



Agenda Item 2 (b)

CX/EXEC 12/67/3

**JOINT FAO/WHO FOOD STANDARDS PROGRAMME**  
**EXECUTIVE COMMITTEE OF THE CODEX ALIMENTARIUS COMMISSION**

**Sixty-seventh Session**

**FAO Headquarters, Rome, Italy**

**26-29 June 2012**

**CRITICAL REVIEW FOR THE ELABORATION OF CODEX STANDARDS AND RELATED  
TEXTS**

**PROPOSALS FOR THE ELABORATION OF NEW STANDARDS AND RELATED TEXTS**

A list of proposals to elaborate new standards and related texts is contained in **Table 1**, including the reference of the project document in the relevant report. Projects document which were not included in the report and were finalised after the session of the relevant Committee are attached to the present document in the **Annexes**. The Commission will decide whether or not to undertake new work in each case, taking into account the critical review conducted by the Executive Committee, and to decide which subsidiary body or other body should undertake the work.

The Executive Committee is invited to consider these proposals in the light of the *Strategic Plan 2008-2013* and the *Criteria for the Establishment of Work Priorities and for the Establishment of Subsidiary Bodies*.

TABLE 1: PROPOSALS FOR NEW WORK

Responsible Committee	Standard and Related Texts	Reference and project document
CCFH	Revision of the <i>Code of Hygienic Practice for Spices and Dried Aromatic Plants</i>	REP12/FH, paras 137 - 138, Appendix VII
CCFH	Annex on berries to the <i>Code of Hygienic Practice for Fresh Fruits and Vegetables (CAC/RCP 53-2003)</i>	REP12/FH, paras 139 - 140, Appendix VIII
CCCF	Code of Practice for Weed Control to Prevent and Reduce Pyrrolizidine Alkaloid Contamination in Food and Feed	REP12/CF para. 114, Appendix VII
CCCF	Revision of the Maximum Levels for Lead in Fruit Juices, Milks and Secondary Milk Products, Infant Formula, Canned Fruits and Vegetables, Fruits and Cereal Grains (except buckwheat, cañihua and quinoa) in the <i>General Standard for Contaminants and Toxins in Food and Feed</i>	REP12/CF para. 127, Appendix VIII
CCCF	Annex for Prevention and Reduction of Aflatoxins and Ochratoxin A in Sorghum to the <i>Code of Practice for the Prevention and Reduction of Mycotoxin Contamination in Cereals (CAC/RCP 51-2003)</i>	REP12/CF para. 136, Appendix IX
CCCF	Code of Practice for the Prevention and Reduction of Ochratoxin A contamination in Cocoa	REP12/CF para. 141, Appendix X
CCCF	Code of Practice to Reduce the Presence of Hydrocyanic Acid in Cassava	REP12/CF, para. 165 (see <b>Annex 1</b> to this document)
CCCF	Proposed Draft Maximum Levels for cassava and cassava products	REP12/CF, para. 165 (see <b>Annex 1</b> to this document)
CCCF	Proposed Draft levels for radionuclides in food	REP12/CF, para. 169 (see <b>Annex 2</b> to this document)
CCPR	Priority List for the Establishment of MRLs for Pesticides	REP12/PR para. 169, Appendix XIII
CCRVDF	Priority List of Veterinary Drugs Requiring Evaluation or Re-evaluation by JECFA	REP12/RDVF para. 117, Appendix IX
CCRVDF	Risk Management Recommendations for Residues of Veterinary Drugs for which no ADI and/or MRLs has been recommended by JECFA due to Specific Human Health Concerns	REP12/RDVF paras 134-138, Appendix X

**PROJECT DOCUMENT****PROPOSAL TO REVIEW MAXIMUM LEVELS FOR HYDROCYANIC ACID IN CASSAVA AND CASSAVA PRODUCTS AND ESTABLISH NEW MAXIMUM LEVELS FOR OTHER COMMODITIES AND TO DEVELOP A CODE OF PRACTICE TO REDUCE THE PRESENCE OF HYDROCYANIC ACID IN FOODS****1. Purpose And Scope of the new work**

The purpose of the proposed new work is to protect human health by managing the risk posed by the presence of hydrocyanic acid in some foods. The work will review the maximum levels for hydrocyanic acid in existing Codex standards, in particular for bitter cassava and sweet cassava with a view to possible revision of these MLs; consider the establishment of new MLs for additional commodities, such as ready-to-eat cassava chips; develop a Code of Practice to reduce the presence of hydrocyanic acid in cassava and cassava products, encompassing agricultural aspects and methods of processing and identify suitable methods of analysis for hydrocyanic acid in foods.

