CODEX ALIMENTARIUS COMMISSION



Food and Agriculture Organization of the United Nations



Agenda Item 13 b)

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JOINT FAO/WHO FOOD STANDARDS PROGRAMME

CODEX ALIMENTARIUS COMMISSION

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OTHER MATTERS ARISING FROM FAO AND WHO

(Prepared by FAO and WHO)

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PART I: RECENT FAO/WHO EXPERT MEETINGS AND CONSIDERATION BY CODEX

1. The scientific advice provided by FAO and WHO through JECFA, JMPR, JEMRA and *ad hoc* expert meetings remains a high priority for both organizations and continues to serve as the basis for Codex standards. The CAC remains an important client for this advice, where the results are used extensively in the development of Codex texts and standards. The advice may be equally relevant for member countries of FAO and WHO, in the strengthening of science-based decision making on food safety and nutrition issues at national and regional level. The following summarises the additional scientific advice provided in the course of 2012-2013 since FAO and WHO's previous report to the Commission in July 2012 (CX/CAC 12/35/14).

Expert meetings and outputs

2. Joint FAO/WHO Expert Committee on Food Additives (JECFA), 76th Meeting, Geneva, Switzerland, 5–14 June 2012. This meeting was held in the framework of the on-going programme on the risk assessment of food additives, including flavourings, contaminants and natural toxins. The meeting was devoted to (a) elaborate further principles for evaluating the health risk of food and (b) evaluate a considerable number of food additives and flavourings. The results were made available to and considered by the 45th Session of the Codex Committee on Food Additives (CCFA).

3. Joint FAO/WHO Meeting on Pesticide Residues (JMPR), Rome, Italy, 11–20 September 2012. The Meeting evaluated 31 pesticides, of which 7 were new compounds, and 7 were re-evaluated within the periodic review programme of the Codex Committee on Pesticide Residues (CCPR). The Meeting established acceptable daily intakes (ADIs) and acute reference doses (ARfDs). The Meeting estimated maximum residue levels, which it recommended for use as maximum residue limits (MRLs) by the CCPR. It also estimated supervised trials median residue (STMR) and highest residue (HR) levels as a basis for estimation of the dietary intake of residues of the pesticides reviewed. The recommendations made by the 2012 JMPR were available for consideration of the 45th Codex Committee on Pesticide Residues (CCPR).

4. FAO/WHO Joint Meeting on Pesticide Specifications (JMPS), 11th Meeting, Dublin, Ireland, 6-11 June 2012. This meeting was held in the framework of the on-going programme on the evaluation and development of pesticide specifications. The Joint Meeting evaluated 36 specifications for 21 active ingredients. Seven general items were discussed and the pesticide specifications established at the meeting are published on the FAO (www.fao.org/agriculture /crops/core-themes/theme/pests/pm/jmps/ps/ps-new/en/) and WHO websites (http://www.who.int/whopes/ quality/en/). The next Joint Meeting on Pesticide Specifications will be held in early June 2013.

5. Joint FAO/WHO Expert Meeting on the Public Health Risks of Histamine and other biogenic amines from fish and fishery products, Rome, 23-27 July, 2012. This meeting was held following the request from the Codex Committee on Fish and Fishery Products (CCFFP). The expert meeting focused their advice on histamine limits and related sampling plans relevant to consumer protection rather than quality determinants. The hazard identification process, in which all biogenic amines were considered, concluded that there is compelling evidence that histamine is the most significant causative agent of Scombrotoxin fish poisoning (SFP) and that histamine can be used as an indicator of SFP. Appropriate sampling plans and testing for histamine should be used to validate hazard analysis critical control point (HACCP) systems, verify the effectiveness of control measures, and detect failures in the system. The meeting analyzed a range of sampling plans implemented under different scenarios of histamine levels and acceptance of noncompliant samples and provided some advice and guidance on sampling plans. In addition, following the recommendation of the expert meeting, FAO and WHO have developed a tool to design and assess sampling plans for histamine. The tool, with its user-friendly interface, will be available from July 2013 at www.fao.org/food/food-safety-quality/publications-tools/food-safety-tools/en . The full report of the expert meeting is available at http://www.fao.org/food/food-safety-quality/a-z-index/histamine/en/ and the outcome of the meeting has been made available to the 32nd CCFFP and the 44th CCFH. The 32nd Session of the CCFFP has established an Electronic Working Group to assess how the Committee might use the scientific advice and make recommendations with respect to approaches that CCFFP could consider to integrate the advice into the relevant standards and relevant sections of the Code of Practice for Fish and Fishery Products as well as identify issues on which further clarification might be needed and as appropriate make recommendations on criteria for histamine and the associated sampling plans.

