

CODEX ALIMENTARIUS COMMISSION



Food and Agriculture
Organization of the
United Nations



World Health
Organization

Viale delle Terme di Caracalla, 00153 Rome, Italy - Tel: (+39) 06 57051 - E-mail: codex@fao.org - www.codexalimentarius.org

Agenda Item 18

CX/CF 21/14/16

April 2021

JOINT FAO/WHO FOOD STANDARDS PROGRAMME

CODEX COMMITTEE ON CONTAMINANTS IN FOODS

14th Session

(virtual)

3-7 and 13 May 2021

DISCUSSION PAPER ON THE IMPLEMENTATION OF A STRUCTURED APPROACH TO IDENTIFY THE NEED FOR REVIEW OF CODEX STANDARDS AND RELATED TEXTS FOR CONTAMINANTS IN FOODS

(Prepared by the Electronic Working Group chaired by Canada
and co-chaired by Japan and the United States of America)

BACKGROUND

1. CCCF13 (2019) agreed to establish an electronic working group (eWG), chaired by Canada and co-chaired by Japan and the United States of America (USA), working in English, to prepare a proposal for an approach to identify the need for review of existing standards and related texts developed by the Codex Committee on Contaminants in Foods (CCCF) for consideration at CCCF14.¹ The discussion paper prepared for the CCCF session scheduled in 2020 (CX/CF 20/14/16)² (attached to this discussion paper as Appendix II) provides background information on the origins of this new work.

COMMENTS IN RESPONSE TO CIRCULAR LETTER CL 2020/53/OCS-CF

2. Due to the global pandemic, CCCF14, initially planned for 2020, was rescheduled for 2021. In order to continue with the subject work, a circular letter (CL 2020/53/OCS-CF) was issued requesting comments on the three options put forward in paragraphs 43-45 of CX/CF 20/14/16:
 - **Option 1** (status quo): Continue an ad hoc, or needs-based, review of existing Codex standards.
 - **Option 2**: Establish tracking lists of Codex standards >15 and >25 years since review or initial establishment and those recommended for re-evaluation by CCCF, CAC, or a member country. Ad hoc reviews of existing Codex standards would also continue under this option.
 - **Option 3**: Establish tracking lists of Codex standards >15 and >25 years since review or initial establishment and those recommended for re-evaluation by CCCF, CAC, or a member country. Codex standards >25 years old would be prioritized for assessment to determine if new data and scientific information is available to warrant their full review, with this work taken up voluntarily by a member country or assigned by the Chair.
3. The circular letter recommended the consideration of Option 2 for a 3-year trial period. It also sought input on alternative implementation approaches for Option 2 than those summarised in paragraph 49 of CX/CF 20/14/16 and additional or alternative prioritization criteria used to identify Codex standards and related texts for review than those presented in paragraphs 27 to 41 of CX/CF 20/14/16.

¹ REP 19/CF, paras. 170-184

² Working documents issued during 2020, which has been revised or updated in 2021 for consideration by CCCF14, can be found on the Codex website: <http://www.fao.org/fao-who-codexalimentarius/meetings/extra/cccf14-2020/en/>

4. Thirteen (13) members³ commented in response to the circular letter. Twelve (12) members supported Option 2 on the basis that it builds on the current ad hoc, or needs-based, system but provides an additional organizational framework without appreciable increase in workload. One (1) member supported Option 3. The 3-year trial period for Option 2 was also generally supported, with two members noting that changes to the approach for Option 2 may be required during the trial period and/or a longer trial period may be needed. One member noted that performance metrics could be developed to help evaluate Option 2 both during and after the trial period.
5. No members commenting via the circular letter suggested additional prioritization criteria for identifying Codex standards and related texts for review. However, 3 members suggested that the prioritization criteria somehow be ranked or scored based on their priority.
6. No members commenting in response to the circular letter suggested alternatives to the general implementation approach for Option 2 presented and broad support was offered for the general implementation approach proposed.

SCOPE

7. The scope of this paper is to present how the CCCF would implement and operationalize, on a 3-year trial basis, Option 2 as a structured approach for identifying existing Codex standards and related texts for review. Codex standards, for the purpose of this document, are maximum levels (MLs), guideline levels (GLs) and Codes of Practice (CoP).
8. The following topics are outside the scope of the current discussion paper but could be subject of future work by the CCCF:
 - i) Proposing a systematic approach on when to establish new MLs and CoPs; this includes proposing new Codex standards for food and contaminant combinations for which an ML(s) is established but no corresponding CoP exists, and vice versa;
 - ii) Proposing a systematic approach on when to add chemicals to the Priority List of Contaminants Evaluation by the Joint FAO/WHO Expert Committee on Food Additives (JECFA); and
 - iii) Proposing a systematic approach on when to develop sampling plans for food contaminants for which there are MLs or GLs but no sampling plans.

PROPOSED IMPLEMENTATION APPROACH OF OPTION 2

9. Option 2 focuses on establishing and annually updating two tracking lists of Codex standards: (i) a list of standards >15 and >25 years since the most recent review or initial establishment; and (ii) a list of standards recommended for re-evaluation by CCCF, CAC or a member country within a certain period of time or at an unspecified future date.
10. Following the example of how input is annually sought and communicated on the JECFA Priority List, the tracking lists (refer to paragraph 9) from the previous CCCF meeting would be included in each CCCF meeting report. A circular letter would be issued requesting comments on the tracking lists regarding the availability of new data and information that would be used to identify Codex standards for review. Comments would be posted as a sub-item to the CCCF agenda item on this topic. An in-session working group at the annual CCCF meeting would summarize the current review status and make recommendations to CCCF for any review priorities identified from the tracking lists. Tracking lists would be updated after the in-session working group and presented to CCCF during the plenary session, at which time the lists can be adopted as presented, or edited prior to adoption. CCCF would then consider how to balance these priorities with new Codex standard development.
11. For work to move forward, a member country would volunteer to determine the need for a revision of an existing Codex standard using the prioritization criteria outlined in Appendix I as guidance. If it's determined that a Codex standard requires updating, a member country volunteer would proceed with the new work and prepare a discussion paper containing relevant data and findings.
12. In order to generate the tracking lists, a list of adoption years or the year of most recent review and/or update of Codex standards will also be maintained, based on the information document jointly prepared by Japan and the Netherlands for each session of the CCCF (INF/1), which contains comprehensive information including adoption years on all the existing MLs, GLs and CoPs.

³ Australia, Brazil, Canada, Chile, Costa Rica, Cuba, Ecuador, European Union, Iraq, Morocco, Republic of Korea, Thailand, USA

13. Option 2 does not preclude the continued ad hoc review of existing Codex standards upon nomination by a Codex member and consistent with the guidance provided in the Preamble of the *General Standard for Contaminants in Food and Feed* (CXS 193-1995). The nominating member would undertake the new work and prepare a discussion paper containing relevant data and findings.

PROPOSED EVALUATION OF OPTION 2

14. Option 2 will be considered successful at providing a framework for the review of existing Codex standards if it results in clear rationales for updating standards, is flexible, does not increase administrative burden, results in updated Codex standards, if an update is needed, and, for standards that do not need to be updated, documents that a review has occurred.
15. One (1) member of the eWG convened in advance of CCCF14 (2021) suggested that because the factors outlined in paragraph 14 are subjective, some quantitative targets could be established to evaluate Option 2 during the 3-year time period. However, at the outset, it is recommended that the in-session working group at the annual CCCF meeting would review and report to CCCF on the success of the trial period of Option 2, in consideration of the factors outlined in paragraph 14.
16. The proposed approach remains flexible to enhancements and changes as CCCF becomes more familiar with it during the course of the 3-year trial period. The in-session working group would propose changes to CCCF, as necessary, based on feedback and its evaluation of the approach, including if additional or quantitative criteria are needed to help evaluate the success of Option 2.

