



Final Statement of the Workshop on Food Safety and Healthy Diets



**Workshop on Food Safety and Healthy Diets[1]
The Pontifical Academy of Sciences &
the Global Alliance for Improved Nutrition (GAIN)**

Vatican, 12-13 September 2018

This declaration is based on the presentations and findings of a meeting of global experts on food safety and nutrition convened by the Pontifical Academy of Sciences with support from the Global Alliance for Improved Nutrition (GAIN) held at the Vatican, 12-13 September 2018.

The key objectives of the workshop were to galvanise new approaches to food safety and nutritious foods within the wider agenda of improved food security in support of the Sustainable Development Goals (SDGs), to share the latest scientific evidence and innovations, and to develop recommendations – with a focus on food systems in low- and middle-income countries – leading up to a set of global meetings on food safety in 2019 by FAO and WHO in collaboration with other partners. The workshop was attended by leading scientists, senior government representatives, business executives, and faith leaders, as well as senior officials from the United Nations and the World Bank.

We the signatories below express our personal support for this declaration.

Food Safety and Healthy Diets

Our starting point is that all people – especially the poor and most vulnerable – should have access to the safe, affordable and nutritious food, which is fundamental to sustaining life and human dignity, and which is an essential human right. Poor diet is today the number one risk factor for disease globally, linked to one in five annual deaths according to the recent Global Burden of Disease Study. A healthy diet is a concept, which includes but goes beyond safe foods.

The Sustainable Development Goals (SDGs) recognise that improved nutrition is a core driver for all human development. Malnutrition is a complex and dynamic phenomenon with distinct but often overlapping expressions: from hunger and stunting, to micronutrient deficiencies, and to overweight and obesity.

Recent progress in tackling these forms of malnutrition is mixed. For example, stunting has been reduced and child survival increased, although both levels remain unacceptably high or low, respectively. But last year the number of hungry people in the world rose to 821 million from 777 million in 2015 - yet it is estimated that one-third of the food produced annually, was lost or wasted. We also face huge challenges to address micronutrient deficiencies, which may harm approximately two billion men, women and children – often with irreversible health consequences. Worldwide obesity is rising, having almost tripled to more than 800 million people between 1975 and 2016. This is not just a high income, urban phenomenon, but is increasingly impacting lower income groups and rural populations. Overall, the food system is also placing huge pressures on the environment, as

a major contributor to deforestation, air and water pollution, and climate change. High levels of food waste and food quantity and quality loss are part of this environmental footprint and an important contributor to malnutrition.

Food safety is a neglected dimension of the food and nutritional security challenge, and bold leadership is needed at the global and national levels to give it the necessary policy attention and resources. Food safety is intimately linked to health as billions of people are exposed to potentially harmful viruses, bacteria, parasites, toxins and heavy metals in their foods. At least one in ten people suffer from eating unsafe foods[2]. Better food safety can be linked and mainstreamed into improvements in productivity, food accessibility, and the affordability of nutritious foods, although we do know that some of the most nutritious foods (animal source foods and fresh produce) can be the riskiest and some of the least nutritious foods (oil, sugar, salt, highly processed) less likely vehicles for food borne disease.

Food safety and malnutrition need to be addressed in concert. The rise of diet-related NCDs as contributors to the burden of disease illustrates that healthy diets necessitate the consumption of safe food and the consumption of nutritionally appropriate combinations of safe foods.

Principal Findings

The workshop clarified key concepts, such as “What is a healthy diet?”. A safe and healthy diet contains the appropriate amounts of nutrients needed to meet and not exceed all physiological requirements in line with age and life stage, and not contain harmful substances that can cause health risks in quantities beyond maximum acceptable limits. The actual combinations of foods, and the food safety and quality measures needed to meet such requirements naturally vary by national and cultural context, but the essence of a healthy diet is universal.

