

CODEX ALIMENTARIUS COMMISSION



Food and Agriculture
Organization of the
United Nations



World Health
Organization

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Agenda Item 3

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ORIGINAL LANGUAGE ONLY

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JOINT FAO/WHO FOOD STANDARDS PROGRAMME

CODEX COMMITTEE ON FOOD LABELLING

Forty-seventh Session

Ottawa, Canada

15 May – 19 May 2023

MATTERS OF INTEREST FROM FAO AND WHO

(Prepared by FAO and WHO)

Ad hoc Joint FAO/WHO Expert Consultation on Risk Assessment of Food Allergens

The Codex Committee on Food Labelling (CCFL45), in collaboration with the Codex Committee on Food Hygiene (CCFH50), approached the Joint FAO/WHO Scientific Advice Programme to validate the list of allergenic foods and ingredients in section 4.2.1.4 of the *General Standard for the Labelling of Prepackaged Foods* based on risk assessment and to evaluate the evidence in support of precautionary labelling.

The first meeting of the ad hoc Joint FAO/WHO Expert Consultation on Risk Assessment of Food Allergens was held from 30 November to 11 December 2020. Based on the latest scientific evidence, the expert committee identified prevalence of an immune-mediated hypersensitivity to a specific food, severity and potency as the key criteria for the inclusion or exclusion of allergenic foods or ingredients to the priority list. With these criteria, the expert committee recommended cereals containing gluten (e.g. wheat and other *Triticum* species, rye and other *Secale* species, barley and other *Hordeum* species and their hybridized strains), crustacea, eggs, fish, milk, peanuts, sesame, and specific tree nuts (almond, cashew, hazelnut, pecan, pistachio and walnut) as priority allergens¹.

From 15 March to 2 April 2021, the second meeting was convened to establish threshold levels (i.e. reference doses) for priority allergenic foods through risk assessment and based on health-based guidance value. The reference dose recommendations are as below².

| | RFD recommendation (mg total protein from the allergenic source) |
|-------------------------|---|
| Walnut (and Pecan*) | 1.0 |
| Cashew (and Pistachio*) | 1.0 |
| Almond** | 1.0 |
| Milk | 2.0 |
| Peanut | 2.0 |
| Egg | 2.0 |
| Sesame | 2.0 |
| Hazelnut | 3.0 |
| Wheat | 5.0 |
| Fish | 5.0 |
| Crustacea | 200 |

* see the consideration from the full report. ** provisional.

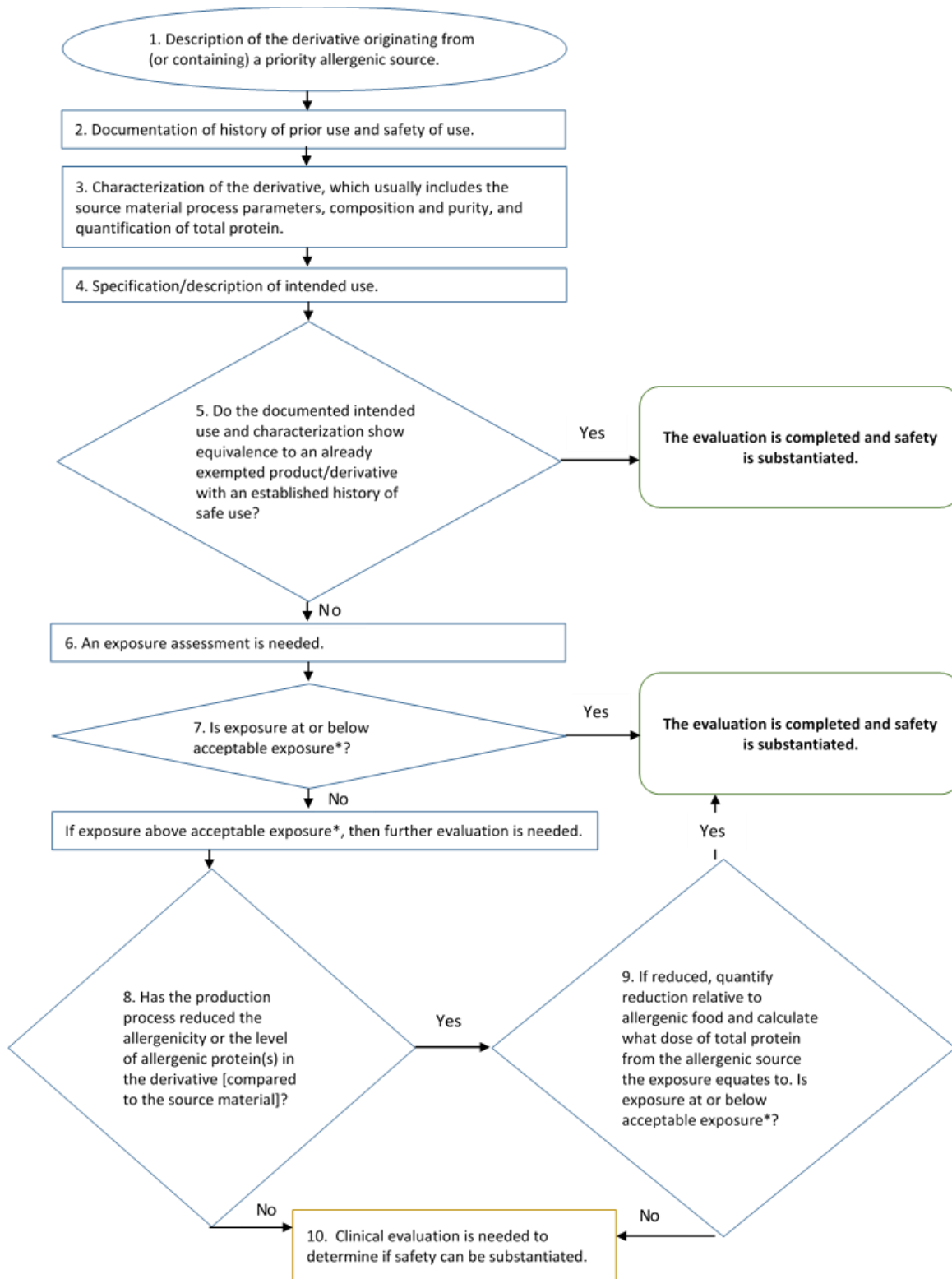
In October 2021, FAO and WHO convened the Expert Consultation for a third meeting to review and evaluate the evidence in support of precautionary allergen labelling. Some of the main conclusions and recommendations include: Precautionary Allergen Labelling (PAL), based on a comprehensive allergen risk management program and implemented using a single clear unambiguous advisory statement, supported by effective risk communication, is an effective strategy to protect consumers from Unintended Allergen Presence (UAP). The available evidence indicates that some manufacturers, consumers and other stakeholders do not

