Report of the United States Delegate
14th Session of the Codex Committee on Contaminants in Foods

May 3 – 7, 2021
Virtual

The 14th Session of the Codex Committee on Contaminants in Foods (CCCF14) was a productive session, with maximum levels (MLs) for cadmium and a Code of Practice (COP) sent for final adoption by the 44th Session of the Codex Alimentarius Commission (CAC44, November 2021), consistent with U.S. positions and comments. Notably, the Committee recommended final adoption of the revised Code of Practice for the Prevention and Reduction of Lead Contamination in Foods (CXS 56-2004) (work chaired by the United States and co-chaired by the United Kingdom and Japan), recommended final adoption of draft MLs for cadmium in chocolates containing or declaring <30% total cocoa solids on a dry matter basis and in chocolates containing or declaring ≥30% to <50% total cocoa solids on a dry matter basis (work chaired by Ecuador), and advanced a Code of Practice for the Prevention and Reduction of Cadmium Contamination in Cocoa Beans for adoption at Step 5 (interim adoption, allowing for another round of consideration by the Committee at its next session).

The U.S. Delegation was led by Dr. Lauren Posnick Robin (Head of Delegation) from the U.S. Food and Drug Administration, Center for Food Safety and Applied Nutrition, and Mr. Alexander Domesle (Alternate Delegate) from the U.S. Department of Agriculture, Food Safety and Inspection Service. The U.S. Delegation also included seven government advisors and five non-government advisors.

The following represents the summary of the most significant agenda items and issues from the 14th Session. The full official report of the Session can be found on the Codex website, http://www.fao.org/fao-who-codexalimentarius/meetings/detail/en/?meeting=CCCF&session=14.

HIGHLIGHTS

Texts for final adoption at CAC44 (2021)

The Committee sent the following draft ML to CAC44 (2021) for adoption at Step 8 (final adoption):

- Draft ML for cadmium in chocolates containing or declaring <30% total cocoa solids on a dry matter basis.

The Committee sent the following draft ML and COP to CAC44 (2021) for adoption at Step 5/8 (final adoption):

- Draft ML for cadmium in chocolate containing or declaring ≥30% to <50% total cocoa solids on a dry matter basis; and
- Draft revision of the COP for the Prevention and Reduction of Lead Contamination in Foods (CXS 56-2004).

The Committee sent the following COP to CAC44 (2021) for adoption at Step 5 (interim adoption, allowing for another round of consideration by the Committee at its next session):

- Draft COP for the Prevention and Reduction of Cadmium in Cocoa Beans.

The Committee sent the following amendments to CAC44 (2021):

- An amendment to the MLs in the *General Standard for Contaminants and Toxins in Food and Feed* (GSCTFF) for lead in fruit juices to add notes/remarks that the MLs for lead in fruit juices and grape juice also apply to fruit juices for infants and young children.

Ongoing and New Work

The Committee also agreed to continue or start work on the following for CCCF15 (2022):

- Work chaired by Ecuador and co-chaired by Ghana on the ML for cadmium in cocoa powder containing or declaring 100% total cocoa solids on a dry matter basis;
- Work chaired by Peru and co-chaired by Ecuador and Ghana on the COP for the Prevention and Reduction of Cadmium Contamination in Cocoa Beans;
- Work chaired by Brazil on draft MLs for lead in dried spices and culinary herbs, including dried bulbs, rhizomes and roots; eggs, sugars and sugar-based candies, cereal-based products and ready-to-eat meals for infants and young children;
- Work chaired by Brazil and co-chaired by India on the MLs for total aflatoxins (AFT) in maize grain; flour, meal, semolina, and flakes derived from maize; husked and polished rice; sorghum grain destined for further processing; and cereal-based food for infants and young children; and associated sampling plans;
- Work chaired by India on MLs for AFT in ready-to-eat peanuts and associated sampling plan;
- Work chaired by India on MLs for AFT and ochratoxin A (OTA) in spices: nutmeg, chili and paprika, ginger, pepper, and turmeric, and associated sampling plans;
- Work chaired by New Zealand on MLs for methylmercury in orange roughy and pink cusk-eel, and associated sampling plan;
- Work chaired by Nigeria on a COP for the prevention and reduction of mycotoxin contamination in cassava and cassava-based products;
- A revised discussion paper for CCCF17 (2024) by the Joint Food and Agriculture Organization (FAO)/World Health Organization (WHO) Expert Committee on Food Additives (JECFA) Secretariat on occurrence of lead and cadmium in quinoa;
- Work chaired by the European Union (EU) and co-chaired by Japan, the Netherlands, and the United States on guidance on data analysis for development of MLs and for improved data collection,
- Implementation of a pilot project on the review of Codex standards on a three-year basis, including plans for establishment of an In-Session Working Group at CCCF15 (2022), chaired by Canada; and
- Work on a forward work plan for CCCF:
    - Review of contaminant/staple food combinations by the Netherlands and the JECFA and Codex Secretariats
    - Project plan on evaluation of implementation of COPs by the Codex Secretariat in consultation with FAO and WHO and the Netherlands.