6. Joint FAO/WHO Expert Meeting on Foodborne Parasites - Prioritization for risk management, Rome, Italy, 3–7 September 2012. The 42nd Session of the Codex Committee on Food Hygiene (CCFH) (December 2010) requested FAO and WHO to review the current status of knowledge of parasites in food to better assess the global problem associated with these, the commodities involved and the related public health and socio-economic/trade issues and to identify parasite/commodity groups of greatest concern. In order to address this request FAO and WHO initiated a series of activities that culminated in an expert meeting on 3-7 September 2012. Relevant data had been identified and collated and a literature review and written reports prepared by experts representing different regions before the meeting. During the meeting, a stepwise process reduced the initial list of 96 parasites to a list of 24 parasites for ranking. Experts further identified specific vehicles of transmission for each of the 24 parasites. A multi criteria-based approach was used to rank the 24 parasites and provide a global ranking as well as a detailed approach to ranking which could be adapted for application at regional or national level. The meeting also highlighted some considerations for risk management including knowledge on foodborne attribution and possible approaches for the control of some of these foodborne parasites. Reference is also made to existing risk management texts as appropriate. The preliminary report is available at <u>http://www.fao.org/food/food-safety-quality/a-z-</u> index/foodborne-parasites/en/. The outcome of the meeting has been made available to the 44th CCFH.

7. The Commission is **invited** to note the information above. To facilitate the transfer and uptake of the relevant scientific advice by Codex, the FAO/WHO Secretariats of these activities make every effort to attend Codex working groups and Codex committee meetings. FAO and WHO would like to thank all those who supported the programme of work to provide the above-mentioned scientific advice and in particular the various experts from around the world and the donors who contributed financially and in-kind to the programme either through or outside the Global Initiative for Food-related Scientific Advice (GIFSA).

Other related activities

8. Pilot Initiative to enhance participation in the development of Codex texts and other activities related to the revision of the Principles for the Establishment and Application of Microbiological Criteria in Foods. To support the revision of the Principles for the Establishment and Application of Microbiological Criteria for Foods (CAC/GL 21-1997) the 43rd Session of the CCFH agreed to elaborate practical examples on the establishment and application of microbiological criteria for different purposes. The active participation of developing countries in the elaboration of these examples was considered critical and the Codex Trust Fund was considered as a possible means of facilitating this. A pilot initiative using a "mentoring" approach which involved coupling of more experienced lead countries and/or observer organizations ("mentors") with less experienced countries ("mentees") was established and supported by FAO, WHO and the Codex Trust Fund Secretariat.

9. The support of the Codex Trust Fund was critical in enabling some of the less experienced countries involved in this pilot initiative to physically participate in the relevant working group meeting as well as the 44th Session of the CCFH.

10. FAO/WHO would like to recognize the time and effort contributed by all the working group members which resulted in very positive initial feedback on this pilot. For the less experienced countries, this had positive results on several levels. The mentoring process provided a valuable learning experience that heightened their understanding of and ability to work with a complex subject. When all the teams gathered for a working group meeting in Parma, Italy, in May 2012, they had the opportunity to share their knowledge, data and learning experiences with members of the other teams and to meet key national experts, which enabled them to set up future exchange activities. Thus the experience of partnering less with more experienced countries was mutually beneficial. A better understanding of the problems faced by partner countries has led to more robust guidelines in which all countries' voices have been heard. This process of partnership and exchange has allowed rapid progress and, in November 2012, the Committee agreed on the guidelines and sent them to the CAC for final adoption in July 2013. A report on the lessons learned from this experience will be posted on the website within 2013.