¹ <https://www.fao.org/publications/card/en/c/CB9070EN/> and <https://www.who.int/publications/i/item/9789240042391>

² <https://www.fao.org/documents/card/en/c/cc2946en> and <https://www.who.int/publications/i/item/9789240065420>

understand current strategies to communicate precautionary messages relating to risks posed by UAP in products. Current data indicate a preference for wording which conveys that a food is “not suitable for” consumers with a particular allergy. Education of consumers, healthcare providers, food business operators, risk assessors and risk managers is critical to PAL management. The decision whether or not to use a PAL statement is part of a regulatory framework that requires food business operators (FBOs) to denote PAL when UAP exceeds the relevant Reference Dose (RfD) and to *not* use PAL when UAP does not exceed the relevant RfD. Moreover, FBO should/must provide an indication on the label (e.g., using a symbol) that a qualified Risk Assessment (RA) to inform the need (or not) for PAL has been undertaken, irrespective of whether the RA outcome indicates that a PAL should be used or not.

The fourth meeting tookplace in November 2022 to elaborate on the recommendations from the first meeting on derivatives of food allergens and established a framework for evaluating labelling exemptions for derivatives of priority allergenic foods as below.



* acceptable exposure in the context of assessing an exemption application can be derived by applying a Margin of Exposure (MoE) to the Reference Dose (RfD) proposed in the 2nd meeting of this expert consultation (i.e. RfD divided by MoE; RfD/MoE). The RfD/30 appears to provide an adequate MoE for derivative safety assessment. For comparison with the acceptable exposure, exposure should be calculated into and expressed as the equivalent of dose of total protein from the priority allergenic source.

NOTE: Establishment of safety based upon this weight of evidence approach is dependent upon consideration of data quality, outcome of the exposure assessment and review by competent authorities (as needed). When safety is established, a labeling exemption can be granted.

The FAO and WHO convened the fifth expert meeting to work on the food allergens which are not in the priority list in March 2023. The outcome will be published soon.

While the meeting reports of the third and fourth meetings are in development, the summary reports were published³. The full report of the third meeting will be published in the first half of 2023 and fourth meeting report will be published in late 2023. FAO and WHO presented the above work during the Food Allergen Webinar on 23 March 2023 hosted by CCFL to provide an opportunity for a better understanding of the topic⁴.

Joint FAO/WHO update of nutrient requirements for infants and young children from birth through 3 years of age

FAO and WHO last updated vitamin and mineral requirements for all age groups in 2004. Since then, new data have emerged suggesting that requirements for some micronutrients may need to be updated, particularly for infants and young children. Therefore, in part to inform the planned updating of WHO guidance on complementary feeding and also to contribute to the ongoing work of CCFSDU in establishing nutrient reference values (NRVs-R) for children aged 6-36 months, FAO and WHO established an expert group to initiate the updating of nutrient intake values for infants and young children from birth through 3 years of age. Nutrient intake values include requirements (e.g. average nutrient requirement [ANR], adequate intake [AI], individual nutrient level [INLx]) and safe upper levels of intake. The expert group is aiming to derive average nutrient requirements where possible, along with INL₉₈ (daily intake reference value that is estimated to meet the nutrient requirement of 98 percent of the apparently healthy individuals in a specified population), and Upper Limits (ULs).

Prior to initiating the process for updating the requirements, WHO conducted an initial review of the recent scientific literature on nutrient requirements, and compilation of national dietary guidelines from all regions, containing detailed information about nutrient requirements in the age group of interest. Using the data obtained from this preparatory work done by WHO, FAO and WHO were able to prioritize the nutrients to be updated (i.e. calcium, vitamin D and zinc as the first three nutrients to be updated). A series of systematic reviews have been completed and discussed by the expert group over a series of meetings beginning in January 2021.

In total, the FAO/WHO expert group has met 9 times with the 9th and final meeting taking place from 27 March to 12 April, 2023. Progress on calcium, vitamin D and zinc is summarized below:

- **Calcium:** requirements (AI, ANR, INL₉₈) and no observed adverse effect level (NOAEL) completed (ULs) unable to be identified due to insufficient evidence. A UL represents the highest intake of a nutrient that is likely to pose no risk of adverse effects to most individuals in a specified population, while a NOAEL represents the highest level of intake at which no adverse effect is observed. NOAELs can be used to derive ULs, but in the case of calcium – and likely for zinc as well – the number of studies reporting NOAELs was too limited for the expert group to derive ULs with confidence.
- **Vitamin D:** requirements (INL₉₈) and ULs.
- **Zinc:** requirements being finalized (AI, ANR, INL₉₈); ULs/NOAELs to be completed at the 9th meeting of the FAO/WHO expert group in March/April of 2023.

Scoping reviews have been completed for iron, vitamin A, folate, and magnesium and are currently being reviewed by FAO and WHO for next steps.

Scientific advice to develop general principles for the establishment of NRVs-R for older infants and young children

FAO commissioned a report to provide scientific advice to CCFSDU on the details of Dietary Intake Reference Values (DIRVs) for protein and 24 micronutrients for older infants (6-12 months) and young children (12-36 months) in the publications of six Recognized Authoritative Scientific Bodies (RASB) and the Food and Agriculture Organization/World Health Organization (FAO/WHO). The report assessed, categorized and ranked the methods used to derive these DIRVs and advised which categories are suitable for inclusion in the general principles to establish NRVs-R for older infants and young children. The draft report was shared with the Codex Committee on Nutrition and Foods for Special Dietary Uses (CCNFSDU) eWG work on NRVs-R for Older Infants and Young Children.

