Publications from International Organizations on Public Health

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FOOD AND AGRICULTURE ORGANIZATION OF THE UNITED NATIONS (FAO)

Metwally S, Viljoen G, El Idrissi A (Eds). Veterinary vaccines: principles and applications. Rome: Food and Agriculture Organization of the United Nations and John Wiley & Sons Limited 2022; 442 p. ISBN 9781119506270 (epub). This work is a concise and authoritative reference featuring easily readable reviews of the latest research in vaccinology and vaccine immune response to pathogens of major economic impact to livestock. It covers advice and recommendations for vaccine production, quality control, and effective vaccination schemes including vaccine selection, specifications, vaccination programs, vaccine handling in the field, application, failures, and assessment of herd protection. In addition, the book presents discussions on the current status and potential future developments of vaccines and vaccination against selected transboundary animal diseases. Veterinary Vaccines: Principles and Applications is an important resource for veterinary practitioners, animal health department officials, vaccine scientists, and veterinary students. It will also be of interest to professional associations and NGO active in livestock industry.

Wildcheck - Assessing the risks and opportunities of trade in wild plant ingredients. Rome: Food and Agriculture Organization of the United Nations 2022; 140 p. ISBN: 978-92-5-135965-5. Thousands of consumer products around the world contain ingredients obtained from wild plants. Wild harvest accounts for some or all of the harvest of the majority of plant species in trade. This report aims to address the challenges associated with wild harvesting by making information on a selection of 'flagship' wild plant ingredients, the Wild Dozen, readily available and easy to understand. FAO offers this information without obligation to a specific prescription for follow-up action (e.g. through certification or policy change), hoping that a wide range of users will access the report as a first step towards responsible sourcing. Along with a broader update on the state of wild plants trade, the report provides a "profile" on each of the Wild Dozen species, summarising key facts on production and trade. Each profile contains a trafficlight risk rating on biological and social factors, along with an overview of opportunities for responsible sourcing. The information is aimed at industry, consumers, policy-makers, investors, and practitioners, concluding with a summary of what these various stakeholders can do to contribute to a sectoral shift towards responsible sourcing of wild plant ingredients.

INTERNATIONAL SCIENCE COUNCIL (ISC)

Unprecedented & Unfinished: COVID-19 and Implications for National and Global Policy. Paris: International Science Council 2022; 110 p. The object of this report is, firstly, to inform policy-makers and the public about the wide-ranging, long-term impacts on the entire global community from COVID-19, and to help elucidate the key decisions and actions that could shift the evolution of the pandemic towards more positive and equitable outcomes across societies. Secondly, it should inform planning and responses to other existential crises, whether pandemics, natural disasters, or the impacts of climate change. This report therefore provides an entry point to addressing the wide-ranging impacts of COVID-19 in two parts. Part 1 sets the scene by outlining three plausible scenarios over a five year time horizon that could conceivably emerge from the pandemic's cascading impacts, taking into account policy interactions and uncertainties that may affect outcomes. These scenarios are intended as simply as illustrations to help the global community plan for the future, by seeking to assess the broader impact of decisions taken today and the costs of inaction. Part 2 provides recommendations on how the global community can prepare for the future to mitigate the impacts of COVID-19 and address other existential crises that we will inevitably face.

UNITED NATIONS ENVIRONMENTAL PROGRAMME (UNEP)

Bracing for Superbugs: Strengthening environmental action in the One Health response to antimicrobial resistance. Geneva: United Nations Environmental Programme 2023; 100 p. ISBN 978-92-807-4006-6. This report provides evidence that the environment plays a key role in the development, transmission and spread of antimicrobial resistance (AMR). Prevention is at the core of the action and environment is a key part of the solution. It aims to demystify and unpack the different, while interconnected, aspects of the environmental dimensions of AMR, offering a comprehensive overview of scientific findings on the subject. It provides actionable evidence of the importance of the environment in the development, transmission and spread of AMR, and it shows that environmental dimensions of AMR are multifaceted and the response rests on collaboration between sectors. A concerted systems approach such as "One Health," which recognizes that the health of people, animals, plants and the environment are closely linked and interdependent, is the approach needed to tackle it. This report analyses the three economic sectors and their value chains that are key drivers of AMR development and spread in the environment: pharmaceuticals and other chemicals, agriculture and food, and healthcare, together with pollutants from poor sanitation, sewage and waste effluent in municipal systems. The report synthesizes current knowledge gaps, and it shows that while several actions are ongoing, more needs to be done and offers solutions to prevent and respond to AMR. A One Health response to AMR will not only help reduce the risk and burden of AMR on societies but will also help address the triple planetary crisis.