PROPOSED PRIORITY RANKING OF THE CRITERIA FOR IDENTIFYING CODEX STANDARDS FOR REVIEW

17. The discussion paper prepared for the CCCF session scheduled in 2019 (CX/CF 19/13/18) (Appendix II) highlighted that areas identified for new work by the CCCF should focus on the reduction of health risks resulting from contamination of food. It also stated that criteria that give indications of a health concern should be given highest priority and that the magnitude, significance, and relative priority of each criterion would be considered by CCCF on a case-by-case basis once any new data and scientific information are assessed.
18. A disruption in international trade is another key criterion that the eWG convened in advance of CCCF14 (2021) indicated would be an important trigger for Codex standard review. Trade disruptions involving staple foods would be considered highest priority for triggering review of related Codex standards. The potential for or degree of disruption in international trade would be determined once any available information is assessed.
19. The eWG convened in advance of CCCF14 (2021) supported the case-by-case assessment by CCCF of new data and information available for each criterion, rather than a structured approach, when considering taking on new work to update existing Codex standards. However, the eWG also recommended that high level guidance be provided on the prioritization of the criteria, in order to provide predictability, consistency and efficiency, as well as for work planning purposes.
20. Appendix I lists the criteria for triggering a review of existing Codex standards, the likelihood of each criterion to indicate a potential safety concern and also proposes an overall priority ranking for each criterion. When considering taking on new work to update existing Codex standards, projects with one or more high priority (#1) rankings or a combination of high (#1) and medium (#2) priority rankings (refer to Appendix I) would be most highly recommended for future work.
21. New work to update existing Codex standards with lower overall priority rankings in Appendix I would need to be balanced with higher priority work, such that standards considered to be of lower priority would not be consistently overlooked for review.
22. Various factors will be considered when determining how to balance new work to update existing Codex standards, such as the availability and timing of availability of new data and information required for the updates, the complexity of the new work and if there are Codex members interested and available to volunteer to lead the new work.
23. The in-session working group can discuss, as necessary, how to help ensure the consistent use of the proposed priority ranking of the criteria for identifying Codex standards for review (Appendix I) and will propose changes to CCCF, as necessary, based on feedback and its evaluation of the circumstances encountered.

RECOMMENDATIONS

24. CCCF14 is invited to agree to the following:
 - i. Implement Option 2 on a 3-year trial basis as outlined in paragraphs 9 to 13 and to evaluate Option 2 as outlined in paragraphs 14 and 16.
 - ii. The prioritization criteria for identifying Codex standards for review and their priority rankings presented in Appendix I and the general application of the priority rankings outlined in paragraph 20 and in consideration of the information presented in paragraphs 21 to 23.
25. If the recommendations presented in paragraphs 24 i) and ii) are accepted, the tracking lists noted in paragraph 9 will be circulated for comment, in the form of a circular letter, in advance of CCCF15 by the Codex Secretariat based on the input provided by Chair of the in-session working group identified as per paragraph 23.
26. CCCF14 identifies a Chair of the in-session working group convening on this topic for the first time at CCCF15.

APPENDIX I
(For consideration by CCCF)

PROPOSED PRIORITIZATION OF CRITERIA FOR IDENTIFYING CODEX STANDARDS FOR REVIEW

Criteria¹ for identifying Codex standards for review	Likelihood of indicating a potential safety concern²	Overall proposed prioritization for review by CCCF 1 – highest priority 2 – medium priority 3 – lowest priority
<i>Criteria for Maximum levels, Guideline Levels and Codes of Practice</i>		
>15 years since review or initial establishment	Low to moderate	2
>25 years since initial review or establishment	Moderate to high	1
Recommended for re-evaluation by CCCF, CAC or a member country within a certain period of time or at an unspecified future date.	Low to Moderate	2
New occurrence data are available: Occurrence data identified by CCCF or its member countries and/or submitted to the GEMS/Food database are significantly different ³ across two or more regions or markets than those used to establish the existing ML or GL.	Moderate to high	1
New dietary exposure data are available: CCCF, JECFA, or other relevant joint FAO/WHO expert consultations recognized by CCCF developed new dietary exposure estimates or revised existing estimates that are significantly different ³ than the previous estimates that were used to establish the existing ML or GL.	Moderate to high	1
A new health-based guidance value (HBGV) is available: Either JECFA, upon request by CCCF, or other relevant joint FAO/WHO expert consultations recognized by CCCF developed a new HBGV, revised an existing HBGV that is significantly different ³ than the previous HBGV that was used to establish the existing ML or GL, or withdrew an existing HBGV.	Moderate to high	1
A new or updated health risk assessment is available from JECFA or other relevant joint FAO/WHO expert consultations recognized by CCCF and the conclusions are significantly different ³ than the previous evaluation.	Moderate to high	1
<i>Additional Criteria for Maximum Levels</i>		
Codex commodity standards: Significant ³ revisions have been made to the commodity standards for relevant foods or food groups for which MLs are established.	n/a	3
Codex Classification of Food and Feed (CXM 4-1989): Significant ³ revisions have been made to this document for relevant foods or food groups for which MLs are established	n/a	3
Trade disruptions: An existing ML for a certain food and contaminant combination is responsible for disruptions in international trade.	n/a	2 1 – when involving a trade disruption of a staple food

Additional Criteria for Codes of Practice		
Technological advances and developments: Significant ³ new information is available on contamination sources or processes, and/or agricultural, production and manufacturing practices related to food or feed contaminant management and control	n/a	2
Expanded scope: CoP could include other contaminants or toxins, or food or feed, with comparable contamination sources or processes, and/or agricultural, production and manufacturing practices	n/a	3
Comparable CoP updated: Updates to a CoP for a similar food or feed and contaminant combination may be transferable to another CoP or make an existing CoP redundant	n/a	3
<p>n/a – not applicable</p> <p>¹Certain criteria may overlap, particularly those relating to the various elements of a health risk assessment</p> <p>²Potential safety concern would be determined once any new data and scientific information are assessed</p> <p>³The significance would be determined on a case-by-case basis by CCCF</p>		

APPENDIX II**DISCUSSION PAPER ON THE IMPLEMENTATION OF A STRUCTURED APPROACH
TO IDENTIFY THE NEED FOR REVIEW OF
CODEX STANDARDS AND RELATED TEXTS FOR CONTAMINANTS IN FOODS
(CX/CF 20/14/16)
(For information)****BACKGROUND**

1. At the 11th session of the Codex Committee on Contaminants in Food (CCCF11, 2017), the Codex Secretariat highlighted the need for CCCF to develop a forward work plan to strategically establish or prioritize items within its workload. CCCF11 agreed that the Codex Secretariat and Host Country Secretariat would develop a plan to address this issue and report back at CCCF12.¹
2. A discussion paper regarding the forward workplan of CCCF was presented at CCCF12 (2018). The WHO Representative underlined the value of longer-term forward planning to identify areas of concern for public health with trade implications, allowing for data gathering well in advance.² CCCF12 agreed that a further discussion paper would be prepared by the Codex, JECFA and the Host Country Secretariats with assistance of the EU. The paper would focus on whether CCCF covered the main staple foods moving in international trade and the related presence of contaminants being of public health concern.
3. At CCCF13 (2019), a discussion paper was presented to identify areas of work that CCCF could prioritize for future meetings.³ The focus was on the reduction of health risks resulting from chemical contamination of food. The importance of the identified commodities in trade was to be identified in a later stage. Four key areas were presented in the appendices to the discussion paper. Appendix C focused on the review of existing Codex standards, that is, Maximum Levels (MLs) and Guideline Levels (GLs) in the *General Standard for Contaminants in Food and Feed* (CXS 193-1995)⁴, and Codes of Practice (CoPs)⁵.
4. Appendix B of the discussion paper³ outlined that CCCF, and the Codex Committee on Food Additives and Contaminants (CCFAC) before it, established numerous standards, namely MLs, GLs, and CoPs. Some standards were established long ago and have not been revised since, and for some contaminants CoPs have been established and no MLs have been developed to date. At this time, updates to Codex standards stem from discussions at CCCF, JECFA evaluations, and when new information becomes available. CCCF was invited to consider if a structured approach with criteria on when and why to update/supplement existing standards should be developed and if yes, what this approach should entail.
5. CCCF13 (2019) noted that keeping existing standards up-to-date was important, a work plan would be needed, the proposed approach should not lead to too much administrative burden, and should not preclude ad hoc decisions to revise the existing standards. CCCF13 agreed to establish an electronic working group (eWG), chaired by Canada and co-chaired by Japan and the United States of America (USA), working in English, to prepare a proposal for an approach to identify the need for review of existing CCCF standards for consideration at CCCF14.⁶