**2. Relevance and timeliness**

At its 72nd session JECFA conducted a risk assessment of cyanogenic glycosides in foods. Cyanogenic glycosides can cause acute poisoning in humans as well as several chronic diseases associated with underprocessed cassava production. JECFA established an ARfD of 0.09mg/kg body weight, expressed as cyanide. A PMTDI of 0.02mg/kg body weight, as cyanide, was also established. Estimates of dietary exposure, using conservative estimates (total conversion of cyanogenic glycosides to hydrogen cyanide; no reduction from food preparation or processing), indicate possible exceedances of the acute and sub-chronic reference doses in some population groups.

Given these possible health impacts it is important to consider whether existing MLs in commodity standards are protective and whether MLs in other commodities are warranted. It is also worth developing guidance to reduce the levels of hydrocyanic acid in foods.

**3. Main aspects to be covered**

The proposed new work will focus on reviewing MLs for cyanogenic glycosides in cassava and cassava products considering whether other cassava-based foods, particularly cassava chips, should have MLs established. Additionally the CoP will focus on agricultural practices, processing and cooking methods to reduce hydrogen cyanide levels in foods derived from cassava.

**4. Assessment against criteria for the establishment of work priorities**

*a. Consumer protection from the point of view of health, food safety, ensuring fair practices in the food trade and taking into account the identified needs of developing countries.*

Reviewing MLs for cassava and possibly establishing new MLs will ensure levels of hydrocyanic acid in foods are not detrimental to the health of consumers.

*b. Diversification of national legislations and apparent resultant or potential impediments to international trade.*

For countries interested in reviewing their own MLs for hydrocyanic acid in the light of the JECFA report this new work will provide international standards on which to draw and may thus provide a more consistent international approach to this natural toxicant.

*c. Work already undertaken by other international organizations in this field and/or suggested by the relevant international intergovernmental body(ies)*

The JECFA evaluation indicates the importance of considering whether MLs which are more health protective should be established. There are a number of FAO publications addressing good agricultural

and manufacturing practices for the growing and processing of cassava (referenced in CX/CF 09/3/11: Discussion paper on cyanogenic glycosides).

## **5. Relevance to Codex strategic goals**

### **Goal 1: Promoting sound regulatory frameworks**

The work will draw on the scientific information assessed by JECFA.

### **Goal 2: Promoting widest and consistent application of scientific principles and risk analysis**

This work will draw heavily on the work of JECFA, in accordance with the risk analysis principles for CCCF as outlined in the Procedural Manual.

### **Goal 3: Strengthening Codex work management capabilities**

This work will assist Codex in its goal of strengthening its work-management capabilities, specifically to respond quickly and efficiently to international developments, by developing appropriate risk management measures in response to the risk assessment conducted by JECFA. The CoP will be a document which can be referenced by Codex and used by cassava producing and consuming countries.

### **Goal 4: Promoting cooperation between Codex and relevant international organisations**

In 2009 CCCF requested JECFA evaluate cyanogenic glycosides as an outcome of a discussion paper on their presence and food safety aspects (CX/CF 09/3/11). This work therefore is part of a continuum from identification of an issue by Codex to request advice from JECFA, to evaluation and then subsequent consideration of appropriate risk management measures.

### **Goal 5: Promoting maximum and effective participation of members**

This work will require inputs from cassava producing countries, as well as those who import, process and consume cassava and its products..

## **6. Information on the relationship between the proposal and other existing Codex documents**

Cyanogenic glycosides were discussed by the 4<sup>th</sup> session of CCCF in 2009 (see above). There are a number of Codex standards which include reference to MLs for cyanogenic glycosides in cassava and its products:

- Codex Standard 151-1989: Standard for gari
- Codex Standard 176-1989: Standard for edible cassava flour
- Codex Standard 238 –203: Standard for sweet cassava
- Codex Standard 300-2010: Standard for bitter cassava

## **7. Identification of any requirement for and availability of expert scientific advice**

No additional advice requirements have been identified.

## **8. Identification of any need for technical input to the standard from external bodies.**

Currently there is no identified need for additional technical input from other external bodies. Members of Codex will be expected to consult with technical bodies in their own countries to identify information useful for the Code of Practice and to inform the review of existing MLs and possible establishment of MLs for other commodities.

## **9. The Proposed timeline for completion of the new work, including the starting date, proposed date of adoption at Step 5 and the proposed date for the adoption by the Committee.**

The work will commence after the Codex Alimentarius Commission approves the new work in July 2012 and will be adopted by CCCF and finalized by CAC in 2015.

## ANNEX 2

## PROJECT DOCUMENT

**PROPOSAL FOR “A REVIEW OF CURRENT GUIDELINE LEVELS FOR RADIONUCLIDES IN FOOD AND DEVELOPMENT OF A GUIDANCE ON THE INTERPRETATION AND APPLICATION OF THESE LEVELS”****1- Purpose and Scope of the new work**

The purpose of the proposed new work is to evaluate potential revision of the Codex guideline Levels for Radionuclides in Foods, and to develop in connection with the review of the guideline levels a clear guidance on the interpretation and application of the guideline levels.