³ Third meeting: <https://www.fao.org/3/cb7971en/cb7971en.pdf> and https://cdn.who.int/media/docs/default-source/food-safety/jemra/3rd-allergen-summary-report-13dec2021.pdf?sfvrsn=5415608_7

Fourth meeting: <http://www.fao.org/3/cc3825en/cc3825en.pdf> and <https://www.who.int/news-room/events/detail/2022/11/14/default-calendar/ad-hoc-joint-fao-who-expert-consultation-on-risk-assessment-of-food-allergens-part-4-review-and-establish-exemption-for-the-food-allergens>

4 more detail about the webinar could be found from: <https://www.fao.org/fao-who-codexalimentarius/meetings/detail/en/?meeting=CCFL&session=47>

Other information

UN Decade of Action on Nutrition 2016 - 2025

The UN Decade of Action on Nutrition, proclaimed by the UN General Assembly in 2016, aims to accelerate implementation of the ICN2 commitments, achieve the global nutrition and diet-related noncommunicable disease (NCD) targets by 2025, and contribute to the realisation of the Sustainable Development Goals (SDG) by 2030. The third progress report of the Secretary-General on the Implementation of the United Nations Decade of Action on Nutrition (2016-2025), compiled by the joint FAO/WHO Secretariat of the Nutrition Decade, was submitted to the General Assembly in April 2022, pursuant to General Assembly resolution 72/306. This report provides an overview on key developments for the period 2020-2021 towards achieving the global nutrition and related Sustainable Development Goals targets. These include advances in nutrition-related activities within the six action areas of the Nutrition Decade's Work Programme, advances in the science-base for improved nutrition, as well as other nutrition-related global processes. It also documents stakeholders' engagement in nutrition, induced by the Nutrition Decade and relevant global dialogues, notably the UN Food Systems Summit (UNFSS) and the Tokyo Nutrition for Growth (N4G) Summit in 2021.

Action networks, with global or regional scope, aimed at accelerating and aligning efforts around specific topics linked to an action area of the work programme of the Nutrition Decade were established. Australia, France and Chile led the global action network aimed at accelerating and aligning efforts around nutrition labelling. The Network was established to exchange country experiences and good practices, share successes and challenges, and provide mutual support to accelerate implementation of effective nutrition labelling policies.

The Nutrition Decade's Mid-term review (MTR) identified as thematic focus for priority action from 2021 to 2025: (i) access to and affordability of healthy diets; (ii) healthy food environments including regulating the reformulation and marketing of highly-processed energy-dense foods high in fats, sugars and/or salt; and (iii) the interconnection of nutrition with environment and climate change. Based on the MTR and other global processes, the areas identified requiring intensified action include among others: - addressing nutrition challenges within the context of food systems and climate change at the upcoming COP28 ; - strengthening accountability mechanisms to ensure the commitments made at the UNFSS and the N4G Summit in 2021 bring about real and sustained change; - aligning the UNFSS commitments and Coalitions and N4G commitments with the Decade's modalities of engagement (i.e. SMART commitments and Action Networks) to advance the global nutrition agenda in a coherent way across multiple sectors and maintain political momentum to scale up nutrition action in the context of UNFSS follow-up and the UNFSS Coordination Hub ; - strengthening UN interagency coordination mechanisms to support delivery of nutrition goals including in the context of the implementation of national food systems pathways.

The Healthy Diets Monitoring Initiative, a joint initiative of FAO/WHO/UNICEF was formed in 2022 to bring together experts and initiate a process to reach consensus on the core principles of what constitutes a healthy diet, and implications for metrics to monitoring progress towards healthy diets at national and global levels. A consensus statement will be released in early 2023, in addition to a workplan to accelerate progress in the development, validation, and implementation of metrics to measure progress.

The State of Food Security and Nutrition in the World 2022: Repurposing food and agricultural policies to make healthy diets more affordable (SOFI 2022)

FAO, IFAD, UNICEF, WFP and WHO partnered to produce the joint report on The State of Food Security and Nutrition in the World 2022. The present report provides latest trends and analysis on the global food security and nutrition situation, including updated estimates on the cost and affordability of healthy diets. Furthermore, a stocktaking of the most predominant food and agricultural policy support currently in place around the world is presented to better understand the amount of support, the activities and actors mostly supported (or, on the contrary, penalized), and the pathways through which this support is pushing up the relative cost of nutritious foods and promoting unhealthy diets. A key recommendation of the report is that governments must start rethinking how they can reallocate their existing public budgets to make them more cost-effective and efficient in reducing the cost of nutritious foods and increasing the availability and affordability of healthy diets, sustainably and leaving no one behind.

CFS Voluntary Guidelines on Food Systems and Nutrition

The Committee on World Food Security (CFS) is the most inclusive international and intergovernmental platform for all stakeholders to work together to ensure food security and good nutrition for all. The Committee reports to the UN General Assembly through the Economic and Social Council (ECOSOC) and to FAO Conference. During its 47th plenary session in February 2021, CFS endorsed the CFS Voluntary Guidelines on Food Systems and Nutrition (VGFSyN). The CFS, in October 2021, reiterated the role of all CFS stakeholders to translate the VGFSyN into specific actions at regional, national and local levels. Furthermore, FAO developed an evidence platform providing evidence and tools to support governments and stakeholders in the uptake of the VGFSyN. It gives easy access to specialized science and evidence-based standards,

normative guidelines and recommendations from FAO, WHO and other UN Nutrition member agencies including those developed by Codex, for each of the 105 recommendations of the VGFSyN. WHO actively supported the dissemination and use of the CFS VGFSyN with a focus on a package of seven actions for improving the nutritional quality of food along the food supply chain and food environments, and collaborated with CFS during the WHO Food Systems Health talks week in a partner event on the 'CFS Voluntary Guidelines on Food Systems and Nutrition (VGFSyN) - Promoting healthy diets through sustainable food systems.

FAO ACTIVITIES

FAO activities on Food Labelling

At the Second International Conference on Nutrition (ICN2), governments affirmed that the “empowerment of consumers is necessary through improved and evidence-based health and nutrition information and education to make informed choices regarding consumption of food products for healthy dietary practices” (FAO/WHO 2014). Food labelling was included among the recommendations in the ICN2 Framework for Action (FAO/WHO, 2014). To this end, FAO has developed the following resources on food labelling for developing the capacity in countries to implement food labelling policies and programmes:

The FAO website on Food Labelling (<http://www.fao.org/food-labelling/en/>) which provides information on Food Labelling standards and guidelines and FAO activities on food labelling. Studies to support policies for micro, small and medium food processing companies in the implementation of front of pack nutrition labelling. Country level policy analyses was conducted in Chile and Brazil and resulting reports are expected to be published in 2023.

FAO with the support of the Japanese cooperation is implementing capacity development at different levels in Ghana, Kenya and Vietnam aiming to scale up capacities of small and medium size enterprises for nutrition-sensitive food systems including implementation of food labelling. Activities include the introduction of mentoring programmes for local SMEs and the organization of e-learning programmes and workshops to boost the skills and competencies that SMEs need to better perform in local markets.

