
- Ministry of Health. 2006 (revised 2008). *Food and Nutrition Guidelines for Healthy Pregnant and Breastfeeding Women: A background paper*. MOH: Wellington. Available at: <https://www.health.govt.nz/system/files/documents/publications/food-and-nutrition-guidelines-preg-and-bfeed.pdf>
- Source: Ministry of Health. 2017. *Eating for Healthy Pregnant Women*. MOH: Wellington. Available at: <https://www.healthed.govt.nz/resource/eating-healthy-pregnant-womenngā-kai-totika-mā-te-wahine-hapū>
- Source. Ministry of Health. 2013. *Eating for Healthy Breastfeeding Women*. MOH: Wellington. Available at: <https://www.healthed.govt.nz/resource/eating-healthy-breastfeeding-womenngā-kai-totika-mā-te-ūkaipō>

Main webpages

- Page collating the main consumer-facing documents: <https://www.health.govt.nz/our-work/eating-and-activity-guidelines/resources-eating-and-activity-public>
- The Eating and Activity Guidelines for New Zealand Adults: <https://www.health.govt.nz/publication/eating-and-activity-guidelines-new-zealand-adults>
- Page with age/physiological group-specific guidance: <https://www.health.govt.nz/our-work/eating-and-activity-guidelines/current-food-and-nutrition-guidelines>
- Process for developing the eating and activity guidelines: <https://www.health.govt.nz/our-work/eating-and-activity-guidelines/process-developing-eating-and-activity-guidelines>
- Evidence for the Eating and Activity Statements: <https://www.health.govt.nz/our-work/eating-and-activity-guidelines/evidence-eating-and-activity-statements>
- How We Eat – Reviews of the evidence on food and eating behaviours related to diet and body size: <https://www.health.govt.nz/publication/how-we-eat-reviews-evidence-food-and-eating-behaviours-related-diet-and-body-size>

- Current Food and Nutrition Guidelines page for age/group-specific guidance: <https://www.health.govt.nz/our-work/eating-and-activity-guidelines/current-food-and-nutrition-guidelines>.

Canada

The official webpage for the Canada's food guide is:

- <https://food-guide.canada.ca/en/>

The following technical documents are available from the FAO country page:

- Health Canada. 2019. *Canada's Dietary Guidelines for Health Professionals and Policy Makers*. Health Canada. Ottawa. Available at: <https://food-guide.canada.ca/static/assets/pdf/CDG-EN-2018.pdf>.
- Health Canada. 2016. *Evidence review for dietary guidance: Summary of results and implications for Canada's Food Guide 2015*. Health Canada. Ottawa. Available at: <https://www.canada.ca/content/dam/canada/health-canada/migration/publications/eating-nutrition/dietary-guidance-summary-resume-recommandations-alimentaires/alt/pub-eng.pdf>.
- Health Canada. 2019. *Food, Nutrients and Health: Interim Evidence Update 2018 For Health Professionals and Policy Makers*. Health Canada. Ottawa. Available at: <https://www.canada.ca/content/dam/hc-sc/documents/services/canada-food-guide/resources/evidence/food-nutrients-health-interim-evidence-update-2018/pub1-eng.pdf>.

In addition, a longer technical document, not linked to at the FAO website but referenced in the documents above, is available:

- Health Canada. 2016. *Evidence review for dietary guidance: Technical report 2015*. Health Canada. Ottawa. Available at: http://publications.gc.ca/collections/collection_2018/sc-hc/H164-192-2016-eng.pdf.
- One consumer-facing document is available for download from the FAO country page:
- *Canada's Food Guide* – a 2-page consumer-facing document with a 'healthy plate' and some key messages. Available at: <https://food-guide.canada.ca/static/assets/pdf/CFG-snapshot-EN.pdf>.

In addition to downloadable documents, the FAO country page provides a series of links for further information, as follows:

- Canada's Food Guide Snapshot: <https://food-guide.canada.ca/en/food-guide-snapshot/>. This presents the Food Guide with embedded hyperlinks to further information.
- Canada's Dietary Guidelines: <https://food-guide.canada.ca/en/guidelines/>. This is a web version of the *Dietary Guidelines for Health Professional and Policy Makers*; available to download by section, and with hyperlinks to related resources.
- Healthy Eating Recommendations: <https://food-guide.canada.ca/en/healthy-eating-recommendations/>. The recommendations are the same as the key messages selected by Health Canada for the country page at FAO. In the web version, each recommendation and sub-recommendation is hyperlinked to additional information. Some of the additional information is relevant to or targeted to age or physiological groups, but at this interface it is not organized by age/physiological group, such advice is scattered and embedded 'under' key messages.
- Evidence Behind Canada's Food Guide: <https://www.canada.ca/en/health-canada/services/canada-food-guide/resources/evidence.html>. This links to a page that provides further links and explanations of the process followed in developing and revising Canada's guidelines, including the evidence review and stakeholder engagement processes. There are links to the Guidelines, to the Evidence Review and Evidence Update listed above.
- History of Canada's Food Guides from 1942 to 2007: <https://www.canada.ca/en/health-canada/services/canada-food-guide/about/history-food-guide.html>.

In addition to the documents and websites above, the guidelines document (2019) refers to and provides a hyperlink to additional web-based guidance for feeding infants and young children, *Nutrition for Healthy Term Infants* at: <https://www.canada.ca/en/health-canada/services/canada-food-guide/resources/infant-feeding.html>. This in turn leads to two sets of principles and recommendations with supporting technical rationale for each recommendation, and to additional consumer-facing guidance. The principles and recommendations are targeted to health-care providers.

- Nutrition for Healthy Term Infants: Recommendations from Birth to Six Months: <https://www.canada.ca/en/health-canada/services/canada-food-guide/resources/infant-feeding/nutrition-healthy-term-infants-recommendations-birth-six-months.html>.
- Nutrition for Healthy Term Infants: Recommendations from Six to 24 Months: <https://www.canada.ca/en/health-canada/services/canada-food-guide/resources/infant-feeding/nutrition-healthy-term-infants-recommendations-birth-six-months/6-24-months.html>.
- Healthy Canadians - Infant Nutrition Birth to 24 Months: <https://www.canada.ca/en/health-canada/services/infant-care/infant-nutrition.html>.
- Safety of Donor Human Milk in Canada: <https://www.canada.ca/en/health-canada/services/canada-food-guide/resources/infant-feeding/safety-donor-human-milk-canada.html>.
- Safety of Homemade Infant Formulas in Canada: <https://www.canada.ca/en/health-canada/services/canada-food-guide/resources/infant-feeding/safety-homemade-infant-formulas-canada.html>.

Similarly, the guidelines document also refers to additional online resources for several life stages, including childhood and adolescence. These are accessed via the main page for Canada's Food Guide: <http://www.canada.ca/foodguide>, under a button for 'Tips'. While not explicitly noted in the guidelines document, there is also guidance for prenatal nutrition, available from the same main page by branching to 'Resources', and additional guidance for breastfeeding (with overlapping content to those above) under 'Tips'. Further branching from these pages leads to both guidance for professionals and consumer-facing guidance.

- Resource: Prenatal Nutrition: <https://www.canada.ca/en/health-canada/services/canada-food-guide/resources/prenatal-nutrition.html>
- The page above provides links to a series of topic-specific professional resources and a consumer-facing resource: *The Sensible Guide to a Healthy Pregnancy*: <https://www.canada.ca/en/public-health/services/health-promotion/healthy-pregnancy/healthy-pregnancy-guide.html>
- Tips: Breastfeeding Your Baby: <https://www.canada.ca/en/public-health/services/health-promotion/childhood-adolescence/stages-childhood/infancy-birth-two-years/breastfeeding-infant-nutrition.html>
- Tips: Healthy Eating for Parents and Children: <https://food-guide.canada.ca/en/tips-for-healthy-eating/teens/>
- Tips: Healthy Eating for Teens: <https://food-guide.canada.ca/en/tips-for-healthy-eating/teens/>
- Tips: Healthy Eating at School: <https://food-guide.canada.ca/en/tips-for-healthy-eating/school/>

In addition to all of the above, additional consumer-facing resources are available, but were not reviewed for this case study. These include resources on food safety available at:

<https://www.canada.ca/en/health-canada/services/food-safety-vulnerable-populations.html>

There is specific guidance for pregnancy, and for children under five years of age:

- <https://www.canada.ca/en/health-canada/services/food-safety-vulnerable-populations/food-safety-pregnant-women.html>
- <https://www.canada.ca/en/health-canada/services/food-safety-vulnerable-populations/food-safety-information-children-ages-5-under.html>

For pregnant women, there are also links to resources on listeriosis, and smoking:

- <https://www.canada.ca/en/public-health/services/diseases/listeriosis.html>
- <https://www.canada.ca/en/health-canada/services/health-concerns/tobacco/smoking-your-body/pregnancy.html>

Bolivia

- Bolivia 2013. *Guia Alimentaria para la mujer durante el periodo de Embarazo y Lactancia* ('Food guide for women during the period of pregnancy and lactation'). Available at: https://www.minsalud.gob.bo/images/Libros/DGPS/PDS/p345_g_dgps_uan_GUIA_ALIMENTARIA_PARA_LA_MUJER_DURANTE_EL_PERIODO_DE_EMBARAZO_Y_LACTANCIA.pdf and at: <https://www.minsalud.gob.bo/38-libros-y-normas/fichas-bibliograficas/1679-unidad-de-alimentacion-y-nutricion-2>
- Bolivia 2013. *Guia Alimentaria para el niño y la niña en edad escolar* ('Food Guide for girls and boys of school age'). Available at: https://www.minsalud.gob.bo/images/Libros/DGPS/PDS/p343_g_dgps_uan_GUIA_ALIMENTARIA_PARA_LA_NIAS_Y_EL_NIO_EN_EDAD_ESCOLAR.pdf and at: <https://www.minsalud.gob.bo/38-libros-y-normas/fichas-bibliograficas/1676-unidad-de-alimentacion-y-nutricion>
- Bolivia 2013. *Guia Alimentaria para los y las Adolescentes*. ('Food Guide for Adolescent girls and boys'). Available at: https://www.minsalud.gob.bo/images/Libros/DGPS/PDS/p344_g_dgps_uan_GUIA_ALIMENTARIA_PARA_LAS_ADOLESCENTES.pdf and at: <https://www.minsalud.gob.bo/38-libros-y-normas/fichas-bibliograficas/1679-unidad-de-alimentacion-y-nutricion-2>

Chile

- Chile 2013. *Guia de Alimentación del Niño(a) menor de 2 años/ Guia de alimentación para la Adolescencia*. ('Food guide for children under 2 years of age through adolescence). Available at: <http://www.fao.org/nutrition/education/food-dietary-guidelines/regions/countries/chile/en/>

Colombia

- Colombia 2018. *Guías Alimentarias Basadas en Alimentos para mujeres Gestantes, Madres en Período de Lactancia y Niños y Niñas menores de dos años de Colombia. Documento Técnico*. (Food-Based Dietary Guidelines for Pregnant Women, Nursing Mothers and Children under two years of age in Colombia. Technical Document). Available at: https://www.icbf.gov.co/sites/default/files/gabasmenor2anos_documentotecnico_2018.pdf
- Colombia 2018. *Guías Alimentarias Basadas en Alimentos para mujeres Gestantes, Madres en Período de Lactancia y Niños y Niñas menores de dos años de Colombia. Material Educativo* (Food-Based Dietary Guidelines for Pregnant Women, Nursing Mothers and Children under two years of age in Colombia. Educational Material). Available at: https://www.icbf.gov.co/sites/default/files/gabasmenor2anos_infografia_2018.pdf

Panama

Technical document:

- Panama 2018. *Guia Alimentaria para menores de 2 años de Panama*. ('Food Guidelines for children under 2 years old from Panama'). Available at: <http://www.fao.org/3/CA1014ES/ca1014es.pdf>

Educational material:

- Panama 2018. *Guia Alimentaria para menores de 2 años de Panama*. ('Food Guidelines for children under 2 years old from Panama'). Available at: <http://www.fao.org/3/CA1017ES/ca1017es.pdf>

Annex 5

New Zealand's summary evidence statements on food and eating behaviours

The source for Table A5.1 is the following web-page of the Ministry of Health, New Zealand: <https://www.health.govt.nz/our-work/eating-and-activity-guidelines/issue-based-documents-eating-and-activity/summary-evidence-statements-food-and-eating-behaviours>

The review methodology and grading criteria are described in detail in the accompanying background paper:

Gerritsen S and Wall C. 2017. *How We Eat: Reviews of the evidence on food and eating behaviours related to diet and body size*. Wellington: Ministry of Health.

Table A5.1 New Zealand's summary evidence statements on food and eating behaviours

| Evidence statements | Topic and grade |
|--|--|
| For partners of pregnant/breastfeeding mothers | |
| Be supportive about breastfeeding (with a positive attitude; remembering it is best for baby and your partner's health). Your support makes it more likely that the mother of your child will intend to breastfeed, start breastfeeding and breastfeed for longer. Your support also helps her feel more confident about her ability to breastfeed. | Family support for breastfeeding Grade A |
| For breastfeeding mothers | |
| Involve your partner and/or your own mother in breastfeeding education and support (both before and after birth). Their support can help you to start breastfeeding and to breastfeed for longer. | Family support for breastfeeding Grade A |
| Eat a wide variety of foods and flavours (including bitter vegetables such as broccoli and cauliflower) while you are pregnant and/or breastfeeding. This makes it more likely that your child will accept vegetables in early childhood. | Parental feeding practices and parenting style Grade B |
| For parents and caregivers of children and young people | |
| Be a nurturing and supportive parent. This helps your child to keep eating a healthy diet and to stay a healthy body size. | Parental feeding practices and parenting style Grade A |
| Watch out for signs that your baby or toddler is hungry or has eaten enough. With this awareness, you can help your child make small improvements in their diet, food preferences and eating behaviours. It may also protect them from gaining too much weight. | Responsive eating Grade B |
| Especially in the early years, keep offering children a wide range of foods, no matter what foods they say they prefer. Allow them to make their own choices from a wide variety of foods and encourage them to 'take one bite' of unfamiliar foods. | Parental feeding practices and parenting style Grade B |
| When your child tries a new food, give them lots of encouragement. Do not use food as a reward (eg, 'If you eat the vegetables you can have dessert'). Your praise and encouragement is more helpful and avoids your child thinking some foods are 'special' or 'good' and that others are 'boring' or 'bad'. Focus instead on how useful different types of food are for their body, to give them energy and keep them healthy. | Parental feeding practices and parenting style Grade B |

| Evidence statements | Topic and grade |
|--|--|
| Do not restrict how much your child eats (when they appear to eat too much) or pressure them to eat (when they appear to eat too little). Forcing a particular way of eating on a child can make them develop unhelpful ways of thinking about food, poor dietary habits and may make them put on too much weight. | Parental feeding practices and parenting style Grade A |
| Avoid strict food rules, but at the same time do not give your child the complete freedom to choose any food. | Parental feeding practices and parenting style Grade A |
| Set limits on the amount of takeaways, sweets and sugary drinks that your child (up to the age of 10 years) has as this helps protect them against a poor diet and putting on too much weight. The best approach is to set those limits without making your child aware of them – just quietly limit their access to, or restrict the portion size of, these foods and drinks. | Parental feeding practices and parenting style Grade A |
| Eat together as a family. This may help children and young people to eat a healthier diet and behave in ways that support good nutrition. | Mealtimes Grade B |
| Avoid watching TV while eating – this applies to both you and your child. Children, young people and adults all tend to eat more while watching TV. The same effect may also happen with other screens (for example, computers, phones). | Responsive eating Grade A |
| Limit the number of sugar-sweetened drinks you have. What you drink influences what your young child prefers to drink. | Adult role-modelling of healthy eating Grade B |
| Give your child a healthy breakfast every day. This can help them achieve better results at school. | Mealtimes Grade A |
| Eat breakfast yourself. Your role modelling encourages your young person to eat breakfast. | Adult role-modelling of healthy eating Grade B |
| Give children and young people regular meals and snacks (three or more times a day). This may help to keep their weight down. | Mealtimes Grade A |
| Eat fruit and vegetables yourself. Your role modelling encourages your child to eat more fruit and vegetables. | Adult role-modelling of healthy eating Grade B |
| Avoid strict food rules, but at the same time do not give your child the complete freedom to choose any food. | Parental feeding practices and parenting style Grade A |
| Involve your child in preparing food and in cooking. This helps your child gain the knowledge, skills and behaviours they need to make healthy food choices (food literacy). Cooking classes in schools and community kitchens may also help them to develop these skills and behaviours. | Food literacy Grade C |
| Support gardening at school as part of the wider curriculum. This may increase children and young people's access to vegetables and fruits, as well as encouraging them to eat and enjoy these foods. | Food literacy Grade C |
| For early childhood teachers | |

| Evidence statements | Topic and grade |
|---|--|
| Be an enthusiastic, positive role model of healthy eating during mealtimes. Your good example may influence pre-schoolers' eating behaviours. | Adult role-modelling of healthy eating |
| | Grade C |
| For adults | |
| Eat a healthy breakfast every day (at all ages). This appears to improve diet quality overall and may protect against weight gain, but is not linked with weight loss. | Mealtimes |
| | Grade B |
| If you want to maintain or lose weight, focus on your energy intake over the whole day rather than on how often you eat. Body size does not appear to be linked to the number of times you eat a day. However, be aware eating more often does give you more opportunities to increase your energy (kilojoule or calorie) intake. | Mealtimes |
| | Grade A |
| Be mindful and pay attention to food while you eat, and then stop eating when you feel full. This helps you to regulate your eating patterns and overcome unhealthy weight control behaviours. More research is needed about whether these techniques help to maintain or lose weight. | Responsive eating |
| | Grade B |
| Get involved in preparing food and in cooking. This helps you gain the knowledge, skills and behaviours you need to make healthy food choices (food literacy). Cooking classes in community kitchens may also help you to develop these skills and behaviours. | Food literacy |
| | Grade C |

Annex 6

Comparison of group-specific dietary guidance across case study countries

The tables in this Annex summarize separately for age and physiological groups. The tables include general population guidance (indicated as 'GPG') when relevant. Source document titles are listed at the top of each table; for full citations see Annex 4.