SCOPE

6. The scope of this paper is to discuss whether a structured approach should be developed to identify if the review of existing Codex standards is needed.
7. The following topics are outside the scope of the current discussion paper but could be the subject of future work by CCCF:
 - i) Developing the actual structured approach that would be implemented and used to review existing Codex standards, and how this could be integrated with processes related to new Codex standard development;
 - ii) Proposing a systematic approach on when to establish new MLs and CoPs; this includes proposing new Codex standards for food and contaminant combinations for which an ML(s) is established but no corresponding CoP, and vice versa;

¹ REP 17/CF, paras. 156-157

² REP 18/CF, paras. 149-156

³ CX/CF 19/13/18

⁴ <http://www.fao.org/fao-who-codexalimentarius/codex-texts/list-standards/en/>

⁵ <http://www.fao.org/fao-who-codexalimentarius/codex-texts/codes-of-practice/en/>

⁶ REP 19/CF, paras. 170-184

- iii) Proposing a systematic approach on when to add chemicals to the Priority List of Contaminants and Naturally Occurring Toxicants for Evaluation by the Joint FAO/WHO Expert Committee on Food Additives (JECFA); and
- iv) Proposing a systematic approach on when to develop sampling plans for food contaminants for which there are MLs or GLs but no sampling plans.

DEFINITIONS

8. The *General Standard for Contaminants in Food and Feed* (CXS 193-1995) defines MLs and GLs for the purposes of contaminants and toxins in food and feed and provides some general information about CoPs (see paragraphs 9 through 11).
9. **A Maximum level (ML)** for a contaminant in a food or feed commodity is the maximum concentration of that substance recommended by the Codex Alimentarius Commission (CAC) to be legally permitted in that commodity.⁷
10. **A Guideline level (GL)** is the maximum level of a substance in a food or feed commodity which is recommended by CAC to be acceptable for commodities moving in international trade. When the GL is exceeded, governments should decide whether and under what circumstances the food should be distributed within their territory or jurisdiction. Because CAC has decided that the preferred format of a Codex standard in food or feed is a ML, the present existing or proposed GLs shall be reviewed for their possible conversion to a ML after a risk assessment performed by JECFA, if appropriate.⁸
11. **A Code of practice (CoP)** is not expressly defined in the GSCFF or any other Codex documents. The GSCFF, however, indicates that a CoP is established to ensure that adequate action is taken to reduce contamination of food and feed. A CoP shall be elaborated comprising source related measures and Good Manufacturing Practices (GMPs) as well as Good Agricultural Practices (GAPs) in relation to the specific contamination problem.⁹

BACKGROUND INFORMATION

12. The Codex Procedural Manual¹⁰ states that when a Codex Committee proposes to elaborate a new standard, CoP or related text within its terms of reference, it should first consider the priorities established by CAC in the Strategic Plan, the relevant outcomes of the Critical Review conducted by the Executive Committee (CCEXEC), and the prospect of completing the work within a reasonable period of time. It should also assess the proposal against the Criteria for the establishment of work priorities (applicable to general subjects) set out in Section II of the Procedural Manual.

Guideline Levels and Maximum Levels

13. The CAC indicates that the preferred format of a Codex standard in food or feed is an ML and that existing or proposed GLs shall be reviewed for their possible conversion to MLs after a risk assessment performed by JECFA, if appropriate.¹¹ This approach was taken for the GLs in the GSCFF for methylmercury in predatory and non-predatory fish, which were revoked by the CAC following the establishment of MLs for methylmercury in tuna, alfonsino, marlin, and shark.¹² JECFA's *Consultation on the Risks and Benefits of Fish Consumption*¹³, conducted upon request of CCFAC38 (2006)¹⁴, informed CCCF's review of the methylmercury GLs¹⁵. CCCF's work to consider establishing MLs for methylmercury in other fish species is ongoing.

⁷ GSCFF, Section 1.2.4

⁸ GSCFF, Section 1.2.4, Footnote 1

⁹ GSCFF, Section 1.3.1

¹⁰ Procedural Manual, Section II

¹¹ GSCFF, Section 1.2.4, Footnote 1

¹² REP 18/CAC, Appendix V

¹³ Report of the Joint FAO/WHO Expert Consultation on the Risks and Benefits of Fish Consumption, 25-29 January 2010, Rome, Italy. Available from: <http://www.fao.org/3/ba0136e/ba0136e00.pdf>.

¹⁴ ALINORM 06/29/12; paras. 191, 192

¹⁵ REP11/CF, para. 98; REP12/CF, para. 45

14. Certain Codex documents describe the criteria for establishing new MLs for contaminants in food and feed. The GSTCFF states that a Codex ML in food and feed should be set only for those contaminants that present both a significant risk to public health and a known or expected problem in international trade.¹⁶ As well, MLs should be set only for food that is significant for the total exposure of the consumer to the contaminant.¹⁷ Further, MLs should be set in such a way that the consumer is adequately protected.¹⁸ The GSCFF also provides detailed information on the data and information requirements for ML elaboration; for example, the availability of information on sampling procedures, internationally representative data, a tolerable intake level, exposure estimates, and complete risk assessment.¹⁹
15. No Codex documents provide guidance on what would trigger a review of existing Codex MLs in the GSTCFF. No existing Codex MLs are currently undergoing review, however, some existing MLs have been reviewed, in the past, as was the case for the lead. At CCCF03 (2009), member countries requested that lead be added to the JECFA Priority List.²⁰ The JECFA74 (2011) re-evaluation for lead²¹ concluded that the previously established provisional tolerable weekly intake (PTWI) for lead could no longer be considered health protective and was withdrawn. JECFA's updated assessment of lead, general awareness that levels of lead in foods had decreased over time, and that the MLs reflected outdated production practices triggered CCCF to review the existing Codex MLs for lead. The updates to the established lead MLs in the GSCFF were completed in 2019 by CCCF13.

Codes of Practice

16. The Codex Procedural Manual (Section IV, paragraph 10) provides some general guidance on when a new CoP for a food contaminant would be established. It indicates that when there is evidence that a risk to human health exists but scientific data are insufficient or incomplete, the CAC should not proceed to elaborate a standard but should consider elaborating a related text, such as a CoP, provided that such a text would be supported by the available scientific evidence.
17. The preferred approach of CCCF is to elaborate a CoP before an ML(s) is established for a certain food and contaminant combination. This approach is implied by the GSCFF, which states that contaminant levels in food and feed shall be as low as reasonably achievable (ALARA) through best practice such as GAPS and GMPs²², and that, where possible, MLs should be based on GMP and/or GAP considerations in order to achieve contaminant levels that are ALARA.²³ This approach has been demonstrated in the case of aflatoxins in tree nuts, for which the CoP (CXC 59-2005) was finalized in 2005 and the MLs in 2008. Another example is for tin in canned foods; the CoP (CXC 60-2005) was established in 2005 and the MLs for canned beverages and foods in 2007.
18. Eleven (11) of the 22 CoPs elaborated by CCCF do not have associated MLs (Appendix C). For example, CCFAC25 (2002) agreed that MLs for dioxins and polychlorinated biphenyls (PCBs) should not be elaborated²⁴ due to the lack of globally representative data, the opinion of member countries that source-directed measures were the most effective tool to reduce dioxin levels, and the need for economical and practical analytical screening methods. The CoP for dioxins and PCBs (CXC 62-2006) was subsequently elaborated.
19. Despite the preferred approach to establish CoPs before MLs for a given food and contaminant combination, of the 103 individual Codex MLs, 29 do not have an associated CoP (Appendix A). Of the 41 individual Codex GLs, none have an associated CoP (Appendix B).
20. No Codex documents provide guidance on what would trigger a review of an existing CoP. Of the 22 CoPs elaborated by CCCF, 3 have undergone updates.²⁵ Currently, one CoP, that for lead in foods (CXC 56-2004), is in the process of being updated and no others are scheduled for review or have been raised for new work (Appendix C).