Emissions Gap Report 2022: The Closing Window - Climate crisis calls for rapid transformation of societies. Nairobi: United Nations Environment Programme 2022; 132 p. ISBN 978-92-807-3979-4. The Emission Gas Report 2022 is the 13th edition of an annual series that provides an overview of the difference between where greenhouse emissions are predicted to be in 2030 and where they should be to avert the worst impacts of climate change. This report shows that updated national pledges since COP26 - held in 2021 in Glasgow, UK - make a negligible difference to predicted 2030 emissions and that we are far from the Paris Agreement goal of limiting global warming to well below 2°C, preferably 1.5°C. Policies currently in place point to a 2.8°C temperature rise by the end of the century. Implementation of the current pledges will only reduce this to a 2.4-2.6°C temperature rise by the end of the century, for conditional and unconditional pledges respectively. The report finds that only an urgent system-wide transformation can deliver the enormous cuts needed to limit greenhouse gas emissions by 2030: 45 per cent compared with projections based on policies currently in place to get on track to 1.5°C and 30 per cent for 2°C. This report provides an indepth exploration of how to deliver this transformation, looking at the required actions in the electricity supply, industry, transport and buildings sectors, and the food and financial systems.

EUROPEAN FOOD SAFETY AUTHORITY (EFSA)

EFSA (European Food Safety Authority), Dujardin B, Ferreira de Sousa R, Gómez Ruiz JA. Scientific Report on the dietary exposure to heavy metals and iodine intake via consumption of seaweeds and halophytes in the European population. EFSA Journal 2023;21(1):7798, 47 pp. EFSA assessed the relevance of seaweed and halophyte consumption to the dietary exposure to heavy metals (arsenic, cadmium, lead and mercury) and the iodine intake in the European population. Based on sampling years 2011-2021, there were 2,093 analytical data available on cadmium, 1,988 on lead, 1,934 on total arsenic, 920

on inorganic arsenic (iAs), 1,499 on total mercury and 1,002 on iodine. A total of 697 eating occasions on halophytes, seaweeds and seaweed-related products were identified in the EFSA Comprehensive European Food Consumption Database (468 subjects, 19 European countries). The impact of a future increase in seaweed consumption ("per capita") on the dietary exposure to heavy metals and on iodine intake will strongly depend on the seaweeds consumed. These results underline the relevance of the current consumption of seaweeds in the overall exposure to different heavy metals and in the intake of iodine. Recommendations are provided for further work needed on different areas to better understand the relationship between seaweed consumption and exposure to heavy metals and iodine intake.

EFSA (European Food Safety Authority) and ECDC (European Centre for Disease Prevention and Control). The European Union Summary Report on Antimicrobial Resistance in zoonotic and indicator bacteria from humans, animals and food in 2020/2021. EFSA Journal 2023;21(3):7867, 232 p. Antimicrobial resistance (AMR) data on zoonotic and indicator bacteria from humans, animals and food are collected annually by the EU Member States (MSs) and reporting countries, jointly analysed by EFSA and ECDC and presented in a yearly EU Summary Report. This report provides an overview of the main findings of the 2020-2021 harmonised AMR monitoring in Salmonella spp., Campylobacter jejuni and C. coli in humans and food-producing animals (broilers, laying hens and turkeys, fattening pigs and bovines under 1 year of age) and relevant meat thereof. Where available, monitoring data from humans, food-producing animals and meat thereof were combined and compared at the EU level, with emphasis on multidrug resistance, complete susceptibility and combined resistance patterns to selected and critically important antimicrobials, as well as Salmonella and E. coli isolates exhibiting ESBL-/AmpC-/ carbapenemase phenotypes. The temporal trend analyses in both key outcome indicators (rate of complete susceptibility and prevalence of ESBL-/AmpC- producers) showed that encouraging progress have been registered in reducing AMR in food-producing animals in several EU MSs over the last years.