Pregnancy

Table A6.1: Guidance for nutrition during pregnancy: Kenya, Ireland, India, New Zealand, and Canada

Sources: Kenya: Professional-facing *National Guidelines for Healthy Diets and Physical Activity*; Ireland: *Best Practice for Infant Feeding in Ireland - A Guide for Healthcare Professionals*, and consumer-facing *Healthy Eating for Pregnancy*; India: Professional- /consumer-facing *Dietary Guidelines for Indians – A Manual*; New Zealand: Consumer-facing *Eating for Healthy Pregnant Women*, Canada: Web-based professional guidance and web-based plus downloadable consumer-facing guidance: *The Sensible Guide to a Healthy Pregnancy*.

| Topic | Kenya | Ireland | India | New Zealand | Canada ^a |
|-------------------------|---|--|---|---|--|
| Additional food | Extra meal and two snacks | 1-2 extra servings of fruits and vegetables OR dairy OR bread, potatoes, and cereal group in 2nd and 3rd trimester | Eat more food. Extra portions during pregnancy: 'Fat/Oil-2, Milk-2, Fruit-1, Green Leafy Vegetables-1/2.' | Captured in recommended servings per food group. | One extra snack in second and third trimester. |
| Food groups | GPG: Eat a variety of foods from different food groups every day. | GPG: Use the Pyramid as a guide for serving sizes and remember that portion size matters | GPG: Eat a variety of foods to ensure a balanced diet | Eat a variety of healthy foods every day from each of the four main food groups | GPG: Make it a habit to eat a variety of healthy foods each day |
| Grains | GPG: Eat whole or unprocessed starchy foods with each meal. | GPG: 3-5 servings, depending on activity level. Whole grain is best. | GPGb: 9 portions | At least 6 servings; choose whole grain | Daily. Choose whole grain. Choose products lower in fat, sugar and salt. |
| Roots and tubers | | -- | -- | -- | -- |

| Topic | Kenya | Ireland | India | New Zealand | Canada ^a |
|----------------------|---|---|--|--|--|
| Meat, poultry | Eat liver and red meat when available. | Fish: Eat twice a week. Guidance on types to consume, limit and avoid (mercury). | PGP: Under Guideline 1 on variety: Include animal-source foods 'such as milk, eggs and meat, particularly for pregnant and lactating women and children. | At least 2 servings a day of lean meat, poultry, fish/seafood, eggs, legumes, nuts and seeds. Guidance on iron sources and enhancers. No more than 100 g liver a week. | Eat lean meats and meat alternatives (legumes, tofu) daily. Eat fish weekly. Detailed guidance on fish to consume/limit/avoid. |
| Fish | GPG: Eat lean meat, poultry, fish, insects or eggs at least twice a week | Avoid liver. | | | |
| Eggs | | PGP: Eat 2 servings a day of meat, poultry, fish, eggs, legumes or nuts. | PGP ^b : 2 portions daily if vegetarian; 1 portion if not | Detailed guidance on fish to consume/limit/avoid. | Professional guidance indicates 150 g cooked fish weekly. |
| Legumes | PGP: Eat at least 4 times a week | | -- | | |
| Nuts | | | | | |
| Dairy | Milk, yogurt or cheese every day (same as GPG) GPG: Drink fresh milk, fermented milk or yoghurt every day. Use low-fat or skim with little or no added sugar | Conflicting guidance on number of servings; 3 or 5 servings a day; avoid unpasteurized and certain types of cheese. Identifies alternate food sources of calcium. PGP: Reduced fat or low-fat dairy; limit cheese. | 5 portions daily, because GPG ^b is 3, and 2 extra are indicated during pregnancy. | At least 3 servings a day; prefer reduced or low-fat. Guidance on alternate sources of calcium. Non-dairy milks should be calcium fortified, and for vegans, also should be B12 fortified. | Daily – reduced, low-fat, or non-fat. Drink fortified soy beverages if not drinking milk. |
| Fruits | PGP: 5 servings a day; variety including green leafy vegetables, red and yellow vegetables, and fruit all daily | PGP: Eat more fruit and vegetables, at least 5 to 7 servings a day | 2 portions daily; GPG ^b is 1 and 1 extra indicated. | At least 2 servings | Daily |
| Vegetables | | | 4-5 portions daily; GPG ^b is 3 and 1/2 extra green leafy vegetables are indicated. | At least 4 servings | Daily – at least one dark green and one orange vegetable daily |

| Topic | Kenya | Ireland | India | New Zealand | Canada ^a |
|------------------------------|--|---|--|--|---|
| Supplements | 60 mg iron + 400 µg folic acid daily for 270 days during pregnancy | Physician may recommend iron supplements for some women; 400 µg folic acid daily preconception and for 1st 12 weeks of pregnancy; 5 µg vitamin D daily; avoid fish liver oil, supplements containing vitamin A, and liver | Conflicting statements: pregnant women are advised to take 'daily supplements of iron, folic acid, vitamin B12 and calcium'; elsewhere stated: 'Take iron, folate and calcium supplements regularly, after 14-16 weeks of pregnancy'. Higher dose of folic acid (0.5 mg) pre-conceptually and throughout pregnancy if there is history of neural tube defects. | 0.8 mg folic acid daily for a month preconception and through the 12th week of pregnancy; higher does if at high risk for neural tube defects; 150 µg iodine-only tablet throughout pregnancy; no other supplements but describes vitamin D sources and who may be at risk and if so advice to consult medical practitioner. | Prenatal multivitamin daily, with 0.4 mg of folic acid and 16-20 mg of iron. Professional guidance (but not consumer-facing) also indicated the multivitamin should include B12. |
| Inhibitors/ enhancers | Tea or coffee between meals, not with meals; oil, nuts or seeds with vitamin A-rich vegetables | -- | Avoid tea before, during, or soon after a meal. Eat vitamin C-rich foods to enhance absorption of iron (examples given) | Vitamin C sources to enhance iron absorption. Avoid drinking tea with meals. | Covered in professional guidance, but not in consumer-facing guidance. |
| Fortified foods | Use iodized salt, in small amounts; GPG: choose fortified maize and wheat flour GPG: use fortified oil | -- | GPG: use iron fortified iodized salt (double fortified salt). GPG: Prefer fortified processed foods. | Choose breads and cereals fortified with folic acid. Non-dairy milks should be calcium fortified, and for vegans, also should be B12 fortified. If using salt, choose iodized salt. | Drink fortified soy beverages if not drinking milk. |
| Beverages | 8-10 glasses of water; no alcohol; tea or coffee between meals, not with meals | Limit caffeine intake; no alcohol | 8-12 glasses of water a day; limit caffeinated beverages; no alcohol. Avoid tea before, during, or soon after a meal. | 9 cups of fluid daily; water or reduced- or low-fat milk are best; limit caffeinated drinks and do not take with meals; limit soft drinks, flavored waters, fruit drinks, diet drinks. Energy drinks, energy shots and alcohol not recommended. | Drink 'plenty' of water; limit caffeinated beverages. GPG: Drink water; replace sugary drinks with water. No alcohol. |

| Topic | Kenya | Ireland | India | New Zealand | Canada ^a |
|-------|---|--|---|-------------------------------------|---|
| Sugar | PGP: Dairy with little or no added sugar | -- | PGP: Guideline 1 on variety includes: 'Include jaggery or sugar and cooking oils to bridge the calorie or energy gap.' Guideline 8 on overweight advises: 'Cut down sugar, salt, fatty foods, refined foods, soft drinks and alcohol' | -- | -- |
| Salt | Use iodized salt, in small amounts, same as PGP PGP: Use iodized salt but use it sparingly. Gives a list of ways to reduce consumption of salt and foods high in salt. | -- | Guideline 10 is 'restrict salt intake to a minimum; but in section on pregnancy states: 'salt intake should not be restricted'. | If using salt, choose iodized salt. | -- |
| Fat | PGP: Low-fat or skim dairy PGP: Moderation message with 7 sub-messages detailing how to reduce unhealthy fats and increase healthy fats. | PGP: Reduced fat or low-fat dairy; limit cheese. PGP: Use fats and oils in very small amounts. Guidance on selecting healthier types of fats, and on lower fat cooking methods. | 6 5-g servings, because GPGa is 4 servings and 2 extra are indicated. PGP: Adults should choose low-fat, protein-rich foods such as lean meat, fish, pulses and low-fat milk (Guideline 1) PGP: Moderate intake of edible oils and decrease solid fats (Guideline 7) Provides positive and negative messages on fats. | Prefer reduced or low-fat dairy. | PGP: Choose healthy fats instead of saturated fats. |

| Topic | Kenya | Ireland | India | New Zealand | Canada ^a |
|--|--|---|---|---|---|
| Foods and beverages high in sugar, salt, and/or fat | GPG: Avoid processed foods with trans fatty acids GPG: Limit consumption of sweetened food and drinks | PGP: No more than once or twice a week. Provides detailed examples and suggestions for substitutions. | PGP: Limit consumption of sugar and unhealthy processed foods (these are described). PGP: Restrict intake of preserved and processed foods such as papads, pickles, sauces, ketchup, salted biscuits, chips, cheese and salted fish. | Choose and prepare foods low in fat, salt, and sugar. Detailed suggestions on how to achieve this, and detailed list of foods and beverages to consume only occasionally. | PGP: Limit highly processed foods. Prepare meals and snacks using ingredients that have little to no added sodium, sugars or saturated fat. PGP: Replace sugary drinks with water. |
| Nausea, vomiting, heartburn, constipation | Advice to seek nutrition counselling, but also provides dietary strategies to address these | Provides guidance for coping with all of these. | Provides examples of high-fiber foods to avoid constipation. | Provides guidance for coping with all of these | Provides guidance for coping with all of these. |
| Food allergens | -- | Potentially allergenic foods should not be avoided unless the mother herself has an allergy | -- | Avoiding common food allergens not recommended | -- |

a The new Canadian Food Guide web application does not appear to include recommended servings or serving sizes for any age or physiological group; this may be forthcoming as part of the application as it is mentioned as forthcoming on p. 1 of Health Canada. 2019. Canada's Dietary Guidelines for Health Professionals and Policy Makers. Heath Canada: Ottawa.

b For India, the general population guidance on portion sizes is for a sedentary adult woman (p. 20 in National Institute of Nutrition. 2011. *Dietary Guidelines for India - A manual*. NIN: Hyderabad).

Table A6.2: Guidance for nutrition during pregnancy: Bolivia and Colombia

Sources: Bolivia: Professional-facing *Guia Alimentaria para la mujer durante el periodo de Embarazo y Lactancia*; Colombia: Two professional-facing documents: *Guias Alimentarias Basadas en Alimentos para mujeres Gestantes, Madres en Período de Lactancia y Niños y Niñas menores de dos años de Colombia. Documento Técnico*; and *Guias Alimentarias Basadas en Alimentos para mujeres Gestantes, Madres en Período de Lactancia y Niños y Niñas menores de dos años de Colombia. Material Educativo*.

| Topic | Bolivia | Colombia |
|-----------------------------|--|---|
| Additional food | Extra serving/day of dairy, fruit and sugar and 2 extra servings/day of vegetables | Extra portions in the 2 nd and 3 rd trimester for grains, roots and tubers, plantains, vegetables, meat, and oil. For 14-17 years, also an extra portion of fruit, and for adult women extra dairy. |
| Food groups | GPG: Eat a varied diet daily, which includes food from all groups, increasing the amount of vegetables and fruits. | For your health and that of your baby, eat fresh, varied and natural foods, as indicated by the 'Colombian Family's Healthy Plate'. Portions per food group vary by age and trimester of pregnancy; ranges are shown below |
| Grains | 6 40-50 g portions/day | 3-3.5 portions/day |
| Roots and tubers | 3 100 g portions/day | 3-4.5 portions/day (including plantains) |
| Meat, poultry | 2 8-100 g portions/day GPG: Consume animal source foods which are source of iron (meats and offal) at least 3 times per week. | 2.5-3.5 portions/day |
| Fish | -- | -- |
| Eggs | -- | 1 portion/day |
| Legumes | -- | 1 portion/day |
| Nuts | -- | 1 portion/day |
| Dairy | 3 100 ml portions/day | 3-4 portions/day |
| Fruits | 3 100 g portions/day | 3-3.5 portions/day |
| Vegetables | 4 50-100 g portions/day | 2-3 portions/day |
| Supplements | Iron and folic acid, dosage and duration not indicated | Iron and folic acid, dosage and duration not indicated |
| Inhibitors/enhancers | Reduce consumption of coffee and tea (inhibition of iron absorption) | -- |
| Fortified foods | GPG: Always use iodized salt in foods, with moderation | -- |
| Beverages | No alcohol GPG: Reduce the consumption of tea and coffee, replacing them with milk, fruit juices or 'apis' (Apis: Traditional drink made from purple corn, ground yellow corn, cinnamon, sugar and clove) | No alcohol Do not consume, soda, sugary drinks, energy drinks |

| Topic | Bolivia | Colombia |
|--|--|--|
| Sugar | 4 10 g portions/day, but too much sugar is not beneficial for the mother, nor for the baby; simple sugars cause sudden changes in blood glucose and insulin levels, a situation that can lead to diabetes during pregnancy | 1 portion/day |
| Salt | GPG: Always use iodized salt in foods, with moderation | Reduce salt intake |
| Fat | 3 10 ml portions/day GPG: Prefer vegetable oils and avoid animal source fats and reheated oils | 2.2-2.9 portions/day, of which only 0.2 is saturated |
| Foods and beverages high in sugar, salt, and/or fat | GPG: Avoid the over consumption of sugar, sweets, sodas and alcoholic drinks | Do not consume fast foods, soda, sugary drinks, energy drinks and packaged products Avoid cold meats, sauces, and broths and soups in sachets/envelopes and buckets |
| Nausea, vomiting, heartburn, constipation | Provides guidance for coping with nausea and vomiting | -- |
| Food allergens | -- | -- |

Lactation

Table A6.3: Guidance for nutrition during lactation: Kenya, Ireland, India, and New Zealand

Sources: Kenya: Professional-facing *National Guidelines for Healthy Diets and Physical Activity*; Ireland: *Best Practice for Infant Feeding in Ireland - A Guide for Healthcare Professionals*, and an additional professional-facing document: *Healthy Eating, Food Safety, and Food Legislation – A Guide Supporting the Healthy Ireland Food Pyramid*; India: Professional- and consumer-facing *Dietary Guidelines for Indians – A Manual*; New Zealand: Consumer-facing *Eating for Healthy Breastfeeding Women*

| Topic | Kenya | Ireland | India | New Zealand |
|-------------------------|--|---|---|---|
| Additional food | Two extra meals and two snacks | 1-2 extra servings of fruits and vegetables OR dairy OR bread, potatoes, and cereal group | Extra portions during lactation: 'Cereals-1, Pulses-2, Fat/Oil-2, Milk-2, Fruit-1, Green Leafy Vegetables-1/2'. Between 6-12 months lactation, diet should gradually reduce to normal | Captured in recommended servings per food group. |
| Food groups | PGP: Eat a variety of foods from different food groups every day. | PGP: Use the Pyramid as a guide for serving sizes and remember that portion size matters | PGP: Eat a variety of foods to ensure a balanced diet | Eat a variety of healthy foods every day from each of the four main food groups |
| Grains | PGP: Eat whole or unprocessed starchy foods with each meal. | PGP: 3-5 servings, depending on activity level. Whole grain is best. | 10 portions; GPGb is 9 portions and 1 extra indicated during lactation | At least 7 servings; choose whole grain |
| Roots and tubers | | | -- | -- |
| Meat, poultry | Eat a variety of plant- and animal-source proteins. | 1-2 servings a week of oily fish; guidance on types to limit (mercury) | PGP: Under Guideline 1 on variety: Include animal-source foods 'such as milk, eggs and meat, particularly for pregnant and lactating women and children.' | At least 2 servings a day of lean meat, poultry, fish/seafood, eggs, legumes, nuts and seeds. Guidance on iron sources and enhancers. |
| Fish | | | | |
| Eggs | PGP: Eat lean meat, poultry, fish, insects or eggs at least twice a week | PGP: Eat 2 servings a day of meat, poultry, fish, eggs, legumes or nuts. | 4 portions daily if vegetarian; 3 portions if not (i.e. 2 more than GPGb) | |
| Legumes | PGP: Eat at least 4 times a week | | -- | |
| Nuts | | | | |

| Topic | Kenya | Ireland | India | New Zealand |
|-----------------------|---|--|--|--|
| Dairy | Emphasizes high calcium needs but does not make a specific recommendation for dairy during lactation. GPG: Drink fresh milk, fermented milk or yoghurt every day. Use low-fat or skim with little or no added sugar. | At least 3 servings of dairy products. GPG: Reduced fat or low-fat dairy; limit cheese. | 5 portions daily, because GPGb is 3, and 2 extra are indicated during lactation. | At least 3 servings a day; prefer reduced or low-fat. Guidance on alternate sources of calcium. Non-dairy milks should be calcium fortified, and for vegans, also should be B12 fortified. |
| Fruits | GPG: 5 servings a day; variety including green leafy vegetables, red and yellow vegetables, and fruit all daily | GPG: 5-7 servings a day | 2 portions daily; GPGb is 1 and 1 extra indicated. | At least 2 servings |
| Vegetables | | | 4-5 portions daily; GPGb is 3 and 1/2 extra green leafy vegetables are indicated. | At least 4 servings |
| Supplements | Only as prescribed by a trained health care provider | 5 µg vitamin D daily 400µg folic acid daily If vegan, lactose intolerant, or do not consume enough calcium rich foods, calcium supplement may be needed | Daily supplements of iron, folic acid, vitamin B12 and calcium. | 150 µg iodine-only tablet No other supplements but describes vitamin D sources |
| Inhibitors/ enhancers | Eat vitamin C-rich foods 'like fruits and vegetables' to enhance iron absorption. Tea or coffee between meals, not with meals. Limit intake of tea and coffee. | -- | Avoid tea before, during, or soon after a meal. Eat vitamin C-rich foods to enhance absorption of iron (examples given) | Vitamin C sources to enhance iron absorption. Avoid drinking tea with meals. |
| Fortified foods | GPG: choose fortified maize and wheat flour GPG: use fortified oil GPG: Use iodized salt but use it sparingly | -- | GPG: use iron fortified iodized salt (double fortified salt). GPG: Prefer fortified processed foods. | Non-dairy milks should be calcium fortified, and for vegans, also should be B12 fortified. If using salt, choose iodized salt. |

| Topic | Kenya | Ireland | India | New Zealand |
|------------------|--|--|--|---|
| Beverages | Take lots of 'nutritious fluids like milk, soup, juice, porridge, beverages and water' Limit tea and coffee, and take separately from meals (iron absorption) | At least 8 glasses of fluids daily; milk and water are best choices No more than 2-3 cups caffeinated beverages Alcohol: Limit alcohol; follow GPG for intake for women (11 units/week). Additional behavioral guidance (e.g. do not drink just before feeding; expressing) provided | Avoid tea before, during, or soon after a meal. Avoid alcohol. | 9 cups of fluid daily; water or reduced- or low-fat milk are best; limit caffeinated drinks and do not take with meals; limit soft drinks, flavored waters, fruit drinks, diet drinks. Energy drinks, energy shots and alcohol not recommended. If consumed, minimize risk by waiting 2-3 hours after drinking to breastfeed the baby; if needed give alcohol-free expressed milk to the baby. |
| Sugar | PGP: Dairy with little or no added sugar | -- | PGP: Guideline 1 on variety includes: 'Include jaggery or sugar and cooking oils to bridge the calorie or energy gap.' Guideline 8 on overweight advises: 'Cut down sugar, salt, fatty foods, refined foods, soft drinks and alcohol' | -- |
| Salt | PGP: Use iodized salt but use it sparingly. Gives a list of ways to reduce consumption of salt and foods high in salt. | -- | PGP: Guideline 10 is 'restrict salt intake to a minimum' | If using salt, choose iodized salt. |
| Fat | PGP: Low-fat or skim dairy PGP: Moderation message with 7 sub-messages detailing how to reduce unhealthy fats and increase healthy fats. | PGP: Reduced fat or low-fat dairy; limit cheese. PGP: Use fats and oils in very small amounts. Guidance on selecting healthier types of fats, and on lower fat cooking methods. | 6 5-g servings, because GPGa is 4 servings and 2 extra are indicated. PGP: Adults should choose low-fat, protein-rich foods such as lean meat, fish, pulses and low-fat milk (Guideline 1) PGP: Moderate intake of edible oils and decrease solid fats (Guideline 7) Provides positive and negative messages on fats. | Prefer reduced or low-fat dairy. Guidance on choosing foods rich in polyunsaturated fat and omega-3s (examples given). |

| Topic | Kenya | Ireland | India | New Zealand |
|---|--|---|---|---|
| Foods and beverages high in sugar, salt, and/or fat | PGP: Avoid processed foods with trans fatty acids PGP: Limit consumption of sweetened food and drinks | PGP: No more than once or twice a week. Provides detailed examples and suggestions for substitutions. | PGP: Limit consumption of sugar and unhealthy processed foods (these are described). PGP: Restrict intake of preserved and processed foods such as papads, pickles, sauces, ketchup, salted biscuits, chips, cheese and salted fish. | Choose and prepare foods low in fat, salt, and sugar. Detailed suggestions on how to achieve this, and detailed list of foods and beverages to consume only occasionally. |
| Food allergens | -- | -- | -- | Discuss any concerns with a health care provider; cutting out foods may not help a colicky baby |

a The new Canadian Food Guide web application does not appear to include recommended servings or serving sizes for any age or physiological group; this may be forthcoming as part of the application as it is mentioned as forthcoming on p. 1 of Health Canada. 2019. Canada's Dietary Guidelines for Health Professionals and Policy Makers. Heath Canada: Ottawa. At present

b For India, the general population guidance on portion sizes is for a sedentary adult woman (p. 20 in National Institute of Nutrition. 2011. Dietary Guidelines for India - A manual. NIN: Hyderabad).