¹⁶ GSTCFF Annex 1; Sections 1.3.1 and 1.3.2

¹⁷ Procedural Manual, Section IV, also with reference to Section 3 of the Policy of the Committee on Contaminants in Foods for Exposure Assessment of Contaminants and Toxins in Foods or Food Groups

¹⁸ GSTCFF Section 1.3.2

¹⁹ GSTCFF, Annex 1

²⁰ ALINORM 09/32/41, Appendix XI

²¹ World Health Organization. 2011. Evaluation of certain food additives and contaminants: seventy-third report of the Joint FAO/WHO Expert Committee on Food Additives. Available from:

<http://apps.who.int/food-additives-contaminants-jecfa-database/chemical.aspx?chemID=3511>

²² GSTCFF Section 1.3.1

²³ GSTCFF, Annex I

²⁴ ALINORM 03/12

²⁵ CXC 51-2003; CXC 56-2004; CXC 59-2005; CX 62-2006

21. When CoPs are updated and when new CoPs are developed, CCCF first determines, through a discussion paper presented at CCCF, if there is sufficient information/new information available on contamination sources and mitigation measures that would warrant such work.²⁶ For example, the CoP for dioxins and dioxin-like PCBs (CX 62-2006) was updated in 2018 to also include non-dioxin-like PCBs, as their sources in food and feed are similar to dioxin-like PCBs.²⁷

EXISTING CODEX STANDARDS: TIMING OF ELABORATION AND UPDATE

Maximum Levels and Guideline Levels in the GSCFF

22. The GSCFF was established in 1995, almost 25 years ago. Prior to the GSCFF being established, Codex MLs and GLs were housed in individual Codex standard documents for each food and contaminant combination.
23. As of December 31, 2019, there were a total of 103 Codex MLs and 41 Codex GLs for different food and contaminant combinations in the GSCFF. A summary of the number of years since the establishment, or the most recent review, of Codex MLs and GLs is shown in the Table 1²⁸ and the complete lists of MLs and GLs in the GSCFF are provided in Appendices A and B, respectively.

Table 1. Length of time since MLs and GLs in the GSCFF were established or updated^a

	Within last 5 years (2015-2019)	> 5 years (2010-2014)	> 10 years (2005-2009)	> 15 years (2000-2004)	> 20 years (1995-1999)	> 25 years (before 1995)
Number of MLs	40	26	22	5	0	10
Number of GLs	-	40 (radionuclides)	-	-	0	1 (vinylchloride monomer)

^a refers to year the ML was most recently reviewed by CCCF; based on the results of the assessment, the ML value was either retained, as is, or updated in the GSCFF. The dates of original adoption of Codex MLs and GLs are not listed in the GSCFF and are not available elsewhere.

Codes of Practice

24. As of December 31, 2019, 22 CoPs have been elaborated by CCCF, and a new CoP for cadmium in cocoa is in development.²⁹ A summary of the number of years since the establishment or the most recent update (i.e. amendment or revision) of CoPs developed by CCCF is shown in the Table 2 and the complete list of CoPs is provided in Appendix C.

Table 2. Length of time since codes of practice developed by CCCF were established or updated

	Within last 5 years (2015-2019)	> 5 years (2010-2014)	> 10 years (2005-2009)	> 15 years (2000-2004)	> 20 years (1995-1999)	> 25 years (before 1995)
Number of CoPs	3	4	9	5	1	0

Maximum levels and codes of practice recommended for re-evaluation

25. As of December 31, 2019, 8 existing MLs (Appendix D) and 1 existing CoP (Appendix E) have been recommended by either CCCF, CAC, or a member country for re-evaluation by CCCF following their adoption, either within a certain period of time or at an unspecified future date. In these cases, the review has not been scheduled or raised as new work, despite either the re-evaluation date or a number of years having passed since the recommendation for future review. In other cases, the review date is approaching in 2020 or 2021.

²⁶ e.g. CXC 51-2003: REP14/CF, para. 98; CXC 56-2004: REP 19/CF, para. 105; CXC 59-2005: ALINORM 09/32/41, para. 121 and ALINORM 10/33/41, para. 77; CXC 78-2017: REP15/CF, para. 140; CXC-##-### (under development): REP 19/CF, para.109

²⁷ REP17/CF, para. 144; REP18/CF, Appendix V

²⁸ The dates of original adoption of Codex MLs and GLs are not listed in the GSCFF and are not available elsewhere.

²⁹ REP19/CF, para. 112

CRITERIA (TRIGGERS) FOR REVIEW OF EXISTING CODEX STANDARDS

26. The Codex Committee on Pesticide Residues (CCPR) uses a two-tiered, time-based approach (i.e. 15 and 25-year rules) to prioritize existing pesticide maximum residue limits (MRLs) for review.³⁰ It is proposed that a similar approach, as outlined in paragraphs 27 and 28, be used by CCCF to prioritise existing MLs, GLs and CoPs for review.

Criteria for review of maximum levels, guideline levels and codes of practice

27. **15-year rule:** Codex MLs, GLs and CoPs for food contaminants that have not been reviewed or updated for more than 15 years will be added to the “List of Contaminant Standards Established or Most Recently Updated > 15 Years Ago”. Codex standards in this list would be scheduled for review upon nomination by a member country, based on the availability of adequate new data and scientific information under the criteria headings, below (paragraphs 31 to 41).
28. **25-year rule:** Codex MLs, GLs and CoPs listed in the “List of Contaminant Standards Established or Most Recently Updated > 15 Years Ago” (as outlined in paragraph 27) for 10 years without nomination by a member country will be moved to the list of standards > 25 years old and brought to the attention of CCCF.
29. The establishment of a “15-year rule” and “25-year rule”, as outlined in paragraphs 27 and 28, respectively, would not preclude ad hoc work to review Codex standards that are deemed to be of high importance from a food chemical safety perspective that may be required in response to, for example, adulteration, natural disasters, or other unforeseen environmental issues.
30. Any new data and scientific information that falls under one of the criteria headings below (paragraphs 31 to 41) would be considered by CCCF for each food and contaminant combination on a case-by-case basis, in the form of a discussion paper to be considered by the Committee. CCCF would determine for which criterion(a) new information is available, the adequacy of such information, and the magnitude or significance³¹ of the new information relative to the existing situation/knowledge base. CCCF would also consider, on a case-specific basis, the relative priority of each criterion, if new information is available for several. Criteria that give indications of a public health concern should be given highest priority. CCCF will then determine if there is sufficient adequate new data and/or scientific information to initiate a review of an existing Codex standard.
31. **New occurrence data are available:** Occurrence data identified by CCCF or its member countries and/or submitted to the GEMS/Food database are significantly different than that used to establish the existing ML or GL. For example, more geographically representative occurrence data are available, contaminant profiles have changed due to environmental issues (e.g. climate change, natural disasters), new plant cultivars that respond differently to contaminants are being used, and/or technological changes have resulted in improvements in agricultural and manufacturing practices.
32. **New dietary exposure data are available:** CCCF, JECFA, or other relevant joint FAO/WHO expert consultations recognized by CCCF develop new dietary exposure estimates or revise existing estimates that are significantly different than the previous estimates that were used to establish the existing ML or GL.
33. **A new health-based guidance value (HBGV) is available:** Either JECFA, upon request by CCCF, or other relevant joint FAO/WHO expert consultations recognized by CCCF develop a new HBGV, revise an existing HBGV that is significantly different than the previous HBGV that was used to establish the existing ML or GL, or withdraw an existing HBGV.
34. **A new health risk assessment (HRA) is available:** CCCF, JECFA, or other relevant joint FAO/WHO expert consultations recognized by CCCF present the results of a new HRA or update an existing HRA in which the conclusions are significantly different than the previous evaluation. In cases where public health concerns are identified, a review of the associated Codex standards should be prioritized.
35. **Recommended for re-evaluation:** CCCF, CAC, or a member country recommends the re-evaluation of Codex standards by CCCF within a specific period of time or at an unspecified future date following their adoption. Any recommended re-evaluation timelines would take precedence over the “15-year rule” and “25-year rule”, as outlined in paragraphs 27 and 28, respectively. Codex MLs and CoPs that have been recommended for future re-evaluation are listed in Appendices D and E, respectively.³²

³⁰ Procedural Manual, Risk Analysis Principles applied by the Codex Committee on Pesticide Residues, Sections 5.2.1 and 5.2.5

³¹ The magnitude or significance would be determined on a case-by-case basis by CCCF

³² The eWG is not aware of GLs that have been recommended for future re-evaluation

Additional criteria for review of maximum levels

36. **Codex commodity standards:** Significant revisions have been made to the commodity standards for relevant foods or food groups for which MLs are established.
37. **Codex Classification of Food and Feed (CXM 4-1989):** Significant revisions have been made to this document for relevant foods or food groups for which MLs are established.
38. **Trade disruptions:** An existing ML for a certain food and contaminant combination is responsible for disruptions in international trade.

