

codex alimentarius commission



FOOD AND AGRICULTURE
ORGANIZATION
OF THE UNITED NATIONS

WORLD
HEALTH
ORGANIZATION



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Agenda Item 3

CX/EURO 00/3

JOINT FAO/WHO FOOD STANDARDS PROGRAMME CODEX COORDINATING COMMITTEE FOR EUROPE

Twenty-second Session
Madrid, Spain, 3 – 6 October 2000

REPORT ON FOOD SAFETY/FOOD CONTROL ACTIVITIES OF FAO AND WHO COMPLEMENTARY TO THE WORK OF THE CODEX ALIMENTARIUS COMMISSION SINCE THE 21ST SESSION OF THE COMMITTEE

I. JOINT FAO/WHO ACTIVITIES

1. JECFA SUMMARY 1998-2000

The Joint FAO/WHO Expert Committee on Food Additives provides scientific guidance to the Codex Committee on Food Additives and Contaminants and the Codex Committee on Residues of Veterinary Drugs in Food. The 51st, 53rd and 55th JECFA assessed over 600 food additives including approximately 560 flavoring agents and five contaminants - lead, methylmercury, zearalenone, cadmium and tin-and conducted intake assessment on five specific food additives. They updated principles governing the establishment and revision of specifications for: establishing ADIs, microbiological criteria for food additives, flavoring agents, vitamins and minerals, enzyme preparations from genetically modified organisms, and the heavy metals limit tests. They evaluated the safety-in-use of substances used as food additives for enzyme preparations, flavoring agents, food colors, glazing agents, preservatives, sweetening agents, thickening agents and miscellaneous food additives. New or revised identity and purity specifications for the additives JECFA evaluated were published as Food and Nutrition Paper no 52, as Addenda 6 and 7 (number 8 is in process).

They reviewed a WHO Expert Report on the scientific criteria for including and/or excluding specific food and food products as food allergens at the request of the Codex Committee on Food Labelling and considered allergenicity of peanut and soya bean oils.

Finally, the JECFA began the process of drafting specific heavy metals limits for food additives (e.g., lead, arsenic) in place of the general heavy metals limits. Specifically, at the 55th JECFA, new limits were proposed for organic and inorganic phosphate emulsifiers.

Regarding residues of some veterinary drugs in animals and food, two meetings were held. The 52nd and 54th JECFA evaluated thirty (30) veterinary drugs, thirteen (13) for the first time. Drugs evaluated included anthelmintics (6), antimicrobials (11), antiprotozoals (3), glucocorticosteroids (1), insecticides used as veterinary drugs (6), animal production aids (2) and tranquilizers (1). JECFA established twelve (12) acceptable daily intakes (ADIs), including two group ADIs. For one substance, an ADI “not specified” was allocated. Twenty-nine (29) temporary MRLs on three substances were not maintained. JECFA recommended 169 maximum residue limits (MRLs), of which 35 are temporary MRLs. In addition, JECFA made substantial progress in harmonisation with JMPR for those substances used either as a pesticide or as a veterinary drug, including new or revised definitions regarding the matrix or product to which an MRL applies. Two residue monographs for certain residues of veterinary drugs in food were published as part of the Food and Nutrition Paper series 41.

2. Microbiological Risk Assessment

Risk assessment of microbiological hazards in foods has been identified as a priority area of work for the Codex Alimentarius Commission. At its last session (32 nd) the Codex Committee on Food Hygiene (CCFH) identified a list of pathogen-commodity combinations that require expert risk assessment advice. In response, FAO and WHO, have jointly launched a programme of work with the objective of providing expert advice on risk assessment of microbiological hazards in foods to their Member countries and to the Codex Alimentarius Commission.