A handbook on food labelling that provides an introduction to labelling as part of an ongoing effort to assist regulators and others working in the area of food systems who are responsible for formulating and implementing food labelling policies. Specific types of labels are explained such as ingredient lists (including allergen and food additive information), date marking, nutrition labels (back of pack panels and front of pack systems) as well as nutrient and health claims. Relevant sections of the book follow the guidance given by the Codex Alimentarius Commission on food labelling in particular the Codex *General Standard for the Labelling of Prepackaged Foods* (CXS 1-1985). The handbook is available in English and has also been translated in French at <http://www.fao.org/documents/card/en/c/fc5f4bc2-650a-4704-9162-9eb9b3a1fdd0/> and <https://doi.org/10.4060/i6575fr>.

FAO's Role on supporting countries in their development of labels contributing to sustainable food system

FAO is supporting the development of quality linked to geographical origin products that will contribute to rural development. Geographical Indications (GIs) refer to products with specific characteristics, qualities or reputation resulting essentially from their geographical origin. GIs are legal tools for protection of intellectual property rights according to the Agreement on Trade-Related Aspects of Intellectual Property Rights (TRIPS) of the World Trade Organization and the Geneva Act of the Lisbon agreement of the World Intellectual Property Organization (WIPO). GIs are also tools for sustainable food system development as they could facilitate direct management by the local community of producers and the preservation of local natural resources. Origin-based labels preserve and add value to traditional quality food products, for the benefit of producers, especially family farmers and smallholders, but also for consumers, promoting better access to nutritious local food. A new thematic website is now online to inform on FAO vision and activities on this topic (www.fao.org/geographical-indications).

Ad hoc Joint IAEA–FAO Technical Meeting on the Way Forward for the Assessment of Protein Requirements and Protein Quality and for the Development of a Protein Digestibility and Quality Database

A meeting was held at the IAEA headquarters in Vienna from 10-13 October 2022 to review and update evidence and related methods on protein requirements and protein quality assessment and to design a framework for the development of a Protein Digestibility Database to aid dialogue on the evaluation of protein quality and protein sufficiency in different populations. The meeting agreed that there are mounting concerns on how to sustainably feed the world's population, and on how to shift to more sustainable protein sources with less environmental impact and what that means in terms of protein quality. There was a general consensus that in vitro methods of protein quality is the way forward; however, optimization and standardization of in vitro

methods are needed. The meeting also acknowledged that not enough new data are available to justify updating amino acid requirements and reference patterns and that there is an urgent need for (new) data in particular for the elderly and infants and that technical capacity and expertise on protein quality assessments need to be built in low- and middle- income countries. Finally, the meeting agreed that future work need to focus on functional indicators (e.g. faltering growth, wasting, etc.) that can be linked to low protein quality and amino acid deficiencies.

Reference to the Protein Digestibility Database, there was consensus that the database is urgently needed, and that enough data exist to populate it. The objective of the database would be: to develop, populate and maintain a fully accessible, robust database on ileal digestibility of protein and individual amino acids in foods consumed by humans, and provide up-to-date information on the protein quality from different food sources. Next steps include exploring funding possibilities and establishing Terms of Reference for setting up a scientific advisory group of experts to assist with validation of existing data and future management of the database.

The 2023 International Symposium on Dietary Protein for Human Health

FAO in collaboration with the Riddet Institute, Wageningen University & Research and the International Atomic Energy Agency (IAEA) will be convening the 2023 International Symposium on Dietary Protein for Human Health from 14–16 September 2023 in Utrecht, Kingdom of the Netherlands. The Symposium will provide an update and "forum for debate" on contemporary issues related to protein nutrition in human health and sustainable food protein production.

The three-day Symposium will include presentations and discussions on protein nutrition and health; amino acid requirements; amino acid digestibility and availability; dietary protein quality, influence of protein quality on growth and development and on whole-body protein metabolism; and protein and future food sustainability.

Nutrition in FAO

Raising nutrition levels is central to FAO's mandate and embedded in the Organization's Constitution. Better nutrition, alongside better production, a better environment, and a better life – the four Betters – are FAO's aspirations for the Strategic Framework 2022-31 to support the achievement of the 2030 Agenda for Sustainable Development. FAO has embarked on action planning to move from strategy to concrete, context-specific action with nutrition recognized as a key technical theme of a cross-cutting nature explicitly visible in the Priority Programme Areas of FAO's Strategic Framework 2022-31 with a dedicated cross-organizational strategy and accountability, as requested by the Member States. In this regard, in 2021, FAO Member States welcomed and adopted a corporate Vision and Strategy for FAO's Work in Nutrition that consists of coordinated action towards one mission: to tackle malnutrition in all its forms by accelerating impactful policies and actions across agrifood systems to enable healthy diets for all, to contribute to a vision of a world where all people are eating healthy diets.

At global level, action focuses on the Organization's normative function while regional, subregional, and national-level action focuses on operationalizing FAO's work in nutrition to the conditions and priorities of each context. To this end, FAO has convened the Organization's Technical Network on Nutrition, consisting of experts from all technical areas of FAO at headquarters and decentralized offices, to guide its work in nutrition and improve access to expertise, knowledge, and resources across the Organization.

Leading by example, FAO announced ambitious and measurable pledges at the Tokyo Nutrition for Growth Summit in December 2021 that reflect the Organization's commitment to better policy and to global- and country-level action. The next steps include communications, normative work, and global engagement, by which FAO is maintaining attention on the critical role of MORE efficient, inclusive, resilient, and sustainable agrifood systems for healthy diets and improved nutrition. FAO will hold itself accountable to its efforts to fulfil its mission in nutrition by monitoring the indicators of the Accountability Framework and the Implementation Plan of FAO's work in nutrition.

Global Food Consumption Databases

The FAO/WHO Global Individual Food consumption data Tool (FAO/WHO GIFT) is an open-access online platform, hosted by FAO and supported by WHO, providing access to harmonised individual quantitative food consumption data, especially in low- and middle-income countries. This comprehensive database is a multipurpose tool and provides simple and accurate food-based indicators, derived from sex and age disaggregated data on individual food consumption that are needed in the fields of nutrition and food safety, in particular on assessing dietary exposure. The food classification and description system used is called FoodEx2. It has been developed by the European Food Safety Authority (EFSA) and was enhanced for use at a global level. The tool is freely accessible online through an interactive web platform: <http://www.fao.org/gift-individual-food-consumption/en/>. FAO/WHO GIFT is currently being populated with microdata from surveys

that the end user can download for secondary analysis. To date, the platform contains microdata from 36 surveys (11 national and 25 sub-national). The platform also contains an inventory map with detailed information on 320 surveys (152 are national and 168 are sub-national), mainly from low and middle-income countries. The FAO/WHO GIFT platform is available at <http://www.fao.org/gift-individual-food-consumption/en/>.