MEETING SUMMARY

Matters Referred to the Committee by the Codex Alimentarius Commission and/or its Subsidiary Bodies (Agenda Item 2)

CCCF agreed that Brazil, with the assistance of the United States and Japan, would review the methods in the *General Standard for Methods of Analysis for Contaminants* (CXS 228-2001) and propose options for consideration by CCCF15 (2022) to do the following: (1) transfer the current methods to the *General Standard for Methods of Analysis and Sampling* (CXS 234-1999), (2) suggest alternative methods for CXS 234-1999, when the current methods are not appropriate, or (3)convert existing methods to performance criteria.

Maximum Level for Cadmium in Chocolates Containing or Declaring <30% Total Cocoa Solids on a Dry Matter Basis (Agenda Item 5)

Chocolates Containing or Declaring <30% Total Cocoa Solids on a Dry Matter Basis
Ecuador, as Chair of the Electronic Working Group (EWG), opened and provided background for discussion. CCCF13 (2019) originally advanced the ML of 0.3 mg/kg to Step 5/8 for final adoption by the Codex Alimentarius Commission (CAC42, 2019), but CAC42 could not reach consensus on the ML and held the ML at Step 5 for further consideration and data. The CAC confirmed that the concept of proportionality with respect to the MLs adopted by CAC41 (2018) for other chocolate categories should be maintained and that if no new additional information was received that justified a change to the ML, the Committee would recommend the adoption of the ML of 0.3 mg/kg by the CAC.

The CCCF Chair noted that two other MLs were already adopted for chocolate categories with higher cocoa content. The Joint FAO/WHO Expert Committee on Food Additives (JECFA) Secretariat reported that JEFCA91 (February 2021) performed an exposure analysis for cadmium from all food sources and confirmed the conclusions of previous JECFA meetings that cadmium in cocoa does not constitute a significant source of exposure within the human diet on a global level.

Considering the latest JECFA evaluation and that no new information was provided to justify a change in the ML, the Chair proposed to advance the ML to Step 8 for final adoption by CAC44.

CCCF agreed to advance the ML of 0.3 mg/kg for chocolates containing or declaring <30% total cocoa solids for final adoption at Step 8 by CAC44 (2021), noting the reservations of the European Union, Norway, and Egypt to this decision. The Chair asked member countries to respect the decisions made in CCCF and not to reopen the issue at CAC44 (2021).

Maximum Levels for Cadmium in Chocolates Containing or Declaring ≥30% to <50% Total Cocoa Solids on a Dry Matter Basis and Cocoa Powder (100% Total Cocoa Solids on a Dry Matter Basis) (Agenda Item 6)

Chocolates containing or declaring ≥30% to <50% total cocoa solids

Ecuador, as Chair of the EWG, presented two scenarios to choose from for MLs: 0.5 to 0.6 mg/kg, based on a proportional approach, or 0.6 to 0.7 mg/kg, based on Global Environment Monitoring System (GEMS)/Food data. As presented, the scenarios had different rates of rejections, ranging from 7.3 percent at the level of 0.7 mg/kg to 20.5 percent at the level of 0.5 mg/kg for the Latin American and Caribbean Region. Peru, Chile, Australia, Ecuador, Argentina, Paraguay, the Dominican Republic, Panama, Trinidad and Tobago, Costa Rica, and an observer organization (the International Confectionery Association (ICA)) supported 0.7 mg/kg; Thailand, El Salvador, Bolivia, Brazil, Malaysia, Uruguay, and the African Union supported 0.6 mg/kg; the United States supported 0.6 – 0.7 mg/kg; Uganda and Iran supported 0.5 mg/kg; and the EU, Norway, Switzerland, Belgium, the Czech Republic, Denmark, and Egypt supported 0.3 mg/kg.