Additional criteria for review of codes of practice

39. **Technological advances and developments:** Significant new information³³ is available on contamination sources or processes, and/or agricultural, production and manufacturing practices related to food contaminant management and control. Information could be submitted by members or observers, available from industry or in the scientific literature, and may be described by JECFA in a new or updated contaminant monograph or evaluation.
40. **Expanded scope:** CCCF identifies that the scope of an existing CoP could readily be expanded to include other contaminants or toxins with comparable contamination sources or processes, and/or agricultural, production and manufacturing practices. For example, non-dioxin-like PCBs were included in the CoP for dioxins and dioxin-like PCBs (CXC 62-2006), which was updated to include these chemicals in 2018.³⁴
41. **Comparable CoP updated:** Updates to a CoP for a similar food or feed and contaminant combination may be transferable to another CoP or make an existing CoP redundant. In the past, updates to one CoP have not always triggered the review of comparable CoPs. For example, the CoP for aflatoxin B1 in raw materials and feedingstuffs for milk-producing animals (CXC 45-1997) was not reviewed following the updates to the CoP on mycotoxin contamination in cereals (CXC 51-2003) in 2016, which included the addition of an annex on aflatoxins. As well, neither of the above CoPs is referenced in the other. As another example, the CoP for aflatoxins in peanuts (CXC 55-2004) has not been reviewed since it was initially elaborated, yet the CoP for aflatoxins in tree nuts (CXC 59-2005) was updated in 2010 and includes information that could be also be applicable to peanuts.

PROS AND CONS OF DEVELOPING A SYSTEMATIC APPROACH TO DETERMINING THE NEED TO REVIEW EXISTING CODEX STANDARDS

42. The pros and cons associated with establishing an approach to identify if there is a need for review of existing Codex standards are provided in Table 3, in order to help determine if such an approach should be implemented by CCCF.

Table 3. Pros and cons of implementing a structured approach to Codex standard review

Pros	Cons
Standards that have been recommended for re-evaluation by CCCF, the CAC, or a member country within a certain period of time or at an unspecified future date would be tracked and the work could be scheduled, as needed	Significant, ongoing, resource requirements to: <ol style="list-style-type: none"> i) Maintain the “List of Contaminant Standards Established or Most Recently Updated > 15 Years Ago” and standards that meet the “25-year rule” ii) Maintain a list of Codex standards that have been recommended for re-evaluation by CCCF, the CAC, or a member country within a certain period of time or at an unspecified future date iii) Maintain a list of adoption dates or the dates of the most recent review of Codex standards iv) Determine the availability and adequacy of new data and scientific information that would justify a full review v) Review and update the standards, as required

³³ The magnitude or significance would be determined on a case-by-case basis by CCCF

³⁴ REP18/CAC, Appendix III

Pros	Cons
Older standards would be considered for updates within a reasonable period of time	Significant amount of initial 'catch-up' work to determine the adequacy of new information and update contaminant standards, as necessary, most recently reviewed or updated > 25 years ago (10 MLs, 1 GL, 0 CoPs) and > 15 year ago (5 MLs, 6 CoPs)
Would establish a proactive versus reactive approach to updating standards and managing food chemical safety	Locking into a certain approach may limit flexibility for ad hoc revisions, unless such flexibility is clearly provided for in the framework and it is understood that ongoing work could be deferred if pressing food safety issues arise

PROPOSED OPTIONS

43. **Option 1 – Status quo:** Existing Codex standards would continue to be reviewed on an ad hoc basis, upon nomination by member countries and/or CCCF on the basis of new and adequate data and scientific information.
44. **Option 2 – Tracking lists:** Establish tracking lists of Codex standards > 15 and > 25 years old and of standards recommended for re-evaluation by CCCF, CAC, or a member country. The review of existing Codex standards would continue on an ad hoc basis, as described in paragraph 43.
45. **Option 3 – Tracking & prioritization lists:** Establish tracking lists of Codex standards > 15 and > 25 years old and of standards recommended for re-evaluation by CCCF, CAC, or a member country. Any Codex standards meeting the "25-year rule" would be prioritized for assessment by a member country for the availability of adequate new data and scientific information in order to determine if such information is sufficient to warrant a review of the standard. If a member country does not volunteer for the assessment, the work would be assigned to a member country by CCCF or Codex Secretariat. Option 3 would help ensure that the availability of new data or scientific information is considered for all Codex MLs, GLs, and CoPs every 25 years, at a minimum. Codex standards could still be reviewed on an ad hoc basis, as described in paragraph 43.
46. Only two eWG members voted on the proposed options. Both supported Option 2, as described in paragraph 43, as it provides a structure that will help ensure that dated Codex standards are brought to the attention of CCCF while still allowing for the flexibility of ad hoc reviews. Option 2 is preferred over Option 3 as it involves fewer resource requirements and would avoid the potential challenges associated with the assignment of new work by CCCF or Secretariat in the absence of member country volunteers. One eWG member suggested that Option 2 could be implemented on a trial basis to determine if it provides benefits over the current ad hoc approach (i.e. Option 1, as described in paragraph 42).

RECOMMENDATIONS

47. CCCF is invited to focus its discussions in the recommendations below taking into account the information and analysis provided in paragraphs 1 - 46. Additional information given in Appendices A-E can further assist Codex members and observers in the consideration of the recommendations below.
48. CCCF is invited to consider implementing Option 2, as described in paragraph 43. It is proposed that Option 2 be implemented for 3 years, after which time its effectiveness could be reviewed and discussed in 2023 by CCCF17.
49. The process by which Option 2 could be implemented and how this could be integrated with the process related to new Codex standard development is outside the scope of this discussion paper. However, a possible approach for Option 2 could involve:
- i. Establishing an eWG to generate, and annually maintain, the following lists:
 - a) List(s) of contaminant standards established or most recently updated > 15 and > 25 years ago.³⁵
 - b) List of Codex standards that have been recommended for re-evaluation by CCCF, CAC, or a member country within a certain period of time or at an unspecified future date.

³⁵ The dates of original adoption of Codex standards could also be included in these lists. However, the original adoption dates of Codex MLs and GLs are not currently listed in the GSCFF and are not available elsewhere. This information could be researched, as resources permit, and priority given to MLs and GLs that are most heavily referenced by member countries. For MLs and GLs established before the GSTCFF, Codex commodity standards would have to be consulted for the original adoption dates.

- ii. The above tracking lists would be shared with CCCF in advance of each meeting. An in-session working group at the annual CCCF meeting could summarize the current review status, if any, and make any recommendations to CCCF for review priorities from the tracking lists. CCCF would then consider how to balance these priorities with new Codex standard development.
- iii. member countries that nominate existing Codex standards for review or new Codex standards for elaboration would take the item on as new work and present their findings in the form of a discussion paper.