FAO/INFOODS Food Composition Databases

FAO coordinates the International Network of Food Data Systems (INFOODS), a worldwide network of food composition experts aiming to improve the quality, availability, reliability and use of food composition data. These data are necessary, for example, for the assessment of dietary intakes, diet quality, and for the development and application of food based dietary guidelines and nutrition labelling or selected Codex standards. An update and expansion to the FAO/INFOODS Global Food Composition Database for Fish and Shellfish (uFiSh) is underway by FAO and aims to provide more species of fish and aquatic plants and animals. FAO is also in the process of preparing a new food composition table for Ethiopia, together with the Ethiopia Public Health Institute. In addition, FAO will soon publish the FAO/INFOODS Evaluation Framework to Assess the Quality of Published Food Composition Tables and Databases (FCT/FCDBs) – (Evaluation Framework). The databases can be downloaded from the FAO/INFOODS website: <http://www.fao.org/infoods/infoods/en/>

Food Systems-Based Dietary Guidelines (FSBDGs)

FAO in collaboration with world-renowned experts have elaborated a new methodology for the development and implementation of second-generation dietary guidelines that are food systems based. The new methodology will allow countries not only to address health and nutritional challenges and priorities but also to anchor them onto targeted food systems analysis for increasing their usability, relevance and contribution to the transformation of food systems towards socio-cultural, economic and environmental sustainability leveraging the potential of dietary guidelines to inform and guide policies and actions throughout the food system. The guidelines resulting from this new methodology are context-specific multilevel recommendations that enable governments to outline what constitutes a healthy diet from sustainable food systems, align food-related policies and programmes and support the population to adopt healthier and more sustainable dietary patterns and practices. Their effectiveness resides in that they are developed through an evidence-informed, multidisciplinary and multisectoral engagement process and with a food system approach. They result in a package of outputs and resources that can be adopted and used for food system transformation towards better diet-related practices and, subsequently, better health, better nutrition, and other sustainability outcomes.

FAO continues providing technical support to countries for the development and implementation of dietary guidelines. In the last four years, FAO provided technical support to 14 countries in the Africa region, 9 countries in Latin America and the Caribbean, 2 countries in Europe and Central Asia and 1 country in Asia and the Pacific. The FAO website on Food-Based Dietary Guidelines which was launched in November 2014, continues to be updated and serves as the only global repository and platform for information exchange on dietary guidelines from across the world. At present the repository contains information from almost 100 countries. To access the FAO website on FBDGs: <http://www.fao.org/nutrition/nutrition-education/food-dietary-guidelines/en/>.

School-based Food and Nutrition

FAO recognizes schoolchildren as a priority population for nutrition interventions and views schools as ideal settings to support the nutrition and development of children and adolescents. Based on FAO's School Food and Nutrition Framework⁵ and the white paper on school-based food and nutrition education⁶, FAO has been collaborating since 2021 with UNICEF for strengthening school-based food and nutrition education (SFNE) in low and middle-income countries, with the ultimate goal of fostering food competences in schoolchildren and adolescents for better food choices and for adopting healthier and more sustainable diets. In 2022 the two organizations designed a joint global initiative for developing the capacities of education officials and curriculum developers to integrate action-oriented food and nutrition education curricula into their school systems. The initiative will be launched in 2023.

In June 2022, FAO launched the [School Food Global Hub](https://www.fao.org/publications/card/en/c/CA4091EN/)⁷, developed by FAO in collaboration with WFP and supported by the Federal Ministry of Food and Agriculture. The Hub supports the Peer-to-Peer Initiative of the School Meals Coalition that was launched at the UN Food Systems Summit in 2021 and is part of a project

⁵ School Food and Nutrition Framework, 2019, <https://www.fao.org/publications/card/en/c/CA4091EN/>

⁶ FAO. 2020. School-based food and nutrition education – A white paper on the current state, principles, challenges and recommendations for low- and middle-income countries. Rome. <https://doi.org/10.4060/cb2064en>

⁷ <https://www.fao.org/platforms/school-food/en>

that aims to create a global methodology to help countries develop robust nutrition guidelines and standards for school meals and school food. One of the main objectives of the Hub is to stimulate global dialogue on the importance of school food to support healthy eating habits among children and adolescents. It also showcases the complementary measures that contribute to this, such as the school food environment, policy and legal frameworks, the integration of school food and nutrition education within the curriculum, home-grown school feeding initiatives, etc. In this respect, the Hub strives to bring together all possible content in these areas; from scientific articles and publications to news and events to many other useful resources. The Hub has a number of innovative features that can be of interest to different audiences: the section on *“Around the world”* serves as a ‘one-stop’ resource to collate country-specific information on school food and school-based food and nutrition education with 20 country profiles to date, while the *“Countries corner”* facilitates peer-to-peer exchange of good practices and lessons learned on school food. The *“Youth Corner”* provides a platform for sharing interactive materials in social media and organizing campaigns to document youth experiences of school food and education in an audiovisual format (videos, photos, stories).

Minimum Dietary Diversity-Women (MDD-W) – A global standardized food-based indicator for monitoring dietary diversity and micronutrient adequacy of women’s diets

The Minimum Dietary Diversity for Women (MDD-W) is a dichotomous indicator of whether or not women of reproductive age (15-49 years of age) have consumed at least five out of ten defined food groups the previous day or night. The proportion of these women who reach this minimum in a population can be used as a proxy indicator for micronutrient adequacy. The indicator measures dietary diversity and micronutrient adequacy, two important dimensions of diet quality.

With support from GIZ, FAO are developing an e-learning on MDD-W, building on the MDD-W Updated User Guide published in 2021: <http://www.fao.org/documents/card/en/c/cb3434en> This e-learning is due to be released in 2023 and provides a comprehensive overview of MDD-W data collection, analysis and data use. In addition, under the umbrella of the same project, evidence around MDD-W is being expanded, for example, with validation work being undertaken on adolescents.

MDD-W is also one of the metrics being evaluated through the FAO/WHO/UNICEF Healthy Diet Monitoring Initiative to consider the assessment and monitoring of healthy diets: <https://www.who.int/groups/who-unicef-technical-expert-advisory-group-on-nutrition-monitoring/healthy-diets-monitoring-initiative>

WHO ACTIVITIES

Work to develop and implement nutrient profile models (NPMs)

As part of its normative mandate, WHO has been working on establishing nutrient profile models (NPMs) for over a decade⁸. WHO initially focused on providing overall evidence-based guiding principles for the development and implementation of NPMs, which led to the development of region-specific models in all six WHO regions to support governments in implementing policies to protect children from the harmful impact of marketing of foods and non-alcoholic beverages.^{9,10,11,12,13,14}

Such guidance has evolved. For example, the NPM for the WHO European Region published in 2015 has just been updated.¹⁵ The guidance has also expanded to cover other policies targeting the food environment. For example, the NPM developed for the region of the Americas in 2016 was designed for multiple applications, including front-of-package labelling, regulation for school environments, fiscal policies on foods and non-alcoholic beverages, among other policies. Models developed in WHO South-East Asia (SEARO) and Africa (AFRO) included definitions for food and non-alcoholic beverages excessive in total fats, saturated fats, free sugars and sodium that have the potential to be used in other policies requiring such definition.

