



JOINT FAO/WHO FOOD STANDARDS PROGRAMME CODEX ALIMENTARIUS COMMISSION

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ACTIVITIES OF THE JOINT FAO/IAEA DIVISION OF NUCLEAR TECHNIQUES IN FOOD AND AGRICULTURE RELEVANT TO CODEX WORK¹

1. For almost 50 years, the Joint FAO/IAEA Division of Nuclear Techniques in Food and Agriculture (the Joint FAO/IAEA Division) has uniquely promoted the mandates of both FAO, in its efforts to eliminate world hunger and reduce poverty through sustainable agricultural and rural development, improved nutrition and food security, and the International Atomic Energy Agency (IAEA), through peaceful uses of atomic energy to accelerate and expand the contributions of nuclear technologies to promote global health and prosperity.
2. The mission of the Joint Division is to strengthen capacities for the use of nuclear techniques for sustainable food security and to disseminate these techniques through international activities in research, training and outreach in its Member States. The Joint Division consists of five sections on food and environmental protection, soil and water management, plant breeding and genetics, animal production and health, and insect pest control.
3. The Joint Division will continue to strengthen its joint efforts with sister divisions in FAO Headquarters to improve food safety, protect consumer health, and facilitate international agricultural trade by providing assistance in four main areas, namely, coordinating and supporting research, providing technical and advisory services, providing laboratory support and training, and collecting, analysing and disseminating information. The activities related to the work of Codex are the use of ionizing radiation, the control of food contaminants, and the management of nuclear and radiological emergencies affecting food and agriculture.
4. In these Codex-related fields of activity, the Joint Division currently provides technical support and management for thirty three national and nine regional capacity building projects through the IAEA Technical Cooperation program, and coordinates four international research projects.

JAPANESE NUCLEAR EMERGENCY

5. Subsequent to our report² to the 34th Session of the Joint FAO/WHO Codex Alimentarius Commission in July 2011, activities of the Joint FAO/IAEA Division related to the Japanese nuclear emergency include:

¹ Document prepared by and under responsibility of the Joint FAO/IAEA Division (please see <http://www-naweb.iaea.org/nafa/index.html> for additional details).

² See document CAC/34 INF/7 (ftp://ftp.fao.org/codex/meetings/CAC/CAC34/if34_07e.pdf) for details.

- Cooperation with other IAEA departments, WHO and other international organizations in the dissemination and interpretation of international standards
- Collection and analysis of monitoring data (FAO/IAEA database)
- Participation in the WHO International Expert Panel on Preliminary Dose Estimation from the Nuclear Accident after the 2011 Great East Japan Earthquake and Tsunami
- Participation in the UNSCEAR Assessment of Exposure and Dose Assessment for the Public and Environment
- Implementation of activities related to the IAEA Nuclear Safety Action Plan

6. New standard limits for radionuclides in food were announced in early March 2012 by the Japanese Ministry of Health, Labour and Welfare with an enforcement date of 1 April 2012 (transitional measures apply to some commodities). As of 30 May 2012, more than 172,000 samples were collected for over 500 types of foodstuffs from 47 prefectures in Japan, indicating that less than 3% of samples (at 30 May 2012) exceeded the Japanese regulation values or new standard limits for radionuclides in foods for radioactive cesium.

7. Information on the interpretation and application of the Codex guideline levels for radionuclides in foods were widely disseminated after the Fukushima accident – primarily as related to international trade. However, international standards containing food and agriculture provisions, including IAEA safety standards, may need a further examination based on the Japanese experience. This would include the strengthening of international standard provisions for the control of radionuclide contamination of crops, animals, soil and water, as well as the provision of training and support in the interpretation and application of standards.

8. In follow-up to discussions at the 6th Session of the Codex Committee on Contaminants in Foods (CCCF) to involve the IAEA and other relevant international organizations in the proposed revision of the Codex Guideline Levels for Radionuclides in Foods (paragraphs 48-51 and 169-173, REP12/CF), the Joint FAO/IAEA Division gives notice of its intention to participate and contribute to the electronic CCCF Working Group undertaking this new work.

NEW DATABASE APPLICATIONS ON FOOD CONTAMINANTS AND FOOD IRRADIATION

Veterinary Drug Residues

9. Access to analytical methods continues to be a problem in many developing country Member States, especially in the form of validated method protocols. To help address this problem, the Joint FAO/IAEA Division has collaborated with the Codex Committee on Residues of Veterinary Drugs in Foods in publishing analytical methods made available by National Authorities on its web pages.³

10. A new Food Contaminant and Residue Information System (FCRIS) web application has been created. In addition to the new methods database within FCRIS, the system includes revised information from the previous Joint FAO/IAEA Division INFOCRIS database (<http://www-infocris.iaea.org/EN/default.htm>), which will be replaced by FCRIS. This is a compendium of certain contaminants in foods in a user-friendly platform that facilitates the uploading of new information.

11. The methods database will contain methods from various sources. Some of the methods already uploaded have been developed through activities of the Joint FAO/IAEA Division, while others are linked to, for example, the United States Department of Agriculture/Food Safety Inspection Service (USDA/FSIS) webpages and the DILAVE laboratories of the Ministry of Agriculture, Livestock and Fisheries, Uruguay.

³ Please see the report of the 20th Session of the Codex Committee on Residues of Veterinary Drugs in Foods for additional details (paragraphs 24-29 and 91-96, REP12/RVDF)

Additional methods will soon be obtained from the United Kingdom and Canada, and further submissions are invited from all Codex Member States for review and upload by FAO/IAEA staff. The FCRIS database will accommodate both multi-residue analytical methods and single analyte methods. Access to the methods is intended to enhance the capabilities of developing countries and strengthen residue monitoring plans.

Pesticide Residues

12. The associated FCRIS Pesticide Attributes Database (PAD) and the Pesticide Residue Methods (PRM) database are being developed as resources for physicochemical / toxicological data and for methods of analysis for pesticides, respectively.

13. FCRIS and the related PAD and PRM databases still require further review and refinement before publication on the Joint FAO/IAEA Division website. In the meantime, we welcome the submission of additional information from Codex members and observers through established Codex procedures.⁴

Food Irradiation

14. Two new Food Irradiation Treatment Facilities and Irradiated Food Authorization databases have been developed on the basis of current NUCLEUS databases related to food irradiation (<http://www-naweb.iaea.org/nafa/databases-nafa.html>).

15. As the current databases are becoming out-dated both in terms of entries and the computer coding that supports the data, we have totally revised and recoded the database in a user-friendly platform that facilitates the uploading of new information as well as the editing of existing information.

IAEA SCIENTIFIC FORUM - FOOD FOR THE FUTURE: MEETING THE CHALLENGES WITH NUCLEAR APPLICATIONS

16. The IAEA Scientific Forum on “Food for the Future: Meeting the Challenges with Nuclear Applications”, will be held from 18-19 September 2012 during the 56th Session of the IAEA General Conference. The Scientific Forum, which will include three separate sessions on Increasing Food Production, Ensuring Food Protection and Enhancing Food Safety, will discuss the challenges and solutions to satisfy food demands from a growing population as well as the roles played by nuclear applications in food and agricultural production. The Joint FAO/IAEA Division, together with the IAEA Technical Cooperation Department, is supporting this commendable task through multiple activities.

⁴ Please see the report of the 44th Session of the Codex Committee on Pesticide Residues in Foods for additional details (paragraphs 11-12, 16 and 180-183, REP12/PR)