Table A6.4: Guidance for nutrition during lactation: Bolivia and Colombia

Sources: Bolivia: Professional-facing *Guia Alimentaria para la mujer durante el periodo de Embarazo y Lactancia*; Colombia: Two professional-facing documents: *Guías Alimentarias Basadas en Alimentos para mujeres Gestantes, Madres en Período de Lactancia y Niños y Niñas menores de dos años de Colombia. Documento Técnico*; and *Guías Alimentarias Basadas en Alimentos para mujeres Gestantes, Madres en Período de Lactancia y Niños y Niñas menores de dos años de Colombia. Material Educativo*.

| Topic | Bolivia | Colombia |
|-----------------------------|--|--|
| Additional food | Extra serving/day of dairy, grains, and fruit, and 2 extra servings/day of vegetables; 1.5 extra servings of sugar and 0.5 extra servings of fats | Extra servings are indicated for most food groups during lactation |
| Food groups | GGP: Eat a varied diet daily, which includes food from all groups, increasing the amount of vegetables and fruits. | GGP: Eat natural and diverse foods, as indicated in the 'Colombian Family's Healthy Plate' Portions per food group vary by age and by semester of lactation; ranges are shown below |
| Grains | 7 40-50 g portions/day | 3-3.5 portions/day |
| Roots and tubers | 3 100 g portions/day | 4-4.5 portions/day (includes plantains) |
| Meat, poultry | 2 8-100 g portions/day GGP: Consume animal source foods which are source of iron (meats and offal) at least 3 times per week. | 3.5 portions/day GGP: Consume animal source foods which are source of iron (meats and offal) at least 3 times per week |
| Fish | -- | -- |
| Eggs | -- | 1 portion/day |
| Legumes | -- | 0.8-1 portion/day |
| Nuts | -- | 0.8-1 portion/day |
| Dairy | 3 100 ml portions/day | 3.5-4 portions/day |
| Fruits | 3 100 g portions/day | 3 portions/day |
| Vegetables | 4 50-100 g portions/day | 2-3 portions/day |
| Supplements | Iron, dosage and duration not indicated | Iron and folic acid, dosage and duration not indicated |
| Inhibitors/enhancers | Reduce consumption of coffee and tea (inhibition of iron absorption) | -- |
| Fortified foods | GGP: Always use iodized salt in foods, with moderation | -- |
| Beverages | No alcohol GGP: Reduce the consumption of tea and coffee, replacing them with milk, fruit juices or 'apis' (Apis: Traditional drink made from purple corn, ground yellow corn, cinnamon, sugar and clove) | Increase water consumption |
| Sugar | 4.5 10 g portions/day | 1 portion/day |

| Topic | Bolivia | Colombia |
|--|---|--|
| Salt | PGP: Always use iodized salt in foods, with moderation | -- |
| Fat | 3.5 10 ml portions/day PGP: Prefer vegetable oils and avoid animal source fats and reheated oils | 2.9-3.4 portions/day, of which only 0.2 is saturated |
| Foods and beverages high in sugar, salt, and/or fat | PGP: Avoid the over consumption of sugar, sweets, sodas and alcoholic drinks | -- |
| Food allergens | -- | -- |

Infants under 6 months of age

Table A6.5: Guidance for infants under 6 months of age: Kenya, Ireland, India, New Zealand, and Canada

Sources: Kenya: Professional-facing *National Guidelines for Healthy Diets and Physical Activity*; Ireland: *Best Practice for Infant Feeding in Ireland - A Guide for Healthcare Professionals*; and web-based consumer-facing guidance at: <https://www2.hse.ie/babies-and-toddlers/breastfeeding/>; India: Professional- and consumer-facing *Dietary Guidelines for Indians – A Manual*; New Zealand: Consumer-facing *Eating for Healthy Babies and Toddlers*, Canada: Professional-facing guidance: *Nutrition for Healthy Term Infants: Recommendations from Birth to Six Months*; web-based consumer-facing guidance at: <https://www.canada.ca/en/health-canada/services/infant-care/infant-nutrition.html> and consumer-facing booklet: *10 Valuable Tips for Successful Breastfeeding*.

| Topic | Kenya | Ireland ^a | India | New Zealand | Canada |
|---|---|---|--|-------------|---|
| Early initiation and/or giving colostrum | <p>Start breastfeeding within an hour after delivery</p> <p>Skin to skin contact is likely to help with latching on</p> <p>Mother should breastfeed immediately after delivery to provide baby with colostrum</p> | <p>'Holding your baby with their skin next to your skin immediately after birth will calm and relax you both. Skin-to-skin contact with your baby in the first hour after birth will help get the first feed off to a good start.'</p> <p>'When you start breastfeeding, your breasts will release an early milk called colostrum. It is produced in small amounts by your body and is quite thick in consistency. Colostrum is full of antibodies that will help your baby fight off infection.'</p> | <p>'Start breast-feeding within an hour after delivery and do not discard colostrum'</p> | -- | <p>'Breastfeed right after birth. Cuddle your baby on your chest...When you and your baby are skin to skin... your milk production and baby's feeding reflexes are triggered....Remain skin to skin with your baby until after a successful breastfeed'</p> |
| Exclusive breastfeeding in first few days | <p>'Do not give any other food or drink (not even pre-lacteal feeds), except for medicines as recommended by a trained health care professional'</p> | -- | <p>'Feeding honey, glucose, water or dilute milk formula before lactation should be avoided'</p> | -- | -- |

| Topic | Kenya | Ireland ^a | India | New Zealand | Canada |
|--|--|---|--|---|---|
| Feeding on demand and feeding at night | 'Breastfeed babies on demand – any time when they want to during the day and night' | Professional guidance: 'Infant-led or demand feeding is normal and ensures a good milk supply' | 'Breast-feed the infant frequently and on demand to establish and maintain good milk supply' | 'Young babies need to be fed often and on demand (when they are hungry)' | Don't time feeds, look for hunger cues. 'Night feeds are important to establish breastfeeding and to maintain milk production' |
| Exclusive breastfeeding in first 6 months | 'Do not give any other food or drink... except for medicines as recommended by a trained health care professional' | Professional guidance: 'For the first 6 months, infants should be exclusively breastfed' 'avoid giving an infant any other drinks' | 'Breast-feed exclusively (not even water) for a minimum of six months if the growth of the infant is adequate' | 'Breast milk is specially made for your baby and is all your baby needs until they are around 6 months old' | 'Breastfeeding is the only food or drink your baby will need for the first 6 months' |
| Expressing breast milk | 'Express breastmilk that can be given to the baby, from a cup, when it is not possible to be with the baby' | Detailed professional and consumer-facing guidance on how-to, including for preparing to express breastmilk; how to express by hand, with a hand pump or an electric breast pump; storing expressed breastmilk for use at home; preparing to feed stored expressed breast milk to an infant; feeding expressed breastmilk to an infant. | 'A working mother can express her breast milk and store it hygienically up to 8 hrs. This can be fed to her infant by the caretaker' | 'You can express breast milk. For babies under 3 months, sterilise all equipment and containers. For babies over 3 months, thoroughly wash and rinse all equipment and containers.' Provides details on safe storage/how long to store | Very brief mention of storing and warming expressed breast milk |

| Topic | Kenya | Ireland ^a | India | New Zealand | Canada |
|-----------------------------------|--|--|--|---|--|
| Breastfeeding problems | <p>'If it seems that the baby is refusing to breastfeed, provide help and support to the mother so that her baby will feed again.'</p> <p>'The baby may appear to refuse to breastfeed if he/she is feeling sick, if sudden changes have upset him/her, if he/she is distracted or if he/she has decided to stop breastfeeding at around one year. Use expressed milk for feeds'</p> | Extensive web-based consumer-facing guidance (as well as a contact link for breastfeeding expert) on a large number of potential problems or issues: breastfeeding with C-section, baby with one side preference, flat/inverted nipples, sore nipples, engorgement, leaking breasts, mastitis, relactation, tongue-tie, and others. | -- | -- | Guidance on caring for tender nipples and on engorgement |
| Breastfeeding skills and 'how-to' | 'The mother should keep her baby close to her, with plenty of skin-to-skin contact to promote breastfeeding' | <p>Detailed consumer-facing guidance for initiating breastfeeding, positioning (various positions), and attachment.</p> <p>How to know when an infant wants to breastfeed;</p> <p>For professionals: Checklist to help mothers know if breastfeeding is going well</p> <p>'If feeding well, an infant will suckle deeply; mothers will hear some swallowing and the feeding will not be painful'</p> | <p>'Frequent sucking by the baby and complete emptying of breast are important for sustaining adequate breast milk output'</p> | <p>'If your baby is hungry after feeding from one breast, then offer the other breast. After feeding on both breasts, begin the next feed on the breast used last.'</p> | <p>Provides guidance on recognizing hunger cues, positioning, latching on, how to tell if baby is sucking well, breaking suction</p> <p>'The next time you breastfeed your baby, start with the breast on which he finished the last time'</p> |

| Topic | Kenya | Ireland ^a | India | New Zealand | Canada |
|--|---|---|--|---|---|
| How to tell if the baby is getting enough | -- | Description of normal number of wet diapers and number and color of bowel movements for breastfed babies | Description of normal number of wet diapers and number and color of bowel movements for breastfed babies | 'Baby's appetite, weight gain and lots of wet nappies tell you how much milk your baby needs' Description of normal bowel movements for breastfed babies | Principles of 'supply and demand' |
| Support for the breastfeeding mother | Spouses, family members and friends should: Allow time and space for the mother to breastfeed while at home by providing a comfortable sitting area; and assisting with caring for and controlling older children. Provide emotional and physical support for the mother to exclusively breastfeed by helping with household chores, assisting the mother in feeding the baby with expressed breast milk when she is away, and supporting her to eat healthy meals. | Educating and supporting women who choose to breastfeed – during antenatal care, in the maternity unit, and in community care Describes legal rights in the workplace for breastfeeding mothers Both professional and consumer-facing guidance address practical ways partner and family members can help Groups the mother can contact for help and support | 'Ensure active family support for breast-feeding' | Limited – a list of who the mother can contact for help with breastfeeding or formula feeding | 'Getting help with breastfeeding: Everybody needs a bit of help sometimes. It can take time for you and your baby to get used to breastfeeding. Don't give up. It can sometimes take up to 6 weeks... Health professionals have a lot of experience helping women and their babies breastfeed. They understand what you're going through. You can get help, advice, tips, and support for breastfeeding from: (provides a list)' |

| Topic | Kenya | Ireland ^a | India | New Zealand | Canada |
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| Colic | -- | Breastfeeding mothers should not be advised to stop. Advise to avoid drinking too much tea, coffee, and other caffeinated drinks For formula-fed infants, parents/carers should seek advice of a healthcare professional regarding use of specialised formula | -- | -- | -- |
| Other breastfeeding topics | -- | Consumer-facing: Signs that baby is hungry; medication while breastfeeding, breastfeeding while pregnant Professional-facing: Breastfeeding and contraception; Situations in which breastfeeding is not advisable (medical contraindications); Checklist for healthcare professionals regarding what mothers should know about breastfeeding | Breastfeeding by HIV+ women | -- | Recognizing hunger cues. |

| Topic | Kenya | Ireland ^a | India | New Zealand | Canada |
|---------------------------------|-------|---|-------|---|--|
| Choice of infant formula | -- | 'Soya formula should only be used if your doctor has recommended them.... Regular cow's milk is not suitable for your baby until he or she is one year old' | -- | Guidance covers checking 'use-by' dates; give a cow's milk formula unless a health professional advises other; do not give cow's milk or condensed or evaporated milk | Guidance for professionals: Recommends cow milk-based, commercial infant formula. Soy-based infant formula is indicated for galactosemia or for infants who cannot consume dairy-based products for cultural or religious reasons. 'Recommend infant formulas for special medical purposes only when ...infant has the indicated condition. Discourage the use of home-made, evaporated milk formula. Cow milk, goat milk, soy beverage, rice beverage or any other beverages should not be given to young infants' |

| Topic | Kenya | Ireland ^a | India | New Zealand | Canada |
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| Safe use and storage of infant formula | -- | <p>There is detailed guidance on safe bottle feeding, both consumer-facing and in the 'best practices' guide for professional.</p> <p>Guidance for professionals covers:</p> <p>Equipment needed; washing the equipment; sterilising the equipment; using the right water to make up the feed; preparing the feed; storing and transporting feeds; and how to feed according to appetite</p> | -- | <p>Detailed guidance on how to prepare infant formula including hygiene practices, advice to sterilize and use boiled water to make up powder for first 3 months; detailed guidance on making up formula and using within 2 hours.</p> <p>Also: 'Babies should not be left lying with a bottle to suck on because of the risk of choking and ear problems. Also, if they fall asleep with milk in their mouths, the milk can damage their teeth'</p> | <p>Not in the consumer-facing guides. Guidance for professionals covers:</p> <p>Use of banked human milk as well as:</p> <p>Detailed guidance on proper preparation and safe</p> <p>Notes to warn caregivers of the risk of choking if infants are left alone while feeding and explain the dangers of 'propping' a bottle</p> |
| Supplements | | Both breastfed and non-breastfed: 5µg (200 IU) of vitamin D3 daily | Breastfed: 'talk to doctor or nurse about vitamin D supplements, especially for dark-skinned breastfed babies' | -- | 'Babies who are breastfed should get a vitamin D supplement of 10 micrograms (µg) or 400 international units (IU) each day' |
| Use of cup | 'Express breastmilk that can be given to the baby, from a cup, when it is not possible to be with the baby' | Not during 1st 6 months | -- | -- | -- |

^a For Ireland, except for consumer-facing guidance on infant formula, all guidance in this table comes from a 'best practices' guide for health professionals.

Table A6.6: Guidance for infants under 6 months of age: Chile, Colombia, and Panama

Sources: Chile: Professional-facing *Guía de Alimentación del Niño(a) menor de 2 años / Guía de alimentación para la Adolescencia*; Colombia: Two professional-facing documents: *Guías Alimentarias Basadas en Alimentos para mujeres Gestantes, Madres en Período de Lactancia y Niños y Niñas menores de dos años de Colombia. Documento Técnico*; and *Guías Alimentarias Basadas en Alimentos para mujeres Gestantes, Madres en Período de Lactancia y Niños y Niñas menores de dos años de Colombia. Material Educativo*; Panama: Professional-facing *Documento Técnico de las Guías Alimentaria para los menores de 2 años de Panamá* and consumer-facing: *Guías Alimentaria para los menores de 2 años de Panamá*.

| Topic | Chile | Colombia | Panama |
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| Early initiation and/or giving colostrum | <p>Early and frequent colostrum suction maintains adequate glycemic levels in the newborn, prevents dehydration and exaggerated weight loss, and also helps the infant to properly establish coordination between the functions of suction, breathing and swallowing.</p> <p>Colostrum also provides important immunological protection and facilitates the reproduction of lactobacillus bifid in the intestinal lumen, promoting enterobacterial colonization by a protective flora.</p> | <p>Offer breast milk during the first hour of life and in skin-to-skin contact, to promote breastfeeding success.</p> <p>Feed your baby colostrum, it is the first milk, and saves lives thanks to its high content of nutrients and defenses.</p> | <p>Early attachment is generated once the child receives breast milk in his first hour of birth, where he has the opportunity to receive his first milk or colostrum. It is the baby's first vaccine as it is richer in fat-soluble proteins and vitamins and some minerals, in addition to containing oligosaccharides, immunoglobulin A and lactoferrin. Colostrum occurs only within the first 4 days after birth. Its texture and appearance is dense, yellowish and sticky and it is important to guide the mother that this is normal and that she should give it to the baby for its beneficial effects. It also acts as a laxative and helps prevent jaundice.</p> |
| Exclusive breastfeeding in first few days | -- | -- | -- |
| Feeding on demand and feeding at night | To ensure adequate production and flow of breast milk, it is necessary to breastfeed the child both day and night, whenever baby wants, 'on demand', 'unrestricted breastfeeding' or 'breastfeeding driven by the infant' | The practice of exclusive breastfeeding during the first six months must be on demand, that is, without schedules or restrictions, day and night, every time the baby asks for it | -- |
| Exclusive breastfeeding in first 6 months | In 2002, the World Health Assembly (WHO) and UNICEF adopted the World Strategy for Infant and Young Child Feeding. This Strategy recommends exclusive breastfeeding as optimal infant feeding during the first 6 months of life. | To help the children to grow up healthy, intelligent, safe and affectionate, support mothers to practice exclusive breastfeeding, as the only food during the first six months of life. | -- |

| Topic | Chile | Colombia | Panama |
|-----------------------------------|---|--|---|
| Expressing breast milk | In some situations, to continue feeding the infant with exclusive breastfeeding, milk extraction can be a very useful alternative. There are several simple milk extraction techniques; the manual extraction technique is described. The duration extracted milk can be kept will depend on the mode of preservation; modes of preservation are described. | In cases of temporary separation of the mom and baby, you can extract, preserve, transport and supply breast milk to your baby. To express breast milk you can do so manually, in a warm, hygienic and quiet environment. Collect the breast milk extracted in glass jars with a plastic screw cap and refrigerate it for up to 12 hours or freeze it for up to 3 months | There are some situations that force the mother to have to express the milk. If the mother decides to express breast milk, she must take into account important aspects such as the hygiene of the place where she does it, how she is going to save the extracted milk and how they are going to give the baby milk. It is preferable to give the baby milk in cups, teaspoons or cups and avoid using a bottle. There is explanation and drawings of the manual extraction of milk and of extraction with pumps. |
| Breastfeeding problems | -- | -- | The most frequent breastfeeding problems are described, along with what to do (cracked nipples, mastitis and blocked ducts) They also describe three conditions for not breastfeeding: Galactosemia, HIV, and phenylketonuria |
| Breastfeeding skills and 'how-to' | Mother and children must choose the most comfortable position. There are different alternatives; it is very useful to use the nursing cushion. A significant percentage of the problems related to breastfeeding are due to poor technique, for this reason it is important to support, educate and evaluate the breastfeeding technique early. | -- | Ideally, the mother should have the baby in her lap, aligned with her face facing the mother's chest. Drawings show the steps to achieve a good grip. The position taken by the mother should be such that both the baby and she feel comfortable, and that the baby can breastfeed in the amount he needs. Several positions are described with text and drawings: Classic sitting, 'sitting watermelon', 'horse riding sitting' |