To implement this programme of work, FAO and WHO have convened the following major meetings:

a) Joint FAO/WHO Hazard Characterisation Workshop

The primary purpose of this workshop was to begin a process for the development of a practical guidelines document on hazard characterization of microbiological hazards in food and water. In order to do this the workshop compared and reviewed the approaches used in hazard characterization for several pathogens (*Salmonella* spp., *Listeria monocytogenes*, enterohaemorrhagic *Escherichia coli*, *Cryptosporidium parvum* and Norwalk-like viruses). Comparing the approaches used for these pathogens formed the basis for the discussions and provided a means of illustrating the weaknesses and benefits of the approaches currently being used. Based on this information, the workshop formulated general principles and guidelines for hazard characterization. The first draft of these guidelines was presented to the Joint FAO/WHO Expert Consultation on Risk Assessment of Microbiological Hazards in Foods, that took place in July 2000, for review and comment. This document will be further reviewed before finalization.

b) Joint FAO/WHO Expert Consultations on Risk Assessment of Microbiological Hazards in Foods

The objectives of the Consultation were 1) to provide scientific advice to FAO/WHO Member countries and to Codex on the risk assessment of *Salmonella* spp. in broilers and eggs and *Listeria monocytogenes* in ready-to-eat foods; 2) to provide guidance to FAO and WHO Member Countries and Codex on practical guidelines and methodology for hazard characterization and exposure assessment; and 3) to identify the knowledge gaps and information requirements needed to complete the above-mentioned risk assessments. The report of the Expert Consultation will be published and presented to the next session of the Codex Committee on Food Hygiene in October 2000, and the working documents that were prepared by expert drafting groups and presented to the Consultation will be posted on the respective FAO and WHO websites for further public comments.

3. Foods Derived from Biotechnology

In June 2000, the Joint FAO/WHO Consultation on Foods Derived from Biotechnology was held in Geneva. It addressed the overall safety aspects of foods derived from genetically modified plants and reviewed the existing strategies for the safety and nutritional assessment of those foods. It also addressed the questions posed by the Codex *ad hoc* Intergovernmental Task Force on Foods Derived from Biotechnology.

The Consultation identified specific areas on which further expert consultation was needed and recommended that FAO/WHO should convene an expert consultation on the assessment of allergenicity of genetically modified foods and the novel proteins contained therein as a matter of priority. The Second consultation on allergenicity is scheduled to be held in the beginning of the year 2001.

4. Selection of Experts

To further improve the transparency of the selection procedure of experts who attend expert consultations, FAO and WHO jointly established a new procedure. In the field of microbiological risk assessment and safety assessment of genetically modified foods, FAO and WHO established rosters of experts (biotechnology and microbiological risk assessment) from which individuals would be selected to serve at expert consultations. In order to establish the rosters, FAO and WHO issued "Call for application to the roster", which described the essential qualification of the applicants, selection procedure for the roster and other relevant information. The rosters are posted on the respective WHO and FAO websites.

II. FAO ACTIVITIES

A) GLOBAL ACTIVITIES

1. FAO International Conference on International Food Trade Beyond (Melbourne, 11-15 October 1999)

The conference considered how food quality and safety issues affect trade, health and development at both domestic and international levels. Pointing the way from 2000 onwards, it took into account recommendations of the 1991 FAO/WHO Conference, current needs in the field of food trade, the Uruguay Round Agreements and the forthcoming round of WTO negotiations. The Conference made a number of recommendations which were considered by the Executive Committee and its conclusions are presented under Agenda Item 2 (CX/EURO 00/2).

2. Third International Food Data Conference (Rome, 5-7 July 1999)

The conference was organized by FAO in cooperation with the European Cooperation and Research Action on Food Consumption and Composition Data, the United Nations University, the International Union of Nutritional Sciences and the Italian National Institute of Nutrition, Rome. The aim of the conference was to discuss basic subjects, current issues and future directions in generating, compiling, disseminating and using food composition data. Issues related to data quality assessment, sampling and nutritional quality were discussed and recommendations made. Through the Conference, members of the food composition scientific/technical community gained an appreciation of how food composition activities fit in with the work of Codex Alimentarius and with FAO's other food quality and safety programmes.

3. FAO/IAEA/AOAC/IUPAC International Workshop on Principles and Practices of Method Validation (Budapest, 4-6 November 1999)

This workshop provided a forum for presenting research results and exchanging experiences and practical solutions related to the "in-house method validation of analytical methods" in general; and specifically the validation of methods for the analysis of pesticide residues, veterinary drug residues and mycotoxins. The recommendations of the workshop will be considered in the framework of Codex, especially by the next session of the Committee on Methods of Analysis and Sampling (February 2001).