**2- Relevance and timeliness**

A FAO Technical Meeting on Preparedness and Response to Nuclear and Radiological Emergencies Affecting Food and Agriculture was held in 2011 in the context of the Fukushima nuclear accident after the 2011 Great East-Japan earthquake and tsunami. The Meeting identified a need for the development of recommendations on how to estimate national reference levels in food and feed, including the establishment of action levels. In addition, the 16<sup>th</sup> Meeting of the Interagency Committee on Radiation Safety (IACRS) noted that the low values for iodine in the Guideline levels for Radionuclides in Foods in the General Standard for Contaminants and Toxins in Food and Feed (Codex Standard 193-1995) could justify the revision of the Standard.

At the sixth Session of the Codex Committee on Contaminants in Foods in 2012, the activities of the Joint FAO/IAEA Division of nuclear techniques in food and agriculture relevant to Codex work were reported. It was noted by WHO that after the Fukushima Daiichi nuclear power plant accident several countries struggled with the interpretation and application of the guideline levels for radionuclides in foods contaminated following a nuclear or radiological emergency in the General Standard for Contaminants and Toxins in Food and Feed and that there may be some merit in looking into these guideline levels for possible revision and/or clarification.

**3- Main aspects to be covered**

The proposed new work focuses on the review of the current guideline levels for radionuclides in food, especially the Guideline Level for iodine. In connection with the review of the Guideline Levels, the new work focuses on the development of a clear guidance for national governments on the interpretation and application of the guideline levels, which may include recommendations for foods exceeding Guideline Levels, recommendations on how to adopt different values for internal use within their own territories in the case of wide-spread radioactive contamination, and definition of foods consumed in small quantities, in light of the lessons learned from recent experience.

**4- Assessment against the criteria for the establishment of work priorities**

*a) Consumer protection from the point of view of health, food safety, ensuring fair practice in the food trade and taking into account the identified needs of the developing countries.*

Guideline levels of radionuclides in food protect consumers to potential exposure to radioactive elements in foods following a nuclear emergency.

*b) Diversification of national legislations and apparent resultant or potential impediments to international trade.*

This new work will re-examine the guideline levels for radionuclides in foods following a nuclear emergency, and provide guidance on the interpretation and application of these levels in the trade of foods that might be contaminated with radionuclides which are dangerous for consumers. Harmonized application of guidelines will facilitate international trade in such circumstances.

*c) Work already undertaken by other organizations in this field*

Information from recent meetings such as the FAO Technical Meeting and IACRS will be addressed.

## **5- Relevance to Codex Strategic Goals**

The work proposed falls under all five Codex Strategic Goals:

### *Goal 1: Promoting Sound Regulatory Frameworks*

The result of this work will assist in promoting sound regulatory frameworks in international trade by using scientific knowledge and practical experience for prevention and reduction of Radionuclides contamination of food following a nuclear emergency.

### *Goal 2: Promoting widest and consistent application of scientific principles and risk analysis.*

This work will apply the most recent scientific information regarding the consequences of accidental contamination of food with radionuclides in relation to public health risks after consumer exposure, and the international trade of contaminated food.

### *Goal 3: Strengthening Codex work-management capabilities*

Revision of guideline levels of radionuclides in food and a clear guidance on the interpretation and application of these levels will reduce possible conflicts between countries trading food that might be contaminated by radionuclides from nuclear incidents and accidents.

### *Goal 4: Promoting cooperation between seamless linkages between Codex and other multilateral bodies.*

The work will promote cooperation between Codex and international organizations that are relevant in the field of nuclear activities and its potential hazards, in particular the IAEA.

### *Goal 5: Promoting maximum application of codex standards*

This work will reduce potential differences between countries in the interpretation of guideline levels for radionuclides and thus promote the global use of guideline levels for radionuclides in food in international trade following a nuclear emergency.

## **6- Information on the relationship between the proposal and other existing Codex documents**

This new work is directly related to the present Codex Standard for radionuclides in the Codex General Standard for Contaminants and Toxins in Food and Feed (Codex Standard 193-1995)

## **7- Identification of any requirement for and availability of expert scientific advice**

Risk assessment based on recent scientific evidence on the revision of Guideline Levels of iodine will be provided by WHO, FAO and IAEA, while ensuring consistency with the Levels of other radionuclides.

## **8- Identification of any need for technical input to the standard from external bodies**

IAEA will provide additional scientific information by on the revision of Guideline Level of iodine, while ensuring consistency with the Levels of other radionuclides.

## **9- The proposed timeline for completion of the new work, including the starting date, proposed date of adoption at Step 5 and the proposed date for the adoption by the Commission, the timeframe for developing a standard should not normally exceed 5 years.**

If the Codex Alimentarius Commission approves this new work in 2012, proposed draft revised guideline levels and its guidance on the interpretation and application of these levels will be circulated for comments at Step 3 and consideration by the 7<sup>th</sup> Session of the CCCF at Step 4 in 2013. Adoption at Step 5 by the Commission is foreseen for 2013, and at Step 8 in 2014.