WORLD HEALTH ORGANIZATION (WHO)

Food safety aspects of cell-based food. Geneva: World Health Organization and Food and Agriculture Organization of the United Nations 2023; 145 p. ISBN (FAO) 978-92-5-137723-9 (print) ISBN (WHO) 978-92-4-007094-3 (electronic version) ISBN (WHO) 978-92-4-007095-0 (print version). The Food and Agriculture Organization of the United Nations (FAO), in collaboration with the World Health Organization (WHO), has developed the present document to engage with respective Members and relevant stakeholders by proactively sharing the current knowledge to identify concrete ways to inform consumers and all

other stakeholders about the food safety considerations for cell-based food products. The primary objective of this document is to provide readers with up-to-date technical knowledge on the multidisciplinary topic of cell-based food production, with a focus on the food safety aspects, through the process of literature synthesis and expert elicitation. This document includes a literature synthesis of relevant terminology issues. principles of cell-based food production processes and the global landscape of regulatory frameworks for cellbased food production. Case studies from Israel, Oatar and Singapore have been included to highlight different scopes, structures and contexts surrounding their regulatory frameworks for cell-based food. While the primary target audience of this document was set for national food safety competent authorities, the global community of scientists, developers, the cell-based food industry as well as academics doing research in the area of cell-based food production may benefit from reading this document.

Report 2022: pesticide residues in food: Joint FAO/WHO Meeting on Pesticide Residues. Geneva: World Health Organization and Agriculture Organization of the United Nations 2023; 1000 p. ISBN (FAO) 978-92-5-137585-3 (print) ISBN (WHO) 978-92-4-006960-2 (electronic version) ISBN (WHO) 978-92-4-006961-9 (print version). A Joint Meeting of the Food and Agriculture Organization of the United Nations (FAO) Panel of Experts on Pesticide Residues in Food and the Environment and the World Health Organization (WHO) Core Assessment Group on Pesticide Residues (JMPR) was held at FAO Headquarters, Rome (Italy), from 13 to 22 September 2022. The Meeting evaluated 34 pesticides, including seven new compounds and four compounds that were reevaluated within the periodic review programme of the CCPR, for toxicity or residues, or both. The Meeting also estimated the dietary exposures (both short-term and long-term) of the pesticides reviewed and, on this basis, performed a dietary risk assessment in relation to the relevant acceptable daily intakes (ADIs) and where necessary acute reference doses (ARfDs).

WHO global report on sodium intake reduction. Geneva: World Health Organization 2023; 99 p. ISBN 978-92-4-006998-5 (electronic version) ISBN 978-92-4-006999-2 (print version). Reducing sodium intake is one of the most cost-effective ways to improve health and reduce the burden of noncommunicable diseases, as it can avert a large number of cardiovascular events and deaths at very low total programme costs. The World Health Organization (WHO) has developed this report to monitor progress and identify areas for action in the implementation of sodium reduction policies and other measures within Member States and across WHO regions and World Bank income groups. For the first time, a Sodium Country Score from 1 (the lowest level) to 4 (the highest level) is allocated to each Member State based on the level of implementation of sodium reduction policies and other measures. The Sodium Country Score is used to estimate the impact of policy progress on population dietary sodium intake and cardiovascular disease. WHO recommends several sodium-related best buys policies as practical actions that should be undertaken immediately, to prevent cardiovascular disease and its associated costs. These include lowering sodium content in food products; implementing front-of-pack labelling to help consumers select food products with lower sodium content; conducting mass media campaigns to alter consumer behaviour around sodium; and implementing public food procurement and service policies to reduce sodium content in food served or sold.