Publications from International Organizations on Public Health

Edited by **Annarita Barbaro**

FOOD AND AGRICULTURE ORGANIZATION OF THE UNITED NATIONS (FAO)

Contribution of terrestrial animal source food to healthy diets for improved nutrition and health outcomes. An evidence and policy overview on the state of knowledge and gaps. Rome: Food and Agriculture Organization of the United Nations 2023; 296 p. ISBN 978-92-5-137536-5. FAO's Committee on Agriculture requested a comprehensive, science- and evidence-based global assessment of the contribution of livestock to food security, sustainable food systems, nutrition and healthy diets, considering environmental, economic and social sustainability. The assessment follows an agrifood systems approach and applies a One Health perspective to the economic, social and environmental dimensions when reviewing how the livestock sector contributes to the 2030 Agenda for Sustainable Development. It will consist of four component documents. This first component document focuses on the downstream impacts of terrestrial animal source food consumption as part of healthy diets and provides a robust systematic review of the evidence for its contribution to health and nutrition outcomes.

The State of Food and Agriculture 2022. Leveraging agricultural automation for transforming agrifood systems. Rome: Food and Agriculture Organization of the United Nations 2022; 182 p. ISBN 978-92-5-136043-9. The State of Food and Agriculture 2022 looks into the drivers of agricultural automation, including the more recent digital technologies. Based on 27 case studies, the report analyses the business case for adoption of digital automation technologies in different agricultural production systems across the world. It identifies several barriers preventing inclusive adoption of these technologies, particularly by small-scale producers. Key barriers are low digital literacy and lack of an enabling infrastructure, such as connectivity and access to electricity, in addition to financial constraints. Based on the analysis, the publication suggests policies to ensure that disadvantaged groups in developing regions can benefit from agricultural automation and that automation contributes to sustainable and resilient agrifood systems.

The impact of microplastics on the gut microbiome and health – A food safety perspective. Food Safety and Quality Series, No. 21. Rome: Food and Agriculture Organization of the United Nations 2023; 58 p. ISBN 978-92-5-137807-6. With a food safety focus, a scientific literature review was conducted to character-

ize the current understanding about the effects of microplastics on the gut microbiome and potential health implications. The main aspects analysed are the effects of microplastics on the composition, diversity and function of gut microbiome using in vitro and in vivo models; health implications resulting from the microplastic-microbiome interactions and underlying mechanisms; the establishment of causality; and influence of the gut microbiome on microplastic biodegradation. The research was also scoped to identify current gaps, limitations and needs for the eventual consideration of microbiome-related data in chemical risk assessment. This work contributes to the FAO global programme on the impact of food systems on NCDs and obesity, by understanding the potential health implications of gut microbiome-microplastic interactions. The outcomes will provide information which can be used to improve food safety policies.

UNITED NATIONS EDUCATIONAL, SCIENTIFIC AND CULTURAL ORGANIZATION (UNESCO)

Open data for AI: what now? Paris: UNESCO Publishing 2023; 64 p. ISBN 978-92-3-100600-5. The aim of these guidelines is to apprise Member States of the value of open data, and to outline how data are curated and opened. Member States are encouraged not only to support openness of high-quality data, but also to embrace the use of AI technologies and facilitate capacity building, training and education in this regard, including inclusive open data as well as AI literacy. The report has been produced through an extensive literature review and consultations with stakeholders, followed by a peer review process. It outlines concrete steps that can assist Member States in opening up their data, divided into three phases: preparation; opening of the data; and follow up for reuse and sustainability; with each phase consisting of four steps. These guidelines follow up on the UNESCO Recommendation on the Ethics of Artificial Intelligence.

JOINT UNITED NATIONS PROGRAMME ON HIV/AIDS (UNAIDS)

UNAIDS data 2022. Geneva: United Nations Programme on HIV/AIDS 2022; 446 p. Every year UNAIDS provides revised global, regional and country-specific modelled estimates using the best available epi-

demiological and programmatic data to track the HIV epidemic. Modelled estimates are required because it is not possible to count the exact number of people living with HIV, people who are newly infected with HIV or people who have died from AIDS-related causes in any country: doing so would require regularly testing every person for HIV and investigating all deaths, which is logistically infeasible and ethically problematic. Modelled estimates—and the lower and upper bounds around these estimates—provide a scientifically appropriate way of describing HIV epidemic levels and trends.

