

# codex alimentarius commission



FOOD AND AGRICULTURE  
ORGANIZATION  
OF THE UNITED NATIONS

WORLD  
HEALTH  
ORGANIZATION



JOINT OFFICE: Viale delle Terme di Caracalla 00100 ROME Tel: 39 06 57051 www.codexalimentarius.net Email: codex@fao.org Facsimile: 39 06 5705 4593

**Agenda Item 7**

**CX/AFRICA 02/7  
October 2002**

## **JOINT FAO/WHO FOOD STANDARDS PROGRAMME**

### **FAO/WHO COORDINATING COMMITTEE FOR AFRICA**

#### *Fifteenth Session*

*Kampala, Uganda, 26-29 November 2002*

### **OTHER MATTERS OF INTEREST FROM FAO AND WHO**

#### **INTRODUCTION**

1. This paper summarises the scientific advice provided by FAO and WHO to their member countries and the Codex Alimentarius Commission (CAC) for the period 2000 – mid 2002. The scientific advice on risk assessment of chemicals is provided through the Joint FAO/WHO Expert Committee on Food Additives (JECFA) and the Joint Meeting on Pesticide Residues (JMPR). Work on microbiological risk assessment is performed by the Joint FAO/WHO Meetings on Microbiological Risk Assessment (JEMRA).

2. The outputs from the scientific bodies provides guidance to the appropriate Codex Committee, which include the Codex Committee on Food Additives and Contaminants (CCFAC); the Codex Committee on Residues of Veterinary Drugs in Food (CCRVDF); the Codex Committee on Pesticide Residues (CCPR) and the Codex Committee on Food Hygiene (CCFH).

3. A series of Expert Consultations on biotechnology have been held to address specific topics raised by the Codex Ad Hoc Intergovernmental Task Force on Foods Derived from Biotechnology. Programs on Global Environmental Monitoring System for Food and Control of food borne infections and intoxications are being coordinated. Expert Consultations on probiotics and Conferences on food safety policy provide advice to member countries.

4. The paper is divided into two main parts, a discussion of the general issues which are common to the work of the Joint FAO/WHO Bodies/Consultations, and a description of the specific outputs of this work.

#### **GENERAL ISSUES**

5. FAO/WHO are placing increased emphasis on the procedures for the selection of experts, the generation of national data from countries and the general working procedures for the operation of the expert bodies. They are considered priority areas to further strengthen the scientific advice and opinion provided by the Joint FAO/WHO bodies and Consultations. Furthermore, the quality of the scientific data and their applicability to all countries will be enhanced where scientific data is available from all countries.

## SELECTION OF EXPERTS

6. Taking into consideration the request of the 24<sup>th</sup> Session of the Codex Alimentarius Commission (CAC), the selection procedures for experts have been revised. The amended procedures include the development of rosters of scientists for specialist areas and the “calls for experts”, are posted on the relevant FAO and WHO websites (see Annex I). In the selection of experts, every effort is made to ensure transparency, geographical distribution and reliable scientific opinion.

7. The selection process includes a review of all applications by a selection panel, which determines whether the applicants meet the essential requirements. The roster of experts for JECFA and JMPR is reviewed every 4 years, while those for *ad hoc* expert consultations are reviewed as a new issue needs to be addressed. Selected experts participate in their personal capacities, and not as representatives of their institutions or governments.

8. The "Call for experts" to form expert rosters for JECFA, JMPR, JEMRA, and biotechnology, with a description of procedures are available at the web pages shown in the Annex to this paper.

9. The provision of data by national institutions strengthens the international work on risk assessment of chemicals and microbiological hazards. However it is recognised that some countries lack resources to generate and assemble this data, and others acknowledge not making the data available for this work.

10. At recent meetings of JECFA and JEMRA, the limitations due to the lack of data have been noted. For example, for microbiological risk assessments to be applicable to a range of countries, including developing countries – there is a need for relevant scientific data from those countries. There is a general recommendation from the Expert Consultations to strengthen technical cooperation and provision of technical assistance to developing countries in particular, to develop the capacity and expertise to undertake international microbiological risk assessments.