11. FAO/WHO project on mycotoxins in sorghum (2012-2014). Following up on the ongoing discussions in the Codex Committee on Contaminants in Foods (CCCF) on the potential need for a Codex Maximum Level on mycotoxins in sorghum FAO and WHO are currently conducting a project on the issue. The aim of this project is to assist countries in generating data which the CCCF may decide to submit to JECFA to carry out a detailed risk assessment, with a view to the establishment of MLs for selected mycotoxins in sorghum. The FAO/WHO project will facilitate an assessment of the types and levels of mycotoxins in sorghum in four major sorghum producing/exporting countries. The project with a start-up date of January 2012 is funded by the European Commission through funds provided to the FAO/WHO Project and Fund for Enhanced Participation in Codex (Codex Trust Fund). FAO and WHO are working closely together to implement the project with various national and international experts. Any additional information can be provided upon request and FAO and WHO will keep the Committee informed of the progress of the project.

12. FAO/WHO Paper: State of the art on the initiatives and activities relevant to risk assessment and risk management of nanotechnologies in the food and agriculture sectors. This work is a follow up of the FAO/WHO expert meeting on the application of nanotechnologies in the food and agriculture sectors: potential food safety implications (2009). One of the key oucomes of the meeting was a recommendation for FAO and WHO to review the risk assessment strategies in particular through the use of tiered approaches, in order to address the specific emerging issues associated with the application of nanotechnologies in the food chain. In addition, at the 33rd Session of the Codex Alimentarius Commission (July 2010), the possible establishment of a Task Force on the topic of nanotechnology was discussed, however, taking into consideration of the outcome of the above mentioned FAO/WHO expert meeting, the Commission agreed that there was no need to establish a Task Force for the time being and encouraged FAO and WHO to continue working on this matter. Currently there are several ongoing initiatives and activities to develop some risk assessment/management tools (i.e., decision trees) outside of FAO/WHO including OECD, EFSA, ILSI and IFT. These need to be taken into account in FAO/WHO follow-up activities. Thus FAO and WHO initiated the process to develop a technical paper on the state of the art on the initiatives and activities relevant to risk assessment and risk management of nanotechnologies in the food and agriculture sectors. The paper underwent a public review process and and will be finalized and made available online by July 2013 at http://www.fao.org/food/food-safety-quality/a-z-index/nanotechnologies/en/ and http://www.who.int/foodsafety/biotech/nano/en/index.html.

13. FAO technical analysis paper: Low level presence (LLP) of genetically modified organisms (GMOs) in internationally traded food crops. Low level presence (LLP) of Genetically Modified Organisms (GMOs) in internationally traded crops is of growing concern to national authorities in a number of countries and to a number of private sector bodies. National policies and regulations that govern the acceptability of genetically modified (GM) crops vary. The land area under GM cultivation has grown steadily over the last two decades and many of the GM crops are important in international trade (including maize, canola, soybean). More GM crops are under development and a growing number of countries are involved in developing these crops. Current systems of production, handling and transport can lead to unintentional low level presence of GMOs in "non- GMO" consignments. A number of trade-related problems have been reported due to such unintentional mixing. However, the potential importance of this issue remains little recognized: information is scarce on the extent of LLP incidents, their impacts on trade

flows and the regulatory questions they raise. Thus FAO is carrying out a study to better understand the extent of trade-disruption due to LLP. The study intends to 1) determine the extent of the impact of LLP in internationally traded commodities or trade flows, on food and feed availability and food security and to determine which commodities and which countries are most affected; 2) determine how the impact of LLP in internationally traded commodities is likely to evolve over the next 5-10 years and how this impact will affect food security and economic development; and 3) investigate how selected regulatory scenarios could affect the movement of commodities with LLP of GMO. In order to collect basic national information on this matter, relevant national authorities have been approached by FAO to fill out a questionnaire. All the responses will be taken into consideration in conducting the overall analysis, together with other information sources (scientific literature and data/information available elsewhere). The first draft of the technical analysis paper is expected to be available in September 2013.

