



## SURVEY



# **THE ESSENTIAL ROLE OF FOOD SCIENCE AND TECHNOLOGY IN FUTURE FOOD SYSTEMS**

## Introduction

The role of The International Union of Food Science and technology (IUFOST) is to illuminate the central role of the discipline of Food Science and Technology in ensuring safe, secure and sufficient nutritious food for all. The Scientific Committee of the UN Global Food Summit has acknowledged the importance of IUFOST in the framework for developing future food systems and in providing scientific evidence of where and how we need to work together in creating sustainable food systems.

IUFOST and IAFOST will be compiling submissions, as agreed with the UN Scientific Committee Chair for the UN Food Systems Summit that is to be held in September 2021. IUFOST and IAFOST representing global food science and technology are applying various methodologies including this survey to prepare our intervention for the Summit and to identify the importance of our work in every sector going forward.

## Background

Food Systems around the world are changing rapidly as a result of urbanisation, climate change, and many other physical and socio-economic stresses. We have seen these stresses escalate during the present global crisis. This is demonstrated in the changing or disrupted distribution patterns, concerns about the affordability and availability of nutritious food. Sustainable food systems, described as those providing a healthy diet, including safe and nutritious food for all, sustainable consumption patterns, equitable livelihoods, resilience to vulnerabilities, shocks and stress are the goals for the future.

- What solutions can Food Scientists, Technologists, Engineers offer for immediate, medium and long term to achieve these goals?
- What policies are being implemented, could be implemented from the perspective of FS&T to help achieve these goals?

## THE FOOD SCIENCE AND TECHNOLOGY GLOBAL COMMUNITY NEEDS TO PRESENT EVIDENCE-BASED SOLUTIONS.

Please record examples of solutions and what actions can be taken to achieve those and who would drive these solutions – scientific community, policy makers, international non-governmental organisation, local problem solvers, consumer.

Engagement should include cross-disciplinary activity, mobilisation of your scientists and students, gathering of local and regional scientific communities. Inclusivity in potential and actual research partnerships also is a requirement. Diversity, excellence and transparency are to be key features of accepted papers for the Summit.

- A. Cross-cutting themes that may be of interest for the disciplines of Food Science, Technology and nutrition in formulating policy briefs include:
- Food safety, food borne illness, NCDs, allergens, mycotoxins, food safety risks
  - Role of Science, Technology and innovation
    - IUFoST may voluntarily provide a working paper on this by engaging experts/scientists from academia and private sectors/food industries
  - Fresh foods, processed and preserved foods
    - Role of processing that in one hand will prolong shelf life but on the other some of processed may produce harmful substances?
    - health harming substances should be complemented with components and organisms to capture different sources of harming processes.  
Indigenous food systems and inclusive transformation of smallholder farming
  - Capacity building, education, communication, role of media, digitalization: role of gender, youth
  - Responding to current trends in food consumption: natural, light, local, sustainable, etc.
- B. Example of Preparation paper on Healthy diets by UN Scientific Group:
- Inconsistencies in terminology and research gaps that they had encountered are being noted
  - Rationale in terms of efforts undertaken to understand a healthy diet, as a part of healthy lifestyles. are needed
  - The difference between individual food items and their intake → dietary based guidelines are important to note
  - The affordability of a healthy diet as a challenge: Healthy diets can be unaffordable, come from unsustainable food systems and not be aligned to the Food Security definition (availability, access, etc).
  - Robust definition of diet including food safety is an interesting opportunity to draw connections between human and ecosystem health, i.e., encroachment and zoonoses, groundwater overexploitation and arsenic, etc.
  - Need to stay in the major groups, around fibers, fruits, plant proteins, animal proteins ...etc.
  - Need to address processing impact on food quality (Nutrition) and safety.

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Google Link: <https://bit.ly/3rMIHnA>

For a fillable word doc, contact [Secretariat@iufost.org](mailto:Secretariat@iufost.org)

If you are interested in assisting with the compilation, drafting and editing of the IUFoST interventions, please register your interest to the IUFoST secretariat at [Secretariat@iufost.org](mailto:Secretariat@iufost.org),  
Subject line: Academy Council.

Thank you.