This workshop on *Food Safety and Healthy Diets* explored practical actions to address these issues in order to better nourish the world and emphasised the benefits to global sustainability of human-centred food systems. It allowed participants to advocate for transformative changes in food systems to improve health and nutrition through access to safer, better quality foods for all. These issues are at the heart of the 2030 Agenda for Sustainable Development and the UN Decade of Action on Nutrition (2016-2025).

The workshop reviewed the evidence on related key themes: the most common food safety challenges prevalent throughout supply chains; post-harvest food loss and waste; and the double burden of malnutrition. These issues were examined using an interdisciplinary lens, combining food and health policy perspectives as well as presenting the latest technology, innovations and state-of-the art solutions. Participants from government, private sector, academe, UN agencies and civil society noted:

- The triple challenge of food safety, food security and sustainability requires inclusive partnerships between governments, the private sector, academia, civil society and consumers. Multiple food safety challenges are prevalent throughout food supply chains from production, harvesting, transportation, processing, storage, manufacturing and distribution to the final consumer. Moreover, changes to the global environment (increasing temperatures, altered water resources and other environmental stressors) will bring additional, and to-date relatively unquantified, pressures on food systems.
- The science base of food safety and healthy diets needs strengthening. The emphasis on food safety in the recent studies by the InterAcademy Partnership on future research priorities in the field of agriculture, food security and nutrition for Africa, Asia, the Americas and Europe provides a basis.
- There is a need for a forward-looking perspective on food systems, especially those in low and middle-income countries. This would highlight emerging hazards and risks, especially pertaining to malnutrition, food safety, climate change, and the range of policy and other instruments available to address these. These forward-looking perspectives should take into account changes in demographics, economic structures, diets, and other factors.
- National governments need to lead greater uptake of multi-sectoral and multi-disciplinary country-owned partnerships to reform this ever more complex and challenging food safety landscape. An ad hoc or “fire brigade” approach tackling outbreaks and problems associated with unsafe foods is no substitute for a systematic, preventative and proactive approach. National governments need to mobilize domestic resources and actors, not only public spending, to implement and enforce sustainable food safety policies.
- The private sector is a critical partner ensuring that food systems are comprehensive, responsible and productive in growing, processing and distributing food. A balance combining incentives with regulation is needed to ensure this is done responsibly and sustainably - incentives for business, a favourable enabling environment, consumer education and demand, fiscal measures, and direct pressure and accountability from consumers, grassroots organizations, high-value employees, and investors. Experience has shown that improvements in food safety come through significant contributions from private sector response to public

and market demands. “Pull approaches” harnessing consumer demand for safe food is the major lever for improvement by prompting the private sector to respond to this demand.