The Committee agreed to advance the ML of 0.7 mg/kg for chocolates containing or declaring ≥30% to <50% total cocoa solids to Step 5/8 for final adoption by CAC44, noting the reservations of the European Union, Switzerland, Norway, and Egypt. The CCCF Chair urged Codex members to respect the decision and not to reopen discussions at CAC44.

Cocoa powder containing or declaring 100% total cocoa solids ready for consumption

Ecuador as the EWG Chair presented two scenarios for MLs: 1.3 – 1.5 mg/kg, based on a proportional approach, and 2.0 – 3.0 mg/kg, based on the GEMS/Food data. Various member countries supported proposals for 1.5 mg/kg, including the United States, Brazil, Chile, and Malaysia. Others supported MLs of 3.0 mg/kg or higher, including Australia, Ecuador, Colombia, Peru, and Kenya. The European Union supported 0.6 mg/kg based on an EU standard. Ecuador, as Chair of the EWG, also asked whether CCCF should consider changing the name of the category so that all available data can be used, as most of the data did not specify the percentage of cocoa content in the analyzed samples or whether the samples were for intermediate or final products. There was little support for this proposal. Some Members proposed to delay setting an ML until more data became available or until the COP for cadmium in cocoa beans was finalized.

After extensive discussion, the Committee agreed to postpone discussion of MLs for another year to allow for more data submissions and new ML proposals. The Committee also agreed to re-establish the EWG, chaired by Ecuador and co-chaired by Ghana, to request JECFA to issue a call for data, and decided that if no new data were submitted, the current data set would be used to derive the ML.

Code of Practice for the Prevention and Reduction of Cadmium Contamination in Cocoa Beans (Agenda Item 7)

Peru, as Chair of the EWG, introduced the agenda item and recalled the aim of the COP, to provide risk management measures to prevent/reduce cadmium contamination in cocoa beans and support implementation of the MLs for cadmium in chocolates and cocoa products.

CCCF supported the development of the COP and agreed to work further on the COP, specifically focusing on practical and real-world mitigation measures. The Committee agreed to

advance the COP for interim adoption at Step 5 by CAC44 (2021) and established an EWG to continue the work with Peru as chair and Ecuador and Ghana as co-chairs.

Maximum Levels for Lead in Certain Food Categories (Agenda Item 8)

Brazil, as Chair of the EWG, highlighted questions for discussion on data management and categorization of commodities and proposed MLs for consideration by CCCF.

No MLs were forwarded for adoption, to allow for more data and further consideration at the next session. The Committee noted general support for the following.

a. Rejection rates should be ≤ 5 percent but should be determined on a case-by-case basis; also, that geographically representative data are important for establishing global MLs.
b. MLs for dried culinary herbs and spices should be based on data, rather than applying concentration factors to MLs for fresh leafy vegetables or roots and tuber vegetables.
c. The EWG should look at data with and without turmeric to determine if turmeric data should be included in the dried rhizomes, bulbs, and roots category.
d. The EWG should consider the feasibility of establishing an ML for fresh eggs and not include egg products or preserved eggs.
e. An ML for cereal-based foods for infants and young children should be set on an "as is" or "dry matter basis" rather than "as consumed."
f. An ML for herbal tea for infants and young children would not be set at this time.

The Committee also discussed the following categories and issues.

- *Juices for infants and young children*: The EWG concluded that the ML proposed for lead in fruit juice for infants and young children was similar to the MLs already established for fruit juices in the GSCTFF; therefore, a note in the GSCTFF could be inserted that the MLs apply to fruit juices for infants and young children. The United States, as the previous chair of the EWG which recommended new or lower MLs for lead in fruit juices, confirmed that the data used for the review of these MLs had included juices labelled for infants and young children for fruit juices and grape juice, but not for juices from berries and small fruits. The International Fruit and Vegetable Juice Association (IFU) noted that there were already three MLs for juices and stated that there were cost implications of lowering MLs. The Committee agreed to include a note/remark that the MLs for fruit juices and grape juice in the GSCTFF also apply to fruit juices and grape juice for infants and young children and to advance this amendment to CAC44 for adoption, noting the reservation of the European Union.
- *Foods for infants and young children*: The Committee agreed: (1) to postpone a decision on ready-to-eat meals for infants and young children, pending more data, and (2) that it was not feasible to set MLs for yoghurt, cheese and milk-based products for infants and young children due to the complexity of this category.