| Topic | Chile | Colombia | Panama |
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| How to tell if the baby is getting enough | <p>Normal weight gain</p> <p>Average 6 diapers a day wet with clear urine.</p> <p>Average 4 yellow and fluid stools daily; from day 5 of life there may be a gradual decrease in the frequency of bowel movements.</p> <p>At 1 month of life 1 per day is normal. It is also normal to be more abundant over time</p> | -- | -- |
| Support for the breastfeeding mother | In the process of breastfeeding, the participation of the father is essential in supporting the mother, strengthening attachment, helping in other household chores or caring for other children, and also caring for the child when baby is not breastfeeding. | -- | <p>Some women have difficulty initiating breastfeeding successfully, especially when they lack about certainty its benefits and importance. For this reason it is essential that the mother receives close support and adequate counseling.</p> <p>During consultations during pregnancy, it is important that the mother receive this type of counseling in order to ensure exclusive breastfeeding during the first six months of life and the continuation of it until two years of age or older.</p> |
| Colic | -- | -- | -- |
| Other breastfeeding topics | Photos with hunger signs divided into early signs (Waking up, shaking, looking for the breast) intermediate signs (stretching, shaking, sucking hands) Late signs (Crying, intense agitation, redness) | Breastfeeding strengthens the emotional bond between the mother and her baby. | Description of the physiology of breastfeeding. Description of the benefits of BF for the mother, for the child, for the family and for the environment |
| Choice of infant formula | Under 5 months of age: With breastfeeding (BF): supplement with the starting formula the minimum number of times needed, and support breastfeeding to be able to abandon the formula if possible Without BF: start formula according to the requirements of the baby. | -- | -- |

| Topic | Chile | Colombia | Panama |
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| Safe use and storage of infant formula | The preparation of the starter formula is indicated in each product package, although in general the desired contributions and energy density are achieved by diluting it between 13% - 14% using the measure that each package brings. Formula does not require the addition of any ingredient or nutrient. | -- | -- |
| Supplements | -- | -- | -- |
| Use of cup | -- | Provide the breast milk extracted using cup or glass | -- |

Infants 6-23 months of age

Table A6.7: Guidance for 6-23 months of age: Kenya, Ireland, India, New Zealand, and Canada

Sources: Kenya: Professional-facing *National Guidelines for Healthy Diets and Physical Activity*; Ireland: *Consumer-facing Feeding your baby: Introducing Family Meals, 2018 edition*; India: Professional- and consumer-facing *Dietary Guidelines for Indians – A Manual*; New Zealand: Consumer-facing *Eating for Healthy Babies and Toddlers from Birth to Two Years*, 2013; Canada: Web-based consumer-facing guidance: *Infant nutrition* (covers through 24 months)

| Topic | Kenya | Ireland | India ^a | New Zealand | Canada |
|---|--|--|---|--|--|
| Age range | 6-23 months Some guidance differentiated by: 6 months; 7-8 months; 9-11 months; 12-23 months | 6-23 months Some guidance differentiated by: 'About' 6 months; 6-9 months; 9-12 months; 12-23 months | 6-12 mo ^a | 6-23 months Some guidance differentiated by: 'Around' 6 months; 7-8 months; 8-12 months; 12-23 months | 6-24 months, differentiated as: 6-12 months; 12-24 months |
| Continued breastfeeding/ duration of breastfeeding | -- | Best practice guide for professionals: 'From 6 months to 2 years and beyond, breastfeeding should continue...' Guide for parents/caregivers: 'Babies who are breastfed can continue to be breastfed while they are starting family foods and up to 2 years of age and beyond' | 'Encourage breastfeeding till two years or more, if possible' | Not covered; breast milk is identified as a 'best drink' from 12-23 months, but so is whole cow's milk; guidance on dairy indicates either | 'Continue to breastfeed for up to two years or more, as long as both you and your child want to' |

| Topic | Kenya | Ireland | India ^a | New Zealand | Canada |
|--|-------|---|--------------------|---|--------|
| How to tell when baby is ready for foods other than breast milk | | Provides a detailed description of developmental signals for readiness for first foods – these signals are 'generally seen between 4 and 6 months (17 and 26 weeks) of age' | -- | <p>~ 6 months: Provides a detailed description of developmental signals for readiness for first foods</p> <p>7-8 months: describes signs baby is ready to move from pureed to mashed foods and finger foods</p> <p>8-12 months describes signs of readiness for more textures, lumpy food, and firmer finger food</p> <p>12 months: signs of readiness for family foods</p> | -- |

| Topic | Kenya | Ireland | India ^a | New Zealand | Canada |
|--|---|--|--|---|---|
| Guidance on starting foods other than breast milk | 'Start at six months of age with small amounts of food and increase the quantity as the child gets older, while maintaining frequent breastfeeding between meals and at night.' | Be guided by infant readiness. Some infants may be ready before 6 months, but no infant needs solid food before 4 months | Provides instructions on how to prepare amylase-rich food and provides recipes for 4 complementary food mixtures | 'Offer solids when your baby is most relaxed and happy. Give the milk feed first (until 8–9 months old) and offer solids as a 'top up'. | 'Start with foods that contain iron and offer them a few times each day. Iron-rich foods include meats such as beef, lamb, game, poultry, and fish. Meat alternatives include eggs, tofu, and legumes such as beans and lentils. Iron-fortified infant cereal is also a common first food.' |
| The transition | | Provides detailed guidance for introducing first foods, including 'equipment', choosing the right moment (baby is alert, not too hungry, caregiver is not rushed, no distractions, etc.). | | Hold baby while you feed them or sit them in a baby highchair. Use a small teaspoon and put the food in the middle of their tongue. Throw out any uneaten food left on baby's plate. | |
| Guidance on how to feed | Gradually increase food consistency and variety as the child grows older, adapting to his/her requirements and abilities' | Offer breastmilk or formula before first solids | | Try one new food every 2–4 days | Gradually increase the number of times a day that you offer solid foods' |
| Guidance on making complementary foods | Provides guidance on additions to enrich complementary foods; see also guidance on textures | 'Introduce each food on its own for 2 days before introducing another food' 'Use breastmilk, formula milk or water to moisten their food to the correct consistency' Offer a wide variety of foods Recipes provided | | Remove the skins and seeds from fruit and vegetables before you cook or purée them Use expressed breast milk or formula to make the food runny enough for your baby to swallow Provides meal ideas for 8–12 months and 12–23 months | Example menus provides for ages 7, 11, and 17 months, and for a 17-month vegetarian child |

| Topic | Kenya | Ireland | India ^a | New Zealand | Canada |
|---|--|---|---|---|---|
| Age of introduction of various foods | Adding milk to complementary food 1st mentioned at 7-8 months and fluid milk from 12 months | From 6 months, recommended first foods include: Cereals, meat, poultry, fish, fruit, vegetables (see below re: textures) 6-9 months: As above plus eggs, bread, rice, pasteurized cheese, yogurt, and cow's milk in small amounts to moisten food 9-12 months: most homemade family foods From 12 months: whole cow's milk as a beverage | 'Infants should be introduced to different vegetables and fruits gradually. In families which can afford egg yolk and meat soup can be introduced. At about one year of age, the child should share the family diet' Milk is indicated beginning at 6-12 months (Annex 4) | From 6 months, recommended foods include: Cereals, meat, poultry, fish, legumes, fruit, vegetables (see below re: textures) 7-8 months, as above plus egg, soft cheese, custard and plain yogurt | First foods (from 6 months) can include: Beef, lamb, game, poultry, fish, eggs, tofu, legumes, and iron-fortified infant cereal If you are making the transition to cow milk as your child's main milk source, wait until your baby is between 9 and 12 months old |
| Recommended number of meals and snacks | Breastfed: 6 months – feed complementary food 2 times/day 7-8 months – 3 times 9-11 months – 4 times: 3 meals and one snack 12-23 months – 5 times: 3 meals and 2 snacks Non-breastfed: At 6-8 months, feed 1 extra meal, and add one snack depending on appetite. From 9 months, provide 1-2 extra meals and 2 snacks depending on the appetite' | Start with pureed foods offered with one milkfeed, and progress to 2-3 meals and 2-3 snacks/day | Feed complementary food on demand 3-4 times a day | 'Three small meals a day and small healthy snacks between meals' | 12-24 months: 'Establish a schedule of regular meals and snacks for your child' |

| Topic | Kenya | Ireland | India ^a | New Zealand | Canada |
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| Recommended portion sizes or total quantity | <p>6 months: 'Start with 2 TBSP at each feed and increase to 3 TBSP in the 3rd to 4th week'</p> <p>7-8 months: 'Increase amount gradually to half (½) a 250 ml cup'</p> <p>9-11 months: Give half (½) a 250 ml cup daily^b of family food'</p> <p>12-23 months: Give ¾ to 1 cup of 250 ml'</p> | <p>About 6 months: Start with 1 teaspoon and build up to 6 tsp at a time. Progress to 5-10 teaspoons per meal</p> <p>6-9 months: 2-4 tablespoons per meal</p> <p>9-12 months: 4-6 tablespoons per meal</p> <p>From 12 months:</p> <p>'Give them a portion suitable for their age and appetite</p> <p>Give smaller portions to begin with then let them ask for more if they are hungry</p> <p>Use smaller plates and cutlery'</p> | See below per food group | <p>When starting, at around 6 months:</p> <p>'Try ½–2 teaspoons first and gradually increase the amount until baby is having about 3–4 teaspoons at a meal'</p> <p>General guidance:</p> <p>'All babies are different. Watch for signs of being full – some babies turn their heads away. As your baby becomes more active, you will need to offer small amounts of food often'</p> | <p>'Pay attention to your baby's hunger cues. Trust your child to decide how much they are going to eat at any meal'</p> |

| Topic | Kenya | Ireland | India ^a | New Zealand | Canada |
|---------------------------------|---|---|--|---|--|
| Guidance on texture | 6 months: 'thick enough not to run off the spoon' 7-8 months: 'Mashed/pureed family foods, by 8 months the baby can begin eating finger foods. Thick food as the baby grows older' 9-11 months: 'finely chopped family foods, finger foods and sliced foods' 12-23 months: 'Cut food into small, soft pieces so that the child can pick, chew and swallow comfortably' | About 6 months: 'Puréed foods, starts with quite thin ('runny') consistency, gradually getting thicker as your baby gets used to taking foods from a spoon' 6-9 months: 'Moves to mashed foods... gradually becoming lumpier in texture. Soft finger foods' 9-12 months: 'Moves to minced and chopped family foods. More textured finger foods' 'By the time your baby is 1 year of age they should be able to eat most meals enjoyed by the rest of the family' | For 'young infants' a 'semi-solid consistency' | Around 6 months: Infant cereals, baby rice, and pureed foods 7-8 months: Continue to puree meat and fish; can give mashed fruits, vegetables, egg and legumes; finger food: very soft fruit and vegetables, toast fingers, thin slices of cheese 8-12 months: Can add minced meat and finely chopped soft foods, and slightly firmer finger foods (examples given) 12-23 months: Most family foods (see below under choking risks) | Not discussed; example menus for different ages specify textures |
| Guidance on milk fat (%) | -- | Whole cow's milk | 'Top milk' | Whole cow's milk from 12-23 months | No skim or partly skimmed milk before 2 years |
| Healthy snacks | 'Snacks may be ripe banana, mango, boiled potato etc.' | Many examples provided | -- | Examples: Fruits, vegetables, crackers with peanut butter, grated cheese, yogurt | Many examples in the example menus |
| Poor appetite | -- | -- | -- | -- | Limit to 750 mL of milk/day to not affect intake of other foods |

| Topic | Kenya | Ireland | India ^a | New Zealand | Canada |
|--------------|-------|--|--------------------|--|--------|
| Picky eaters | -- | <p>'Your baby may refuse a new food. If they do, don't force them, offer another food that they are familiar with and wait 5-7 days before offering the refused food again. Babies and young children may need to be offered a food up to 15 times before they will accept it'</p> <p>'Make sure they are not filling up on extra milk, drinks or snacks too close to mealtimes.'</p> <p>Keep distractions to a minimum; turn off the television and eat family meals with your child so that they can learn from you.</p> <p>If they refuse certain foods, try again a few days later.</p> <p>Do not offer sweet foods such as yogurts instead of savoury foods as they will soon learn that if they refuse dinner they can still get dessert.'</p> | -- | <p>'If they don't like the food the first time, wait a few days and try again with a smaller amount. It might take up to 15 tries!'</p> <p>If refusing vegetables: 'Don't worry – it's very common, especially as toddlers get older. Keep trying to introduce a variety of vegetables over time. Try offering raw, grated vegetables or pieces of soft fruit as an alternative'</p> | -- |

| Topic | Kenya | Ireland | India ^a | New Zealand | Canada |
|--|--|--|--------------------|-------------|---|
| Role of parent/caregiver and of child; responsive feeding | <p>'Interact with the child during meals to respond to his/her cues about the amount of food he/she wants'</p> <p>6 months: 'Do not force the baby to eat' 'The baby needs time to get used to new food'</p> <p>7-8 months: 'Be patient and actively encourage the baby to eat'</p> <p>9-23 months: 'Make mealtimes a relaxed and happy time for the child while encouraging and not forcing e.g. clap hands, make funny faces and demonstrate opening the mouth wide, saying encouraging words'</p> | <p>'Encourage your baby to touch and play with their food'</p> <p>'Baby led weaning is a way of introducing solid food by allowing your baby to choose what they eat and to feed themselves from the very start' while caregiver offers a varied and balanced diet'</p> <p>Food pouches do not teach the same eating skills as eating from a spoon or with fingers</p> <p>'Don't use foods, especially foods high in fat or sugar, as a reward or treat'</p> <p>For 12+ months: 'Don't pressure them to eat all the food on their plate, allow them to stop when they say they are full'</p> | -- | -- | <p>'Let them discover different textures and experiment with feeding themselves.'</p> <p>Give your baby foods they can eat using their hands.'</p> <p>'Pay attention to your baby's hunger cues.'</p> <p>Trust your child to decide how much they are going to eat at any meal.'</p> <p>Be a role model; try new and nutritious foods yourself.</p> |
| Family meals | -- | <p>'Never leave a baby or young child alone during feeding'</p> <p>Eating as a family is important as babies and children learn by example. This can encourage them to have a wide and varied diet</p> | -- | -- | Eat together as a family as often as you can |

| Topic | Kenya | Ireland | India ^a | New Zealand | Canada |
|-------------------------|---|--|---|---|--|
| Food groups | 'Feed babies a variety of meals from at least four food groups in each meal' | Ireland does not provide guidance on number of portions or portion sizes per day or week. Age of introduction of various food groups is indicated above. | -- 0.5 30 g portion 0.5 100 g portion | New Zealand does not provide guidance on number of portions or portion sizes per day or week. Age of introduction of various food groups is indicated above. Example menus are provided and include diverse food groups. | By 12 months, your child needs a variety of foods from the food groups in Canada's Food Guide: vegetables and fruits, whole grain foods, and protein foods |
| Grains | 6 months: Begin with staple foods, like porridge.... | | | | |
| Roots and tubers | 7-8 months: Include at least one food from: animal source, staple, legumes and seeds, vitamin A rich fruits and vegetables (and milk for non-breastfed) | | | | |
| Meat, poultry | | Example menus are provided and include diverse food groups. | '1 portion of pulse may be exchanged w/1 portion of meat' 'In families which can afford egg yolk and meat soup can be introduced' | | Canada does not provide guidance on number of portions or portion sizes per day or week. Age of introduction of various food groups is indicated above. |
| Fish | | | 0.25 30 g portion | | |
| Eggs | 9-11 months: Give a variety of foods, include milk, sorghum, millet, pigeon peas, groundnuts, cowpeas and green grams, orange-fleshed sweet potatoes (and milk for non-breastfed) | | -- | | Example menus are provided and include diverse food groups. |
| Legumes | | | | | |
| Nuts and seeds | | If not breastfed on demand, a maximum of 1 pint of whole cow's milk a day Do not give low-fat or skimmed milk | Breastfed: 200 ml milk Non-breastfed: 400 ml milk | You may choose to continue breastfeeding and/or offer up to 2 cups (500 ml) of whole milk a day. The more breast milk your toddler has, the less whole milk they need | If not breastfeeding, offer 500 ml of whole milk/day. Limit to maximum of 750 ml/day |
| Dairy | 12-23 months: Include at least one food from: animal source, staple, legumes and seeds, vitamin A rich fruit and vegetables. Give the child 2-3 cups (250ml) of milk | | | | |
| Fruits | | See above for other food groups | 1 100 g portion 0.25 100 g portion green leafy vegetables 0.25 100 g portion other vegetables 'Dietary fibre in green leafy vegetables can... promote the bowel movements leading to loose motions in infants. Since GLVs are rich in dietary fibre, it is advisable to initially feed only the juice of the GLVs after cooking them properly' | See above for other food groups | See above for other food groups |
| Vegetables | | | | | |

| Topic | Kenya | Ireland | India ^a | New Zealand | Canada |
|---------------------------------|--|---|--|--|---|
| Supplements | 'Vitamin A supplementation at six months, and every six months thereafter, until the age of five' | 5µg (200 IU) of vitamin D3 daily throughout the first year of life | Non-breastfed infants fed animal milk (instead of infant formula) should receive supplements of iron and vitamin C | Doctor may recommend vitamin D supplements | 'Continue to give your breastfed infant a vitamin D supplement of 10 µg (400 IU)' |
| | Home fortification: '1 sachet of micronutrient powders to one meal every third day. At least 10 sachets/month and a total of 60 sachets in 6 months' | | | | |
| Fortified foods and ingredients | From 12 months, add small amounts of iodized salt | No emphasis; fortified breakfast cereals are included in a table of calcium sources | -- | Iron-fortified infant cereal as a first food starting from around 6 months | Iron-fortified infant cereal is a common first food |