11. With respect to microbiological risk assessment (MRA), Guidelines on the provision of national data to JEMRA have been prepared by Brazil and the Pan-American Institute of Food Protection and Zoonosis (INPPAZ)<sup>1</sup> and discussed at the 34<sup>th</sup> CCFH<sup>2</sup>.

12. The work of JECFA on exposure assessments of food additives and contaminants also requires scientific data from different countries to ensure the relevancy and application to all countries. To this end, member countries are invited to contact the JECFA Secretariat for support/guidance in developing ways of providing this data.

## PROJECT PLANNED TO UPDATE AND CONSOLIDATE PRINCIPLES AND METHODS FOR THE RISK ASSESSMENT OF CHEMICALS IN FOOD<sup>3</sup>

13. Following a request from member countries, FAO and WHO have developed a project to review the principles and procedures used by JECFA and JMPR in their risk assessment activities. The project will look at the incorporation of new scientific tools, and harmonise risk assessment procedures for different classes of chemicals with other scientific assessment bodies. Further information is available on the FAO and WHO websites<sup>4</sup> which includes the project plan and call for experts.

14. The final output of the project will be guidelines on good risk assessment practices to serve as a basis for the coordination and harmonization of the risk assessment of chemicals in food. It will contribute to improvements in the quality and timeliness of risk assessments in JECFA and JMPR.

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<sup>1</sup> Working paper CX/FH 01/15 [ftp://ftp.fao.org/codex/ccfh34/fh01\\_15e.pdf](ftp://ftp.fao.org/codex/ccfh34/fh01_15e.pdf)

<sup>2</sup> See 34th Session of CCFH. Alinorm 03/13, [ftp://ftp.fao.org/codex/alinorm03/al03\\_13e.pdf](ftp://ftp.fao.org/codex/alinorm03/al03_13e.pdf)

<sup>3</sup> Discussed at the fifty-seventh and fifty-eighth JECFA Meetings.

<sup>4</sup> FAO website <http://www.fao.org/esn/jecfa/> and WHO website <http://www.who.org/pcs>

## SPECIFIC OUTPUTS OF THE JOINT FAO/WHO ACTIVITIES

### JOINT FAO/WHO EXPERT COMMITTEE ON FOOD ADDITIVES AND CONTAMINANTS (JECFA)

15. JECFA provides scientific risk assessment advice on food additives, contaminants and veterinary drugs. A summary of the evaluations of the fifty-sixth, fifty-seventh and fifty-eighth meetings of JECFA held during 2000 - 2002 are described. Information on JECFA is available at both the FAO and WHO websites<sup>4</sup>.

#### *Food Additives*

16. A range of food additives were evaluated at the fifty-seventh meeting<sup>5</sup> and fifty-ninth meeting<sup>6</sup> of JECFA, including emulsifiers, colours, food salts, glazing agents, preservatives, sweeteners and thickening agents, and specifications were developed. JECFA provides scientific advice to the Codex Committee on Food Additives and Contaminants (CCFAC) and the results of the fifty-seventh meeting were discussed at the 34<sup>th</sup> Session of the CCFAC<sup>7</sup>.

17. Meanwhile, the assessment program on flavouring agents is continuing. A total of 1156 compounds have been evaluated, including the establishment of specifications through the fifty-ninth meeting.

18. Detailed lists of the food additives evaluated at the fifty-seventh and fifty-ninth meetings can be found in the summaries on the FAO and WHO JECFA websites.

19. More comprehensive information on JECFA evaluations of food additives is available in the on-line Compendium<sup>8</sup> (updated through the fifty-seventh meeting) and the Summary of JECFA Evaluations<sup>9</sup> (updated until the fifty-eighth JECFA).

#### *Contaminants*

20. Certain mycotoxins including aflatoxin M<sup>1</sup>, fumosins, ochratoxin A, and the trichothecenes deoxynivalenol, T-2 and HT-2 were evaluated at the fifty-sixth meeting of JECFA<sup>10</sup>.

21. Twenty-seven polychlorinated dibenzodioxins, polychlorinated dibenzofurans, and dioxin-like polychlorinated biphenyls were evaluated at the fifty-seventh meeting of JECFA. A tolerable intake was established. The Committee concluded that, in view of the long half-lives of these compounds in humans, setting regulatory limits would have no discernible effect on body burdens for several years. In contrast, long-term reductions could be gained by identifying and eliminating the routes by which these compounds pass from the environment into food supplies. Two chloropropanols were also evaluated at the fifty-seventh meeting. A tolerable intake was established for 3-chloro-1,2-propanediol.