- Governments in developing countries can invest more in food safety but must also invest more smartly. This means investing with a clear purpose based on evidence of risk; using public investment to leverage private investment; not neglecting informal food distribution channels which service low income populations; and measuring impacts of interventions.
- The coordination of the agendas addressing undernutrition and diet related non-communicable diseases is thus urgently required and will mean a shift in thinking behaviour and supportive actions. First, emphasis on personal responsibility for dietary choices must be balanced by meaningful changes in food environments that enable healthy choices. Second, the control that industry has over the food supply must be tempered by measured policy interventions that address public health imperatives – clear and actionable labelling, food reformulation, advertising controls and fiscal interventions are all underutilised and present significant opportunities to improve healthy diets.
- Understanding all national food systems is important, especially in countries in the earlier stages of transformation, so that we can identify hot spots of unsafe foods. Unsafe foods hit the poorest hardest and this must be overcome by government actions, as well as corporate attention and civil society.
- There is great potential for reducing food loss and waste via improved capacity especially in Low and Middle-Income Countries on improved postharvest practices. These include handling including personal hygiene practices, safe harvest and postharvest handling of fruits and vegetable (F&V) crops, use of sharp tools, and use of appropriate containers that can be easily sanitized (such as washing for plastic crates) and cooling/cold storage which can jointly reduce waste and food borne illnesses. There is a critical need to accelerate the provision of sustainable and effective means to store crops by and for smallholder farmers.
- Production, processing and marketing of unsafe food itself exacerbates food loss and waste. But monitoring food losses and waste also requires much better measurement – gross weight masks huge differences in the economic value and nutritional quality of diverse foods. International agencies can improve how this is measured.
- More generally, safe and nutritious foods need to be made more available and affordable via better financing, investment and a better enabling environment. There is growing consensus that food systems, in their current form, are failing to deliver these foods and that governments need to work closely with consumers and the private sector – from farm to fork - to improve the affordability, demand for and accessibility of safe nutritious foods for all. Behaviour change approaches focused on improving diet quality in populations with a high prevalence of malnutrition will fail if physical access and affordability issues are not simultaneously addressed.
- Supplementation and food fortification have been successfully implemented in many countries to help fill the gap between mineral and vitamin requirements and intakes. Looking to the future, many now recognize that agriculture also has a fundamental responsibility to produce foods rich in these minerals and vitamins at lower cost to secure national health. Biofortification can help here complementing supplementation and food fortification.
- Governments need good quality and harmonized data and indicators on progress and outcomes upon which to develop, implement and monitor programs that seek to drive equitable access to affordable high-quality diets.
- Efforts to eradicate malnutrition in all its forms must include a strong understanding of potential future impacts of food production, trade and distribution on natural resource use and the environment so that national and global policies are fit for the future. Sustainably produced, safe and nutritious foods are essential for a healthy planet.

Recommendations

We urge governments and the private sector, as well as other stakeholders, to undertake scalable and practical solutions, which reflect the central role of safe foods and healthy diets to the Sustainable Development Goals, and to overcome the particularly large burden of unsafe and unhealthy food for the poor:

1. Governments need to pay particular attention to tackling the high costs of weak national food control systems on consumer health and nutrition as well as economies, as well as tackling trans-border issues. Knowledge and action on food safety and safe diets need to be a focus in information to the public including in education systems. Governments should adopt a four-part approach: treat, prevent, promote and regulate. Affordable and sustainable food safety systems cannot only rely on a relatively high cost model of inspection,

end-product testing and penalties for infractions. They need to place greater emphasis on incentivising and facilitating farm and food business compliance via regulations and safe operating practices, and greater public accountability mechanisms.

2. It is urgent to better address the health of consumers dependent on informal food markets which risk exposing these consumers to unsafe foods and poor-quality diets.

3. Businesses need to respond to the call. To enable this, positive as well as negative incentives are needed which facilitate business to do more for healthy diets. We will continue to miss opportunities to advance nutrition if we do not speak to businesses about their priorities, drivers and culture, and work with them to create better environments that make healthy foods more available, accessible, affordable and desirable. Efforts to include and engage Small and Medium Enterprises (SMEs) in this are as important as for large companies. Efforts need to include support for SMEs to upgrade their food handling, manufacturing, and quality management processes.

4. The emerging body of evidence on the way changing food systems are driving a double burden of under- and malnutrition can be used by countries to take steps to cap rising levels of obesity before it is too late. Several countries have shown that taxation can work to reduce the consumption of unhealthy products. Other promising policy actions include front of pack warning labels, marketing to children restrictions and regulations of food and beverages in schools.

5. The private sector needs to commit to food sourced from responsible supply chains and that means purchasing ingredients and processing them in a way that is sustainable, transparent and respectful of people, animals and the environment.

6. Scientists from all relevant fields of research are called upon to expand research on food safety and healthy diets as defined above. There is a lack of evidence on food safety burden and impacts, notably unproven but potentially large impact of hazards such as toxoplasma, pesticides and mycotoxins, and the lack of information on cost-effective intervention. A particular issue is the scale and impact of aflatoxins, on which participants in the workshop held divergent views, but agreed on the need for better assessment and preventative actions.