⁸ WHO. Nutrient profiling: Report of a WHO/IASO technical meeting. (2010):

https://apps.who.int/nutrition/publications/profiling/WHO_IASO_report2010/en/index.html

⁹ WHO/EURO Nutrient profiling model (2015): https://www.euro.who.int/_data/assets/pdf_file/0005/270716/Nutrient-children_web-new.pdf

¹⁰ WHO/WPRO Nutrient profiling model (2016): <https://www.who.int/publications/i/item/9789290617853>

¹¹ WHO/PAHO Nutrient profiling model (2016):

https://iris.paho.org/bitstream/handle/10665.2/18621/9789275118733_eng.pdf

¹² WHO/SEARO Nutrient profiling model (2017): <https://apps.who.int/iris/handle/10665/253459>

¹³ WHO/EMRO Nutrient profiling model (2017): https://applications.emro.who.int/dsaf/EMROPUB_2017_en_19632.pdf

¹⁴ WHO/AFRO Nutrient profiling model (2019): <https://apps.who.int/iris/handle/10665/329956>

¹⁵ WHO/EURO Nutrient profiling model. 2nd edition (2023): <https://www.who.int/europe/publications/i/item/WHO-EURO-2023-6894-46660-68492>

The adoption of WHO regional NPMs by countries have strengthened their policies to promote and protect healthy diets and public health, and have reduced the time they take to deliver such benefits to their populations.¹⁶ Following Member States' requests, WHO continued to work on NPMs, including for applications other than marketing restrictions.^{17,18} This will also complement forthcoming WHO guidelines on nutrition labelling policies,¹⁹ fiscal policies to promote healthy diets,²⁰ and policies to protect children from the harmful impact of food marketing,²¹ and is of particular importance for those regions that initially focused their NPMs on policies to restrict the marketing of food and non-alcoholic beverages.

Work is underway to develop guidance for establishing NPMs for front-of-package labelling in regions where WHO regional NPMs initially focused only on marketing regulations. WHO will continue to provide guidance and technical support to its Member States on advancing implementation of food environment policies to promote healthy diets, including guidance on NPMs that underlie such policies.

WHO guidelines on complementary feeding of infants and children 6-23 months of age

WHO is finalizing guidelines on complementary feeding of infants and young children. The guidelines will cover topics on the continuation of breastfeeding, the timing of introduction of complementary foods, milk options when breast milk is not adequate, dietary diversity, unhealthy foods and beverages, vitamin and mineral supplementation and fortification, and responsive feeding. The evidence behind the guidelines has been summarized in 12 systematic literature reviews and was supplemented by dietary pattern modelling to examine nutrient gaps under various eating patterns. The Developing and Evaluating Communication Strategies to support Informed Decisions and Practice based on Evidence (DECIDE) framework, an evidence-to-decision tool that includes intervention effects, values, resources, equity, acceptability, and feasibility criteria, was used to guide the formulation of the recommendations by the guideline development group (GDG). The guidelines are currently undergoing final review by the GDG members and then will be sent out for peer review. Publication is expected in the summer of 2023.

WHO technical support on the Code of marketing of breast-milk substitutes

In 2022, at the request of the World Health Assembly, WHO published a report on the scope and impact of digital marketing strategies for the promotion of breast-milk substitutes. Based on the findings of the report, the Assembly has now asked for guidance for Member States on regulatory measures aimed at restricting the digital marketing of breast-milk substitutes, so as to ensure that existing and new regulations designed to implement the International Code of Marketing Breast-milk Substitutes and subsequent relevant Health Assembly resolutions adequately address digital marketing practices. WHO is currently preparing this guidance for presentation to the Assembly in 2024.

WHO collaborated with a global marketing firm to study the reach and influence of marketing on infant feeding attitudes in Bangladesh, China, Mexico, Morocco, Nigeria, South Africa, the United Kingdom and Viet Nam. The study demonstrated the pervasiveness of marketing of formula milk and showed that exposure to marketing was significantly related to more positive attitudes towards formula feeding and a perceived need for formula milks. Marketing of breast-milk substitutes undermined women's confidence in their ability to breastfeed and capitalizes on mothers' expectations and anxieties around feeding.

The 2022 Code Status Report analyzed the provisions of the Code covered in national legislation for all 194 WHO Member States. The report documented that between 2016 and 2021, 25 countries plus the European Union updated their legal measures on the Code or enacted new ones. Compared to older laws and regulations, the countries with newer legal instruments were much more likely to be substantially aligned with Code and were much more likely to cover breast-milk substitutes for children up to 36 months of age.

¹⁶ Crosbie E, et al. A policy study on front-of-pack nutrition labeling in the Americas: emerging developments and outcomes. *Lancet Reg Health Am.* 2022;18:100400. doi: 10.1016/j.lana.2022.100400.

¹⁷ Use of nutrient profile models for nutrition and health policies: meeting report on the use of nutrient profile models in the WHO European Region, September 2021. (2022): <https://www.who.int/europe/publications/i/item/WHO-EURO-2022-6201-45966-66383>

¹⁸ The Global RECAP: Global Regulatory and Fiscal Capacity Building Programme (2023): <https://www.who.int/initiatives/global-regulatory-and-fiscal-policy-capacity-buidling-programme>

¹⁹ Sixth meeting of the WHO Nutrition Guidance Expert Advisory Group (NUGAG) Subgroup on Policy Actions (2022): [https://www.who.int/news-room/events/detail/2022/12/14/default-calendar/sixth-meeting-of-the-who-nutrition-guidance-expert-advisory-group-\(nugag\)-subgroup-on-policy-actions](https://www.who.int/news-room/events/detail/2022/12/14/default-calendar/sixth-meeting-of-the-who-nutrition-guidance-expert-advisory-group-(nugag)-subgroup-on-policy-actions)

²⁰ Public consultation on the draft WHO guideline on fiscal policies to promote healthy diets (2022): <https://www.who.int/news-room/articles-detail/public-consultation-on-the-draft-guideline-fiscal-policies-to-promote-healthy-diets>

²¹ Public consultation on the draft WHO guideline on policies to protect children from the harmful impact of food marketing (2022): <https://www.who.int/news-room/articles-detail/Online-public-consultation-on-draft-guideline-on-policies-to-protect-children-from-the-harmful-impact-of-food-marketing>

To advance national implementation of the Code, WHO and UNICEF are co-hosting a Global Congress on the Code in June 2023. The Congress will bring together national delegations from governments, UN agencies, civil society organizations, and academics to 1) increase knowledge and skills on strategies to end the unethical marketing of breast-milk substitutes, bottles, and teats; 2) develop national roadmaps/workplans to strengthen legislation, monitoring and enforcement of the Code; and 3) build regional networks to share information and support of national action on the Code.