Appendix A: Maximum levels in GSCFF

Contaminant	Food Commodity ^a	Year of Adoption or Review ^b	Corresponding CoP
<i>Established >20 years ago (before 2000)</i>			
Acrylonitrile	Food	Prior to 1995	No
Arsenic, total	Edible fats and oils		No
	Fat spreads and blended spreads		
	Salt, food grade		
Cadmium	Salt, food grade		No
Tin, total	Cooked cured chopped meat		CXC 60-2005 (specific to canned foods)
	Cooked cured ham		
	Cooked cured pork shoulder		
	Corned beef		
	Luncheon meat		
<i>Established >15 years ago (between 2000-2004)</i>			
Aflatoxin M ₁	Milks	2001	CXC 45-1997
Cadmium	Cereal grains		No
	Legume vegetables		
	Pulses		
Patulin	Apple juice	2003 ³⁶	CXC 50-2003
<i>Established >10 years ago (between 2005-2009)</i>			
Cadmium	Brassica vegetables	2005	No
	Bulb vegetables		
	Fruiting vegetables		
	Leafy vegetables		
	Root and tuber vegetables		
	Stalk and stem vegetables		
	Wheat		
	Cephalopods	2006	
	Marine bivalve molluscs		
	Rice, polished		
Tin, total	Canned beverages	2007	CXC 60-2005
	Canned food (other than beverages)		

³⁶ CCFAC 36 (2004) agreed to reconsider the ML by including it on the Priority List for Evaluation by JECFA in 4 years time (i.e. 2007) to allow for the implementation of the related CoP (ALINORM 04/27/12, paras. 130-131). In 2007, CCCF01 agreed to take patulin out of the priority list, noting that there was an existing ML and this topic was no longer considered a high priority (ALINORM 07/30/41, para. 127).

Contaminant	Food Commodity ^a	Year of Adoption or Review ^b	Corresponding CoP
Aflatoxins, total (B ₁ , B ₂ , G ₁ , G ₂)	Almonds (destined for further processing)	2008	CXC 59-2005
	Hazelnuts (destined for further processing)		
	Pistachios (destined for further processing)		
	Almonds (ready-to-eat)		
	Hazelnuts (ready-to-eat)		
	Pistachios (ready-to-eat)		
3-MCPD	Liquid condiments with acid-HVP	2008	CXC 64-2008
Ochratoxin A	Barley		CXC 51-2003
	Rye		
	Wheat		
Established >5 years ago (between 2010-2014)			
Aflatoxins, total (B ₁ , B ₂ , G ₁ , G ₂)	Brazil nuts (destined for further processing)	2010	CXC 59-2005
	Brazil nuts (ready-to-eat)		
Melamine	Food (other than infant formula) and feed		No
	Powdered infant formula		
Arsenic, total	Natural mineral waters	2011	No
Cadmium	Natural mineral waters		No
Lead	Natural mineral waters		CXC 56-2004 (update in progress)
Mercury, total	Natural mineral waters		No
	Salt, food grade		No
Aflatoxins, total (B ₁ , B ₂ , G ₁ , G ₂)	Dried figs		2012
Lead	Meat and fat of poultry	CXC 56-2004 (update in progress)	
	Meat of cattle, pigs, sheep		
Melamine	Liquid infant formula	No	
Hydrocyanic acid	Cassava flour	2013	CXC 73-2013
	Gari		
Lead	Cereal grains		CXC 56-2004 (update in progress)
	Milks		
Arsenic, inorganic	Rice, polished	2014	CXC 77-2017
Fumonisin (B ₁ , B ₂)	Maize flour/meal		CXC 51-2003
	Raw maize grain		
Lead	Bulb vegetables		CXC 56-2004 (update in progress)
	Fruits		
	Infant formula		
	Leafy vegetables		
	Root and tuber vegetables		
	Secondary milk products		

Contaminant	Food Commodity ^a	Year of Adoption or Review ^b	Corresponding CoP
Established within last 5 years (2015-2019)			
Deoxynivalenol	Wheat maize and barley milling fractions	2015	CXC 51-2003
	Infant cereals		
	Wheat, maize, and barley cereal grains		
Lead	Berries and other small fruits		
	Brassica vegetables		
	Canned fruits		
	Canned vegetables		
	Cranberry		
	Currants		
	Elderberry		
	Fruit juices		
	Fruiting vegetables		
Legume vegetables			
Arsenic, inorganic	Rice, husked	2016	CXC 77-2017
Lead	Pickled cucumbers	2017	CXC 56-2004 (update in progress)
	Table olives		
	Canned chestnuts/purée		
	Fish		
	Fruit juices obtained exclusively from berries and other small fruits		
	Jams, jellies and marmalades		
	Preserved tomatoes		
	Pulses		
Aflatoxins, total (B ₁ , B ₂ , G ₁ , G ₂)	Peanuts (destined for further processing)	2018	CXC 55-2004
Cadmium	Chocolate (≥70% total cocoa solids)		In development
	Chocolate (≥50 to <70% total cocoa solids)		
Lead	Edible fats and oils		
	Fat spreads and blended spreads		
	Grape juice		
	Mango chutney		
	Mushrooms		
	Salt, food grade		
Methylmercury	Alfonsino		No
	Marlin		
	Shark		
	Tuna		
Lead	Cattle, edible offal of	2019	CXC 56-2004 (update in progress)
	Fortified/liqueur wine		
	Pig, edible offal of		
	Poultry, edible offal of		
	Wine		

a - refer to GSCFF for specific exclusions and other details; b - refers to year the ML was most recently reviewed by CCCF; based on the results of the assessment, the ML value was either retained, as is, or updated in the GSCFF

Appendix B: Guideline levels in the GSCFF

Contaminant	Food Commodity ^a	Year of Adoption or Review ^b	Corresponding Codex CoP
<i>Established >20 years ago (before 2000)</i>			
Vinyl chloride monomer	Food	Prior to 1995	No
<i>Established >5 years ago (between 2010-2014)</i>			
Radionuclides (Pu-238, Pu-239, Pu-240, Am-241, Sr-90, Ru-106, I-129, I-131, U-235, S-35, Co-60, Sr-89, Ru-103, Cs-134, Cs-137, Ce-144, Ir-192, H-3, C-14, Tc-99)	Infant foods	2013	No
Radionuclides (Pu-238, Pu-239, Pu-240, Am-241, Sr-90, Ru-106, I-129, I-131, U-235, S-35, Co-60, Sr-89, Ru-103, Cs-134, Cs-137, Ce-144, Ir-192, H-3, C-14, Tc-99)	Foods other than infant foods	2013	No

a - refer to GSCFF for specific exclusions and other details; b - refers to year the ML was most recently reviewed by CCCF; based on the results of the assessment, the ML value was either retained, as is, or updated in the GSCFF