The Committee agreed to:

- Discontinue work on MLs for herbal teas and yoghurt, cheese and milk-based products for infants and young children;
- Re-establish the EWG, chaired by Brazil, to continue working on MLs for lead in the following food categories: dried spices and culinary herbs, including dried bulbs,

rhizomes, and roots; eggs; sugars and sugar-based candies; and cereal-based products and ready-to-eat meals for infants and young children; and
- Present a broader range of MLs and rejection rates at the next meeting and describe the data analysis in more detail.

Revision of the Code of Practice for the Prevention and Reduction of Lead Contamination in Foods (CXS 56-2004) (Agenda Item 9)

The United States, as Chair of the EWG, presented the item and indicated the COP was reviewed extensively over the past two years and the revised COP was refined to incorporate more information on sources of lead and practices for reducing lead during agricultural production and food processing.

The Committee noted general support for the final adoption of the revised COP and agreed to forward the revised COP to CAC44 for adoption at Step 5/8. The Chair noted that the Committee made a big step in advancing the document despite working virtually.

The Committee also agreed to recommend to the Codex Committee on Food Additives to request JECFA to:
- review the lead specifications for diatomaceous earth and charcoal (activated carbon); and
- evaluate available data to support development of a lead specification for bentonite.

Maximum Levels for Aflatoxins (AFT) in Certain Cereals and Cereal-Based Products Including Food for Infants and Young Children (Agenda Item 10a)

Brazil, as Chair of the EWG, highlighted the key issues related to data management and proposed MLs for different categories of cereals and cereal-based foods.

No MLs were forwarded for adoption, pending further evaluation, but the Committee noted the following:

Maize grain, destined for further processing
There was an extensive discussion of factors relevant to establishing an ML for maize grain. Chile expressed concern about the effect of lower MLs on food aid, and the United States also noted that the EWG should consider this factor in the analysis next year. Japan, China, Thailand, El Salvador, the United States, Senegal, and Tanzania noted the difficulties of distinguishing shipments of maize for animal and human use since maize might be imported without an identified use, or its designated use might change after importing. El Salvador and the United States noted the need for geographically representative data. The East African Community (ECOWAS) stressed that MLs should be set for human protection, without drawing a distinction between "direct human consumption" and "for further processing." Other issues raised in the discussion included the need to consider year to year variation in aflatoxin rates and the identification and treatment of "outliers" in datasets.

After extensive discussion, the Committee agreed to re-establish the EWG to:
- Verify outliers and assess whether they should be excluded;

- Analyze year to year and regional variations;
- Consider whether the ML for maize should be set for maize for further processing or ready-to-eat;
- Assess the impact of lower MLs on food aid/food security; and
- Try to gather more geographically representative data, including details on food and feed, and liaise with the JECFA Secretariat on whether it would be possible to further segregate data available in GEMS/Food to differentiate between maize for food or feed.

Flour, meal, semolina, and flakes derived from maize; cereal-based foods for infants and young children.

For maize, the Committee recommended topics for the EWG to work on for next year. Topics suggested included considering wider ranges of MLs and rejection rates (European Union), improving geographical representation of the data (India), consideration of the effects of food processing on reducing aflatoxins and more transparency in data presentation (Canada), and preference for MLs expressed on an "as is" basis for infant cereal (International Special Dietary Foods Industries, ISDI). The World Food Programme (WFP) expressed its concern that the proposed MLs would limit the capacity to provide aid, particularly for infant cereal-based foods, but also for other commodities such as sorghum and cornmeal.

Availability of methods

The Committee discussed whether there were available methods that could support the proposed MLs. The European Union stated it had provided collaboratively validated HPLC (high-performance liquid chromatography) and LC MS/MS (liquid chromatography with tandem mass spectrometry) methods. The United States said that there were important issues other than the availability of methods: (1) Are analytical methods capable of testing at the lower MLs available in a range of countries? (2) Are rapid field tests used for export capable of testing at the lower MLs?, and (3) Do the available analytical methods have sufficiently low Limits of Quantification (LOQs) for each component isomer to support a "sum of components" approach, as recommended by the Codex Committee on Methods of Analysis and Sampling (CCMAS)? Brazil confirmed it would check the availability of appropriate methods, particularly regarding method LOQs for MLs lower than 8 parts per billion (ppb).