#### *Veterinary Drugs*

22. Maximum Residue Levels (MRLs) and Acceptable Daily Intakes (ADIs) for a range of veterinary drugs were established at the fifty-eighth meeting<sup>11</sup> of JECFA. These recommendations will be presented at the 14<sup>th</sup> Session of the Codex Committee for Residues of Veterinary Drugs in Foods (CCRVDF) in Spring 2003.

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<sup>5</sup> Fifty-seventh JECFA. The full details will be published in the WHO Technical Report Series No. 909, in the toxicological monographs in the *WHO Food Additives Series* as No. 48, and in the specifications in FAO Food and Nutrition Paper Series 52/9. The summary report is available at the FAO/WHO websites.

<sup>6</sup> Fifty-ninth JECFA. The full details will be included in the WHO Technical Report Series, the *WHO Food Additives Series* as No. 50, and in the FAO Food and Nutrition Paper Series 52/Add. 10, respectively. The Summary report is available at the FAO/WHO websites.

<sup>7</sup> 34<sup>th</sup> Session of CCFAC. Alinorm 03/12, April 2002, [ftp://ftp.fao.org/codex/alinorm03/AI03\\_12e.pdf](ftp://ftp.fao.org/codex/alinorm03/AI03_12e.pdf)

<sup>8</sup> <http://www.fao.org/es/ESN/Jecfa/database/cover.htm>

<sup>9</sup> <http://jecfa.ilsa.org/>

<sup>10</sup> Fifty-sixth JECFA. The full details are published in the WHO Technical Report Series No. 906, and in the monographs in *WHO food Additives Series* as No. 47 and in the FAO Food and Nutrition Paper Series No. 74.

<sup>11</sup> Fifty-eighth JECFA. The full details will be included in the WHO Technical Report Series, in the *WHO Food Additives Series* as No. 49 and in the FAO Food and Nutrition Paper Series as No. 41/14.

23. The establishment of a risk assessment policy for the setting of MRLs for veterinary drugs is under discussion by JECFA following the request of the 13<sup>th</sup> Session of CCRVDF<sup>12</sup>. This topic will be considered by the FAO/WHO project to update principles and methods for the risk assessment of chemicals in food. A working paper addressing the specific questions (on MRLVDs) raised by CCRVDF will be prepared by the Joint FAO/WHO Secretariat for consideration at the next meeting of the Committee. This work will contribute to increased communication and transparency between risk assessors and managers and will assist in defining risk assessment policies and risk management guidelines related to the establishment of MRLVDs.

#### **JOINT FAO/WHO MEETING ON PESTICIDE RESIDUE (JMPR)**

24. The evaluation work of the Joint FAO/WHO Meeting on Pesticide Residues continued at the 2000-<sup>13</sup> and 2001-<sup>14</sup> Joint Meetings. A large number of pesticides that had been brought forward in the periodic review programme of the Codex Committee on Pesticide Residues (CCPR) were evaluated, for which Maximum Residue Levels (MRLs) were either recommended or withdrawn. Other important issues under discussion at these Meetings included the assessment of acute toxicity, consideration of risks posed by pesticides to infants and children, and the assurance of the transparency of the work of JMPR.

25. A pilot project has been proposed to improve the efficiency of pesticide residue evaluations through a system of work-sharing among different national/international bodies. The proposal is to divide the work of reviewing a submission on a pesticide among two or more reviewers in different national or international organizations, each referring to the other's evaluation in making its review, while respecting the right of each country or organization to finalise its own risk assessment and to make its own regulatory decision. Before work sharing could be accepted on a routine basis, the technical, scientific and policy conditions would have to be elaborated.

26. The reports of these Meetings and other work of JMPR including the Codex Alimentarius database on Pesticide Residues in Food are available at the FAO website<sup>15</sup>. The calls for experts with the appropriate scientific background for both the FAO Panel and the WHO Core Assessment Group have been placed on the FAO and WHO websites<sup>16</sup>.

