

# International Symposium on Food Safety and Control



**Monday, 27 May 2024 - Friday, 31 May 2024**

**IAEA - Headquarters**

## Scientific Programme

## **Food authenticity and fighting food fraud**

- Methods and systems to support food authenticity and combat food fraud
- Isotopic and elemental analysis for food authenticity and verification of production and geographical origin
- Field-deployable methods to check food authenticity at the point of contact
- Promotion of food authenticity for food safety and to improve nutrition

## **Food and phytosanitary irradiation**

- Food irradiation to maintain and extend food quality, minimise pathogens in food and food packaging
- Phytosanitary applications of food irradiation to meet pest quarantine requirements
- Advances in machine source irradiation using electron beam and X rays including soft beam (keV) technologies
- Dosimetry and dose modelling for process control

## **Chemical residues and contaminants in food and feed**

- Detection and control of chemical residues and contaminants in food and feed to protect human and animal health
- Contributing to antimicrobial resistance knowledge and control through antimicrobial residue monitoring
- Building resilience to climate change - laboratory capability to identify and respond to changing contamination patterns

## **Preparing for and responding to emergencies and incidents affecting the food supply**

- Rapid, field-deployable screening tests for food contaminants
- Methodology to help trace contaminated products to origin
- Laboratory networks for fast response and communication
- Food irradiation for long-life emergency rations (for responders and those affected)

## **Detection and characterization of pathogens in food**

- Nuclear and related techniques for the detection of pathogens in food
- Contributing to antimicrobial resistance knowledge and control through the detection and characterization of antimicrobial resistant organisms

## **Standard setting and risk assessment**

Procedures and engagement with Codex Alimentarius

- Irradiation dosimetry and generic treatments
- Risk-based food safety and control
- Labs and networks using nuclear-related methods to meet food safety/quality equivalence standards for trade

## **One Health**

- Holistic approaches to human, animal and environmental health