| Topic | Kenya | Ireland | India ^a | New Zealand | Canada |
|------------|--|---|---|---|---|
| Beverages | <p>'Give clean and safe water from a clean cup'</p> <p>Do not give tea or coffee or drinks made with sugar'</p> <p>Breastfed:</p> <p>6 months: 'Give the child small sips of clean drinking water'</p> <p>12-23 months: 'Give the child 2-3 cups (250 ml) of milk'</p> <p>Non-breastfed:</p> <p>At 6 months: 3-4 cups milk</p> <p>6-8 months: 1-2 cups milk</p> <p>From 9 months: 1-2 cups milk (<i>nb: this seems inconsistent with advice for breastfed</i>)</p> | <p>6-12 months:</p> <p>Breast milk on demand or infant formula. Cooled boiled water can be offered</p> <p>Formula: at 6-9 months, 3-4 feeds about 600mls per day; from 9-12 months about 400ml per day</p> <p>Follow-on-milks are not recommended</p> <p>Fruit juices are not recommended</p> <p>Do not give: Cow's milk; sheep's milk or rice milk; tea or coffee, even decaffeinated varieties; fruit juice drinks or fizzy drinks; sports or energy drinks, or dilutable squashes</p> <p>12-23 months:</p> <p>Breastmilk on demand, or a maximum of 1 pint of whole cow's milk a day</p> <p>Infant formula is not necessary</p> <p>Do not give low-fat or skimmed milk</p> | <p>Breastfed: 200 ml milk</p> <p>Non-breastfed: 400 ml milk</p> | <p>6-12 months: Breast milk (or formula) and water</p> <p>1-2 years: Breast milk, whole cow's milk, and water</p> <p>6-18 months: Boil water from tanks or bore holes</p> <p>Do not offer drinks containing natural or added sugar, such as fruit juice, cordial, fizzy drinks, or flavoured milks</p> <p>Never give babies and toddlers tea, coffee, alcohol, smart or energy drinks or other adult drinks</p> | <p>'If you are going to make fortified soy beverage your child's main milk source, wait until they are 2 years of age. Rice or nut beverages should not be used as your child's main milk source'</p> <p>If not breastfeeding, offer 500 ml of whole milk/day. Limit to maximum of 750 ml/day</p> <p>Limit fruit juice and do not offer sweetened beverages</p> <p>If your child seems thirsty, offer water</p> <p>Do not offer herbal teas, sports drinks or other drinks with caffeine or artificial sweeteners</p> |
| Use of cup | Mentions cups even for younger infants, for expressed breastmilk. For infants 6 months and older give water in a cup | Introduce from 6 months; after 12 months bottles should be stopped | -- | -- | From 6-12 months: 'Give your baby an open cup when offering fluids other than breast milk. At first, your baby will need help with the cup' |

| Topic | Kenya | Ireland | India ^a | New Zealand | Canada |
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| Sugar | -- | 'Don't add salt or sugar to your baby's food' Don't give honey or sugar | Since infants cannot consume bulky complementary food, in sufficient quantities, energy-rich foods like fats and sugars should be included in such preparations. 2.5 g portions of sugar/day 4.5 g portions of oil/day | 'Don't add salt, sugar, honey, sweeteners, soy sauce, cream, butter or margarine to your baby's food' | -- |
| Fat | From 7 months, add small amounts of oil to food | -- | | | |
| Salt | 'Do not give meals that are too spicy or salty' From 12 months, add small amounts of iodized salt | 'Don't add salt or sugar to your baby's food. If making a family meal, remove their portion before adding salt' | -- | | -- |
| Foods high in sugar, salt, and/or fat | -- | 'Don't use stock cubes, gravy, packets or jars of sauce when making family foods for your child' Do not give processed or cured meats (such as sausages, ham, bacon) 'Foods high in fat, sugar or salt, such as biscuits, crisps, chocolate, sweets, ice-cream or fizzy drinks should not be a regular part of your child's daily diet at any age' 'Don't use foods, especially foods high in fat or sugar, as a reward or treat' | -- | -- | Higher-fat, nutritious foods are an important source of energy for your child. Examples: breast milk, whole cow's milk cheese, avocado, nut butters, and some fish such as salmon or trout |

| Topic | Kenya | Ireland | India ^a | New Zealand | Canada |
|-------------------------------|---|--|--|---|---|
| Other foods to avoid | Avoid feeding meals that contain bones or hard pieces as they might choke the child | Unpasteurized cheese Undercooked eggs Bran Liver Whole or chopped nuts | -- | 'Babies should be at least 12 months old before they eat honey' Choking risks: Small hard foods; small round foods; foods with skins or leaves that are difficult to chew; compressible food that can get stuck in children's throats; thick pastes; fibrous or stringy foods (examples given for each) Avoid giving whole nuts and large seeds until children are at least 5 years old | 'Do not offer solid foods that are hard, small and round, or smooth and sticky' |
| Feeding during illness | 'Breastfeed the child more during illness, in addition to meals Provide extra food after illness – the equivalent of one extra meal per day' | | 'Never starve the child Feed energy-rich cereals-pulse diet with milk and mashed vegetables Feed small quantities at frequent intervals Continue breast-feeding as long as possible Give plenty of fluids during illness Use oral rehydration solution to prevent and correct dehydration during diarrhea episodes' | -- | -- |

| Topic | Kenya | Ireland | India ^a | New Zealand | Canada |
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| Infant formula | | See guidance for 0-6 months for choice of formula and safe use. | 'What should be done if breast-milk is not adequate?' 'If breast-feeding fails': Feed animal milk or commercial infant formula; milk should be boiled; at first, may be diluted 1:1 with water; full strength milk from 4 weeks of age; 120-180 ml milk + 1 tsp sugar 6-8 times/day. Follow label instructions for formula; use sterile cup, spoon, bottle and nipple; avoid overfeeding 'artificially-fed infants to prevent obesity' | See guidance for 0-6 months for choice of formula and safe use. In addition: 'Use breast milk or formula as the main drink until your baby is 12 months old. There is no need to change to a follow-on formula at 6 months' | See guidance for 0-6 months for choice of formula and safe use. |
| Other feeding practices | 'Do not give meals that are too spicy or salty' 'Separate the child's bowl ... to tell how much he/she has eaten' 'Complementary foods should meet the basic criteria of frequency, amount, texture (thickness), variety, adequacy, active feeding and hygiene (FATVAH)' Provide suggestions to add to enrich complementary foods (milk, oil, avocado, peanut paste) | Advice on dealing with constipation (fruits, vegetables, fluids) 'You should not avoid certain foods in your baby's diet in an attempt to prevent allergy. There is no benefit to delaying the introduction of peanut' 'There is now no need to avoid gluten when you are introducing foods into your baby's diet' | -- | 'Delaying the introduction of solid food until your baby is ready for it and continuing to breastfeed while you introduce solids – may help prevent allergic reactions to some foods' | Introduce common food allergens one at a time |

a The Indian Dietary Guidelines document has chapters on: 1) breastfeeding; 2) feeding home-based solids starting from 6 months; and 3) adequate feeding for children and adolescents in health and sickness. Exact age groupings are not clear in the chapters; the age groupings shown here are from Annex 4 which provides portion sizes and number of portions by age. b For Kenya, advice on quantity for age 9-11 months may be a typo as it indicates quantity per day but it is in a table column labeled quantity per meal. The quantity seems low for per day.

Table A6.8: Guidance for 6-23 months of age: Chile, Colombia, Panama

Sources: Chile: Professional-facing *Guia de Alimentación del Niño(a) menor de 2 años / Guia de alimentación para la Adolescencia*; Colombia: Two professional-facing documents: *Guías Alimentarias Basadas en Alimentos para mujeres Gestantes, Madres en Período de Lactancia y Niños y Niñas menores de dos años de Colombia. Documento Técnico*; and *Guías Alimentarias Basadas en Alimentos para mujeres Gestantes, Madres en Período de Lactancia y Niños y Niñas menores de dos años de Colombia. Material Educativo*; Panama: Professional-facing *Documento Técnico de las Guías Alimentaria para los menores de 2 años de Panama* and consumer-facing: *Guías Alimentaria para los menores de 2 años de Panama*.

| Topic | Chile | Colombia | Panama |
|--|---|--|--|
| Age range | 0-6 months 6-11 months 12-23 months | 6-8 months 9-11 months 12-24 months | 6-8 months 9-11 months 12-24 months |
| Continued breastfeeding / duration of breastfeeding | Breast milk remains the best at this age to supplement solid nutrition | Continue breastfeeding as many times as the boy or girl wants, after meals | Continued BF is mentioned in each age group |
| How to tell when baby is ready for foods other than breast milk | -- | -- | -- |
| Guidance on starting foods other than breast milk The transition Guidance on how to feed Guidance on making complementary foods | The incorporation of solid food should occur around 6 months in order to meet nutritional requirements and stimulate neurological and motor development. Complementary feeding includes solid or semi-solid foods (porridge or purees), and also liquid foods (water). | When you introduce a new food, offer it several times until it is accepted and in different preparations to promote its acceptance. To promote the health and nutrition of children, offer a variety of fresh, natural foods prepared at home from six months of age and continue breastfeeding for up to 2 years or more | When you are in this process of introducing food.... breastfeeding should continue, but it does not mean that you first fill the child with milk and then offer food. It would be the other way around: first the child is offered food with patience and dedication and, once it is over, he is breastfed. Introduce one new food at a time and not several at a time, to give the child a chance to try it calmly and accept or reject it. If he rejects it, give it again another day until he accept it. Keep in mind that this is an adaptation process and to be patient. |

| Topic | Chile | Colombia | Panama |
|---|--|--|---|
| Age of introduction of various foods | <p>From 6-12 months</p> <p>6 Months</p> <p>Daily: Green vegetables, colored vegetables, fruits, cereals, tubers, oil 3 times/week</p> <p>Meat (Beef, chicken, pork)</p> <p>7 Months</p> <p>2 times a week</p> <p>Fish, legumes</p> <p>9-10 Months</p> <p>1-2 times a week</p> <p>Egg</p> <p>1-2 years</p> <p>Daily: Cereals, vegetables, fruits, semi-skimmed milk, water</p> <p>Twice a week: Meat of all kinds, fish and seafood, legumes</p> | <p>6-8 months</p> <p>Offer one new food at a time along with one already known. Insert a new one 2 to 4 days later according to the baby's tolerance.</p> <p>Cereals</p> <p>Cereal products</p> <p>Tubers</p> <p>Fruits</p> <p>Vegetables</p> <p>12-24 months</p> <p>Family food</p> | <p>6-8 months</p> <p>Cereals, fruits, vegetables, stews, meats, oil or butter (one teaspoon) should be offered as start-up foods</p> <p>9-11 months</p> <p>Add new foods such as macaroni, whole egg.</p> <p>12-24 months</p> <p>When the child turns one, he must enjoy healthy foods with the rest of the family</p> |

| Topic | Chile | Colombia | Panama |
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| Recommended number of meals and snacks | -- | <p>6-8 months 2-3 meals / day, and according to appetite, 1-2 snacks</p> <p>The frequency of meals should be progressive, until reaching three meals a day at 8 months.</p> <p>9-11 months Offer at least 3 meals a day and one or two snacks according to your baby's appetite.</p> <p>12-24 months 3-4 meals / day, and according to appetite, 1-2 snacks</p> | <p>Between 6 and 8 months, the child should be given two main meals a day if breastfed, and 4 times if not breastfed.</p> <p>At 9 to 11 months, 3 meals if breastfed and 4 if not breastfed; and after 12 months feed 4 to 5 times a day.</p> |
| Recommended portion sizes or total quantity | <p>At the beginning of complementary feeding, the porridge or mixed puree must be delivered in small quantities, and it can be increased as feeding progresses and is accepted, consuming at 8 months about 150 ml of porridge (3/4 cup), plus 100 ml (1/2 cup) of fruit; and at 9 months 200 ml (1 cup) of porridge and 100 ml (1/2 cup) of fruit at each meal. These amounts are referential and may vary on different occasions.</p> | <p>6-8 months Start with 2-3 tablespoons per meal and gradually increase to 1/2 glass or 250 ml cup</p> <p>9-11 months The amount of food per meal is half a cup (4 ounces)</p> <p>12-24 months The amount of food per main meal is 1 cup or plate (8 ounces)</p> | <p>6-8 months Quantity: 1/2 cup or 5 tablespoons for each meal</p> <p>9-11 months The amount increases to 3/4 cup or the equivalent, 7 tablespoons per mealtime</p> <p>12-24 months 1 cup or 10 tablespoons for each meal</p> |

| Topic | Chile | Colombia | Panama |
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| Guidance on texture | Porridge or soft puree is recommended, without lumps, or pieces of fiber that stimulate the extrusion reflex. When the upper incisors have erupted (8-9 months), the porridge may have the consistency of thicker mash and then ground with a fork, with timing related to the eruption of the first molars (around 12 months) | 6-8 months Offer very thick mashed foods, until chewing ability appears 9-11 months Offer finely chopped, crushed foods that the baby can take by hand 12-24 months Offer the variety of solid foods, with some modified textures: chopped, ground, small pieces | 6-8 months As for consistency, it must be in the form of purees, porridge, mashed, shredded 9-11 months Include food in the form of small pieces 12-24 months The consistency of the food should be the same as the rest of the family, while preventing choking |
| Guidance on milk fat (%) | Semi-skimmed milk (3%) | Whole milk | -- |
| Healthy snacks | -- | -- | Snacks should always be given to the child in all age groups, offering fruits, breastfeeding, or some cereal in small quantities. They should not be given before the meal, otherwise, the baby will not eat the main meal |
| Poor appetite | -- | -- | -- |
| Picky eaters | -- | When you introduce a new food, offer it several times until it is accepted and in different preparations to promote its acceptance | The presentation of the dish is important; use colors that are appealing to the child and adapted for their utensils. Try to make the food attractive to the eye Practice with combinations of foods that mask some flavors that you feel the child doesn't like Encourage the child to eat with patience and dedication without distractions that prevent him from enjoying the moment |

| Topic | Chile | Colombia | Panama |
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| Role of parent/caregiver and of child; responsive feeding | <p>It is recommended that children eat in a pleasant and quiet environment, using tools that they identify as their own. It is not recommended that distractions appear during mealtimes, especially avoid television when offering meals.</p> <p>Respect if the child does not want more food; observe if this is total rejection or if it is repeated, to determine if the child is ill.</p> <p>Establishing a flexible eating routine makes it easy for the child to organize their social interaction patterns without anxiety.</p> | <p>Pay attention to your baby's hunger and satiety signals</p> <p>Offer food slowly and patiently and encourage the baby to eat</p> <p>Signs of hunger in the child</p> <p>6-8 months</p> <p>Brings his head close to the spoon or tries to bring food to his mouth. Points to the food.</p> <p>9-11 months</p> <p>Reaches for the food</p> <p>Expresses desire for specific food with words or sounds. Points to the food.</p> <p>He gets excited when he sees food.</p> <p>12-24 months</p> <p>Combines phrases with gestures; for example, says 'I want that' and points to food</p> <p>Takes parents to the kitchen and points out the food or drink he wants</p> | <p>Feed the child slowly; encourage him to eat without forcing it.</p> <p>'Perceptual feeding' or responsive refers to principles of psychosocial care that should be used when feeding the child, focused on active attention and stimulation during the moments of infant feeding, which implies a reciprocity between the child and his caregiver, based in three aspects:</p> <ul style="list-style-type: none"> • The child shows signs of hunger or satiety through motor actions, facial expressions or vocalizations • The caregiver recognizes the signals and responds quickly to the signal warmly and appropriately to the stage of the child's development • The child experiences a response given by the caregiver |
| Family meals | Children must adapt to family customs and progressively the child must join the family meals | -- | From one year, children should share the family table and eat the same foods that the rest of the family consumes, both in the type of food, the amount, frequency and consistency required at this stage |
| Food groups | | | |

| Topic | Chile | Colombia | Panama |
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| Grains | Include cereals from 6 months of age, including those that contain gluten (wheat, oats, rye and barley), even in children with a first-degree family history of celiac disease. It is not clear whether the introduction of gluten in the period between 4 months and 6 months prevents or delays the onset of celiac disease in a susceptible general population or in infants with a family history. | Cereals: Rice, corn, wheat, barley, oats, rye, prepared at home. Cereal products: pasta, bread, toast | 6-8 months: ½ cup daily 9-11 months: ½ cup daily 12-24 months: ½ cup daily |
| Roots and tubers | -- | Potato, yucca, yam, green banana. | -- |
| Meat, poultry | According to availability, and preferably low-fat meat, beef or chicken | Include a portion of animal foods such as meats, offal, eggs and fresh cheeses daily at meals Red and white meats, offal, chicken, pork, fresh fish and smaller species such as rabbit, and guinea pig | 6-8 months: 1 oz. chopped 2-4 times/week 9-11 months: 2 oz. chopped 2-4 times/week 12-24 months: 1 oz. chopped 2-4 times/week |
| Fish | Fish can be incorporated between 6-7 months. It is recommended to give at least 2 times per week, giving preference for fatty fish (salmon, sardine) for its high content of DHA, which helps in the child's neuromotor development | -- | 6-8 months: 1 oz chopped once/week 9-11 months: 2 oz chopped once/week 12-24 months: 1 oz. chopped 2-4 times/week |
| Eggs | Egg can be introduced between 9-10 months; give 1 or 2 times/week in place of meat | Eggs | 6-8 months: 1 unit yolk only, 3 times/week 9-11 months: 1 unit yolk only, 3 times/week 12-24 months: 1 unit daily |
| Legumes | Introduce legumes stewed with cereals between 7-8 months (ground, until about 12 months); a portion of them replaces mashed vegetables with meat. Consumption is recommended twice a week. | Beans, chickpeas, lentils, dried peas | 6-8 months: 1/3 cup 3 times/week 9-11 months: 1/3 cup 3 times/week 12-24 months: 1/3 cup 3 times/week |

| Topic | Chile | Colombia | Panama |
|--|---|--|--|
| Nuts and seeds | -- | -- | -- |
| Dairy | Semi-skimmed milk (3%) | Cow's milk or other mammals Curd and fresh cheeses without added salt. Yogurt and kumis made from whole milk | 6-8 months: Breast milk on demand 9-11 months: Breast milk on demand 12-24 months: Breast milk on demand |
| Fruits | All kind of fruits For dessert, fruit puree, raw or cooked, with no added sugar or honey is recommended | Fresh fruits such as papaya, guava, apple, mango, tangerine, orange, granadilla, etc. Offer your children fruits taking advantage of those that are in season | 6-8 months: 2 portions daily 9-11 months: 2 portions daily 12-24 months: 2 portions daily |
| Vegetables | Green Vegetables (spinach, broccoli, celery, zucchini, others) Colored vegetables (carrots, mushrooms, eggplant) | Spinach, broccoli, cauliflower, carrot, etc. Offer your children vegetables taking advantage of those that are in season | 6-8 months: $\frac{1}{2}$ cup daily 9-11 months: $\frac{1}{2}$ cup daily 12-24 months: $\frac{1}{2}$ cup daily |
| Supplements | Supplementation with iron (Fe) 1 mg/kg/day is justified in exclusively breastfed infants from 4 months to one year | -- | Iron supplementation in children under 24 months is suggested as a preventive strategy for anemia |
| Fortified foods and ingredients | It is not justified in infants fed fortified formulas | -- | Consumption of fortified foods such as wheat flour fortified with iron |