#### **JOINT FAO/WHO MEETINGS ON MICROBIOLOGICAL RISK ASSESSMENT (JEMRA)**

27. Microbiological risk assessment (MRA) is an emerging tool for the evaluation of the safety of food and water supplies. FAO and WHO have important tasks in developing MRA at an international level and to provide advice to risk managers at national and international level. The Codex Alimentarius Commission (CAC) and in particular the Codex Committee of Food Hygiene (CCFH) has requested sound scientific advice as a basis for development of guidelines and recommendations on microbiological hazards in foods, as well as answers to specific risk management questions (raised at the 33<sup>rd</sup> Session<sup>17</sup> and 34<sup>th</sup> Session of CCFH) on certain pathogen-commodity combinations.

28. *Ad hoc* Joint FAO/WHO Expert Consultations on Microbiological Risk Assessment (JEMRA) provide this advice. The pathogen-commodity reports produced by FAO/WHO can be used in the development of risk management guidelines by the CCFH.

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<sup>12</sup> 13<sup>th</sup> Session of CCRVDF. Alinorm 03/31, [ftp://ftp.fao.org/codex/alinorm03/al03\\_31e.pdf](ftp://ftp.fao.org/codex/alinorm03/al03_31e.pdf)

<sup>13</sup> Pesticide residues in food-2000. Report of the Joint Meeting of the FAO Panel of Experts on Pesticide Residues in Food and the Environment and the WHO Core Assessment Group on Pesticide Residues. FAO Plant Production and Protection Paper 163

<sup>14</sup> Pesticide residues in food-2001. Report of the Joint Meeting of the FAO Panel of Experts on Pesticide Residues in Food and the Environment and the WHO Core Assessment Group on Pesticide Residues. FAO Plant Production and Protection Paper 167

<sup>15</sup> <http://www.fao.org/WAICENT/FAOINFO/AGRICULT/AGP/AGPP/Pesticid/Default.htm>

<sup>16</sup> [http://www.fao.org/ag/agp/agpp/pesticid/jmpr/pm\\_jmpr.htm](http://www.fao.org/ag/agp/agpp/pesticid/jmpr/pm_jmpr.htm); [http://www.who.int/pcs/jmpr/pest\\_expert\\_call.pdf](http://www.who.int/pcs/jmpr/pest_expert_call.pdf)

<sup>17</sup> See 33<sup>rd</sup> Session of CCFH, Alinorm 01/13A <ftp://ftp.fao.org/codex/alinorm01/AI0113ae.pdf>

29. This work also provides national governments with information and risk assessment tools to use in conducting their own assessments.

The scope of the work and main outputs of the Joint Expert Consultations for Risk Assessment (JEMRA) are:

- a) General Guidelines on Risk Assessment
- b) Risk Assessment of specific pathogen-commodity combinations

#### ***General Guidelines on Risk Assessment***

30. Two sets of draft Guidelines are in preparation and should be completed by the end of 2002:

- FAO/WHO Guidelines for Hazard Characterization of Microbiological Hazards in Food and Water
- FAO/WHO Guidelines on Exposure Assessment for Microbiological Hazards in Food

31. These Guidelines are intended to be used by a multidisciplinary audience involved in developing, reviewing or using microbiological risk assessment documents at international or national level. They will also be of use to risk managers who base their decision on the risk assessment results and need to be aware of the underlying principles and methodology. Future work will include the development of Guidelines for risk characterisation of microbiological hazards in food in 2003.

#### ***Risk assessment of specific pathogen-commodity combinations***

##### ***a) Salmonella spp. in broiler chickens and eggs***

32. This risk assessment is complete. It is based on two exposure assessments, one each for *Salmonella* spp. in broiler chickens and *Salmonella* Enteritidis in eggs, and one hazard characterization for *Salmonella*. The hazard characterization could potentially be used in risk assessment for *Salmonella* in other commodities as well. Based on current information the risk assessment indicates that the probability for members of the population across all age groups of becoming ill from ingesting *Salmonella* cells is assumed to be the same. For *Salmonella* in eggs a farm-to-table model was developed while for *Salmonella* spp. on broiler chickens a model from end of processing to consumption was developed.

33. The Expert Consultation held in Rome, 30 April – 4 May 2001<sup>18</sup> reviewed these risk assessments. The *Salmonella* spp. risk assessment provides information that would be useful in determining the impact intervention strategies may have on reducing cases of salmonellosis from contaminated eggs and poultry.