Appendix C: Codes of Practice Developed by CCCF

Code of Practice	Document No.	Year Established (Updated)	Corresponding Codex ML(s)
<i>Established >20 years ago (before 2000)</i>			
Reduction of Aflatoxin B1 in Raw Materials and Supplemental Feedingstuffs for Milk-Producing Animals	CXC 45-1997	1997	Yes (for aflatoxin M1 in milks)
<i>Established >15 years ago (between 2000-2004)</i>			
Concerning Source Directed Measures to Reduce Contamination of Foods with Chemicals	CXC 49-2001	2001 (2012)	N/A
Prevention and Reduction of Patulin Contamination in Apple Juice and Apple Juice Ingredients in Other Bev.	CXC 50-2003	2003	Yes
Prevention and Reduction of Aflatoxin Contamination in Peanuts	CXC 55-2004	2004	Yes
Prevention and Reduction of Mycotoxin Contamination in Cereals	CXC 51-2003	2003 (2017)	Yes (for some mycotoxins)
Prevention and Reduction of Lead Contamination in Foods	CXC 56-2004	2004 (<i>updates in progress</i>)	Yes
<i>Established >10 years ago (between 2005-2009)</i>			
Prevention and Reduction of Inorganic Tin Contamination in Canned Foods	CXC 60-2005	2005	Yes
Prevention and Reduction of Ochratoxin A Contamination in Wine	CXC 63-2007	2007	No
Prevention and Reduction of 3-MCPD during the Production of Acid-HVPs and Products that Contain Acid-HVPs	CXC 64-2008	2008	Yes
Prevention and Reduction of Aflatoxin Contamination in Dried Figs	CXC 65-2008	2008	Yes
Prevention and Reduction of Acrylamide in Foods	CXC 67-2009	2009	No
Prevention and Reduction of Contamination of Food with PAHs from Smoking and Direct Drying Processes	CXC 68-2009	2009	No
Prevention and Reduction of Ochratoxin A Contamination in Coffee	CXC 69-2009	2009	No
Prevention and Reduction of Aflatoxin Contamination in Tree Nuts	CXC 59-2005	2005 (2010)	Yes
Prevention and Reduction of Dioxin, Dioxin-like PCBs and non-Dioxin-like PCBs in Food and Feed	CXC 62-2006	2006 (2018)	No
<i>Established >5 years ago (between 2010-2014)</i>			
Prevention and Reduction of Ethyl Carbamate Contamination in Stone Fruit Distillates	CXC 70-2011	2011	No
Prevention and Reduction of Ochratoxin A Contamination in Cocoa	CXC 72-2013	2013	No
Prevention and Reduction of Hydrocyanic Acid (HCN) in Cassava and Cassava Products	CXC 73-2013	2013	Yes
Prevention and Reduction for Weed Control to Prevent and Reduce Pyrrolizidine Alkaloid Contamination in Food and Feed	CXC 74-2014	2014	No
<i>Established within last 5 years (2015-2019)</i>			
Prevention and Reduction of Arsenic Contamination in Rice	CXC 77-2017	2017	Yes
Prevention and Reduction of Mycotoxins in Spices	CXC 78-2017	2017	No (work is ongoing)
Reduction of 3-MCPDEs and GEs in Refined Oils and Food Products Made with Refined Oils	CXC 79-2019	2019	No

Appendix D: Maximum levels recommended for re-evaluation by CCCF, CAC, or a Member Country where the re-evaluation is outstanding or upcoming

Contaminant	Food	Comments	Reference	Years since ML Established	Year Recommended for Review*
Lead	Milk	CCCF noted that the ML might be reviewed in future when new data became available and might be revised in light of the review of the MLs for milk products	REP13/CF para. 29	6	Not specified
Lead	Cereal grains	CCCF noted that if different MLs would be considered for cereal grains in future, stricter MLs could be applied to certain cereal grains in light of available data	REP13/CF para. 29	6	Not specified
Lead	Table olives	CCCF agreed to lower the ML from 1 mg/kg to 0.4 mg/kg and to re-evaluate in the future when more data became available	REP16/CF para. 77	3	Not specified
Lead	Jams, jellies, marmalades	CCCF agreed to lower the ML to 0.4 mg/kg and to re-evaluate in the future when more data became available	REP17/CF para. 61	2	Not specified
Deoxynivalenol	Cereals and cereal-based products	CCCF decided to proceed with the establishment of MLs and indicated that at CCCF08 (2014) it would consider the extension of the MLs to acetylated derivatives of DON CCCF agreed that when further information became available on occurrence and an internationally validated method, MLs for acetylated derivatives of DON could be considered	REP11/CF para. 41 REP 14/CF paras. 61-62	4	Not specified
Fumonisin	Maize flour & maize meal	CCCF agreed that the ML of 2000 µg/kg for maize flour and maize meal would be advanced for adoption by the CAC with the understanding that an exposure and impact assessment should be undertaken by JECFA within three years for reconsideration of the ML. JECFA83 (2016) updated its exposure assessment and reviewed toxicological and epidemiological studies available since its previous 2011 evaluation. The previously established group PMTDI was retained and limited ne occurrence data were available since 2011 for all regions except Europe. CCCF called upon other regions (Africa, SE Asia, Eastern Mediterranean) to provide data to GEMS/Food on fumonisin levels in maize.	REP14/CF para. 71 JECFA/83/SC REP17/CF para. 151	6	2017

Contaminant	Food	Comments	Reference	Years since ML Established	Year Recommended for Review*
Inorganic arsenic	Husked rice	CAC adopted the ML for husked rice on the understanding that the ML would be reviewed by CCCF three years after the CoP (CXC 77-2017) was finalized	REP16/CAC paras. 63, 65	3	2020
Methylmercury	Tuna	CAC adopted the proposed MLs and agreed that CCCF could consider revising the ML for tuna in the light of additional data after three years	REP18/CAC para. 39	2	2021

*could represent the year that the item is brought forward for new work to CCCF, and not necessarily the year the review should be initiated

Appendix E: Codes of practice recommended for re-evaluation by CCCF, CAC, or a Member Country where the re-evaluation is outstanding or upcoming

Code of Practice	Comments	Reference	Years since CoP Established	Year Recommended for Review*
Prevention and Reduction of Arsenic Contamination in Rice (CXC 77-2017)	CCCF agreed to continue work on the finalization of the COP and stated that the COP could be reviewed in future when more information and data became available A delegation indicated that results of several studies would be available in 2019 and there would be a need to revise the COP when the results become available	REP16/CF para. 99 REP17/CF para. 102	3	2019

*could represent the year that the item is brought forward for new work to CCCF, and not necessarily the year the review should be initiated

APPENDIX III**List of Participants****CHAIRPERSON-PRÉSIDENT-PRESIDENTE**

Ms. Elizabeth Elliott
Head, Food Contaminants Section
Bureau of Chemical Safety
Food Directorate
Health Canada
Canada

Dr. Sonya Billiard
Associate Director,
Bureau of Chemical Safety
Food Directorate
Health Canada
Canada

CO-CHAIRS - CO-PRÉSIDENTS – CO-PRESIDENTES

Mr. Yoshiyuki Takagishi
Associate Director
Food Safety Policy Division
Food Safety and Consumer Affairs Bureau
Ministry of Agriculture, Forestry and Fisheries
Japan

Dr. Yukiko Yamada
Guest Scholar, National Institute of Health Sciences, Ministry of Health, Labour and
Welfare
and Adjunct Professor, Azabu University

Ms. Lauren Robin (Posnick)
Branch Chief
Plant Products Branch
Office of Food Safety
U.S. Food and Drug Administration
United States of America

Mr. Henry Kim
Senior Policy Analyst
Plant Products Branch
Office of Food Safety
U.S. Food and Drug Administration
United States of America

MEMBERS NATIONS AND MEMBER ORGANIZATIONS
ÉTATS MEMBRES ET ORGANIZATIONS MEMBRES
ESTADOS MIEMBROS Y ORGANIZACIONES
MIEMBROS

ARGENTINA-ARGENTINE

Ms. Silvana Ruate
 Head of the Control and Development National Food
 Institute

AUSTRALIA - AUSTRALIE

Dr. Matthew Joseph O'Mullane
 CCCF Delegation Leader, Section Manager
 Food Standards Australia New Zealand

BRAZIL - BRÉSIL – BRASIL

Ms. Larissa Bertollo Gomes Porto
 Health Regulation Expert
 Brazilian Health Regulatory Agency – Anvisa

Ms. Ligia Lindner Schreiner
 Health Regulation Specialist
 Brazilian Health Regulatory Agency

Ms. Carolina Araújo Viera
 Health Regulation Specialist
 Brazilian Health Regulatory Agency

Ms. Ana Claudia Marquim
 Firmo de Araújo
 Specialist on Regulation and Health Surveillance
 Brazilian Health Regulatory Agency

CANADA – CANADÁ

Mr. John Field
 Chief, Chemical Health Hazard Assessment Division-
 Packaging & Contaminants
 Bureau of Chemical and Safety, Food Directorate
 Health Canada

CHINA - CHINE

Mr. Yongning WU
 Professor, Chief Scientist
 China National Center of Food Safety Risk Assessment
 (CFSA)
 Director of Key Lab of Food Safety Risk Assessment,
 National Health and Family Planning Commission

Mr. Jingguang LI
 Professor
 China National Center for Food Safety Risk Assessment
 (CFSA)
 Key Lab of Food Safety Risk Assessment National
 Health and Family Planning Commission

Ms. Yi SHAO
 Associate Professor
 Division II of Food Safety Standards
 China National Center of Food Safety Risk Assessment
 (CFSA)

