



## JOINT FAO/WHO FOOD STANDARDS PROGRAMME

### CODEX ALIMENTARIUS COMMISSION

#### Forty-seventh Session

#### WORK OF THE CODEX COMMITTEE ON CONTAMINANTS IN FOOD (CCCF)

1. The Commission is invited to adopt the standards and related texts submitted for final adoption as listed in **Part 1** of this document.
2. The Commission is also invited to adopt the draft standard and sampling plan submitted for adoption at Step 5 as listed in **Part 2** of this document. If adopted, the draft standard and sampling plan will be advanced to Step 6 for further comments and consideration by CCCF18.
3. The comments received regarding standards and related texts from CCCF17 submitted for adoption are contained in CX/CAC 24/47/6 Add.1.
4. The Commission is also invited to endorse the recommendation of the 86th Session of the Executive Committee of the Codex Alimentarius Commission (CCEXEC86) regarding extension of deadlines for the completion of work.
5. The Commission is furthermore invited to approve new work proposals from CCCF17 as listed in **Part 3** of this document and compiled in Annex I and Annex II. The Commission is invited to consider these proposals in the light of its *Codex 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*.
6. The Commission is invited to endorse discontinuation of work as proposed by CCCF and referenced in **Part 4** of this document.
7. The critical review of these texts was undertaken by CCEXEC86.

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

<b>Standards and related texts</b>	<b>Reference</b>	<b>Job No.</b>	<b>Step</b>
MLs for lead in spices, dried aril; dried seeds (including a separate ML for celery seeds); dried rhizomes and roots; dried floral parts; and spices, dried fruit and berries (including separate MLs for Sichuan pepper, star anise, paprika and sumac) for inclusion in the <i>General standard for contaminants and toxins in food and feed</i> (CXS 193-1995)	REP24/CF17, paragraph 61, Appendix II	N05-2019	5/8
MLs for lead and cadmium in quinoa for inclusion in the <i>General standard for contaminants and toxins in food and feed</i> (CXS 193-1995)	REP24/CF17, paragraph 119, Appendix VII	-	-
Code of practice for the prevention and reduction of ciguatera poisoning	REP24/CF17, paragraph 97, Appendix V and Appendix VI	N04-2023	5/8
Sampling plan for methylmercury in fish for inclusion in the <i>General standard for contaminants and toxins in food and feed</i> (CXS 193-1995)	REP24/MAS43, paragraphs 12(i) and 20(i), Appendix II <sup>1</sup>	N04-2021	5/8

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

<b>Standards and related texts</b>	<b>Reference</b>	<b>Job No.</b>	<b>Step</b>
MLs for lead in dried bark and dried culinary herbs for inclusion in the <i>General standard for contaminants and toxins in food and feed</i> (CXS 193-1995)	REP24/CF17, paragraph 61, Appendix II	N05-2019	5
Sampling plans for total aflatoxins and ochratoxin A in certain spices (dried chilli pepper and paprika, and nutmeg) for inclusion in the <i>General standard for contaminants and toxins in food and feed</i> (CXS 193-1995) <sup>2</sup>	REP24/CF17, paragraph 92, Appendix IV	N20-2017	5

**Part 3 – Proposals to undertake new work or revise a standard**

<b>Text</b>	<b>Reference and project document</b>
New work on the revision of the <i>Code of practice for the prevention and reduction of aflatoxin contamination in peanuts</i> (CXC 55-2004)	<ul style="list-style-type: none"> <li>• REP24/CF17, Appendix VII</li> <li>• Annex I of this document</li> </ul>
New work on a code of practice for the prevention and reduction of cadmium contamination in foods	<ul style="list-style-type: none"> <li>• REP24/CF17, Appendix IX</li> <li>• Annex II of this document</li> </ul>

<sup>1</sup> CCMAS43 amended and endorsed the sampling plan for methylmercury in fish.

<sup>2</sup> CCCF requested an extension of the deadline for completion of the work to 2025, which was supported by CCEXEC86.

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**Part 4 – Work proposed for discontinuation**

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**Standards and related texts****Reference**

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Draft MLs for lead in dried spice, flowers; and fresh culinary herbs  
in CXS 193-1995

REP24/CF17,  
paragraph 69(ii)

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**PROJECT DOCUMENT****PROPOSAL FOR A NEW WORK ON THE REVISION OF THE  
CODE OF PRACTICE FOR THE PREVENTION AND REDUCTION OF AFLATOXIN CONTAMINATION IN  
PEANUTS  
(CXC 55-2004)****1. Purpose and scope of the project**

The purpose and scope of the proposed new work is to revise the *Code of Practice for the Prevention and Reduction of Aflatoxin Contamination in Peanuts* (CXC 55-2004) to reflect new information available to prevent and reduce aflatoxin contamination in peanuts.