34. The 34<sup>th</sup> Session of the CCFH recommended that the results of the risk assessment on *Salmonella* Enteritidis in eggs be taken into consideration in the Proposed Draft revision of the Code of Hygienic practice for Egg Products. Based on the MRA work on *Salmonella* in poultry, CCFH established a drafting Group to develop a Discussion Paper on Risk Management Strategies for *Salmonella* spp. in poultry to better utilise the risk assessment. It will be discussed at the 35<sup>th</sup> Session of CCFH to be held in 2003.

##### ***b) Listeria spp. in ready-to-eat foods***

35. The risk assessment was limited to a finite range of ready-to-eat (RTE) foods selected to represent various classes of product characteristics, in order to determine if the risk of these foods serving as a vehicle for human foodborne listeriosis can be estimated. The foods chosen were ice cream, pasteurised milk, smoked fish, fermented meats, and soft cheeses.

36. The risk assessment showed that the probability of becoming ill from ingesting *L. monocytogenes* was higher for susceptible populations (immunocompromised, elderly, perinatal) than the general population. The probability of becoming ill was also shown to vary between the sub-groups of the susceptible population. Eliminating higher levels of *L. monocytogenes* at the time of consumption has a large impact on the number of predicted cases of illness.

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<sup>18</sup> Joint FAO/WHO Expert Consultation on Risk Assessment of Microbiological Hazards in Foods, 30 April – 4 May 2001, Risk Characterization of *Salmonella* spp. in eggs and broiler chickens and *Listeria monocytogenes* in ready-to-eat foods, Food and Nutrition Paper 72. <http://www.fao.org/es/ESN/pagerisk/reportSL.pdf>.

37. This risk assessment was reviewed at the Expert Consultation<sup>18</sup> where the risk management questions raised at the 33<sup>rd</sup> Session of CCFH were addressed. Currently, this risk assessment is being reviewed due to some slight errors that were highlighted in the methodology. The final risk assessment is due for publication in 2002 following peer review. The 34<sup>th</sup> CCFH recommended that the risk assessment on *Listeria monocytogenes* in RTE foods be utilised in the development of the work on the “Proposed Draft Guidelines for the Control of *Listeria monocytogenes* in foods”

c) *Vibrio* spp. in seafood

38. The objective of the work on *Vibrio* spp. in seafood products was to undertake the first steps of a risk assessment to identify which *Vibrio* spp.-product combination have the most impact on public health and/or international trade. The work on *Vibrio* spp. in seafood covers *Vibrio parahaemolyticus* in raw oysters, *Vibrio vulnificus* in raw oysters, and *Vibrio cholerae* in shrimp from developing countries for export. This work was discussed at the Expert Consultation in Geneva, 23 – 27 July 2001<sup>19</sup>, and the progress made since then was reviewed at the Expert Consultation held in Bangkok, Thailand, 5 – 9 August 2002<sup>20</sup>.

39. At the 34<sup>th</sup> Session of CCFH, a drafting group was established to develop a Discussion Paper on risk management strategies for *Vibrio* spp. in seafood, with a view towards better defining questions to be addressed in the risk assessment by JEMRA.

d) *Campylobacter* spp. in broiler chickens

40. To date, the hazard identification, hazard characterization and exposure assessment components have been addressed. A farm to table exposure model has been developed. Existing national risk assessments provided invaluable resources in developing the exposure module. During the process a large number of uncertainties and gaps in data have been identified which are currently being addressed.

41. This risk assessment was discussed at the Expert Consultation held in July 2001<sup>19</sup>, and subsequently at the 34<sup>th</sup> Session of CCFH. There is ongoing interaction with the CCFH drafting group (established at the 34<sup>th</sup> Session) to ensure the work is tailored to meet the needs of the CCFH. This risk assessment was reviewed and discussed at the Expert Consultation held in Bangkok, Thailand, 5 – 9 August 2002<sup>20</sup>.

### ***Interaction between risk assessors and risk managers***

42. As the risk analysis framework is an evolving process there is a recognised need to elaborate principles and guidelines to assist risk managers at both national and international levels to optimally use risk assessment in their risk management activities. Interaction between risk assessors and risk managers is important to clearly define the scope of the risk assessment work - at the outset, to revise the scope early in the assessment if necessary, and to ensure the development of appropriate guidance by risk managers. To assist in this process, FAO/WHO have implemented two Meetings<sup>21</sup> to address this issue.