| Topic | Chile | Colombia | Panama |
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| Beverages | <p>Since the child receives solid food, water can be offered (boiled only in the case of not having potable water), without the addition of sugar, honey, or any other natural or artificial flavoring or sweetener.</p> <p>20-50 ml can be given 2-3 times a day, in addition to milk.</p> <p>Powdered beverages, juices or nectars with sugar, soft drinks and in general any sugary drinks or artificial sweeteners are not recommended or necessary. If the child refuses to drink water, it is not advisable to modify its flavor by adding any type of flavoring; the right thing is to continue offering only water so that child can acquire the habit.</p> | -- | <p>Water is the best option to quench your child's thirst. Young children need about 2 cups of to meet their fluid needs. Once your baby starts eating solid foods, it is recommended to offer a total of 4-8 ounces per day of drinking water in a cup. This will help the baby become familiar with the taste and acquire a taste for simple water. Do not add sugar or honey to the water for the child to accept it.</p> <p>It is not recommended to offer processed fruit juices or sugary drinks before the first year of life, such as sodas, sugary drinks from powdered mixtures, flavored drinks, sports drinks, commercial juices and nectars.</p> |
| Use of cup | -- | The baby must have his own spoon, glass and plate. | Children should have their own utensils such as plate, glass and teaspoon from the beginning of the introduction of food |

| Topic | Chile | Colombia | Panama |
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| Sugar | It is not recommended to add sugars to the preparations. Artificial sweeteners (saccharin, aspartame, sucralose, stevia or other) should not be used in food for children under 2 years old, directly or in preparations or commercial products ('light' or 'diet' or other similar) | Do not add sugar or honey in children's food and preparations. Do not offer candy. | Excessive consumption of calories from free sugars contributes to weight gain and presence of cavities and reduces appetite in children less than 2 years. Intake of free sugars should be reduced throughout life. Children under 2 years of age do not require the consumption of free sugars to cover their caloric needs, but it could be added after the first year. It is not recommended to add more than 3 teaspoons (15 grams) of added sugar, which represents 60 calories, contributing 8% of total daily calories, and which can come from white or brown sugar, honey, or sugar that was added to some preparation. |
| Fat | At the time of serving it is recommended to add to the porridge or mixed puree 2.5-3.0 ml of raw vegetable oil, preferably canola or soy | Vegetable oil and butter can be used Do not include trans- fats found in packaged products, margarine and cookies | 6-8 months: 1 teaspoon daily 9-11 months: 1 teaspoon daily 12-24 months: 2 teaspoons daily |
| Salt | It is not recommended to add salt to food prepared for the child | Do not add salt, condiments to food prepared for the child | A high consumption of salt and sodium since childhood increases the risk of suffering from high blood pressure, coronary heart disease and stroke in adulthood. It is estimated that the sodium requirement of children under 6 months is 0.12 g/day. From 7 to 12 months they require 0.37 g/day and from 1 to 3 years, 1 g/day |

| Topic | Chile | Colombia | Panama |
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| Foods high in sugar, salt, and/or fat | <p>It is not advisable to include in the children's diet foods that are not beneficial for health, for example, those foods with high energy content or calories, salt/sodium, sugars or saturated fats, such as sweets, sugary breakfast cereals, chocolates, candies, ice cream, cookies, cakes, juices and fancy drinks, sweet or savory snacks and in general those foods labeled "HIGH IN" sodium, sugars, saturated fats or calories. These foods are inadequate for infants, they contribute to generating bad habits from very young ages, they deteriorate the quality of the diet, they can lead to the rejection of meals and they contribute to developing malnutrition due to excess, lack of micronutrients, development of noncommunicable diseases, and dental caries, among others.</p> | <p>Do not offer processed products such as sugary drinks, and sausages, among others</p> <p>Do not offer your child canned milk, commercial compotes, baby box cereals, packaged products, cold meats, fast foods and sugary drinks</p> | <p>In several sections of the guides we talk about the harmful effect of the consumption of salt, sugar and highly processed products.</p> |
| Other foods to avoid | -- | -- | -- |
| Feeding during illness | -- | -- | <p>When the child is sick:</p> <p>Give more liquid and more breast milk for rehydration.</p> <p>Give more soft foods than usual. Choose baby's favorites. The amount he eats is likely to decrease, so the frequency should increase. This way he will have more energy to recover quickly.</p> <p>Encourage the child to eat with dedication and patience. Understand that he feels bad and wants to eat little.</p> |

| Topic | Chile | Colombia | Panama |
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| Infant formula | <p>If the child has already started formula, you can use formula diluted generally between 14-15%, using the measures included with each package, or if you do not have these formulas, use LPF diluted to 7.5%, adding 5% cereal without adding sugar. These recommendations may require modifications by the health team, depending on the child's nutritional condition.</p> <p>The use of continuation formulas after 6 months of life is not required according to scientific evidence. Starting formula can be used throughout the first year, when you have to supplement or replace breast milk.</p> | -- | |
| Other feeding practices | -- | <p>The food of their territories contributes to the growth and development of children and strengthens their cultural identity as Colombians</p> | -- |

Young children 2-4 years of age/toddlers/preschoolers

Table A6.9: Guidance for 2-4 years/toddlers/preschoolers: Kenya, Ireland, Spain, India and New Zealand

Sources: Kenya: Professional-facing *National Guidelines for Healthy Diets and Physical Activity*; Ireland: Web-based consumer-facing guidance at: <https://www.safefood.eu/Healthy-Eating/Food-Diet/Life-Stages/Toddlers.aspx>; Spain: *Nutricion Saludable de la Infancia y la Adolescencia. La Alimentacion de tus Niños y Niñas*; India: Professional- and consumer-facing *Dietary Guidelines for Indians – A Manual*; New Zealand: Consumer-facing *Eating for Healthy Children Aged 2 to 12*.

| Topic | Kenya | Ireland | Spain | India | New Zealand |
|--|--|--|---|--|--|
| Age range | 24-59 months | Guidance for 'toddlers'; age range is not defined. Some guidance is specifically for undertwos, but other statements refer to older children up to five years of age | 3-6 years | Guidance for children and adolescents is combined. Some statements are specific to 'young children' under five years of age. | Guidance covers children ages 2-12 years. Some guidance is divided by age (underfives and 5-12 years of age) |
| Recommended number of meals and snacks | 2-4 meals and 1-2 healthy snacks; small frequent meals | 'If your toddler can't manage set 'meals', then offer a number of nutritious snacks throughout the day instead.' Advises to get the toddler in the habit of having breakfast each day. | 'Address energy needs' as it is a period of growth and development Initiate the habit of breakfast Have breakfast, lunch, afternoon snack ('merienda cena') and dinner Avoid 'pecking' and abuse of snacks | 'Snacks provide a useful contribution' | 3 meals and 2-3 snacks or 'mini-meals'; do provide breakfast Don't encourage 'continuous eating or grazing' |
| Recommended portion sizes or total quantity | 1½-2 bowls of 250ml of food per meal | -- | -- | 'Discourage overeating as well as indiscriminate dieting'; see portion sizes in food groups below. | 'Smaller serving sizes than an adult's'; detailed per food group Encourage to stop eating when they feel full |

| Topic | Kenya | Ireland | Spain | India | New Zealand |
|---------------------------------|---|--|---|---|---|
| Guidance on milk fat (%) | -- | Semi-skimmed milk is OK after 2nd birthday, but not nonfat (skim) milk | Unless medically prescribed, there is no need to give skim/non-fat milk | -- | At 2 years, can gradually introduce reduced fat and low-fat dairy |
| Healthy snacks | Give nutritious snacks 'such as ripe banana, mango, boiled egg, sweet potatoes or milk' | Fruit and milk, but don't let children fill up on fruit or milk between meals as it will affect appetite | -- | -- | Numerous suggestions provided |
| Poor appetite | -- | Only mention is as above under snacks | -- | Only mention is that appetite may be low during illness | Advises that children who drink too much milk (more than 500 ml/day) may not eat enough food |
| Picky eaters | -- | <p>Notes it is normal for children to refuse specific foods or all foods from time to time; gives reasons why they may refuse</p> <p>Parent/caregiver may need to offer a food 8-10 times before it is accepted</p> <p>Advises to reduce distractions (e.g. television) during meals</p> <p>Avoid giving snacks or drinks just before meals</p> <p>Provides specific and detailed suggestions for when child refuses meat, milk, or vegetables</p> | -- | -- | <p>Notes it is normal to need to offer new foods many times before they are accepted;</p> <p>Advises that children who drink too much milk (more than 500 ml/day) may not eat enough food;</p> <p>Let the child control how much food they eat</p> <p>Make mealtimes fun rather than a battle</p> |

| Topic | Kenya | Ireland | Spain | India | New Zealand |
|--|--|---------|--|--|---|
| Role of parent/caregiver and of child | 'Encourage but do not force the child to eat' | -- | <p>Educate to 'eat everything'</p> <p>Spend the necessary time for the child to learn to eat while enjoying</p> <p>Food should not be perceived by them as a prize</p> <p>Do not use food to solve problems that have nothing to do with it, such as boredom, tensions, anxiety crisis, etc.</p> <p>Be a good role model in your own practices</p> | 'Take extra care' in feeding young children under five | <p>Be a positive role model</p> <p>'Provide a wide variety of healthy foods for children to choose from'</p> <p>Encourage to try new foods</p> <p>Encourage to stop eating when they feel full</p> <p>'Don't use rewards or force or push a child to eat'</p> |
| Family meals | 'Make meal times a relaxed and happy time for the child' | -- | As far as possible, share meals. Meals should be pleasant and convey correct eating habits and manners | -- | <p>'Make mealtimes fun... Have meals together as a family (when possible) and turn off the TV and cellphones.</p> <p>Have meals at times that suit children – this may mean having meals earlier than you are used to.'</p> |
| Food skills | -- | -- | Enjoy shopping and preparing food together with children | -- | <p>'Take children food shopping and encourage them to choose healthy foods'</p> <p>'Make preparing food fun – involve children from an early age'</p> |

| Topic | Kenya | Ireland | Spain | India | New Zealand |
|-------------------------|---|--|--|--|--|
| Food groups | | No specific guidance on servings or amounts per food group. There is a link to the food guide pyramid as illustration of a 'healthy balanced diet' but this has portions and portion sizes for ages 5 years and up, not for toddlers | Ensure a varied diet, with greatest possible diversity of foods Need for animal-source foods (meat, fish, eggs, dairy) is proportionally larger than for adults | | Example serving sizes of different items provided for each group |
| Grains | Include staple foods; not clear if for each meal, or every day | | Daily (bread) Combine legumes, rice and pasta throughout the week | 1-3 yrs: 2 30 g portions/day 4-6 yrs: 4 30 g portions/day | At least 4 servings/day; include whole grain types |
| Roots and tubers | | | Moderation, especially of French fries | 1-3 yrs: 50 g portion/day 4-6 yrs: 100 g portion/day | -- |
| Meat, poultry | Include animal source food; not clear if for each meal, or every day | | Alternate meat and processed meat, fatty and lean fish and eggs Encourage consumption of fish No more than 4-5 eggs/week | Pulses 'may be exchanged' with 1 50 g portion of egg/meat/chicken/fish | At least one serving/day Vegetarian children: at least 1-2 servings/day of legumes, nuts or seeds |
| Fish | | | Encourage consumption Combine legumes, rice and pasta throughout the week | 1 30 g portion/day | |
| Eggs | | | -- | -- | |
| Legumes | Include legumes and seeds; not clear if for each meal, or every day | | Daily – at least 500 ml of milk. Can substitute yogurt or cheese | 'Plenty of milk and milk products'; 5 100 g portions/day | 2-3 servings/day; 250 ml milk is one serving |
| Nuts and seeds | Increase the nutrient density of foods by adding oilseeds (e.g. groundnuts, soybeans) | | | | |
| Dairy | 2-3 cups of milk a day | | | | |

| Topic | Kenya | Ireland | Spain | India | New Zealand |
|-----------------|--|--|--|--|--|
| Fruits | Include vitamin A-rich fruits and vegetables; not clear if for each meal, or every day | | Fruits, vegetables and salad daily '5 a day' for fruits and vegetables | 1 100 g portion/day Green leafy vegetables: 50 g portion/day Other vegetables: 1-3 yrs: 50 g portion/day 4-6 yrs: 100 g portion/day | At least 2 servings/day |
| Vegetables | | | | | At least 2 servings/day |
| Supplements | Vitamin A supplements every 6 months | -- | -- | -- | -- |
| Fortified foods | PGP: Choose fortified maize meal and wheat flour PGP: Use fortified oil Dietary Guidelines (p. 18) states guidance is complementary to separate guidelines on use of multiple micronutrient powders for home fortification | -- | -- | PGP: Always use iron fortified iodized salt (double fortified salt) | If child does not drink cow's milk, can give soy milk with added calcium and vitamin B12 |
| Beverages | 'Plenty' of clean water 2-3 cups of milk a day 'Give children under five years of age plain, full cream milk whenever possible' | Water and milk are most 'tooth-friendly'. 100% juice is a healthy choice but only give with meals and dilute it 10:1 with water 'Fizzy drinks, sugary squashes, tea and coffee are not suitable' | At least 500 ml milk/day Water is the best drink. Meals should always be accompanied by water Sodas and soft drinks – only occasionally | Give plenty of milk – 5 100 ml portions/day | Lots of small drinks through the day; they may forget to drink Water is best Milk is good and can be served after meals or with snacks 'Give less' juice; dilute juice with equal amount of water and give only with meals Soft drinks only occasionally (< one a wk) Do not give: tea, coffee, energy drinks, energy shots |

| Topic | Kenya | Ireland | Spain | India | New Zealand |
|--|--|--|---|--|--|
| Sugar | | Don't add sugar or honey to foods | Avoid excessive fat, sugar and salt | 3-4 5 g portions of sugar. Young children below the age of 5 years should be given less bulky foods, rich in energy and protein such as legumes, pulses, nuts, edible oil/ghee, sugar, milk and eggs. | -- |
| Fat | If no fatty foods in the meal, put a little fat or oil in the meal to add energy and help absorb vitamin A | -- | Fats are necessary but avoid overly high fat intake e.g. from fatty cheeses, butter and flavored margarines, or from fat contained in pates, spreads, sandwich bread and various buns | See above; also: 5 5 g portions of fat/oil Avoid 'overindulgence' in fats. | -- |
| Salt | Use iodized salt for family meals sparingly | -- | Avoid excessive fat, sugar and salt | Avoid excessive salt intake | -- |
| Foods high in sugar, salt, and/or fat | Avoid sugary foods and sweets | -- | Sweets should be taken in moderation. Avoid 'abuse' of sweets, 'goodies' and soft drinks | PGG: Guideline 14: 'Minimize the use of processed foods rich in salt, sugar and fats'; this section has detailed description of foods to limit | Limit fruit juice and dried fruit Provides a long and diverse list of foods high in sugar, salt and fat – children should eat these only occasionally (less than once a week) Limit processed meats Limit 'takeaways' to occasionally |
| Other foods to avoid | -- | Raw eggs, whole or chopped nuts (choking hazard), certain fish (mercury content) | -- | -- | Do not give small hard foods, such as whole nuts and large seeds (choking) |

| Topic | Kenya | Ireland | Spain | India | New Zealand |
|------------------------|-------|---------|-------|---|-------------|
| Feeding during illness | -- | -- | -- | <p>'Never starve the child.</p> <p>Feed energy-rich cereals-pulse diet with milk and mashed vegetables.</p> <p>Feed small quantities at frequent intervals.</p> <p>Continue breast-feeding as long as possible.</p> <p>Give plenty of fluids during illness.</p> <p>Use oral rehydration solution to prevent and correct dehydration during diarrhea episodes.'</p> | -- |

Table A6.10: Guidance for 2-4 years/toddlers/preschoolers: Canada and Chile

Sources: Canada: Web-based consumer-facing guidance for parents of children at: <https://food-guide.canada.ca/en/tips-for-healthy-eating/parents-and-children/>; Chile: Professional-facing: *Guía de Alimentación del Niño(a) menor de 2 años/ Guía de alimentación para la Adolescencia*.

| Topic | Canada | Chile |
|--|---|--|
| Age range | The Canadian Dietary Guidelines cover ages 2 and above. Additional guidance summarized here is for parents of children of any age – young children through teenagers. | The Chilean Dietary Guidelines cover ages 2 and above. Except for portions, the guidance is the same from 2-18 years. Guidance on portions in this table is for children 2-5 years. |
| Recommended number of meals and snacks | Offer small meals and snacks at regular times throughout the day | 4 or 5 – breakfast, lunch, afternoon snack and dinner, and possibly another light ‘collation’ |
| Recommended portion sizes or total quantity | The new Canadian Food Guide web application does not appear to include recommended servings or serving sizes; may be forthcoming. | Portions sizes are indicated per food group below |
| Guidance on milk fat (%) | -- | GPG: Eat low-fat dairy products |
| Healthy snacks | -- | Fruits, vegetables, dairy products. Avoid foods that have the warning message: “HIGH IN” CALORIES, SUGARS, SODIUM AND SATURATED FATS, such as soft drinks, sugary nectars and juices, sweets, cocktail foods, sweet and savory pastry and snack products. |
| Poor appetite | -- | Variation in appetite are normal and can have many causes |
| Picky eaters | <p>‘Children are more likely to accept a new food the more often they are exposed to it. An unfamiliar food can be offered again later if it is rejected the first time.</p> <p>You can help overcome picky eating by:</p> <ul style="list-style-type: none"> - making routines - offering foods more than once - planning your meals and snacks - involving your kids in meal preparation’ | <p>This is covered in a detailed section on development of eating habits and behavior. Recommendations include including a variety of flavors in meals, introducing new foods gradually, in small quantities, and with patience and persistence, and introduce together with familiar foods. Introduce by showing the child that the mother, father, or older siblings enjoy the food. They also note that flavor exposure begins in utero, and continues during breastfeeding</p> |

| Topic | Canada | Chile |
|--|---|---|
| Role of parent/caregiver and of child | <p>Lead by example: 'Prepare and eat healthy foods...Enjoy a variety of healthy foods'</p> <p>'Let your children decide how much food they want to eat'</p> | <p>This is covered in detail the same section and there is an Annex on feeding styles.</p> <p>Suggestions include:</p> <ul style="list-style-type: none"> Offer praise for good behaviors but do not highlight or punish bad behaviors Do not use food as a reward and do not use food to calm a child who is hurt or upset Do not force a child to finish food, child should stop when satiated Offer portions and textures that are appropriate for the child's age |
| Family meals | <p>Encourages family meals as often as possible</p> <p>Make time so meals are not rushed</p> <p>Serve family-style (food is put into larger bowls or serving dishes on the table): children choose which foods to eat and how much</p> <p>Put away toys and screens during mealtime</p> | <p>Create a positive, pleasant environment and model respectful behavior</p> <p>Eating alone or in front of the television, computer, or other distraction can lead to overeating</p> |

| Topic | Canada | Chile |
|-------------------------|--|---|
| Food skills | <p>'Teach your kids about making healthy food choices.</p> <p>Plan out your meals and snacks with your kids to have the healthy foods they like in the home.</p> <p>Get your kids cooking. Support them, regardless of age, by helping them with simple food-related tasks.'</p> | -- |
| Food groups | The new Canadian Food Guide web application does not appear to include recommended servings or serving sizes; may be forthcoming. | |
| Grains | | 1 (girls) to 1.5 (boys) units bread daily 1 small plate of cereals, noodles or potatoes 4-5 times per week |
| Roots and tubers | | |
| Meat, poultry | | 1 small unit 2 times/week |
| Fish | | 1 small unit 2 times/week GPG: Recommends baked or grilled fish |
| Eggs | | 2-3 per week |
| Legumes | | 1 small plate 2 times/week GPG: Don't mix with cold or cured meats |
| Nuts and seeds | | -- |
| Dairy | | 3 cups/day - dairy without sugar (milk, yogurt or cheese) |
| Fruits | | Fruits – two/day Vegetables - 2 plates/day |
| Vegetables | | GPG: Eat fresh vegetables and fruits of different colors five times a day |
| Supplements | -- | -- |
| Fortified foods | -- | -- |

| Topic | Canada | Chile |
|--|--|--|
| Beverages | 'Replace sugary drinks with water' | 1.2-1.5 quarts/day, including fluid in milk, soup and other liquids GPG: To stay hydrated, drink 6–8 glasses of water a day |
| Sugar | -- | GPG: Avoid eating sugar |
| Fat | -- | -- |
| Salt | -- | GPG: Eat foods with little salt and take the salt shaker away from the table |
| Foods high in sugar, salt, and/or fat | Limit the amount of highly processed foods you offer (many examples provided) Prepare meals and snacks with little to no added sodium, sugars, or saturated fat | GPG: If you want to maintain a healthy weight, avoid eating sugar, sweets, sugar-sweetened juices and beverages GPG: Take good care of your heart by avoiding fried foods, and fatty foods like cold and cured meats and mayonnaise GPG: Read and compare food labels and choose products with less fat, sugar and salt (sodium) |
| Other foods to avoid | -- | -- |
| Feeding during illness | -- | -- |