The Committee noted that there was no need for a JECFA dietary exposure assessment currently, in view of further work to be undertaken on the MLs, and that a request for such an assessment could be reconsidered at CCCF15 (2022).

After extensive discussion, the Committee agreed:

- To re-establish the EWG, chaired by Brazil and co-chaired by India, to continue work on MLs for AFT in:
    - maize grain,
    - flour, meal, semolina, and flakes derived from maize,
    - husked and polished rice,
    - sorghum grain destined for further processing, and
    - cereal-based food for infants and young children.
- To request JECFA to issue a call for data on all the categories under discussion to obtain more geographically representative data and request that data specify country of origin

and if possible, differentiate whether the maize is for food or feed, in time to finalize the MLs next year.
- If no data are submitted, the MLs would be finalized based on the existing data set at the next session of CCCF.

Sampling Plans and Performance Criteria for Aflatoxin (AFT) in Certain Cereals and Cereal-Based Products Including Food for Infants and Young Children (Agenda Item 10b)

Brazil, as chair of the EWG, asked for input on whether work on the sampling plans should proceed without MLs and whether to consult CCMAS. The Committee agreed that sampling plans and MLs should be developed simultaneously, and the sampling plan could align with existing sampling plans in the GSCTFF but also with other plans such as ISO 24333:2009.

Brazil noted there were comments in the EWG stating the proposed isomer ratio of 70% B1/ 30% for other aflatoxin isomers was not correct for all grains. Brazil suggested consulting CCMAS, which previously recommended isomer percentages for fumonisins. Brazil also suggested posing the question on the appropriate percentages to the EWG again, as no agreement had been reached on a recommendation, and that if no new information became available, Brazil would ask the Codex Secretariat for additional guidance.

Maximum Level for Total Aflatoxins in Ready-To-Eat Peanuts and Associated Sampling Plan (Agenda Item 11) and Maximum Levels for Total Aflatoxins and Ochratoxin A in Nutmeg, Dried Chili and Paprika, Ginger, Pepper, and Turmeric and Associated Sampling Plans (Agenda Item 12)

CCCF recalled the background for these agenda items. In 2018, CCCF suspended consideration to allow for the COPs for the prevention and reduction of aflatoxin contamination in peanuts (CXC 55-2004) and mycotoxins in spices (CXC 17-2017) to be implemented. After three years, CCCF14 (2021) would consider the new/additional data after implementation of the COPs to establish MLs and JEFCA would issue the call for data.

Ready-to-Eat Peanuts

The United States recommended that the terms of reference for the EWG include use of data from GEMS/Food, consideration of the JECFA83 (November 2016) impact assessment, and development of a sampling plan. India, chair of the EWG, agreed with these proposed terms of reference, and Thailand noted that the EWG should compare data from before and after the work was stopped to consider whether changes are needed in the previously proposed ML of 10 µg/kg. It was also noted that the ML should be consistent with the ML for peanuts for further processing. ICA emphasized the importance of standardizing global MLs for international trade.

CCCF agreed to:
- Re-establish the EWG, chaired by India:
    - To consider new or additional data available in GEMS/Food only and consider old and new data for comparison;
    - To update the working paper that was last presented at CCCF12 (2018) (CX/CF 18/12/10); and

    - To prepare revised proposals for MLs for total aflatoxins in ready-to-eat peanuts and an associated sampling plan for comments and consideration by CCCF15 (2022), taking into consideration the outcome of the impact assessment conducted by JECFA83 and the new and old datasets available in GEMS/Food; and
- Request JECFA to issue a call for data for further consideration by the EWG.

Certain spices: nutmeg, dried chili and paprika, ginger, pepper, and turmeric
Delegations supported resuming work on the establishment of MLs for nutmeg, dried chili and paprika, ginger, pepper, and turmeric and associated sampling plans.

