



Food and Agriculture  
Organization of the  
United Nations



World Health  
Organization

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**Agenda Item 4.2**

**CX/CAC 21/44/4**  
**September 2021**

## JOINT FAO/WHO FOOD STANDARDS PROGRAMME

### CODEX ALIMENTARIUS COMMISSION

#### Forty-fourth Session

#### **Work from the Codex Committee on Contaminants in Food (CCCF) for adoption or approval by the Commission**

1. The Commission is invited to adopt the draft standards and related texts submitted for final adoption (Step 8 or Step 5/8) in accordance with the Procedures for the Elaboration of Codex Standards and Related Texts. The relevant texts from CCCF are listed in **Part 1** of this document.
2. The Commission is also invited to adopt proposed draft standards and related texts submitted at Step 5 of the Uniform Procedure for the Elaboration of Codex Standards and Related Texts. The relevant texts from CCCF are listed in **Part 2** of this document and, if adopted, will be advanced to Step 6 for further comments and consideration by CCCF.
3. Comments received regarding proposed draft standards and related texts from CCCF and submitted in accordance with the Procedures for the Elaboration of Codex Standards and Related Texts are contained in CX/CAC 21/44/4 Add.1.
4. The Commission is furthermore invited to approve proposals to undertake new work or revise a standard, 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 relevant proposals from CCCF are listed in **Part 3** of this document, including the reference of the project document in the relevant report. The project documents are also compiled in this document for ease of reference and to ensure availability in all six languages. The Commission is invited to consider these proposals in the light of its *Strategic Plan 2020-2025* and the *Criteria for the Establishment of Work Priorities* and *Criteria for the Establishment of Subsidiary Bodies of the Codex Alimentarius Commission*.
5. The Commission is also invited to endorse relevant proposals from CCEXEC81 regarding extension of deadlines for completion of work.

**Part 1 – Standards and related texts submitted for final adoption**

<b>Codex body</b>	<b>Standards and Related Texts</b>	<b>Reference</b>	<b>Job No.</b>	<b>Step</b>
CCCF	Proposed MLs for cadmium in chocolates containing or declaring <30% total cocoa solids on a dry matter basis (CXS 193-1995)	REP21/CF Paragraphs 18-27, Appendix II	N15-2014	8
	Proposed MLs for cadmium in chocolates containing or declaring ≥30% to <50% total cocoa solid on a dry matter basis (CXS 193-1995)	REP21/CF Para. 28-40, Appendix II	N15-2014	5/8
	Amendment to the MLs for lead in fruit juices (CXS 193-1995)	REP21/CF Para. 98 and 101, Appendix IV		Adoption
	Revision of the <i>Code of practice for the prevention and reduction of lead contamination in foods</i> (CXC 56-2004)	REP21/CF Para. 106, Appendix V	N06-2019	5/8

**Part 2 – Standards and related texts submitted for adoption at Step 5**

<b>Codex body</b>	<b>Standards and Related Texts</b>	<b>Reference</b>	<b>Job No.</b>
CCCF	Proposed draft Code of practice for the prevention and reduction of cadmium contamination in cocoa beans <sup>1</sup>	REP21/CF Para. 59, Appendix III	N07-2019

**Part 3 – Proposals to elaborate new standards and related texts**

<b>Codex Body</b>	<b>Text</b>	<b>Reference and project document</b>
CCCF	Proposal for new work on MLs for methylmercury in orange roughy and pink cusk eel (CXS 193-1995)	<ul style="list-style-type: none"> <li>• REP21/CF, paragraphs 163 and 166, Appendix VI</li> <li>• Annex I of this document</li> </ul>
CCCF	Proposal for new work on development of a Code of practice for the prevention and reduction of mycotoxins contamination in cassava and cassava-based products	<ul style="list-style-type: none"> <li>• REP21/CF, paragraph 169, Appendix VII</li> <li>• Annex II of this document</li> </ul>

<sup>1</sup> CCCF is requesting an extension of the deadline for completion of the work to 2023

**ANNEX I**

**PROJECT DOCUMENT  
PROPOSAL FOR NEW WORK  
ESTABLISHMENT OF MAXIMUM LEVELS FOR METHYL MERCURY  
IN ORANGE ROUGHY AND PINK CUSK-EEL  
(For approval)**

**1. Purpose and Scope of the new work**

This work aims to establish Maximum Levels (MLs) for methylmercury in orange roughy and pink cusk-eel.

**2. Relevance and timeliness**

The current MLs for methylmercury in fish (tuna: 1.2 mg/kg, alfoncino: 1.5 mg/kg, marlin: 1.7 mg/kg and shark: 1.6 mg/kg) were adopted in 2018<sup>2</sup>. These MLs replaced Guideline Levels (GLs) encompassing all predatory and non-predatory fish species, with the decision of the CAC that consideration should be given to establishment of MLs rather than GLs (REP18/CF, paragraph 81). A recommendation had been previously made that discussion could be commenced on considering MLs for other species in the GEMS/Food database, with a preliminary analysis presented in the supporting discussion paper (CX/CF 17/11/12, paragraph 15). With the establishment of an agreed upon framework at CCCF12 to apply the “as low as reasonably achievable” (ALARA) principle in the establishment of MLs for methylmercury in fish, it is timely to undertake work to derive MLs for additional fish species.