4. FAO Expert Consultation on Trade Impact of *Listeria* in Fish Products (Amherst, USA., 17-20 May 1999)

The consultation was convened in response to concerns regarding the impact in the fishery sector of zero-tolerance policy for *Listeria monocytogenes* in foods. The Consultation documented the current scientific knowledge concerning the risks of listeriosis in relation to fishery products in order to identify the risk contributing and risk mitigation factors. The Consultation recommended that for the purpose of setting standards it should be accepted that it is not possible to produce certain fisheries products consistently free of *L. monocytogenes*, and reviewed measures for the prevention and control of this micro-organism in foods. The Consultation also recommended that food quality and safety assurance systems based on good hygienic practices and HACCP principles be developed and implemented to reduce the potential of colonisation. The Consultation proposed a decision tree for establishing criteria for *L. monocytogenes* in food in international trade and recommended that microbiological criteria for this organism should be harmonised, risk-based and only used on ready-to-eat foods capable of supporting its growth. The report of the consultation is available on the FAO web site at <http://www.fao.org/WAICENT/FAOINFO/ECONOMIC/ESN/listeria/listeria.htm>.

B) REGIONAL ACTIVITIES

1. FAO Umbrella Programme for Training on Uruguay Round Follow up and Multilateral Trade Negotiations on Agriculture.

FAO continue assisting developing countries on agricultural trade issues and, in particular, in preparing for multilateral trade negotiations including in agriculture, fisheries and forestry inter alia through studies analysis and training. An initial series of fourteen subregional workshops are being organized as follows: 4 in Africa, 3 in Asia, 2 in the near East; 2 in Europe and 3 in Latin America. An important part of these

workshops is the discussion of the importance of Codex alimentarius in the implementation of the WTO SPS Agreement in the area of food safety.

In the case of Europe FAO organized two subregional workshops in the Subregion of Central and Eastern Europe, as follows:

Workshop 1 (4-8 October 1999, Prague, Czech Republic)

Participating countries: Bulgaria, Cyprus, the Czech Republic, Estonia, Hungary, Latvia, Lithuania, Malta, Poland, Romania, Slovakia, Slovenia and Turkey (80 participants).

Workshop 2 (10-14 January 2000, Prague, Czech Republic)

Participating Countries: Albania, Armenia, Azerbaijan, Bosnia-Herzegovina, Croatia, Georgia, Kazakhstan, the Kyrgyz Republic, FYR Macedonia, Moldova and Tajikistan (50 participants).

These workshops were implemented under the aegis of the Umbrella Programme for training on Uruguay Round and future multilateral trade negotiations (MTN) on agriculture with the purpose of enhancing the capability of the participating countries to deal with MTN in agriculture in order to maximize benefits as current or potential participants in the WTO. The countries of the sub-region were divided into two groups according to common features shared. The main objectives of the workshops was to provide participating countries with an increased understanding of the existing WTO Agreements relevant to trade in food and agriculture products; provide them with information on the technical capacities required to comply with these Agreements; prepare participants to analyze new issues that are likely to arise in the negotiating process and the consequences for them of alternative positions; review and analyze specific issues of regional concern. The workshop also provided the participants with guidance on how to access further information relevant to the WTO Agreements and assistance in complying with the Agreements.

2. Other activities

Countries from the region continue to receive technical assistance from FAO in the area of General Principles of Food Hygiene and application of hazard analysis critical control point (HACCP). In this regard a Training of Trainers Course on Food Quality and Safety based on Good Manufacturing Practices (GMPs) and the Hazard Analysis Critical Control Point (HACCP) system was held in Latvia from 24 May - 4 June 1999. The venue for the training course was the National Rehabilitation Center, Jurmala, Latvia with participation from Latvia, Lithuania and Estonia. Six persons from Latvia were trained representing the University of Agriculture, the food industry, and state sanitary and veterinary inspection bodies.

FAO and the Government of Spain are negotiation a co-publishing agreement to publish the Spanish version of the FAO Manual on Food Quality and safety Systems - A Training Manual on Food Hygiene and the Hazard Analysis and Critical Control Point System (HACCP).

Further information on technical assistance will be provided in an addendum to the present document.