WHO Nutrition Guidance Expert Advisory Group (NUGAG) Subgroup on Diet and Health

The NUGAG Subgroup on Diet and Health continued to work on a series of guidelines related to healthy diets since the last report to CCFNSDU.

- **Total fat:** The public consultation has been completed and the guideline approved by the WHO guidelines review committee (GRC). The guideline is currently being prepared for release in Spring of 2023
- **Saturated fatty acids and trans-fatty acids:** The public consultation has been completed and the guideline approved by the WHO guidelines review committee (GRC). The guideline is currently being prepared for release in Spring of 2023
- **Carbohydrates:** The public consultation has been completed and the guideline approved by the WHO guidelines review committee (GRC). The guideline is currently being prepared for release in Spring of 2023
- **Non-sugar sweeteners:** The systematic review informing the guideline was published as a WHO document (<https://www.who.int/publications/i/item/9789240046429>) and the 18th meeting of the NUGAG Subgroup on Diet and Health was held to finalize the recommendations. The public consultation was subsequently completed, and the guideline approved by the WHO guidelines review committee (GRC). The guideline is currently being prepared for release in Spring of 2023
- **Polyunsaturated fatty acids:** The 19th meeting of the NUGAG Subgroup on Diet and Health was held in 2022 to review the updated evidence and finalize the recommendations. A public consultation is planned for spring 2023 followed by review of the draft guideline by the WHO GRC. Release of the guideline is anticipated in mid- to late 2023.
- **Dietary patterns:** The systematic review has been finalized. Next steps are currently being discussed.
- **Use of low-sodium salt substitutes:** In response to requests for guidance on the use of low-sodium salt substitute as an intervention to reduce sodium/salt intake in populations, WHO initiated the guideline development process in 2019. A four-day meeting of the NUGAG was held at the end of November/early December 2021 to review the evidence review and formulate the recommendations. The systematic review has been published ([Full report²²](#) and [summary²³](#)). A guideline document is currently under preparation. A Call for comments is planned for early 2023.

WHO Nutrition Guidance Expert Advisory Group (NUGAG) Subgroup on Policy Actions

Following the WHO guideline development process, the NUGAG Subgroup on Policy Actions is working on developing guidelines on priority food environment policies. The guideline on policies to protect children from the harmful impact of **food marketing** is now being finalized following peer review and a public call for comments²⁴. The final draft guideline on **fiscal policies** to promote healthy diets is currently being peer reviewed and a public call for comments is open until 03 February 2023²⁵. The guideline on **school food and nutrition policies** is being prepared for peer review and public consultation. The NUGAG Subgroup on Policy Actions met virtually in December 2022 and January 2023 to review the updated evidence and formulate draft recommendations on **nutrition labelling policies** taking into consideration the certainty of the evidence, and additional criteria including the balance of evidence on benefits and harms, resource implications, acceptability and feasibility of implementing the policy and implications policy implementation may have on equity and human rights. The final draft guideline is now being prepared for public consultation.

Elimination of industrially produced trans-fatty acids

In May 2018, WHO called for the global elimination of industrially produced of *trans*-fatty acids (TFA) by 2023. To achieve successful TFA elimination, WHO recommends governments to adopt either of the two best-

²² <https://www.cochranelibrary.com/cdsr/doi/10.1002/14651858.CD015207/full>

²³ https://www.cochrane.org/CD015207/PUBHLTH_does-using-low-sodium-salt-substitutes-lsss-instead-regular-salt-reduce-blood-pressure-and-heart

²⁴ <https://www.who.int/news-room/articles-detail/Online-public-consultation-on-draft-guideline-on-policies-to-protect-children-from-the-harmful-impact-of-food-marketing>

²⁵ <https://www.who.int/news-room/articles-detail/public-consultation-on-the-draft-guideline-fiscal-policies-to-promote-healthy-diets>

practice policies: 1) Mandatory limit of 2 grams of TFA per 100 grams of total fats and oils in all foods; and 2) Mandatory ban on the production or use of partially hydrogenated oils (PHO) as an ingredient in all foods.

In January 2023, WHO released its fourth annual progress report “Countdown to 2023: WHO report on global trans fat elimination 2022”²⁶ at a high-level virtual event²⁷. The report shows that 43 countries have implemented best-practice policies for tackling TFA in food, with 2.8 billion people protected globally. Despite substantial progress, however, this still leaves 5 billion people worldwide at risk from TFA’s negative health impacts. While most TFA elimination policies to date have been implemented in higher-income countries (largely in the Americas and in Europe), an increasing number of middle-income countries are implementing or adopting these policies, including Argentina, Bangladesh, India, Paraguay, Philippines and Ukraine. Best-practice policies are also being considered in Mexico, Nigeria and Sri Lanka in 2023. No low-income countries have yet adopted a best-practice policy to eliminate TFA.

In 2023, WHO recommends that countries focus on these four areas: adopting best-practice policy, monitoring and surveillance, healthy oil replacements and advocacy. WHO’s REPLACE modules²⁸ provide practical step-by-step guidance to help countries make rapid advances in these areas. WHO also encourages food manufacturers to eliminate industrially produced TFA from their products, aligning to the commitment made by the International Food and Beverage Alliance (IFBA). Major suppliers of oils and fats are asked to remove industrially produced TFA from the products sold to food manufacturers globally.

To support countries to build laboratory capacity to measure TFA in foods, in April 2023, WHO published the simplified protocol²⁹, a fit-for-purpose protocol that provides the data that are required for governments’ surveillance and monitoring activities to check the trend of TFA content in food products on the market and ensure that food products comply with regulations for TFA elimination. Compared to the original WHO reference protocol³⁰ published in December 2020, the procedures have been simplified and suitable alternatives have been included in the simplified protocol so that it is easier to use and globally applicable, especially for laboratories operating with a limited budget, which had challenges implementing the original WHO reference protocol. In 2023, WHO is planning to also revise the original WHO reference protocol, taking into account new data received, which will serve as the “reference method” for conducting full analysis. WHO will provide technical support to countries in implementing the protocols through capacity-building workshops and training programmes.