7. There is a need to establish more food safety programs that provide women with the knowledge and tools to produce and prepare food for their children that is as safe and nutritious as possible.

8. Advocating for food safety and educating consumers and small producers is essential. We note WHO's Five Keys to Safer Food campaign has been deployed in over 130 countries and continues to drive empowerment of consumers, and FAO's support to develop member countries' capacities to effectively manage food safety and quality by providing scientific advice and training tools.

9. We call for support of the efforts of WHO/FAO with partners via a set of international conferences in 2019 to improve food safety and healthy diets and call for specific actions with a clearly defined time schedule and responsible actors.

The co-chairs thank the Pontifical Academy of Science for hosting the meeting and expressed particular appreciation to José Graziano da Silva, FAO Director General, Dr Tedros Adhanom Ghebreyesus, WHO Director General, and Bishop Gallagher, the Secretary for Relations with States within the Holy See's Secretariat of State, for addressing them, and for undertaking to use these findings in their global leadership work on these issues in 2019.

Achieving a healthy diet in a way that protects people and the planet is a moral imperative for humanity, and we invite all faith communities and persons of good will to urgently work together to support this cause.

Signed:

Prof. Joachim von Braun | President of the Pontifical Academy of Sciences

Dr. Marcelo Sánchez Sorondo | Bishop-Chancellor of the Pontifical Academy of Sciences

Dr. Lawrence Haddad | Executive Director, Global Alliance for Improved Nutrition (GAIN)

Dr. Jessica Fanzo | Bloomberg Distinguished Associate Professor of Global Food and Agriculture Policy and Ethics, Johns Hopkins University

The International Livestock Research Institute (ILRI)

Prof. J. David Miller | Department of Chemistry, Carleton University

Prof. Dr. Jakob Zinsstag-Klopfenstein | Deputy Head, Department of Epidemiology and Public Health, Swiss Tropical and Public Health Institute

Dr. Steven Jaffee | Lead Agricultural Economist, World Bank

Dr. Rosa S. Rolle | Senior Enterprise Development Officer, FAO

Dr. Pawan Agarwal | CEO, Food Safety and Standards Authority of India

Greg S. Garrett | Director of Food Policy and Finance, GAIN

Dr. Emorn Udomkesmalee | Co-Chair, Global Nutrition Report's International Expert Group

Dr. Howarth Bouis | CEO, HarvestPlus

Dr. Lynnette Neufeld | Director for Knowledge Leadership, GAIN

Dr. Juan Rivera | Director of the Mexican Institute of Public Health (INSP)

Vinita Bali | Chair of the Board of Directors, GAIN

Dr. Klaus Kraemer | Managing Director, DSM Sight and Life Foundation

Dr. Renata Clarke | Director Food Safety, FAO

Rabbi Awraham Soetendorp | President and Founder of the Jacob Soetendorp Institute for Human Values

Archbishop Bernard Ntahoturi | Archbishop of Canterbury's personal representative to the Holy See and Director of the Anglican Centre in Rome

Kathryn Dewey, PhD. | Distinguished Professor Emerita, Department of Nutrition, University of California, USA

Prof Dr em. Hans K Biesalski | Department of Biological Chemistry and Nutrition, University Hohenheim, Germany

Mauricio Adade | President Global Malnutrition Partnerships & Programs and Latin America Royal DSM, Netherlands

Tom Arnold | Board member, GAIN & Chair, EU Commission Task Force on Rural Africa. Ireland

Sir Gordon Conway | Professor of International Development, Imperial College, London

Mathias Mogge | Secretary General Deutsche Welthungerhilfe e. V. Bonn, Germany

David Nabarro | Strategic Director, 4SD & 2018 World Food Prize Laureate

Lucy Sullivan | Executive Director of 1,000 Days

End notes:

[1] <http://www.pas.va/content/accademia/en/events/2018/food.html>

[2] WHO Estimation of the Global Burden of Foodborne Diseases, 2015