III. WHO ACTIVITIES

A. GLOBAL ACTIVITIES

1. World Health Assembly Resolution on Food Safety

The 53rd Session of the World Health Assembly, the governing body of WHO met in May 2000 and discussed the issue of food safety. The Assembly recognized that a number of extremely serious outbreaks of foodborne diseases had occurred in the world and encouraged WHO to strengthen its capacity to assist Member States to ensure the safety of foods. In connection with this, the Assembly adopted the resolution that directs future priority issues of WHO on food safety, such as microbiological risk assessment, biotechnology, food borne disease surveillance, the use of antimicrobials in food production and technical cooperation. The Resolution is posted on the following website of WHO Food Safety Programme. (<http://www.who.int/fsf/>)

2. Meeting of Interested Parties

Following the decision made at the World Health Assembly, WHO had a “Meeting of Interested Parties” in June 2000 at WHO Headquarter in Geneva. The purpose of the meeting was to present to interested parties, i.e. Member States, international organisations, and NGOs, the details of WHO’s future plans on food safety and to receive suggestions from external sources. The documents presented are posted on the following website. (http://www.who.int/eha/MIP2000/index_en.htm)

3. Microbiological Risk Assessment

In addition to the joint FAO/WHO activities, in collaboration with the Institute for Hygiene and Food Safety of the Federal Dairy Research Center, Germany and FAO, convened an Expert Consultation on the Interaction between Assessors and Managers of Microbiological Hazards in Foods. The main objective of the Consultation was to provide guidance on the appropriate mode of interaction between assessors and managers in the field of microbiological risk assessment. The Consultation addressed the issue of developing a clear and comprehensive description of the scope of work for risk assessment; how risk assessment results can be translated into intervention strategies and the use of terminology in communications between risk assessors and risk managers. The report of the Consultation will be posted on the WHO Food Safety Programme website.

4. Antimicrobial resistance

A WHO Consultation on Global Principles for Containment of Antimicrobial Resistance in Animals Intended for Food was held in Geneva from 5 – 9 June 2000. The objective of the meeting was to develop guidelines to reduce overuse and misuse of antimicrobials in animals intended for food, with the view of protecting human health. The Consultation addressed the quality of production, licensing, distribution, sales and use of antimicrobials in livestock. The final text is available from the following website. (http://www.who.int/emc/diseases/zoo/who_global_principles.html)

5. HACCP

WHO held two expert consultations on HACCP. One was regarding the role of government agencies in assessing HACCP held in June 1998. The Consultation produced the “Guideline on Regulatory Assessment of HACCP. Another consultation was held in collaboration with the Ministry of Health, Welfare and Sports of the Netherlands regarding the strategy for the implementation of HACCP in small and/or less developed businesses. Furthermore, WHO, jointly with the Industry Council for Development (ICD), produced a HACCP manual entitled “HACCP Principles and Practice”, which is targeted for food inspectors as well as personnel in food industry.

6. Food Contamination Monitoring And Assessment Programme

The Food Contamination Monitoring and Assessment Programme, which is part of the Global Environment Monitoring System (GEMS), continues to collect, collate and evaluate data to assess human exposure to chemicals through food. Recently, GEMS/Food has distributed a manual for the electronic report of the chemical contaminant data in food. GEMS/Food will also conduct an analytical quality assurance study for heavy metals and laboratories in developing countries. Any institutions wishing to participate are welcome to contact WHO.

7. Educational Material

WHO prepared a book for health workers and trainers entitled “Food Safety for Health Workers”. It also published the second edition of the manual “Food Safety for Nutritionists and other health professionals”. Further details of these materials can be obtained from the following website of WHO Food Safety Programme. (<http://www.who.int/fsf/>)

B. REGIONAL ACTIVITIES

1. Re-establishment of Food Safety Programme in WHO/EURO

The Food Safety Programme within the WHO Regional Office for EUROPE was re-established at the European Centre for Environment and Health (ECEH)-Rome Division in June 1998 after a 3-year break and operates to ensure that:

- information on food safety is properly collected and circulated to provide the basis for policy and monitoring;
- health-oriented guidelines are constantly updated;
- an international independent body plays a public health advocacy role vis-à-vis the strong economic forces acting within the areas of food production, retailing and global marketing.