14. FAO online platform to share information on safety assessment of foods derived from recombinant-DNA plants authorized in accordance with the Codex "Guideline for the conduct of food safety assessment of foods derived from recombinant-DNA plants (CAC/GL 45-2003, annex III adopted in 2008)". In response to Codex members' feedback obtained during the meeting organized at the 35th CAC in 2012, FAO has established an Informal Network tpo provide input to the development of the new FAO Platform. An open invitation to join the Informal Network was sent to all the Codex Members, and as of May 2013, the Network consists of 42 people from 29 Codex members (Argentina, Australia, Austria, Belgium, Canada, Chile, China, Denmark, EC, Finland, France, Germany, Ghana, India, Indonesia, Ireland, Italy, Israel, Japan, Luxemburg, Mexico, the Netherlands, Norway, Republic of Korea, Sudan, Thailand, United Kingdom, United States of America and Vietnam). The prototype of the Platform has been reviewed several times by the Network members and the Platform will be officially launched at a Side Event during the 36th CAC in 2013.

Publications

15. In addition to the above, FAO and WHO are continuously working to ensure the outcomes of specific expert meetings and their scientific advice work in general is readily accessible through their publications. New publications in the last year include:

a) JECFA publications

- **Report of the 76th JECFA Evaluation of certain food additives.** WHO TRS 974, 2012, http://www.who.int/iris/bitstream/10665/77752/1/WHO_TRS_974_eng.pdf
- **Compendium of Food Additive Specifications,** 76th meeting. FAO JECFA Monograph 13, 2012, http://www.fao.org/fileadmin/user_upload/agns/pdf/JECFA_Monograph_13.pdf
- **Toxicological monographs of the 76th JECFA meeting**: Safety evaluation of certain food additives. WHO Food Additives Series No. 67, 2012. http://www.who.int/iris/bitstream/10665/77763/1/9789241660679_eng.pdf
- JECFA publications are available on the following websites: FAO (<u>http://www.fao.org/food/food-safety-quality/scientific-advice/jecfa/jecfa-publications/en/</u>) WHO (<u>http://www.who.int/foodsafety/chem/jecfa/publications/en/index.html</u>)

b) **JMPR** publications

- Pesticide residues in food 2012. Report of the Joint Meeting of the FAO Panel of Experts on • Pesticide Residues in Food and the Environment and WHO the Core Assessment Group, FAO Plant Production and Protection Paper 215. 2013. http://www.fao.org/fileadmin/templates/agphome/documents/Pests_Pesticides/JMPR/Report12/JMP R_2012_Report.pdf.
- The 2012 JMPR Report, Pesticide residues in food the 2012 Evalutions part I Residues .
- The 2011 JMPR Report, Pestiside residues in food the 2011 Evalutions part II Toxicological. • WHO, 2012. http://extranet.who.int/iris/bitstream/10665/75147/1/9789241665278 eng.pdf

JMPR publications are available on the following websites:

FAO (http://www.fao.org/agriculture/crops/core-themes/theme/pests/jmpr/en/)

WHO (http://www.who.int/foodsafety/chem/jmpr/publications/en/index.html)

JEMRA Publications c)

- Risk Management Tool for the Control of Campylobacter and Salmonella in Chicken Meat • (Version 1). Available at http://www.mramodels.org/poultryRMTool/. This will be available in Spanish in June 2013.
- Microbiological Sampling Plan Analysis Tool. This tool is available at: http://www.mramodels.org/sampling/ .
- JEMRA publications are available on the following websites: . FAO (http://www.fao.org/food/food-safety-quality/scientific-advice/jemra/risk-assessments/en/) WHO (http://www.who.int/foodsafety/micro/jemra/en/index.html)

d) Other publications

- FAO/WHO Paper: State of the art on the initiatives and activities relevant to risk assessment • and risk management of nanotechnologies in the food and agriculture sectors. Available at: http://www.fao.org/food/food-safety-quality/a-z-index/nanotechnologies/en/ and http://www.who.int/foodsafety/biotech/nano/en/index.html.
- FAO/WHO. 2013. The Public Health Risks of Histamine and Other Biogenic Amines from Fish and Fishery Products: expert Meeting Report. Available at: http://www.fao.org/food/foodsafety-quality/a-z-index/histamine/en/.
- WHO in collaboration with OIE, FAO and University of Utrecht. The Global View of • Available Campylobacteriosis. at: http://www.who.int/iris/bitstream/10665/80751/1/9789241564601 eng.pdf.