School-aged children

Table A6.11: Guidance for school-aged children: Kenya, Ireland, Spain, India and New Zealand

Sources: Kenya: Professional-facing *National Guidelines for Healthy Diets and Physical Activity*; Ireland: Professional-facing *Healthy Eating, Food Safety, and Food Legislation – A Guide Supporting the Healthy Ireland Food Pyramid*, and web-based consumer-facing guidance at: <https://www.safefood.eu/Healthy-Eating/Food-Diet/Life-Stages/School-children.aspx>; Spain: *Nutricion Saludable de la Infancia y la Adolescencia. La Alimentacion de tus Niños y Niñas*; India: Professional- and consumer-facing *Dietary Guidelines for Indians – A Manual*; New Zealand: Consumer-facing *Eating for Healthy Children Aged 2 to 12*.

| Topic | Kenya | Ireland | Spain | India | New Zealand |
|--|--|--|--|--|--|
| Age range | 5 to 9 years Noted that at this age, the key messages in the general population guidelines also apply | Noted that the messages in the guidelines are intended for adults and children over 5 years of age. Guidance (e.g. servings) is provided for children 5-12 years of age | 7-12 years | Guidance for children and adolescents is combined. Some statements are specific to 'young children' under five years of age. | Guidance covers children ages 2-12 years. Some guidance is divided by age (underfives and 5-12 years of age) |
| Recommended number of meals and snacks | Give child a healthy breakfast | Offer children a variety of nutritious snacks throughout the day | 'Address energy needs' as it is a period of growth and development Have breakfast, lunch, afternoon snack ('merienda cena') and dinner Avoid 'pecking' and abuse of snacks | 'Snacks provide a useful contribution' | 3 meals and 2-3 snacks or 'mini-meals'; do provide breakfast Don't encourage 'continuous eating or grazing' |

| Topic | Kenya | Ireland | Spain | India | New Zealand |
|--|---|---|-------|--|--|
| Recommended portion sizes or total quantity | Allow child to choose his/her own portion size from preferred foods, 'provided they are adequate, wholesome and nutritious' | Importance of appropriate portion sizes – 'As a rule of thumb, a 5-year old should eat about half the amount that an adult does. Many adults eat larger portions than they need also. Try giving everyone smaller portions on their plates.... Using smaller plates, for children and adults, can help.' GPG: Portion sizes for meat, poultry, fish, and cheese are related to finger and palm size. | -- | 'Discourage overeating as well as indiscriminate dieting'; see portion sizes in food groups below. | 'Smaller serving sizes than an adult's'; detailed per food group Encourage to stop eating when they feel full |
| Healthy snacks | GPG: 'Eat fresh fruits and raw vegetables as snacks instead of sugary snacks' | Provides a long list of healthy snack options | -- | -- | Numerous suggestions provided |
| Poor appetite | -- | -- | -- | Only mention is that appetite may be low during illness | Advises that children who drink too much milk (more than 500 ml/day) may not eat enough food |

| Topic | Kenya | Ireland | Spain | India | New Zealand |
|---------------------------------------|-------|---|--|-------|---|
| Picky eaters | -- | -- | -- | -- | <p>Notes it is normal to need to offer new foods many times before they are accepted;</p> <p>Advises that children who drink too much milk (more than 500 ml/day) may not eat enough food;</p> <p>Let the child control how much food they eat</p> <p>Make mealtimes fun rather than a battle</p> |
| Role of parent/caregiver and of child | -- | 'Children are better at making changes when the whole family do it together.' | <p>Food should not be perceived by them as a prize</p> <p>Do not use food to solve problems that have nothing to do with it, such as boredom, tensions, anxiety crisis, etc.</p> <p>Be a good role model in your own practices</p> | -- | <p>Be a positive role model</p> <p>'Provide a wide variety of healthy foods for children to choose from'</p> <p>Encourage to try new foods</p> <p>Encourage to stop eating when they feel full</p> <p>'Don't use rewards or force or push a child to eat'</p> |
| Family meals | -- | -- | As far as possible, share meals. Meals should be pleasant and convey correct eating habits and manners | -- | <p>'Make mealtimes fun...'</p> <p>Have meals together as a family (when possible) and turn off the TV and cellphones.</p> <p>Have meals at times that suit children – this may mean having meals earlier than you are used to.'</p> |
| Food skills | -- | Links to a webpage on growing vegetables with children | Enjoy shopping and preparing food together with children | -- | <p>'Take children food shopping and encourage them to choose healthy foods'</p> <p>'Make preparing food fun – involve children from an early age'</p> |

| Topic | Kenya | Ireland | Spain | India | New Zealand |
|-------------------------|---|---|--|--|--|
| Food groups | Nutrient-dense foods from at least 4 food groups every day | | Ensure a varied diet, with greatest possible diversity of foods Need for animal-source foods (meat, fish, eggs, dairy) is proportionally larger than for adults | Number of portions for some food groups differs by age and sex for: 4-6 yrs, 7-9 yrs, 10-12 year old girls and 10-12 year old boys | Example serving sizes of different items provided for each group |
| Grains | GPG: 'Include whole or unprocessed starchy foods as part of meals' | Girls: 3-4 servings/day Boys: 3-5 servings/day GPG: Whole grain or whole meal are best. Eat with each meal. | Daily (bread) Combine legumes, rice and pasta throughout the week Moderation, especially of French fries | 4-10 30 g portions, depending on age and sex 1 100 g portion | At least 5 servings/day; include whole grain types -- |
| Roots and tubers | | | | | |
| Meat, poultry | GPG: 'Eat lean meat, fish and seafood, poultry, insects or eggs at least twice a week.' | 2 servings GPG: Eat oily fish up to twice a week | Alternate meat and processed meat, fatty and lean fish and eggs Encourage consumption of fish No more than 4-5 eggs/week | 1-2 30 portions pulses, depending on age May be exchanged with egg/meat/chicken/fish (50 g per portion) | |
| Fish | | | | | At least one serving/day |
| Eggs | | | | | Vegetarian children: at least 2 servings/day of legumes, nuts or seeds |
| Legumes | GPG: At least 4 times a week | | Encourage consumption Combine legumes, rice and pasta throughout the week | | |
| Nuts and seeds | | | -- | -- | |
| Dairy | GPG: 'Drink fresh milk, fermented milk or yoghurt every day' | 5-8 yrs: 3 servings/day 9-12 yrs: 5 servings/day | Daily – at least 500 ml of milk. Can substitute yogurt or cheese | 5 100 ml portions | 2-3 servings/day; 250 ml milk is one serving |

| Topic | Kenya | Ireland | Spain | India | New Zealand |
|-----------------|--|--|--|--|--|
| Fruits | GPG: 'Eat plenty of green leafy vegetables, red and yellow vegetables and fruits every day; and include a variety of other vegetables and fruits' | 5-7 servings/day | Fruits, vegetables and salad daily '5 a day' for fruits and vegetables | 1 100 g portion | At least 2 servings/day |
| Vegetables | | GPG: Base your meals on these and enjoy a variety of colors. More is better | | Green leafy vegetables: 0.5 to 1 100 g portion, depending on age Other vegetables: 1-2 100 g portions, depending on age | At least 3 servings/day |
| Supplements | -- | -- | -- | -- | -- |
| Fortified foods | GPG: Use iodised salt, but use it sparingly GPG: Use fortified oil | -- | -- | GPG: Always use iron fortified iodized salt (double fortified salt) | If child does not drink cow's milk, can give soy milk with added calcium and vitamin B12 |
| Beverages | Child should drink 'plenty of fluids especially water and milk' Limit intake of sugary drinks such as 'sweetened/ coloured water/ juice' GPG: Drink fresh milk, fermented milk or yoghurt every day. Use low-fat or skim milk GPG: Limit the consumption of sweetened foods and drinks. | Plenty of fluids regularly throughout the day. On average about 8 glasses a day Water and milk are the most 'tooth-friendly' Avoid sweetened fruit juices and juice drinks Unsweetened fruit juice – drink with meals, not between, and for 'younger children' dilute 1:10 with water | At least 500 ml milk/day Water is the best drink. Meals should always be accompanied by water Sodas and soft drinks – only occasionally | Give plenty of milk – 5 100 ml portions/day | Lots of small drinks through the day; they may forget to drink Water is best Milk is good and can be served after meals or with snacks 'Give less' juice; dilute juice with equal amount of water and give only with meals Soft drinks only occasionally (< one a wk) Do not give: tea, coffee, energy drinks, energy shots |

| Topic | Kenya | Ireland | Spain | India | New Zealand |
|--------------|---|--|---|---|-------------|
| Sugar | GPG: If you use sugar, use it sparingly | -- | Avoid excessive fat, sugar and salt | 4-6 5 g portions, depending on age | -- |
| Fat | GPG: Use oil or fat in moderation in meals; limit the amount of solid fat. Use fortified oil. Many suggestions for reducing fat intake are provided. | GPG: Always cook with as little fat or oil as possible – grilling, oven-baking, steaming, boiling or stir-frying | Fats are necessary but avoid overly high fat intake e.g. from fatty cheeses, butter and flavored margarines, or from fat contained in pates, spreads, sandwich bread and various buns | 5-7 5 g portions, depending on age Avoid 'overindulgence' in fats. | -- |
| Salt | GPG: Use iodised salt, but use it sparingly GPG: 'Use condiments and processed foods sparingly like ready meals, processed meats like bacon, ham and salami, cheese and salty snacks. Reduce the use of seasoning cubes as they also contain salt' | -- | Avoid excessive fat, sugar and salt | Avoid excessive salt intake | -- |

| Topic | Kenya | Ireland | Spain | India | New Zealand |
|--|--|--|--|--|---|
| Foods high in sugar, salt, and/or fat | <p>Limit intake of sugary and salty snacks 'such as potato crisps, cakes, biscuits'</p> <p>PGP: Limit the consumption of sweetened foods and drinks.</p> | <p>PGP: Limit processed salty meats such as sausages, bacon and ham</p> <p>PGP: Foods high in fat, sugar and salt: not every day, once or twice a week at most. Examples listed.</p> | Avoid sweets, soda, fatty cheese and spreads, and very salty foods | PGP: Guideline 14: 'Minimize the use of processed foods rich in salt, sugar and fats'; this section has detailed description of foods to limit | <p>Limit fruit juice and dried fruit</p> <p>Provides a long and diverse list of foods high in sugar, salt and fat – children should eat these only occasionally (less than once a week)</p> <p>Limit processed meats</p> <p>Limit 'takeaways' to occasionally</p> |
| Feeding during illness | -- | -- | -- | Same guidance as for younger children (Table A6.9) | -- |

Table A6.12: Guidance for school-aged children: Canada, Bolivia, and Chile

Sources: Canada: Web-based consumer-facing guidance for parents of children at: <https://food-guide.canada.ca/en/tips-for-healthy-eating/parents-and-children/>; Bolivia: Professional-facing Guia Alimentaria para el niño y la niña en edad escolar; Chile: Professional-facing: Guia de Alimentación del Niño(a) menor de 2 años/ Guia de alimentación para la Adolescencia.

| Topic | Canada | Bolivia | Chile |
|--|--|---|--|
| Age range | The Canadian Dietary Guidelines cover ages 2 and above. Additional guidance summarized here is for parents of children of any age – young children through teenagers | The Bolivian Dietary Guidelines cover ages 2 and above. There is a separate document for school-aged children 6-10 year of age. Guidance on portions is separate for 6-7 and 8-10 years | The Chilean Dietary Guidelines cover ages 2 and above. Except for portions, the guidance is the same from 2-18 years. Guidance on portions in this table is for children 6-10 years |
| Recommended number of meals and snacks | Offer small meals and snacks at regular times throughout the day | Breakfast, lunch, dinner plus a morning snack and an afternoon snack | 4 or 5 – breakfast, lunch, afternoon snack and dinner, and possibly another light ‘collation’ |
| Recommended portion sizes or total quantity | The new Canadian Food Guide web application does not appear to include recommended servings or serving sizes; may be forthcoming. | Portion sizes were indicated per food group but there were some inconsistencies in the document, so they are not shown here. | Portions sizes are indicated per food group below |
| Healthy snacks | -- | -- | Recommendations for healthy school snacks: Prefer natural foods such as: natural fruits, nuts, among others, avoiding added salt and sugar Consume only one snack per school day. Eat small portions, since they should only be a complement to the main food Always accompany the snack with water |
| Poor appetite | -- | -- | Variation in appetite are normal and can have many causes |

| Topic | Canada | Bolivia | Chile |
|--|---|---------|--|
| Picky eaters | <p>'Children are more likely to accept a new food the more often they are exposed to it. An unfamiliar food can be offered again later if it is rejected the first time.</p> <p>You can help overcome picky eating by:</p> <ul style="list-style-type: none"> - making routines - offering foods more than once - planning your meals and snacks - involving your kids in meal preparation' | -- | <p>This is covered in a detailed section on development of eating habits and behavior. The nature of the guidance is most relevant for toddlers and preschoolers (see tables above for those age groups)</p> |
| Role of parent/caregiver and of child | <p>Lead by example: 'Prepare and eat healthy foods...Enjoy a variety of healthy foods'</p> <p>'Let your children decide how much food they want to eat'</p> | -- | <p>This is covered in detail the same section and there is an Annex on feeding styles.</p> <p>Suggestions include:</p> <ul style="list-style-type: none"> Offer praise for good behaviors but do not highlight or punish bad behaviors Do not use food as a reward and do not use food to calm a child who is hurt or upset Do not force a child to finish food, child should stop when satiated Offer portions that are appropriate for the child's age |
| Family meals | <p>Encourages family meals as often as possible</p> <p>Make time so meals are not rushed</p> <p>Serve family-style (food is put into larger bowls or serving dishes on the table): children choose which foods to eat and how much</p> <p>Put away toys and screens during mealtime</p> | -- | <p>Create a positive, pleasant environment and model respectful behavior</p> <p>Eating alone or in front of the television, computer, or other distraction can lead to overeating</p> |

| Topic | Canada | Bolivia | Chile |
|-------------------------|---|--|---|
| Food skills | 'Teach your kids about making healthy food choices. Plan out your meals and snacks with your kids to have the healthy foods they like in the home. Get your kids cooking. Support them, regardless of age, by helping them with simple food-related tasks.' | -- | -- |
| Food groups | The new Canadian Food Guide web application does not appear to include recommended servings or serving sizes; may be forthcoming. | GPG: Consume a varied diet daily, including foods from all groups, and increasing the quantity of vegetables and fruits | |
| Grains | | 3 portions/day | 1.5 (girls) to 2 (boys) units bread daily |
| Roots and tubers | | 2 portions/day | 1 small plate of cereals, noodles or potatoes 4-5 times per week |
| Meat, poultry | | 1 portion/day GPG: Consume animal source foods which are source of iron (meats and offal) at least 3 times per week | 1 small unit 2 times/week |
| Fish | | -- | 1 small unit 2 times/week GPG: Recommends baked or grilled fish |
| Eggs | | -- | 2-3 per week |
| Legumes | | -- | 1 small plate 2 times/week GPG: Don't mix with cold or cured meats |
| Nuts and seeds | | -- | -- |
| Dairy | | 2 portions/day GPG: Increase the consumption of milk and dairy products | 3 cups/day - dairy without sugar (milk, yogurt or cheese) |
| Fruits | | 2 portions/day | Fruits – 3 units/day |
| Vegetables | | 2 portions/day | Vegetables - 2 plates/day GPG: Eat fresh vegetables and fruits of different colours five times a day |
| Supplements | -- | -- | -- |
| Fortified foods | -- | GPG: Always use iodized salt in foods, with moderation | -- |

| Topic | Canada | Bolivia | Chile |
|--|--|---|--|
| Beverages | 'Replace sugary drinks with water' | Avoid coffee and tea because they inhibit iron absorption GPG: Drink 6-8 glasses of water daily to complement meals GPG: Reduce the consumption of tea and coffee, replacing them with milk, fruit juices or "apis" | 1.5-2.0 quarts, including fluid in milk, soup and other liquids GPG: Avoid sugar-sweetened juices and beverages |
| Sugar | -- | GPG: Avoid the over consumption of sugar | GPG: Avoid eating sugar |
| Fat | -- | GPG: Prefer vegetable oils and avoid animal source fats and reheated oils | -- |
| Salt | -- | GPG: Always use iodized salt in foods, with moderation | GPG: Eat foods with little salt and take the salt shaker away from the table |
| Foods high in sugar, salt, and/or fat | Limit the amount of highly processed foods you offer (many examples provided) Prepare meals and snacks with little to no added sodium, sugars, or saturated fat | GPG: Avoid the over consumption of sugar, sweets, and sodas | GPG: If you want to maintain a healthy weight, avoid eating sugar, sweets, sugar-sweetened juices and beverages GPG: Take good care of your heart by avoiding fried foods, and fatty foods like cold and cured meats and mayonnaise GPG: Read and compare food labels and choose products with less fat, sugar and salt (sodium) |
| Feeding during illness | | -- | -- |

Adolescents

Table A6.13 Guidance for adolescents: Kenya, Ireland, Spain, India and New Zealand

Sources: Kenya: Professional-facing *National Guidelines for Healthy Diets and Physical Activity*; Ireland: Professional-facing *Healthy Eating, Food Safety, and Food Legislation – A Guide Supporting the Healthy Ireland Food Pyramid*, and web-based consumer-facing guidance at: <https://www.safefood.eu/Healthy-Eating/Food-Diet/Life-Stages/Teens.aspx>; Spain: *Nutricion Saludable de la Infancia y la Adolescencia. La Alimentacion de tus Niños y Niñas*; India: Professional- and consumer-facing *Dietary Guidelines for Indians – A Manual*; New Zealand: Consumer-facing *Healthy Eating for Young People*.