**3. Main aspects to be covered**

ML(s) for methylmercury in additional fish species, taking into account the following:

- a. Results of discussions of the CCCF
- b. Risk assessments by JECFA
- c. Conclusions of the Joint FAO/WHO Expert Consultation on the Risks and Benefits of Fish Consumption
- d. Achievability of the MLs

The following species of fish have been identified as having average levels of methylmercury sufficient to exceed the selection criterion of 0.3 mg/kg.

Orange roughy Pink cusk-eel
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**4. Assessment against the criteria for the establishment of work priorities**

**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.**

The new work will derive ML(s) for methylmercury in fish species identified as having average levels of methylmercury sufficient to exceed the selection criterion of 0.3 mg/kg.

**Diversification of national legislation and actual or potential impediments to international trade.**

The international trade of fish and fishery products is increasing, and the new work will provide internationally-harmonized standards. The three fish species are of equivalent or greater trade value to species presently with MLs

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

The proposed work to establish MLs for methylmercury in the identified fish species globally has not been undertaken by any other international organizations nor suggested by any relevant international intergovernmental bodies.

**Consideration of the global magnitude of the problem or issue**

The consumption and international trade of fish and fishery products are increasing globally, thus this work is of worldwide interest and becoming increasingly significant.

**5. Relevance to Codex Strategic Goals**

The proposed work falls under the following Codex Strategic Goals of the Codex Strategic Plan 2020-25

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<sup>2</sup> General Standard for Contaminants in Food and Feed (CXS 193-1995)

**Strategic Goal 1: Address current, emerging and critical issues in a timely manner**

This work was proposed in response to needs identified by Members in relation to food safety, nutrition and fair practices in the food trade. There is already significant trade in fish species which potentially have methylmercury levels that exceed the selection criterion of 0.3 mg/kg.

**Strategic Goal 2: Develop standards based on science and Codex risk-analysis principles**

This work will use the scientific advice of the joint FAO/WHO expert bodies to the fullest extent possible. Also, all relevant factors will be fully considered in exploring risk management options.

**Strategic Goal 4: Facilitate the participation of all Codex Members throughout the standard setting process**

Due to the international interest in the trade and consumption of fish, this work will support and embrace all aspects of this objective by requiring participation of both developed and developing countries to conduct the work.

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

This new work is recommended following the criteria for establishing MLs in food and feed as outlined in the *Standard for Contaminants in Food and Feed* (CXS 193-1995).

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

Expert scientific advice has been already provided by the Joint FAO/WHO Expert Committee on Food Additives (JECFA) and the Joint FAO/WHO Expert Consultation on the Risks and Benefits of Fish Consumption.

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

A need for additional technical input from external bodies has not been identified.

**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.**

Identified species	Timeframe
Pink cusk-eel	Final adoption by CAC in 2024 or earlier
Orange roughy	

**ANNEX II**

**PROJECT DOCUMENT  
PROPOSAL FOR NEW WORK  
Development of a Code of practice for the prevention and reduction of  
mycotoxins contamination in cassava and cassava-based products  
(For approval)**

**1. Purpose and scope of the new work**

The purpose of the proposed new work is to develop a Code of Practice (CoP) that will provide risk management guidance to Codex member countries and relevant stakeholders, e.g. farmers, cassava-based industries (including small-scale producers), national/regional technical/regulatory agencies, etc., for the prevention/reduction of mycotoxins, i.e. aflatoxins and ochratoxin A (OTA), contamination in cassava and cassava-based products during pre-planting, planting, post-harvest processing including fermentation, drying, storing and distribution.

**2. Relevance and timeliness**

Aflatoxins are known hepatotoxins causing the death of people and have been documented as naturally occurring carcinogens, which are primarily associated with high incidence of liver cancer. Aflatoxin B1 has particularly been identified as causative factor in the development of hepatocellular carcinoma, an emerging chronic disease of global concern.

The toxicity of OTA has been reviewed by the International Agency for Research on Cancer (IARC), which classified OTA as a possible human carcinogen (Group 2B) and also by the Joint FAO/WHO Expert Committee on Food Additives (JECFA). OTA is a mycotoxin that occurs naturally worldwide in food commodities including roots and tubers and their products. In roots and tubers, fusarium species have been implicated as pre-harvest contaminants mycotoxins, while aspergillus and penicillium species have been implicated as post-harvest mycotoxins.