CCCF agreed to:
- Re-establish the EWG, chaired by India, to:
    - Consider new or additional data available in GEMS/Food;
    - Update the working paper that was last presented at CCCF12 (2018) (CX/CF 18/12/11);
    - Prepare revised proposals for MLs for AFT and ochratoxin (OTA) in spices (nutmeg, chili and paprika, ginger, pepper, and turmeric) and associated sampling plans, taking into account new and old datasets in GEMS/Food, for comment and consideration by CCCF15 (2022); and
- Request the JECFA Secretariat to issue a call for data for further consideration by the EWG.

Discussion Paper on Methylmercury in Fish (Agenda Item 13)

New Zealand, as Chair of the EWG, introduced this agenda item and explained that the species for ML setting were selected based on exceedance of the agreed selection criterion of 0.3 mg/kg methylmercury. Trade significance was assessed by comparing trade for species with proposed MLs with trade for species that currently have MLs, using marlin as a benchmark.

The EWG proposed new work for three species, orange roughy, pink cusk eel, and Patagonian toothfish, but noted that setting an ML for Patagonian toothfish needed more robust data. The EWG also recommended discontinuing work on other fish species, having concluded the review of 48 taxonomic fish groups, and proposed additional work on the sampling plan based on different weight and value classes of fish and a literature review of risk management measures.

The Committee discussed the scope of the new work. The United States requested removing Patagonian toothfish from the project document since the EWG concluded there were not sufficient data, which the Chair, New Zealand, supported. The United States supported work on the sampling plan but noted that it was important to focus on measures that were practical. The European Union supported guidance on risk management measures, and Australia asked about the availability of criteria for considering trade when selecting species for setting MLs. In response to Australia's question, the Codex Secretariat stated that the Committee does not have specific trade criteria on which to base ML setting, questioned whether it could be feasible to establish such a criterion, and suggested rather that the Committee be guided by the principles of the dual mandate of Codex to protect the health of consumers and ensure fair practices in the food trade, in accordance with the Preamble to the GSCTFF.

The Committee agreed to:

- Submit a project document for new work on MLs for methylmercury in orange roughy and pink cusk eel to CAC44 for approval;
- Discontinue review of MLs for any other additional species;
- Establish an EWG, chaired by New Zealand and co-chaired by Canada, to:
    - Develop proposed MLs for orange roughy and pink cusk eel,
    - Consider further data to establish the feasibility of setting an ML for Patagonian toothfish,
    - Develop the sampling plan, and
    - Conduct a literature review to assess the feasibility of developing guidance for the management of methylmercury in fish; and
- Request JECFA to issue a call for data specific to Patagonian toothfish.

Discussion Paper on Hydrocyanic Acid and Mycotoxins Contamination in Cassava and Cassava-Based Products (Agenda Item 14)

Nigeria, as the Chair of the EWG, highlighted that, based on the replies to Circular Letter (CL) 2019/74-CF, CL 2020/51-CF, and data and information provided by members of the EWG, it was possible to identify currently available mycotoxin risk mitigation measures proven to be cost-effective and applicable worldwide by large, medium, and small-scale farmers and producers. The information received also addressed the scope of the COP for AFT and OTA and the stages of the production chain that should be covered. As far as reassessing the need and feasibility of MLs, Nigeria, as Chair, advised the Committee to wait for new data on hydrocyanic acid (HCN) in cassava. Based on this report from the EWG chair, CCCF agreed to discontinue the establishment of MLs for HCN in cassava/cassava-based products and to work on the development of a COP for mycotoxins.

CCCF agreed to submit a project document for a COP to CAC44 for approval as new work, and to establish an EWG, chaired by Nigeria and co-chaired by Ghana, to work on the COP with focus on AFT and OTA and the stages of production identified in the project document.

Discussion Paper on Cadmium and Lead in Quinoa (Agenda Item 15)

The JECFA Secretariat presented the paper, concluding that if for example, MLs of 0.1 to 0.2 mg/kg were set for cadmium and lead in quinoa, there would be little impact on dietary exposure for the general population, but limited trade rejections would result. Committee members expressed various views. Chile and Brazil supported setting MLs, while Australia and Canada did not see a need for MLs based on the JECFA findings. Peru and Bolivia noted that more data would be needed to establish MLs, while Nigeria, the Economic Community of West African States (ECOWAS), and Brazil recommended extending cereal MLs to quinoa.