INTERNATIONAL LABOUR ORGANIZATION (ILO)

The value of essential work. World Employment and Social Outlook 2023. Geneva: International Labour Organization 2023; 281 p. ISBN 978-92-2-036650-9 (print) ISBN 978-92-2-036651-6 (web PDF). The COVID-19 pandemic has underscored the extent to which economies and societies depend on key workers. It has also highlighted how undervalued most key jobs are. Across the world, these workers produced, distributed and sold food, cleaned streets and buses to minimize the spread of the pandemic, ensured public safety, transported essential goods and workers to their jobs, and cared for and healed the sick. The COVID-19 pandemic has also made evident how undervalued most key jobs are, raising concerns about the sustainability of these essential activities, especially given the possibility of future shocks. This report calls for a revaluation of the work of key workers to reflect their social contribution and greater investment in key sectors. In addition to addressing an important, long-standing deficit in social justice, doing so will help to ensure the continuity of essential economic activities during future shocks and crises.

WORLD HEALTH ORGANIZATION (WHO)

Red and processed meat in the context of health and the environment: many shades of red and green. Information brief. Geneva: World Health Organization 2023; 66 p. ISBN 978-92-4-007482-8 (electronic version) ISBN 978-92-4-007483-5 (print version). Globally, production and consumption of all types of meat has increased substantially in the last 50 years, and – although red meat consumption is now plateauing in high-income countries (HICs) - is predicted to increase by a further 50% by 2050. Meat consumption remains highly unequal both between and within countries, and animal-source food intakes, including red meat, are lowest among those at most risk of undernutrition. This information brief synthesizes the evidence on the role of red and processed meat production and consumption in health and environmental outcomes, and in different social and political contexts. It does not give consumption recommendations, but, rather, represents the first stage in a scoping process

that could lead to World Health Organization (WHO) guidance on the role of red and processed meat in healthy diets from sustainable food systems. This brief is concise, easy to read and includes a summary and the key messages for each chapter. It is a useful resource for both advocates and the general public interested in this topic as well as technical staff, programme managers and decision makers who need to have a quick overview on what the main issues and gaps are on the role of red and processed meat for human and planetary health.

Carbohydrate intake for adults and children: WHO guideline. Geneva: World Health Organization 2023; 100 p. ISBN 978-92-4-007359-3 (electronic version) ISBN 978-92-4-007360-9 (print version). This guideline provides updated, evidence-informed guidance on the intake of carbohydrates to reduce the risk of diet-noncommunicable diseases in adults and children, with a particular focus on carbohydrate "quality". Carbohydrate quality refers to the nature and composition of carbohydrates in a food or in the diet, including the proportion of sugars, how quickly polysaccharides are metabolized and release glucose into the body (i.e., digestibility), and the amount of dietary fibre. The quality of carbohydrates in the diet can broadly impact health. This guideline is intended for a wide audience involved in the development, design and implementation of policies and programmes in nutrition and public health. This guideline includes recommendations on preferred food sources of carbohydrates, and recommended levels of intake for fruits and vegetables, and dietary fibre which can be used by policy-makers and programme managers to address various aspects of carbohydrate intake in their populations through a range of policy actions and public health interventions. The guidance in this guideline replaces previous WHO guidance on carbohydrate intake, including that from the 1989 WHO Study Group on Diet, Nutrition and the Prevention of Chronic Diseases and the 2002 Joint WHO/FAO Expert Consultation on Diet, Nutrition and the Prevention of Chronic Diseases. The guidance in this guideline should be considered in the context of that from other WHO guidelines on healthy diets.

Total fat intake for the prevention of unhealthy weight gain in adults and children: WHO guideline. Geneva: World Health Organization 2023; 66 p. ISBN 978-92-4-007365-4 (electronic version) ISBN 978-92-4-007366-1 (print version). The objective of this guideline is to provide updated guidance on the intake of total fat in the diet to reduce the risk of unhealthy weight gain. It is intended to be used by policymakers, programme managers, health professionals and other stakeholders in efforts to promote healthy diets. The guidance was formulated based on evidence for unhealthy weight gain only. The guideline was developed following the WHO guideline development process, as outlined in the WHO handbook for guideline development. This process includes a review of systematically gathered evidence by an international, multidisciplinary group of experts; assessment of the quality of that evidence via the Grading of Recommendations Assessment, Development and Evaluation (GRADE) framework; and consideration of additional, potentially mitigating factors when translating the evidence into recommendations. The guidance in this guideline replaces previous WHO guidance on

total fat intake, including that from the 1989 WHO Study Group on Diet, Nutrition and the Prevention of Chronic Diseases and the 2002 Joint WHO/FAO Expert Consultation on Diet, Nutrition and the Prevention of Chronic Diseases.