



Food and Agriculture
Organization of the
United Nations



World Health
Organization



WORLD TRADE
ORGANIZATION



THE FUTURE OF FOOD SAFETY



IFSC-1/19/TS4.2

The First FAO/WHO/AU International Food Safety Conference Addis Ababa, 12-13 February 2019

Dietary transitions and multiple burdens of malnutrition necessitate action

Francesco Branca, Director, Nutrition for Health and Development, WHO
Anna Larrey, Director, Nutrition and Food Systems, FAO

Malnutrition can take the form of undernutrition, vitamin and mineral deficiencies and overweight and obesity. Globally, nearly one in three people suffers from at least one form of malnutrition. The number of people with insufficient access to food energy has increased three years in a row. The State of Food Security and Nutrition in the World 2018 reports that 821 million people were undernourished in 2017 compared to 804 million in 2016. Chronic child malnutrition continues to fall, although very slowly. In 2017, 151 million children under five in the world – or 22% – were still stunted, down from 25% in 2012. Over 50 million children under five are affected by wasting, meaning they are too thin for their height. Half of those children live in Southern Asia and one quarter in sub-Saharan Africa. While still grappling with the issues of undernutrition, the other side of malnutrition- over weight and obesity are on the rise. No region in the world has been able to halt or reverse the obesity rates. Globally over 2 billion people are overweight of which 672 million are obese. Children have not been spared. Currently 38 million children under five years in the world are overweight or obese. Multiple forms of malnutrition coexist, with countries experiencing simultaneously high rates of child undernutrition, child overweight, anaemia among women and adult obesity. These multiple forms of malnutrition can be found not only in the same household but also in the same individual, for example a child who is stunted and vitamin A deficient or an adult who is obese and iron deficient.

Unhealthy and poor-quality diets are a common cause for the different forms of malnutrition. Unhealthy diet is among the top risk factors contributing to the global burden of deaths and disability, a consequence of premature deaths from cardiovascular disease and cancer as well as early deaths for infectious diseases such as diarrhea and respiratory infections.

Food systems have evolved to increase the availability of staple foods, such as cereals (food energy), but access to fresh fruits, vegetables, legumes, pulses, and nuts has not improved equally for everyone. Highly processed foods containing salt, free sugars, saturated fats, and trans fats have become cheaper and more widely consumed. Animal source food consumption, including meat, dairy and products has increased drastically but with large differences between world regions. Rapid urbanization, population growth, and globalization have been driving this dietary transition. Food supply has been shaped by agricultural, economic and trade policies, while marketing and price policies have affected consumers' access to healthy diets.

Our current food systems are failing in ensuring the food security of all, not delivering on healthy diets needed for optimal health, and are not environmentally sustainable. For example, global food production, responsible for up to a third of greenhouse gas emissions, is a major source of soil, air, and water pollution, while accounting for more than 70% of freshwater use and 40% of land use

THE FUTURE OF FOOD SAFETY

and contributing to biodiversity loss. The inefficiencies in the food system is seen in the high food loss and waste, where about a third of all food produced for human consumption is lost in the production system or goes to waste as a result of consumer behaviour.

It is possible to aim at a healthy diet, with safe food of adequate quantity and quality, and sustainably produced? A healthy diet starts early in life. Babies should be exclusively breastfed for the first 6 months and continuously breastfed until two years and beyond. Energy intake (quantity of food consumed) should balance energy expenditure. Protein is needed in good quality and adequate amounts to meet individual needs according to factors such as age, gender and bodyweight. Total fat intake should be kept to less than 30% of total energy intake, with a shift in fat consumption away from saturated fats to unsaturated fats, and towards the elimination of industrial trans fats. Carbohydrates in the diet must come from whole grain foods (unrefined complex carbohydrates). We should limit intake of free sugars to less than 10% (or even less than 5%) of total energy intake, keep salt intake to less than 5 g per day and eat at least 400g of fruit and vegetable a day. A diet rich in plant-based foods such as pulses, legumes and reduced animal source foods confers both improved health and environmental benefits. Safe food is an integral part of a healthy and sustainable diet. Consumption of contaminated food and water leads to diarrheal disease and loss of nutrients. Inadequate use of chemicals such as pesticides and veterinary drugs in food production has resulted in public health concerns such as emergence and spread of antimicrobial resistance. At the same time modern food production has led to the use of unsafe ingredients e.g. partially hydrogenated vegetable oils, associated to increased risk of cardiovascular disease.

We need a food system that supports a healthy food environment. The food environment is the space where consumers receive information and make decisions about what to buy and what to eat. Action is needed both at the supply side – including agricultural policies, regulatory policies, public food procurements, price policies - and at the consumers side – including labelling, marketing and public campaigns - to create a conducive food environment in which healthy and sustainable diet is made accessible, affordable, acceptable and convenient to all.

At the Second International Conference on Nutrition, jointly organized by FAO and WHO (ICN2) in November 2014, countries committed through the Rome Declaration on Nutrition and its accompanying Framework for Action, to enhance sustainable food systems by developing public policies from production to consumption and across sectors to provide year-round access to food that meets people's nutrition needs and promote safe and diversified healthy diets. In April 2016 the UN General Assembly proclaimed the period 2016-2025 as the [UN Decade of Action on Nutrition](#). The Nutrition Decade [Work Programme](#) includes calls for country SMART commitments in 6 action areas:

- Sustainable, resilient food systems for healthy diets;
- Aligned health systems providing universal coverage of essential nutrition actions;
- Social protection and nutrition education;
- Trade and investment for improved nutrition;
- Safe and supportive environments for nutrition at all ages;
- Strengthened governance and accountability for nutrition.

The Work Programme also calls on countries to establish Action Networks. Currently, global and regional networks have been established on the following topics: Sustainable Food from the Oceans and Inland Waters for Food Security and Nutrition; nutrition labelling, food-based dietary guidelines, ending childhood obesity, healthy food environments, healthy schools and salt reduction.

Recognizing the close interactions between food safety and nutrition, the ICN2 Framework for Action made specific recommendations on food safety and called on countries to develop, establish, enforce and strengthen food control systems, including reviewing and modernizing national food safety legislation and regulations; to actively take part in the work of the Codex Alimentarius Commission on nutrition and food safety, and implement, internationally adopted standards at the national level; to participate in and contribute to international networks to

THE FUTURE OF **FOOD SAFETY**

exchange food safety information; to raise awareness among relevant stakeholders on the problems posed by antimicrobial resistance, and implement appropriate multisectoral measures to address antimicrobial resistance; to develop and implement national guidelines on prudent use of antimicrobials in food-producing animals. Country commitments in concrete actions to address these issues would be essential.

KEYWORDS: healthy and sustainable diet, dietary transition, multiple forms of malnutrition, Decade of Action on Nutrition; food safety