**2. Relevance and timeliness**

The 16th Session of the Codex Committee on Contaminants in Foods (CCCF16, 2023) identified this code of practice (CoP) for revision as part of an overall work on the review of Codex standards for contaminants. There is already a maximum level (ML) of 15 µg/kg for peanuts for further processing adopted by the Codex Alimentarius Commission (CAC) and a proposed ML for ready-to-eat (RTE) peanuts under consideration by CCCF. Aflatoxins were last evaluated by the 83rd Meeting of the Joint FAO/WHO Expert Committee on Food Additives (JECFA83, 2017). JECFA83 reaffirmed the conclusions of JECFA49 (1997) that aflatoxins are genotoxic human liver carcinogens. Given the health concerns associated with aflatoxin, the new work aims to continue to reduce exposures by updating the existing CoP.

**3. Main aspects to be covered**

The work will address risk management measures to prevent or reduce aflatoxin contamination in peanuts, supported by scientific data, that have become available since adoption of the code of practice (CoP) which are proven to be effective and are widely applied across regions. It will also address information to contextualize aflatoxin formation in peanuts such as the identification of aflatoxigenic species and the stages of peanut reproductive growth.

**4. Assessment against the criteria for establishment of work priorities****(a) Consumer protection from the point of view of health and fraudulent practices.**

A revised CoP that includes measures proven to prevent and reduce aflatoxin production would result in a reduction in aflatoxins exposure from peanuts.

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

A revised CoP is needed to ensure that the most updated information on recommended practices to prevent and reduce aflatoxin exposure from peanuts is available to all member countries. It will also provide the means to enable exporters to reduce aflatoxins levels and to assist in compliance with the current ML of 15 µg/kg for peanuts for further processing and a proposed ML for RTE peanuts under consideration by CCCF.

**(c) Scope of work and establishment of priorities between the various sections of the work.**

The revision of the CoP should prioritize the inclusion of relevant and efficient practices to prevent and reduce aflatoxin contamination in peanuts that are effectively and worldwide applicable.

**(d) Work already undertaken by other international organizations in this field.**

JECFA assessments.

**5. Relevance to Codex Strategic Goals****(a) Goal 1 Address current, emerging and critical issues in a timely manner.**

The proposed new work will support competent authorities and food business operators to implement practical interventions that can be used to reduce risk of aflatoxins in peanuts.

**(b) Goal 2 Develop standards based on science and Codex risk-analysis principles.**

Additional guidance by Codex might assist countries in reviewing their legislation to reduce the risk of aflatoxins and support fair practice in international peanuts trade.

**(c) Goal 3 Increase impact through the recognition and use of Codex standards.**

A revised CoP containing updated risk management practices to prevent and reduce aflatoxin contamination in peanuts will facilitate compliance with Codex MLs for aflatoxins in peanuts.

**(d) Goal 4 Facilitate the participation of all Codex Members throughout the standard setting process.**

Peanuts are an important commodity in international trade and there are new measures that have been identified that contribute to the reduction and prevention of aflatoxins in peanuts.

**(e) Goal 5 Enhance work management systems and practices that support the efficient and effective achievement of all strategic plan goals.**

This work will help developing and maintaining efficient and effective work management practices and systems to prevent or reduce aflatoxin contamination in peanuts to achieve the Codex goals of ensuring public health protection and trade facilitation.

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

The CoP is important to support the implementation of MLs for aflatoxins contamination in peanuts (see points 1 and 4b).

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

JECFA83 has already provided needed expert scientific advice.

**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 external bodies, as there is information available published by ICMSF (International Commission on Microbiological Specifications for Foods) (2018) as well as other publicly available literature that can support the inclusion/revision of the CoP to include new management measures that were proven to be effective in reducing or preventing aflatoxin contamination in peanuts.

**9. Timeline for completion of the new work**

Work will start following approval by CAC in 2024. Completion of work is expected by 2027 or earlier.

## PROJECT DOCUMENT

### PROPOSAL FOR NEW WORK ON A CODE OF PRACTICE FOR THE PREVENTION AND REDUCTION OF CADMIUM CONTAMINATION IN FOODS

#### 1. Purpose and scope of the project

The purpose of the proposed new work is to develop a code of practice (CoP) to prevent or reduce cadmium contamination in foods. The scope of the work encompasses measures to prevent and reduce cadmium contamination during agricultural and aquacultural production and food processing, preparation, packaging, and transport.

#### 2. Relevance and timeliness

The 73rd Meeting of the Joint FAO/WHO Expert Committee on Food Additives (JECFA73, 2011) conducted a re-evaluation of cadmium and established a provisional tolerable monthly intake (PTMI) of 25 µg/kg bw, reflecting the long half-life of cadmium in humans. Dietary exposure estimates indicated that cereals and cereal products, vegetables, seafood, and meat, including offal, were the major contributors to cadmium dietary exposure.