Discussion papers considered by the Codex Committee on Contaminants in Foods (CCCF) have described the fast growing global profile of cassava, a root crop commodity commonly used as food, raw material for human foods, animal feeds, pharmaceutical and confectionary industries. The obvious significance in export trade, especially in regional trade such as amongst members of the FAO/WHO Coordinating Committee for Africa (CCAFRICA) is worthy to note. The health impact of aflatoxins and OTA in cassava and cassava-based products was considered by CCCF13 (2019) (CX/CF 19/13/14). Summary of data from a WTO/FAO/WHO supported regional total diet study involving four sub-Sahara African countries amongst others, showed that aflatoxins and OTA contamination in cassava is of public health concern.

The CoP will assist countries to comply with measures and protocols to prevent/reduce aflatoxins and OTA contamination in cassava and cassava-based products which will in turn facilitate trade. Given the health concerns, there is need for cassava to be safe for use and consumption; and good practices in agriculture, processing and distribution will help in achieving this goal.

**3. Main aspects to be covered**

The CoP will cover the value chain stages of:

1. land preparation,
2. cultivation,
3. pre-harvest,
4. post-harvest handling,
5. storage
6. transportation practices

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

This is for consumer health protection and to prevent/reduce post-harvest losses through best practices from the point of view of food safety and food security. This is also to ensure fair practices in trade while taking into account the identified needs of developing countries.

The CoP will provide risk management guidance for countries and relevant stakeholders to improve the overall safety and quality of cassava and cassava-based products, by preventing/reducing aflatoxins and OTA contamination, and so to minimize consumer dietary exposure to aflatoxins and OTA from roots/tubers and their products and to enhance trade in these products.

### **Specific criteria**

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

The CoP will provide internationally harmonized risk management practices to Codex members and stakeholders for the prevention/reduction of aflatoxins and OTA contamination in cassava and cassava-based products to ensure public health and fair practices in trade.

#### **b. Scope of work and establishment of priorities between the various sections of the work**

See points 1 and 3.

#### **c. Work already undertaken by other organizations in this field**

CCCF is the subsidiary body of the Codex Alimentarius Commission (CAC) having competence on the provision of risk management practices along the food chain to contain contamination of food and food products with chemicals and toxins. A way to do this is through the development of codes of practice. There is already in existence a *Code of practice for the reduction of hydrocyanic acid (HCN) in cassava and cassava products* (CXC 73-2013) to assist in keeping the quality and safety of these products.

As per mycotoxins, some work has also been done by organizations or agencies, for instance, the International Institute of Tropical Agriculture, National Root Crops Research Institute Umudike South-East, Nigeria and Universities in the rain forest belts in Nigeria on management of mycotoxins in roots and tubers. The African Union (AU), through its Partnership for Aflatoxin Control in Africa (PACA platform), is driving eradication of adverse human health effects by aflatoxins from the continent.

However, there is currently no international document that assemble relevant risk management practices available to date into a single document which best reflect effective measures applicable worldwide to contain mycotoxin contamination in fresh and processed cassava for application by Codex members and relevant stakeholders. This CoP will so build on work of recognized organizations, agencies and technical programs/platforms across the world to provide such a unique single internationally harmonized guidance document for use by countries and other stakeholders.

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

The new work falls under the following Codex Strategic Goals of the Codex Strategic Plan 2020-2025:

#### **Goal 1: Address current, emerging and critical issues in a timely manner**

Aflatoxin and OTA contamination in cassava and cassava-based products is a public health concern. Given that cassava or cassava-based products are considered staple food in certain regions and countries, there is need for cassava to be safe for use and consumption. In addition, trade in cassava and its products are growing and therefore, there is also need to ensure safe and fair practices in trade.

This work will harmonize risk management practices across regions/countries to promote maximum application of Codex standards to protect consumers' health and to ensure fair practices in trade. The result of this work will also assist in promoting sound regulatory frameworks in international trade by using good management practices that are proven to be effective and applicable worldwide to prevent/reduce aflatoxins and OTA contamination in these products.

#### **Goal 2: Develop standards based on science and Codex risk analysis principles**

This work will help in identifying risk management options and developing strategies to prevent/reduce aflatoxins and OTA in cassava production and processing based on science and risk-based principles.

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

Currently there is no Codex document addressing mycotoxin contamination in cassava and cassava-based products. The development of the CoP will support implementation of commodity standards available for fresh and processed cassava e.g. Codex Standards for Sweet Cassava (CXS 238-2003), Bitter Cassava (CXS 300-2010), Cassava Flour (CXS 176-1989), Gari (CXS 151-1985), etc. as well as will complement the CoP to contain HCN in cassava and cassava-based products.

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

At this moment, expert advice from scientific advisory bodies, e.g. JECFA, is not necessary. There are several publications on management of mycotoxins published by FAO and other organizations/agencies that are available for consultation.

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

Currently, there is no need for technical input from external bodies. However, if the need arises, such identified bodies shall be contacted.

**9. The proposed timeline for completion of the new work, including the starting date and the proposed date for the adoption by the Codex Alimentarius Commission**

Subject to approval by CAC (2021), the CoP will be circulated for comments and consideration by CCCF15 (2022). Adoption by CAC is planned for 2024 or earlier.