Population sodium/salt intake reduction

In 2011 Member States committed to reducing exposure to unhealthy diets. The commitment was made through a Political Declaration of the High-level Meeting of the United Nations General Assembly on the Prevention and Control of Noncommunicable Diseases.

In 2013 Member States adopted the Global Action Plan for the Prevention and Control of Noncommunicable Diseases 2013-2020 to take coordinated action at all levels to attain nine voluntary global targets, including - a 30% relative reduction in mean population sodium intake by 2025, with a goal of achieving an intake of < 2 000 mg/day sodium; and a 25% relative reduction in the prevalence of raised blood pressure by 2025, so as to contain the prevalence of raised blood pressure.

In 2015 Member States committed to the Sustainable Development Goals, including Goal 3, Good Health and Well-being of which target 3.4 stipulates: by 2030, reduce by one third premature mortality from noncommunicable diseases through prevention and treatment and promote mental health and well-being.

In 2017 Member States endorsed the updated WHO Best Buys as a set of affordable, feasible, impact-driven, and highly cost-effective measures for the prevention and control of noncommunicable diseases. For sodium, these aim to reduce intake through: reducing sodium content in the food supply (reformulation of processed/manufactured food), reducing sodium in meals or snacks consumed outside of the home (public food procurement and service policies), encouraging consumers to make healthier choices related to sodium through information (media campaigns, front-of-pack or other interpretative nutrition labelling, menu labelling or removal of saltshakers in food service areas) and absence of negative influence (restricting marketing of food high in sodium).

WHO has published several tools and technical documents to support Member States, industry and communities in reducing population sodium intake including: The SHAKE Technical Package for Salt Reduction, which is currently being updated and will be re-released in 2023, the Action Framework for

²⁶ <https://www.who.int/publications/i/item/9789240067233>

²⁷ <https://www.who.int/news-room/events/detail/2023/01/23/default-calendar/virtual-high-level-event--fourth-progress-report-on-global-trans-fat-elimination>

²⁸ <https://www.who.int/teams/nutrition-and-food-safety/replace-trans-fat>

²⁹ <https://apps.who.int/iris/handle/10665/366690>; and <https://apps.who.int/iris/handle/10665/366677>

³⁰ <https://apps.who.int/iris/handle/10665/338049>

developing and implementing public food procurement and service policies to promote healthy diets (2021), the Global Sodium Benchmarks for different food categories (2022) and the Sodium Country Score Card which depicts standardized information on sodium reduction policies and actions on an interactive which enables monitoring and increased accountability (2022). The first-of-its-kind Global Report on Sodium Intake Reduction which explores country progress of the implementation of sodium reduction policies and their impacts on population-level dietary sodium intake and cardiovascular disease was launched in March 2023.

Nutrition for Growth Summit in 2021

At the Nutrition for Growth Summit in Tokyo on 7 – 8 December 2021, WHO has announced six new commitments to accelerate progress on the 2025 nutrition targets which have been pushed even further off course during the pandemic. These include:

- Expand initiatives to prevent and manage overweight and obesity;
- Step up activities to create food environments that promote safe and healthy diets;
- Support countries in addressing acute malnutrition;
- Accelerate actions on anaemia reduction;
- Scale up quality breastfeeding promotion and support; and
- Strengthen nutrition data systems, data use and capacity.

Alcohol

In May 2022, the 75th World Health Assembly adopted the Action plan (2022-2030) to effectively implement the Global strategy to reduce the harmful use of alcohol as a public health priority (https://apps.who.int/gb/ebwha/pdf_files/EB150/B150_7Add1-en.pdf). The global alcohol action plan for 2022–2030 aims to boost the implementation of the Global strategy and leverage the available evidence and policy know-how in alcohol control and tackling the harms associated with alcohol consumption. The Action plan sets up six areas for action as well as corresponding global targets and indicators. It proposes specific actions and measures by Member States, the WHO Secretariat and by other stakeholders. The Action plan calls for Member States to “ensure appropriate consumer protection measures through the development and implementation of labelling requirements for alcoholic beverages that display essential information for health protection on alcohol content in a way that is understood by consumers and also provides information on other ingredients with potential impact on the health of consumers, caloric value and health warnings” (Area 2, action 8). For WHO Secretariat, the Action Plan propose to “develop technical guidance on the labelling of alcoholic beverages to inform consumers about the content of products and health risks associated with their consumption” (Area 1, action 3 and Area 2, action 8). The Action plan also develop asks for the economic operators in alcohol production and trade as well as operators in other relevant sectors of the economy to refrain from promoting drinking; eliminate and prevent any positive health claims related to alcohol; and ensure, within regulatory or co-regulatory frameworks, the availability of easily understood consumer information on the labels of alcoholic beverages (including composition, age limits, health warnings and contraindications for alcohol consumption (Area 3, para 44).

In January 2023, the WHO Executive Board 152nd session, approved the updated menu of policy options and cost-effective interventions for the prevention and control of noncommunicable diseases which include those for reducing the harmful use of alcohol (https://apps.who.int/gb/e/e_eb152.html). The menu of policy options call for providing consumers with information about contents of alcoholic beverages and the harms associated with alcohol consumption, including labels and health warnings (https://apps.who.int/gb/ebwha/pdf_files/EB152/B152_6-en.pdf), page 18.

In June 2023, the WHO Secretariat will launch the 2023 report on the progress attained with SDG 2030 health target 3.5.1 and 3.5.2, based on a global survey data 2019. The report will include an update on the labelling of alcoholic beverages policies with a focus on practices of displaying consumer information, health warnings and legal requirements.

In 2022, a Technical Advisory Group on Alcohol Labelling (TAG-AL) was established by the WHO Regional Office for Europe in collaboration with the Department of Health Promotion in headquarters ([https://www.who.int/europe/groups/technical-advisory-group-\(tag\)-for-alcohol-labelling](https://www.who.int/europe/groups/technical-advisory-group-(tag)-for-alcohol-labelling)). The TAG-AL as appointed to advice on the potential impact of alcohol health warning labels on consumer awareness, knowledge, choices and purchasing behaviours. The work currently involved expanding the evidence base for developing impactful health warning labels for alcoholic beverages including testing their potential impact in a series of studies, employing different methodologies, including real-life experiments on purchasing choices in different environments.

In 2021, WHO published a succinct brief for providing policy guidance to Member States on Health warning labels on alcoholic beverages: opportunities for informed and healthier choices (<https://www.who.int/publications/i/item/9789240044449>).