Upcoming meetings

16. Joint FAO/WHO Expert Committee on Food Additives (JECFA), 77th Meeting, Rome, Italy, 4-13 June 2012: The meeting will be dedicated to the (re)evaluation of a number of food additives and one contaminant. The call for data accessible is at http://www.fao.org/fileadmin/user_upload/agns/news_events/JECFA77%20Call%20for%20data%20Revisio n%201%20F%2021%20november.pdf and

http://www.who.int/foodsafety/chem/jecfa/JECFA_77_Call_Revised.pdf. .

17. Joint FAO/WHO Expert Committee on Food Additives (JECFA), 78th Meeting, Geneva, Switzerland, 5-14 November 2013: The meeting will be dedicated to the (re)evaluation of a number of residues of veterinary drugs in foods including rBST following the request of the 35th CAC. The call for data accessible is at http://www.fao.org/fileadmin/user_upload/agns/pdf/jecfa/JECFA78_Call_for_data_final_2.pdf and http://www.who.int/foodsafety/chem/jecfa/JECFA78_call_final.pdf

18. Joint FAO/WHO Meeting on Pesticide Residues (JMPR), Geneva, Switzerland, 17–26 September 2013 : The call for data is accessible at http://www.fao.org/fileadmin/templates/agphome/documents/Pests_Pesticides/JMPR/2013_JMPR_call_for_data.pdf.

PART II: STATUS OF REQUESTS FOR FAO/WHO SCIENTIFIC ADVICE

19. Both organizations continue to jointly prioritize the requests for scientific advice taking into consideration the criteria proposed by Codex as well as the requests for advice from Member Countries and the availability of resources. A table of the current requests for scientific advice posed to FAO and WHO directly by the Codex Alimentarius Commission and its subsidiary bodies as well as meetings being planned by FAO and WHO in response to requests from member countries is attached as Annex I. It presents the overall status of pending requests for scientific advice received by FAO/WHO as of May 2013.

20. FAO and WHO would like to emphasize the severe financial problems faced by the Organizations for the scientific advice program. The current financial situation no longer allows the Organizations to respond to all requests for scientific advice, including requests listed below brought forth by the Codex Alimentarius Commission. It has to be emphasized that this scientific advice forms the basis for the respective Codex Standards. Efforts need to be undertaken by Members to provide support for scientific advice activities in order to be able to support the work of Codex.

ANNEX I

JOINT FAO/WHO ACTIVITIES ON PROVISION OF SCIENTIFIC ADVICE ON FOOD SAFETY STATUS OF REQUESTS FOR FAO/WHO SCIENTIFIC ADVICE¹

In prioritizing the requests for scientific advice to be addressed, FAO and WHO continue to consider the set of criteria for the prioritization proposed by Codex (ALINORM 05/28/3, para. 75) as well as the requests of advice from Member Countries and the availability of resources. The table below presents the overall status of requests for scientific advice as of May 2013.

#	Request for Advice	Originator	Reference	Required Action by FAO/WHO	Status of Planning/ Implementation	Estimated Cost (US\$) ²	Expected Output by Codex
1	Safety evaluation of food additives and contaminants	CCFA CCCF	44 th & 45 th Sessions of CCFA 6 th & 7 th Sessions of CCCF	Joint FAO/WHO Expert Committee on Food Additives (JECFA)	Additive evaluations planned for 77 th JECFA (Rome, Italy, 4-13 June 2013).	350,000	Maximum levels, specifications for food additives, or other advice as appropriate
2	Safety evaluation of residues of veteirnary drugs	CCRVDF	20 th & 21 st Sessions of CCRVDF	Joint FAO/WHO Expert Committee on Food Additives (JECFA)	Planing underway for 78 th JECFA meeting (Geneva, Switzerland, 5- 14 Nov 2013)	300,000	Maximum residue limits, or other advice as appropriate.