JECFA77 (2013) assessed dietary exposure to cadmium from cocoa and cocoa products following a request arising from the 6th Session of the Codex Committee on Contaminants in Foods (CCCF6, 2012). JECFA estimated total dietary cadmium exposure as 30-69% of the PTMI for adults and 96% for children aged 0.5-12 years. JECFA noted that these percentages were likely overestimates of total dietary cadmium exposure, as the estimates from the whole diet also included the contribution from cocoa and cocoa products.

JECFA91 (2021) conducted a new exposure assessment that included the contribution of cadmium from all food sources, in particular cocoa products. This assessment was based on more comprehensive occurrence data, including a wider geographical range of occurrence data in cocoa products. JECFA concluded that the major contributors to dietary cadmium exposure were cereals and cereal products, vegetables, and seafood, while the contribution of cocoa products to dietary cadmium exposure was minor (0.1-9.4%).

Between 2018 and 2022, CCCF adopted maximum levels (MLs) for cadmium in chocolate containing or declaring < 30%, ≥ 30% to < 50%, ≥ 50% to < 70%, and ≥ 70% total cocoa solids, and 100% cocoa powder, as well as the *Code of Practice for the Prevention and Reduction of Cadmium Contamination in Cocoa Beans* (CXC 81-2022).

The new work aims to reduce exposures that may cause exceedance of the PTMI, through the development and implementation of a CoP that covers cadmium contamination in a range of foods in addition to cocoa beans.

Comments in response to a circular letter on the review of Codex standards for contaminants issued in 2022 (CL 2022/85-CF) suggested that a CoP should be considered prior to review/revision of current cadmium MLs as provided in a conference room document submitted to CCCF16 (2023) (CF16/CRD02).

#### 3. Main aspects to be covered

This work will address practical measures, supported by scientific data, that prevent or reduce cadmium contamination.

Measures to be addressed may include agricultural techniques (e.g. fertilization, irrigation), source-directed measures (reduction of cadmium in agricultural soil and water), and food processing modifications (e.g. use of filtration aids in juices and washing techniques for seaweed). This work will also address consumer advice.

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

##### (a) Consumer protection from the point of view of health and fraudulent practices.

To protect consumers' health, exposures to cadmium should be reduced through best practices. A CoP to reduce cadmium will identify measures that can be taken to reduce exposures.

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

Development of a CoP is needed to ensure that information on recommended practices for preventing and reducing cadmium exposures is available to all member countries. It also will provide the means to enable exporters to ensure reduced cadmium levels and to assist in compliance with any current Codex MLs and those that may be established in the future.

**(c) Scope of work and establishment of priorities between the various sections of the work.**

The CoP will provide measures to reduce cadmium in food, as it will address all aspects of food production from agricultural/aquacultural production to processing to packaging and transport and consumption.

**(d) Work already undertaken by other international organizations in this field.**

Health-based guidance that address cadmium exposures have been developed for workplaces, for drinking water (e.g. WHO), and for ambient air quality (e.g. WHO). Country-specific guidances are also available.

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

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

Establishing a CoP for the prevention and reduction of cadmium contamination in foods will address the current need for guidance to ensure the health protection of consumers.

**Goal 2: Develop standards based on science and Codex risk-analysis principles.** This work will apply risk analysis principles in the development of a CoP by using scientific data and results from JECFA assessments to support the reduction of cadmium in foods.

**Goal 3: Increase impact through the recognition and use of Codex standards.** The proposed CoP ensures that information on recommended practices to prevent and reduce cadmium consists of current best practices and are available to all member countries.

**Goal 4: Facilitate the participation of all Codex Members throughout the standard process.** Developing a CoP through the Codex step process will make information on recommended practices to prevent and reduce cadmium available to all Codex members.

**Goal 5: Enhance the work management systems and practices that support the efficient and effective achievement of all strategic plan goals.** A CoP will help ensure development and implementation of effective and efficient work management systems and practices by providing basic guidance for countries and producers.

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

In 2022, Codex adopted the *Code of Practice for the Prevention and Reduction of Cadmium Contamination in Cocoa Beans* (CXC 81-2022). This CoP is specific to cocoa beans and does not provide information about other crops. In addition, the *Code of Practice Concerning Source Directed Measures to Reduce Contamination of Food with Chemicals* (CXC 49-2001) includes measures relating to cadmium.

Cadmium MLs have been established for a variety of foods in the *General Standard for Contaminants in Food and Feed* (CXS 193-1995) (e.g. chocolate and cocoa products, vegetables, grains, seafood, salt) without a CoP being available.

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

JECFA has already provided needed expert scientific advice (e.g. JECFA73, JECFA77, JECFA91).

## **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 external bodies.

## **9. Timeline for completion of the new work**

Work will commence following recommendation by CCCF and approval by the Codex Alimentarius Commission in 2024. Completion of work is expected by 2027.