43. Guidelines for the effective utilisation of risk assessment in the development of microbiological food hygiene, standards, guidelines and related texts are under preparation. This work will be useful in the development of the Draft Principles and Guidelines for the Conduct of Microbiological Risk Management by the CCFH (at Step 3 of the Procedure).

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<sup>19</sup> Joint FAO/WHO Expert Consultation on Risk Assessment of Microbiological Hazards in Foods, Geneva, Switzerland, 23 – 27 July 2001, Hazard identification, exposure assessment and hazard characterization of *Campylobacter* spp. in broiler chickens and *Vibrio* spp. in seafood. WHO/SDE/PHE/FAO/01.4  
<http://www.fao.org/es/ESN/pagerisk/announce.htm>

<sup>20</sup> Joint FAO/WHO Expert Consultation on Risk Characterization of *Campylobacter* spp. in broilers chickens and *Vibrio* spp. in seafood, Bangkok, Thailand, 5 – 9 August 2002

<sup>21</sup> WHO Expert Consultation on the Interaction between Assessors and Managers of Microbiological Hazards in Food, Kiel, Germany, 21-23 March 2000; and FAO/WHO Expert Consultation on the Elaboration of Principles and Guidelines for the Incorporation of Quantitative Microbiological Risk Assessment in the Development of Food Hygiene Standards, Guidelines and Related Texts, 17 – 22 March 2002.  
<http://www.who.int/fsf/mbriskassess/InteractionConsultationinKiel/index.htm>



## FOODS DERIVED FROM BIOTECHNOLOGY

44. Working closely with the Codex Ad Hoc Intergovernmental Task Force on Foods Derived from Biotechnology, FAO and WHO have organised three Joint Expert Consultations to consider aspects of biotechnology. The main topics discussed to date were the safety aspects of foods derived from plants<sup>22</sup>; allergenicity<sup>23</sup> and safety assessment on the foods derived from genetically modified microorganisms<sup>24</sup>.

45. The work of these Consultations has been directly used by the Codex Task Force to develop guidelines and principles for the risk assessment of foods derived from Biotechnology. In particular, the outcome of the third Expert Consultation has been the “Draft Guidelines for the Conduct of Food Safety Assessment of Foods produced using Recombinant-DNA Microorganisms”. This draft is at step 5 of the Codex adoption procedure.

46. Three other Codex documents, including one on allergenicity of GM foods, have been advanced to Step 8 of the Codex procedure and will be examined by the 25<sup>th</sup> Session of the Codex Alimentarius Commission in 2003. A fourth Expert Consultation is scheduled to take place in November, 2002 to address the issue of genetically modified animals, including fish.

## PROBIOTICS

47. The Joint FAO/WHO Expert Consultation on Evaluation of Health and Nutritional Properties of Probiotics in Food, 1 - 4 October 2001<sup>25</sup>, evaluated the scientific information available on the properties, functionality, benefits, safety and nutritional features of probiotics. The experts agreed that adequate scientific evidence exists to indicate that there is potential for the derivation of health benefits from consuming food containing probiotics. However, it was felt that additional research data are needed to confirm a number of these health benefits in humans. The findings of the Consultation were presented at the 30<sup>th</sup> Session of the Codex Committee on Food Labelling (CCFL)<sup>26</sup>.

48. The Consultation also recognised the need to generate guidelines to set out a systematic approach for the evaluation of probiotics in food leading to the substantiation of health claims, to recommend criteria and methodology for the evaluation of probiotics, and to identify and define what data need to be available to accurately substantiate health claims.

49. Subsequent to the Consultation, a Working Group was convened to draft guidelines<sup>27</sup> and a scheme for the evaluation of probiotics for food use.

## GLOBAL FORUM OF FOOD SAFETY REGULATORS

50. The first FAO/WHO Global Forum of Food Safety Regulators was convened in Marrakech, Morocco, from 28 to 30 January 2002<sup>28</sup>. The Forum provided an opportunity for food safety regulators from 110 countries to meet and discuss food safety issues of international importance. It facilitated the exchange of information and the sharing of countries' experiences regarding food safety matters in various environments and circumstances, with participants presenting and discussing successes and problems encountered in fighting foodborne diseases. Other topics considered were the handling of food safety emergencies, tackling well-known and emerging hazards as well as how to meet the needs of developing countries.