¹FAO and WHO express appreciation to those governments who have contributed to support FAO/WHO scientific advice activities, either through direct financial support, facilitation of meetings at national institutes, and technical input by national experts. Figures indicate cost of pending actions related to each activity. Figures do not consider staff costs.

² Total costs for FAO/WHO, including publication of reports, but excluding staff costs.

#	Request for Advice	Originator	Reference	Required Action by FAO/WHO	Status of Planning/ Implementation	Estimated Cost (US\$) ²	Expected Output by Codex
3	Decision-tree approaches for the evaluation of veterinary drugs	JECFA Subsequently supported by CCRVDF	17 th Session of CCRVDF	Convene several expert groups to develop a detailed decision tree approach for the evaluation of veterinary drugs, which provides greater flexibility in the advice that JECFA can provide on issues relating to the potential human health effects	First draft of working document prepared and discussed at 70 th JECFA, provided to 18 th CCRVDF. Expert meeting on dietary exposure assessment methodologies held 7-11 November 2011. Pilot to evaluate new propopsals at 78 th JECFA meeting Additional extra budgetary resources required to support further developments.	150,000	Change in current work process and interaction with JECFA. Use the output to assist in the development of risk management guidance on veterinary drug residues, including for compounds without ADIs and/or MRLs

#	Request for Advice	Originator	Reference	Required Action by FAO/WHO	Status of Planning/ Implementation	Estimated Cost (US\$) ²	Expected Output by Codex
4	Development and validation of risk assessment tools on <i>Vibrio</i> spp. in seafood and advice on methodology for <i>Vibrio</i> spp. in seafood.	CCFH	41 st and 42 nd Sessions of CCFH	Implement an expert meeting to review methodology and develop and validate web-based risk assessment tools.	Workplan developed. First meeting on methodology implemented in October 2011. Training to facilitate pilot testing of methodology implemented in November 2012.	250,000	Web-based tools and consensus methodology to support the implementation of Codex Guidelines.
					Extra budgetary resources required to continue the work.		
5	Pesticide Residues	CCPR	44 rd Session of CCPR	Meetings of the Joint FAO/WHO Meeting on Pesticide Residues (JMPR)	2013 JMPR to be held from 17-26 Sep. in Geneva, Switzerland.	350,000	Maximum Residue Limits or other advice as appropriate.
6.	Risk assessment of microbiological hazards associated with dried spices and aromatic plants	gical Sessions of C ociated spices and	43 rd and 44 th Sessions of CCFH	Data collection and analysis	Call for data and experts issued.	50,000	Advice on the relevant microbiological hazards
				Drafting Group and JEMRA meeting	Systematic literature review underway as part of the work on low moisture foods		and potential control options for spice-borne hazards.
					Analysis of sampling plan performance planned for the second half of 2013		

#	Request for Advice	Originator	Reference	Required Action by FAO/WHO	Status of Planning/ Implementation	Estimated Cost (US\$) ²	Expected Output by Codex
7.	Ranking of low moisture foods of greatest concern and associated microbiological hazards and risk management options	CCFH	44 th Session of CCFH	Data collection and analysis	Call for data and experts issued.	150,000	Prioritized list of low moisture foods and potential control options for microbiological hazards associated with low moisture foods.
				Drafting Group and JEMRA meeting	Systematic literature review underway.		
					Ranking and analysis of risk management options planned for second half of 2013		
8	Review of statistical basis for the establishment of microbiological criteria		43 rd and 44 th Sessions of CCFH	JEMRA meeting	Draft document under preparation.	100,000	Guidance on the underlying statistical information on microbiological criteria to be included in Codex texts.
					Expert review to be convened in the second half of 2013		
9.	Risk-based examples for control of <i>Trichinella</i> spp. and <i>Taenia saginata/C.</i> <i>bovis</i>	CCFH	42 nd 43 rd and 44 th Session of CCFH	JEMRA meeting	Call for data issued. Expert review planned for the third quarter of 2013.	70,000	Overview of possible risk-based approaches for the control of <i>Trichinella</i> and <i>Taenia</i> saginata