At the national level, comprehensive food policies are needed, involving intersectoral collaboration to ensure effective food safety and health promoting measures, e.g. taking nutritional aspects into consideration. The specific goals of the Programme are:

- to assist Member States in the development of Food and Nutrition Action Plans
- to assist countries (particularly outside the EU) in developing/strengthening their National Food Safety Programmes (updating of food legislation, promoting quality assurance systems based on HACCP, training food inspectors in HACCP, strengthening laboratory services, etc);
- to strengthen surveillance of foodborne disease and monitoring of food contaminants in view of a better understanding of the relationship between food intake and disease causation (e.g., microbiological risk assessment);
- to disseminate correct information on food safety

2. Action Plan for Food and Nutrition

Several Programmes of the WHO Regional Office for Europe, including. Food Safety, have prepared a document, that recalls the actions taken by the Organization and other international agencies in the past and proposes an Action Plan for Food and Nutrition as well as a Draft Resolution. The document stresses the need to develop food and nutrition policies which protect and promote health and reduce the burden of food-related disease, while contributing to socio-economic development and a sustainable environment. It insists on the complementary roles played by different sectors in the formulation and implementation of such policies, and provides a framework within which Member States can begin to address the issue. The framework consists of three inter-related strategies:

- A food safety strategy, highlighting the need to prevent contamination, both chemical and biological, at all stages of the food chain. The potential impact of unsafe food on human health is of great concern and food safety systems which take a “farm to fork” perspective are being strengthened.
- A nutrition strategy geared to ensure optimal health, especially in low-income groups and during critical periods throughout life : infancy, childhood, pregnancy and lactation, and older age.
- A sustainable food supply (food security) strategy to ensure enough food of good quality, while helping to stimulate rural economies and to promote the social and environmental aspects of sustainable development.

It is also proposed to set up a Food and Nutrition Task Force to facilitate coordination between organisations: the European Union, the Council for Europe, UN agencies, especially UNICEF, FAO and Environmental and other international, intergovernmental and nongovernmental agencies. The WHO Regional Office is ready to ensure the secretariat of the Task Force .

3. Guidelines for the development/ strengthening of a National Food Safety Programme

To provide technical assistance to Member States “Guidelines for the development/strengthening of a National Food Safety Programme” have been prepared and constantly updated. They have been also translated into Russian, placed on the Centre Website (http://www.who.it/HT/food_safety.htm) as well as disseminated in the Eastern part of the WHO region through the network of WHO Liaison Officers. The guidelines encompasses different modules: -Assessment of the existing situation; Update of food legislation; Strengthening of the food control system (inspection and laboratory); Data collection (e.g. surveillance of foodborne diseases, monitoring of food contaminants and surveillance of antimicrobial resistance); Promotion of voluntary quality assurance systems in the food sector (e.g. HACCP and pre-requisites).

4. The roster of food safety experts/consultants and WHO collaborating centres

The roster of food safety experts/consultants and WHO collaborating centres to be used in connection with the provision of technical assistance has been fully revised to make updated experiences in the different fields of activity available to requesting countries.

5. Food legislation in the EU and non-EU

An electronic compilation of existing food legislation in the EU and non-EU (e.g. Swiss, Canadian, Australian) was prepared. Together with relevant, food safety related Codex Alimentarius documents it plays a major role in the process of assistance to Member States in the development/strengthening of food legislation. The WHO/FAO model food law is under revision.

6. Preparation of Training Packages

1) A training package on Hazard Analysis and Critical Control Points (HACCP), consisting of a CD-ROM prepared by WHO/HQ together with the International Council for Development (ICD) and taking into consideration specific recommendations made by different WHO expert consultations on HACCP, was prepared and tested in the field (Kosovo Province).

2) A training package on “analytical food microbiology” is in preparation: a manual of recommended food microbiology methods is under development, while a compilation of microbiological standards for food used in some 25 different countries was made available on the website (http://www.who.it/HT/food_safety.htm).

3) A training package on the "PCR-detection of genetically modified organisms (soja and maize) in food and feedingstuffs" was prepared together with the EU-Joint Research Centre of Ispra, ITA, the Wallis School of Engineer at Sion, SWI, and the Cantonal Laboratory at Zurich, SWI.

7. Others

1) The re-establishment of the WHO Programme Global Environmental Monitoring System (GEMS) Food/Euro is under evaluation.

2) Activities (at different level) were carried out for the following Member States: Israel, Belarus, Ukraine, Russia, Estonia, Turkmenistan, Yugoslavia (Serbia and Montenegro), Yugoslavia (Kosovo province), Slovenia, Italy, Romania, Bulgaria, Hungary, Former Yugoslav Republic of Macedonia, Albania, Croatia, Bosnia and Herzegovina, Latvia and Lithuania, Turkey.