Mr. Libin WANG
 Professor
 Deputy Director of Food Safety Division Guangdong
 Provincial Health Commission

Mr. Di WU, Ph.D.
 Yangtze Delta Region Institute of Tsinghua University,
 Zhejiang

Ms. Gengsheng HE
 Professor, Deputy Dean
 School of Public Health, Fudan University Deputy
 Director of the Key Laboratory of Public Health Safety
 of the Ministry of Education

Dr. Shuo WANG
 Professor
 School of Medicine
 Nankai University
 Director of Tianjin Key Laboratory of Food Science and
 Health

COSTA RICA

Mrs. Yajaira Salazar
 Coordinator National Committee CCCF
 Ministry of Economics, Industrial and Commercial

Mrs. Amanda Lasso C
 Codex Secretariat
 Ministry of Economics, Industrial and Commercial

EUROPEAN UNION -
UNION EUROPÉENNE -
UNIÓN EUROPEA

Mr. Frans Verstraete
 European Commission

EU Codex Contact Point
 European Commission

GERMANY - ALLEMAGNE - ALEMANIA

Mr. Michael Jud
Senior Scientific Officer
Federal office of consumer protection and food safety

HUNGARY – HONGRIE – HUNGRÍA

Gábor Kelemen
Quality Expert
Ministry of Agriculture

Tímea Dóró
Coordonator
Ministry of Agriculture

INDIA – INDE

Mr. Parmod Siwach
Assistant Director
Export Inspection Council (EIC)
Ministry of Commerce & Industry
NCCP, India

Dr. K.K.Sharma
Coordinator
Pesticide Residues
ICAR-IARI

Dr. Vandana Tripathy
Senior Scientist
ICAR-IARI

IRAN (ISLAMIC REPUBLIC OF) -**IRAN (RÉPUBLIQUE ISLAMIQUE D') -****IRÁN (REPÚBLICA ISLÁMICA DEL)**

Mrs. Mansooreh Mazaheri
Director of Applied Research and Technology
Director of Biology Research Group
Faculty of Food & Agriculture
ISIRI-Standard Research Institute

JAPAN - JAPON - JAPÓN

Mr. Haruyuki Deguchi
Deputy Director
Food Safety Standards and Evaluation Division
Pharmaceutical Safety and Environmental Health
Bureau
Ministry of Health Labour and Welfare

KAZAKHSTAN - KAZAJSTÁN

Zhanar Tolysbayeva
ICBA Director of Global Affairs
The Ministry of Healthcare

KOREA – CORÉE - COREA

Yeji Seong
Codex researcher
Food Standard Division
Ministry of Food and Drug Safety (MFDS)
Republic of Korea

Miok Eom
Senior Scientific Officer
Residues and Contaminants Standard Division
Ministry of Food and Drug Safety (MFDS)
Republic of Korea

Yeon Ju Kim
Codex Researcher
Ministry of Food and Drug Safety (MFDS)
Republic of Korea

Lee Geun Pil
SPS Researcher
Ministry of Agriculture, Food and Rural Affairs
(MAFRA)
Republic of Korea

MEXICO - MEXIQUE – MÉXICO

Ms. Carmen Estela Loreto Gómez
SCCF-CMCAC
Comisión Federal para la Protección contra Riesgos
Sanitarios (COFEPRIS)

Ms. Tania Daniela Fosado Soriano
Punto de Contacto CODEX México
Secretaría de Economía

NETHERLANDS - PAYS-BAS - PAÍSES BAJOS

Ms. Georgina van den Berg
Senior Inspector
Netherlands Food and Consumer Product Safety
Authority

NEW ZEALAND - NOUVELLE-ZÉLANDE -**NUEVA ZELANDIA**

Mr. Andrew Pearson
Manager, Food Risk Assessment
Ministry for Primary Industries

Ms. Jeane Nicolas
Senior Advisor, Toxicology
Ministry for Primary Industries

NIGERIA - NIGÉRIA

Mr. Femi James IBITAYO
Principal Livestock Development Officer
Department of Animal Husbandry Services
Federal Ministry of Agriculture and Rural Development

PARAGUAY

Mirtha Carrillo de Vera
Jefe de Dpto. de Anabólicos del Laboratorio del Servicio Nacional de Calidad y Salud Animal (SENACSA)
Coordinador del Subcomité de Contaminante de los Alimentos del Codex Paraguay
Comité Nacional Codex Alimentarius Capitulo Paraguay (CONACAP)

PERU - PÉROU - PERÚ

Mr. Javier Aguilar Zapata
Especialista en Inocuidad Agroalimentaria
SENASA

Mr. Jorge Pastor Miranda
Especialista en Inocuidad Agroalimentaria
SENASA

Mr. Juan Carlos Huiza Trujillo
Secretario Técnico del Comité Nacional del Codex DIGESA (Dirección General de Salud Ambiental)

POLAND - POLOGNE – POLONIA

Joanna Maryniak-Szpilarska
Agricultural and Food Quality Inspection
Main Inspectorate

SINGAPORE - SINGAPOUR – SINGAPUR

Dr. Wong Kwok Onn
Director, Regulatory Standards Department Food Regulatory Management Division
Singapore Food Agency

SOUTH AFRICA - AFRIQUE DU SUD - SUDÁFRICA

Mr. Force Tefo Thema
National Coordinator for Unesco-Unisa Africa
Botswana University of Agriculture and Natural Resources
Botswana

SWEDEN - SUÈDE – SUECIA

Mrs. Carmina Ionescu
Codex Coordinato
Principal Regulatory Officer
National Food Agency

THAILAND - THAÏLANDE – TAILANDIA

Korwadee Phonkliang
Standards Officer
Office of Standard Development

Chutiwan Jatupornpong
Standards Officer
Office of Standard Development

TURKEY - TURQUIE - TURQUÍA

Betül Vazgeçer
Engineer
Ministry of Agriculture and Forestry
General Directorate of Food and Control

Sinan Arslan
Agriculture and Forestry Expert
Ministry of Agriculture and Forestry
General Directorate of Food and Control

Ahmet Güngör
Agriculture and Forestry Expert
Ministry of Agriculture and Forestry
General Directorate of Food and Control

UNITED KINGDOM - ROYAUME-UNI - REINO UNIDO

Mr. Mark Willis
Head of Contaminants and Residues Branch
Department for Environment Food and Rural Affairs

YEMEN - YÉMEN

Suaad Mohammed Quid Hassen
Yemen Organization for Standardization Metrology and Quality Control

OBSERVERS

OBSERVATEURS

OBSERVADORES

Fédération internationale des vins et spiritueux (FIVS)

Ms. Laura Gelezuinas
Manager

Food Drink Europe

Alejandro Rodarte
Manager Food Policy
Science and R&D

**International Council of Beverages Associations
(ICBA)**

Ms. Simone Soo Hoo
ICBA Secretariat

Maia M. Jack, Ph.D.
Vice President, Science and Regulatory Affairs
American Beverage Association

**International Council of Grocery Manufacturers
Associations /ICGMA**

Sarah Brandmeier
Manager, Regulatory & Technical Affairs

International Feed Industry Federation (IFIF)

Ms. Alexandra de Athayde
Executive Director

Institute of Food Technologists

Rosetta Newsome
Director, Science, Policy, and Scientific & Regulatory
Affairs

International Fruit & Vegetable Juice Association

Mr. John Collins
Executive Director

**International Organization of Spice Trade
Associations**

Laura Shumow

International Special Dietary Foods Industries (ISDI)

Mr. Milan Pazicky
Regulatory Affairs Officer

Jean-Christophe Kremer
ISDI Secretary General

Mr. Timothy Ryan
FIVS Codex Task Force Chair

Mr. John Collins
Executive Director

**International Organization of Spice Trade
Associations**

Laura Shumow

International Special Dietary Foods Industries (ISDI)

Mr. Milan Pazicky
Regulatory Affairs Officer

Jean-Christophe Kremer
ISDI Secretary General

Mr. Timothy Ryan
FIVS Codex Task Force Chair