| Topic | Kenya | Ireland | Spain | India | New Zealand |
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| Age range | 10 to 19 years Noted that at this age, the key messages in the general population guidelines also apply | Noted that the messages in the general guidelines are intended for adults and children over 5 years of age. Guidance (e.g. servings) is provided for teenagers 13-18 years of age. There is also consumer-facing guidance directed to teenagers | 13-16 years | Guidance for children and adolescents is combined. Guidance in this Table is the same as for children (above) except for portions, shown here for ages 13-18. | 13-18 years Consumer-facing guidance is directed to the adolescent |
| Recommended number of meals and snacks | Three meals and 2 snacks 'Help adolescent to have a healthy breakfast' | -- | 'Address energy needs' as it is a period of growth and development Have breakfast, lunch, afternoon snack ('merienda cena') and dinner Avoid 'pecking' and abuse of snacks | 'Snacks provide a useful contribution' | Three meals plus 2-3 snacks 'if you are hungry' Always take time to eat a healthy breakfast |
| Recommended portion sizes or total quantity | Portion sizes are in an Annex | GPG: Portion sizes for meat, poultry, fish, and cheese are related to finger and palm size. | -- | 'Discourage overeating as well as indiscriminate dieting'; see portion sizes in food groups below. | Guidance on food groups includes examples of portions sizes for each group |

| Topic | Kenya | Ireland | Spain | India | New Zealand |
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| Healthy snacks | <p>Create 'family lists' of healthy snack ideas</p> <p>Remind adolescent to pack a healthy snack and water for after school activities</p> <p>GPG: 'Eat fresh fruits and raw vegetables as snacks instead of sugary snacks'</p> | Encourages fruits and vegetables for snacking and provides examples | -- | -- | Many examples provided |
| Role of parent/caregiver and family and the adolescent | <p>Kenya provides extensive suggestions for those caring for adolescents (see also snacks, family meals, food skills, nutrient-focused guidance):</p> <p>'Limit eating in rooms of the house other than the kitchen and dining room'</p> <p>'Create 'family lists' of healthy breakfast, snack and packed lunch ideas'</p> <p>'Watch for signs of an eating disorder' (many 'signs' described) If concerned seek professional help</p> <p>'There should be a positive role model for the adolescent' who.... 'eats and enjoys a well-balanced diet, tries new foods, uses polite table manners, and practices healthy eating habits'</p> | -- | <p>For adults:</p> <p>Be a good role model in your own practices</p> <p>Supervise the adolescent's diet to ensure they are not eating usual or 'absurd' food combinations or very monotonous diets to lose weight – this can result in deficiencies and anorexia</p> <p>Encourage adolescent to be active</p> <p>Avoid letting food issues create conflicts and interfere with relationship with the adolescent</p> <p>Teach the adolescent about nutrition and its impact on health, 'aesthetics', and well-being</p> | -- | <p>For the teen:</p> <p>Lead by example – encourage your family and whānau and friends to make healthy food choices.</p> |

| Topic | Kenya | Ireland | Spain | India | New Zealand |
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| Family meals | 'Have family meals and keep mealtimes pleasant; turn off TV, talk to each other, model polite table manners' | -- | As far as possible, share meals. Meals should be pleasant and convey correct eating habits and manners | -- | As often as you can, eat meals with your family and whānau (extended family) |
| Food skills | 'Encourage adolescent to make his/her own meals and snacks and to plan family meals' 'Teach adolescents about food production' | -- | Enjoy shopping and preparing food together with children | -- | Suggests the teenager can help with preparing the family meals Provides suggestions for eating when 'out and about', including on healthier choices for takeaways |
| Nutrient-focused guidance | Eat several servings of dairy products, green leafy vegetables and other calcium-rich foods and beverages... For girls, eat iron rich foods' For parent/caregiver: 'Keep plenty of calcium-rich foods and beverages on hand' (dairy and non-dairy examples provided) 'Encourage iron-rich foods' (many examples provided) | 'Look after your bones' – provides teenagers with information on calcium and vitamin D, calcium sources (dairy and non-dairy) and strategies for increasing dairy consumption. Encourages 'skimmed and semi-skimmed' dairy. 'Eat plenty of iron' – describes best iron sources (including fortified foods) and gives suggestions for meals and snacks with iron-rich foods. Indicates girls needs are higher, and gives information /examples of enhancers (vitamin C-rich foods) and inhibitors (tea and coffee); advises no tea/coffee within 30 minutes of meals | Provides examples of good food sources of all nutrients and fiber | Guideline 5 on diets for children and adolescents emphasizes calcium needs and provides a set of key points related to this, including describing calcium sources | -- |

| Topic | Kenya | Ireland | Spain | India | New Zealand |
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| Food groups | 'Eat a variety of foods from at least four food groups.' | Number of servings for grains/roots/tubers varies by both sex and activity level ('active' or 'inactive') | Ensure a varied diet, with greatest possible diversity of foods Need for animal-source foods (meat, fish, eggs, dairy) is proportionally larger than for adults | Number of portions for some food groups differs by age and sex for: 13-15 yrs girls/boys and 16-18 yrs girls/boys | Eat a variety of foods from these groups every day: vegetables and fruit; breads and cereals; milk and milk products; lean meats, chicken, seafood, eggs, legumes, nuts and seeds. |
| Grains | GPG: 'Include whole or unprocessed starchy foods as part of meals' | Girls: 3-4 servings/day Boys: 4-7 servings/day | Daily (bread) Combine legumes, rice and pasta throughout the week | 11-15 30 g portions, depending on age and sex | At least 6 servings daily |
| Roots and tubers | | GPG: Whole grain or whole meal are best. Eat with each meal. | Moderation, especially of French fries | 1-2 100 g portions, depending on age and sex | -- |
| Meat, poultry | GPG: 'Eat lean meat, fish and seafood, poultry, insects or eggs at least twice a week.' | 2 servings | Alternate meat and processed meat, fatty and lean fish and eggs | 2-3 30 g portions pulses, depending on age | At least 2 servings daily of lean meats, chicken, seafood, eggs, legumes and nuts |
| Fish | | GPG: Eat oily fish up to twice a week | Encourage consumption of fish No more than 4-5 eggs/ week | May be exchanged with egg/meat/chicken/fish | Vegetarians need at least 3 servings of legumes, nuts or seeds |
| Eggs | | | Encourage consumption Combine legumes, rice and pasta throughout the week | | Limit processed meats |
| Legumes | GPG: At least 4 times a week | | -- | -- | |
| Nuts and seeds | | | | | |
| Dairy | GPG: 'Drink fresh milk, fermented milk or yoghurt every day' | 5 servings/day | Daily – at least 500 ml of milk. Can substitute yogurt or cheese | 5 100 ml portions | At least 3 servings daily Choose low-fat options |

| Topic | Kenya | Ireland | Spain | India | New Zealand |
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| Fruits | GPG: 'Eat plenty of green leafy vegetables, red and yellow vegetables and fruits every day; and include a variety of other vegetables and fruits' | 5-7 servings/day | Fruits, vegetables and salad daily '5 a day' for fruits and vegetables | 1 100 g portion Green leafy vegetables: 1 100 g portion Other vegetables: 2 100 g portions | At least 2 servings of fruit daily Dried fruit and fruit juices are not recommended At least 3 servings of vegetables daily Eat a wide variety of fruits and vegetables |
| Vegetables | | GPG: Base your meals on these and enjoy a variety of colors. More is better | | | |
| For vegetarians | -- | Identifies nutrients that may be lacking, and plant food sources of these (except for vitamin B12). If drinking soymilk, 'read the labels and go for a brand that is fortified with calcium' | -- | No guidance specific to adolescents. For all vegetarians, emphasizes the importance of dairy for B12 | Provides guidance on choosing foods to meet their iron, calcium and B12 requirements |
| Supplements | -- | -- | Only if a doctor advises | -- | -- |
| Fortified foods | GPG: Use iodised salt, but use it sparingly GPG: Use fortified oil | -- | -- | GPG: Always use iron fortified iodized salt (double fortified salt) | For vegetarians: If you drink soy milk, choose one that has added calcium and vitamin B12 |

| Topic | Kenya | Ireland | Spain | India | New Zealand |
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| Beverages | GPG: Drink fresh milk, fermented milk or yoghurt every day. Use low-fat or skim milk GPG: Limit the consumption of sweetened foods and drinks. | 6-8 glasses of fluids Water and milk are the best choices Drink extra before and after sports GPG on drinks: Limit fruit juices and smoothies (no more than 1 a day) 'Be wary of' juice drinks Provides information on 'fizzy drinks', sports drinks and energy drinks and implies are not great, but does not explicitly state to 'limit' | At least 500 ml milk/day Water is the best drink. Meals should always be accompanied by water Sodas and soft drinks – only occasionally No alcohol | Give plenty of milk – 5 100 ml portions/day | 6-8 glasses of water a day and more in hot weather or when very active Water is best Low-fat milk is also a good choice Drink less of: fruit drinks and fruit juice; soft drinks should be less than once a week Coffee and tea, no more than 1-2 cups daily, and don't drink with meals Not recommended: energy drinks or energy shots; alcohol |
| Sugar | GPG: If you use sugar, use it sparingly | -- | Avoid excessive fat, sugar and salt | 4-6 5 g portions, depending on age | -- |
| Fat | GPG: Use oil or fat in moderation in meals; limit the amount of solid fat. Use fortified oil. Many suggestions for reducing fat intake are provided. | GPG: Always cook with as little fat or oil as possible – grilling, oven-baking, steaming, boiling or stir-frying | Fats are necessary but avoid overly high fat intake e.g. from fatty cheeses, butter and flavored margarines, or from fat contained in pates, spreads, sandwich bread and various buns | 7-10 5 g portions fat/oil, depending on age Avoid 'overindulgence' in fats | -- |

| Topic | Kenya | Ireland | Spain | India | New Zealand |
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| Salt | GPG: Use iodised salt, but use it sparingly GPG: 'Use condiments and processed foods sparingly like ready meals, processed meats like bacon, ham and salami, cheese and salty snacks. Reduce the use of seasoning cubes as they also contain salt' | -- | Avoid excessive fat, sugar and salt | Avoid excessive salt intake | -- |
| Foods high in sugar, salt, and/or fat | 'Avoid sticky, sugar-rich and salty snacks that are high in fat' GPG: Limit the consumption of sweetened foods and drinks. | PGP: Limit processed salty meats such as sausages, bacon and ham GPG: Foods high in fat, sugar and salt: not every day, once or twice a week at most. Examples listed. | Consumption of sweets and snacks should be moderate | PGP: Guideline 14: 'Minimize the use of processed foods rich in salt, sugar and fats'; this section has detailed description of foods to limit | Dried fruit and fruit juices are not recommended because of sugar content Otherwise, messages are positive vs. restrictive, i.e. providing guidance on many healthy snack options and healthier options when eating outside the home |
| Feeding during illness | -- | -- | | Same guidance as for children (Table A6.9) | -- |
| Advice on weight | | | Monitor excesses to avoid overweight and obesity See also above under role of caregiver/family | | -- |

Table A6.13: Guidance for adolescents: Canada, Bolivia, and Chile

Sources: Canada: Web-based consumer-facing guidance for parents of adolescents at: <https://food-guide.canada.ca/en/tips-for-healthy-eating/parents-and-children/>, and teen-facing guidance at: <https://food-guide.canada.ca/en/tips-for-healthy-eating/teens/>; Bolivia: Professional-facing *Guia Alimentaria para el niño y la niña en edad escolar*; Chile: Professional-facing: *Guia Alimentaria para los y las Adolescentes*.

| Topic | Canada | Bolivia | Chile |
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| Age range | The Canadian Dietary Guidelines cover ages 2 and above. This is augmented by web-based consumer-facing guidance directed at the teenager 'Healthy eating for teens' – age range not specified | The Bolivian Dietary Guidelines cover ages 2 and above. There is a separate document for school-aged adolescents 11-18 year of age. Guidance on portions is separate for girls and boys and for light, medium and heavy activity levels | The Chilean Dietary Guidelines cover ages 2 and above. Except for guidance on portions, the guidance is the same from 2-18 years. Guidance on portions in this table is for adolescents 11-18 years |
| Recommended number of meals and snacks | Emphasizes importance of breakfast: 'If you often skip breakfast, think of the reasons why and plan ways to overcome these. Try preparing your breakfast the night before. Do you have an activity early in the morning? Think about bringing breakfast with you.' | Eat 4 to 6 times a day (for example, breakfast, morning snack, lunch, afternoon snack or light meal, and dinner). The 6th would be for very active adolescents, like high-performance athletes. It is important not to skip meals or replace them with snacks. Special emphasis is placed on not skipping breakfast | 4 or 5 – breakfast, lunch, afternoon snack and dinner, and possibly another light 'collation' |
| Recommended portion sizes or total quantity | The new Canadian Food Guide web application does not appear to include recommended servings or serving sizes; may be forthcoming. | Portion sizes are indicated per food group | Portions sizes are indicated per food group below |
| Healthy snacks | Advises the teenager to plan ahead for healthy snacks; bring them along to school and elsewhere This can 'can help you choose healthier options and save money' Suggests fruits and vegetables as healthy snacks | Examples of healthy snacks are provided | Recommendations for healthy school snacks: Prefer natural foods such as: natural fruits, nuts, among others, avoiding added salt and sugar Consume only one snack per school day. Eat small portions, since they should only be a complement to the main food Always accompany the snack with water |

| Topic | Canada | Bolivia | Chile |
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| Role of parent/caregiver and family and the adolescent | <p>'Be a champion'</p> <p>Talk to your parents about healthy eating. You can encourage them to take sugary drinks and other highly processed foods off your family's grocery list.</p> <p>.... suggest ideas for healthy meals your whole family will enjoy</p> <p>.... You can also talk to your friends, coaches, teachers</p> <p>Think about:</p> <p>How you can make the healthy choice the easy choice at school and in your community</p> <p>How you can use healthy foods to celebrate at class parties or sporting events</p> <p>Joining the student council to ensure there are healthy choices available for everyone'</p> <p>GPG: Be mindful of your eating habits: Take time to eat; notice when you are hungry and when you are full</p> <p>GPG: Enjoy your food: Culture and food traditions can be a part of healthy eating</p> <p>GPG: Be aware that food marketing can influence your choices</p> | -- | This is covered in a detailed section on development of eating habits and behavior. The nature of the guidance is most relevant for younger children (see tables above) |

| Topic | Canada | Bolivia | Chile |
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| Family meals | <p>'Eating meals with others is an important part of healthy eating.</p> <p>The meals you eat with your family can give you a chance to connect with your family.</p> <p>This can help you:</p> <ul style="list-style-type: none"> Develop healthy habits Learn about culture and food traditions Build and strengthen family relationships Turn off the TV and put away your phone, lap-top or other screens. When you are distracted while you eat, you can lose track of how much you have eaten | -- | <p>Create a positive, pleasant environment and model respectful behavior</p> <p>Eating alone or in front of the television, computer, or other distraction can lead to overeating</p> |
| Food skills | <p>'Learn new skills. Try helping with:</p> <ul style="list-style-type: none"> Grocery shopping Preparing meals and snacks Being responsible for certain meals Meal planning and creating a grocery list | -- | -- |
| Nutrient-focused guidance | -- | -- | -- |

| Topic | Canada | Bolivia | Chile |
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| Food groups | GPG: Make it a habit to eat a variety of healthy foods each day GPG: Eat plenty of vegetables and fruits, whole grain foods and protein foods. Choose protein foods that come from plants more often. | GPG: Consume a varied diet daily, including foods from all groups, and increasing the quantity of vegetables and fruits Portions vary by gender and activity; the range is shown | |
| Grains | The new Canadian Food Guide web application does not appear to include recommended servings or serving sizes; may be forthcoming. | 4-7 40-50 g portions/day | 2 (girls) to 2.5 (boys) units bread daily |
| Roots and tubers | | 2-4 100 g portions/day | 1 medium plate (girls) to 2 plates (boys) of cereals, noodles or potatoes 4-5 times per week |
| Meat, poultry | | 2-4 80-100 g portions/day GPG: Consume animal source foods which are source of iron (meats and offal) at least 3 times per week | 1 medium unit 2 times/week |
| Fish | | -- | 1 medium unit 2 times/week GPG: Recommends baked or grilled fish |
| Eggs | | -- | 2-3 per week |
| Legumes | | 1 portion/day | 1 plate 2 times/week GPG: Don't mix with cold or cured meats |
| Nuts and seeds | | -- | -- |
| Dairy | | 3-4 200 ml portions/day GPG: Increase the consumption of milk and dairy products | 3 cups/day - dairy without sugar (milk, yogurt or cheese) |
| Fruits | | Fruits – 3-4 100 g portions/day | Fruits – 3 units/day |
| Vegetables | | Vegetables – 4-5 50-100 g portions/day Emphasizes the importance of fruits and vegetables as sources of | Vegetables - 2 plates/day GPG: Eat fresh vegetables and fruits of different colours five times a day |
| For vegetarians | -- | fiber -- | -- |
| Supplements | -- | -- | -- |

| Topic | Canada | Bolivia | Chile |
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| Fortified foods | -- | GPG: Always use iodized salt in foods, with moderation | -- |
| Beverages | 'Make water your drink of choice. Carry a reusable water bottle so you always have water with you' | Avoid alcohol GPG: Drink 6-8 glasses of water daily to complement meals GPG: Reduce the consumption of tea and coffee, replacing them with milk, fruit juices or "apis" | 1.5-2.0 quarts, including fluid in milk, soup and other liquids GPG: Avoid sugar-sweetened juices and beverages |
| Sugar | -- | 3-4 10 g portions GPG: Avoid the over consumption of sugar | GPG: Avoid eating sugar |
| Fat | GPG: Choose foods with healthy fats instead of saturated fat | 4-6.5 10 ml portions GPG: Prefer vegetable oils and avoid animal source fats and reheated oils | -- |
| Salt | -- | GPG: Always use iodized salt in foods, with moderation | GPG: Eat foods with little salt and take the salt shaker away from the table |
| Foods high in sugar, salt, and/or fat | 'Choose foods that have little to no added sodium, sugars or saturated fat. Compare the nutrition facts table on foods to choose products that are lower in sodium, sugars or saturated fat.' GPG: Limit highly processed foods. If you choose these foods, eat them less often and in small amounts. | GPG: Avoid the over consumption of sugar, sweets, and sodas | GPG: If you want to maintain a healthy weight, avoid eating sugar, sweets, sugar-sweetened juices and beverages GPG: Take good care of your heart by avoiding fried foods, and fatty foods like cold and cured meats and mayonnaise GPG: Read and compare food labels and choose products with less fat, sugar and salt (sodium) |
| Feeding during illness | -- | -- | -- |
| Advice on weight | 'Working on building healthy eating habits and focusing on your overall health can be more important than focusing on your body weight' | Maintain a healthy weight – exercise and avoid extremes of intake/ extreme weight-loss diets. | 2 of the guidelines for the general population apply: To maintain a healthy weight, eat healthily and be physically active every day. If you want to maintain a healthy weight, avoid eating sugar, sweets, sugar-sweetened juices and beverages |

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