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<sup>22</sup> Joint FAO/WHO Expert Consultation on Foods Derived from Biotechnology, 29 May – 2 June, Geneva, June 2000 <http://www.fao.org/es/ESN/gm/gmreport.pdf>

<sup>23</sup> Joint FAO/WHO Expert Consultation on Allergenicity of Foods Derived from Biotechnology, 22 – 25 January 2001. <http://www.fao.org/es/ESN/gm/allergygm.pdf>

<sup>24</sup> Joint FAO/WHO Expert Consultation on Foods derived from Biotechnology – Genetically Modified Organisms, 24 – 28 September 2001

<sup>25</sup> Report is available at <http://www.fao.org/es/ESN/Probio/report.pdf>.

<sup>26</sup> See 30<sup>th</sup> Session of CCFL, Alinorm 03/22 [ftp://ftp.fao.org/codex/alinorm03/AI03\\_22e.pdf](ftp://ftp.fao.org/codex/alinorm03/AI03_22e.pdf)

<sup>27</sup> <http://www.fao.org/es/ESN/Probio/wgreport2.pdf>

<sup>28</sup> See Proceedings <http://www.foodsafetyforum.org/global/>

51. Consensus was reached on adopting an integrated approach to food safety issues from “farm to fork” and for a risk-based approach in developing food safety policies. Many countries reported ongoing efforts in capacity building and called for more information, communication and consultation to enhance the effectiveness of these activities.

52. The participants at the Marrakech Global Forum unanimously agreed that a second Global Forum be convened in a developing country early in 2004, and requested the Joint FAO/WHO Secretariat to make the necessary arrangements. They suggested that the main theme for the Second Global Forum could be: “*Building Effective Food Safety Systems*”.

## **ACRYLAMIDE**

53. An FAO/WHO Consultation on Health Implications of Acrylamide was convened in Geneva, Switzerland, 25 – 27 June 2002<sup>29</sup>, to undertake a preliminary evaluation of new and existing data and research on acrylamide. The need for the Consultation arose from the findings by the Swedish National Food Administration (NFA) that acrylamide, a potential carcinogen, is formed in many types of food prepared/cooked at high temperatures.

54. The Consultation provided a range of recommendations for further information and new studies to better understand the risk to human health posed by acrylamide in food. Interim advice to minimise whatever risk exists, was provided for governments, industry and consumers. Furthermore an international network “Acrylamide in food” will be established inviting all interested parties to share relevant data as well as ongoing investigations.

55. It was also proposed that "quantitative risk assessment models should be investigated on the basis of scientific merit and uncertainty of estimates" prior to a full risk assessment of acrylamide by JECFA. FAO and WHO are planning to call for such a consultation in October 2003.

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<sup>29</sup> See Summary Report [http://www.who.int/fsf/Acrylamid\\_Summaryreport.pdf](http://www.who.int/fsf/Acrylamid_Summaryreport.pdf).



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**WEBSITES WITH FAO/WHO CALLS FOR EXPERTS**

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Foods derived from Biotechnology: <http://www.fao.org/es/ESN/gm/biotec-e.htm>

<http://www.who.int/fsf/GMfood/index.htm>

JECFA: <http://www.fao.org/es/ESN/Jecfa/Jecfa.htm>

[http://www.who.int/pcs/jecfa/jecfa\\_exp.htm](http://www.who.int/pcs/jecfa/jecfa_exp.htm)

<http://www.who.int/fsf/Chemicalcontaminants/index2.htm>

JMPR: [http://www.who.int/pcs/jmpr/Jmpr\\_exp.htm](http://www.who.int/pcs/jmpr/Jmpr_exp.htm)

<http://www.fao.org/WAICENT/FAOINFO/AGRICULT/AGP/AGPP/Pesticid/Default.htm>

Microbiological Hazards in <http://www.fao.org/es/ESN/pagerisk/riskpage.htm>

Foods:

<http://www.who.int/fsf/mbriskassess/index.htm>