In light of the diverse views on questions posed in the Committee (whether to establish MLs, whether to extend the MLs for cereals to quinoa or whether to have separate MLs for quinoa based on data because quinoa is a pseudocereal), and noting other issues (the limited data available, the need to consider the different cultivars and growing conditions, and ongoing work

on data generation), the CCCF Chair proposed to postpone the discussion on MLs for cadmium and lead in quinoa for three years to allow data generation and submission to GEMS/Food. The United States requested that data on country of origin be included to ensure data were included from major quinoa producers. Chile requested including byproducts of quinoa and quinoa-based food for young children, and Australia requested inclusion of consumption data.

CCCF requested that JECFA (1) issue a call for data and allow two years to collect data on cadmium and lead in quinoa and quinoa-based products, including foods for infants and young children, and including consumption and country of origin information and (2) prepare an updated paper for CCCF17 (2024) .

Discussion Paper on Radioactivity in Feed and Food (Including Drinking Water) in Normal Circumstances (Agenda Item 16)

CCCF13 (2019) agreed to explore work on radionuclides in food in non-emergency situations. The European Union, as EWG Chair, reported that no specific safety problems or international trade issues were identified for food, feed or drinking water due to the presence of naturally occurring radionuclides.

The Committee concluded that no further work was needed in CCCF at this time, but welcomed the offer from the International Atomic Energy Agency (IAEA) to produce an informative document on radionuclides in food in non-emergency situations and to keep CCCF informed of any developments in the field of naturally occurring and artificially produced radioactivity, particularly the FAO/IAEA/WHO work to develop methodologies that can be used to produce criteria to assess radionuclides in food. Chile noted there are foods with higher levels of radionuclides due to regional variations in naturally occurring radioactivity. Switzerland also expressed interest in information on human produced radionuclides. The United States requested and IAEA agreed that CCCF be given the opportunity to review the informative document before its publication.

Guidance on Data Analysis for Development of Maximum Levels and for Improved Data Collection (Agenda Item 17)

Previously, CCCF12 (2018) agreed to establish an EWG to develop general guidance to support consistent approaches for data analysis for ML development. Although EWG consultations did not take place in time for this Committee session, the EWG Chair, the European Union, outlined proposed topics for next year related to data analysis and collection. The EWG Chair proposed including the topic of rejection rates, a topic considered previously but rejected by CCCF13 (2019). The United States supported the EWG focusing on data submission, data analysis, and data presentation, but did not support adding rejection rates to the scope, both because the scope was already extensive and the Committee had discussed a case-by-case approach. Canada, Japan, New Zealand, Ecuador, India, Brazil, ECOWAS, and the International Council of Beverage Associations (ICBA) agreed that rejection rates should not be included this year and/or that rejection rates should be handled on a case-by-case basis. Nigeria and Thailand also commented on the importance of rejection rates.

After extensive discussion, the Chair summarized that while rejection rates are important, the EWG should focus on data submission, data analysis, and data presentation in the coming year. Member countries raised other issues such as the importance of finalizing the work, submitters of data to GEMS/Food providing information on method LOQ, use of a geometric scale for MLs, having additional fields in the GEMS/Food data submission template, providing templates for plenary presentations, addressing issues related to data on food versus feed, using data that encompass the main production areas and processing methods, addressing year to year and regional variation, and providing calls for data and guidance on GEMS/Food in languages other than English.

After an extensive discussion, the Committee agreed:

- The work should be focused on data collection, data analysis, and data presentation as a priority in the coming year;
- A circular letter will be issued requesting Codex members and observers to submit comments on the topics identified in the Annex to CX/CF 21/14/15; and
- The EWG, chaired by the EU and co-chaired by Japan, the Netherlands, and the United States, will be re-established to prepare guidance on data analysis for development of MLs and improved data collection.

Approach to Identify the Need for Revision of Standards and Related Texts Developed by CCCF (Agenda Item 18)

Canada, as Chair of the EWG, introduced a proposed structured approach ("Option 2") to review existing standards and related texts for contaminants in food and feed for a three-year trial period, explaining that this option would provide flexibility and would not preclude *ad hoc* review of existing Codex standards and related texts upon nomination by a Codex member.

Noting general support, the Committee agreed to implement the pilot approach ("Option 2") on a three-year basis, with tracking lists to be circulated for comments via circular letter, and to have an In-Session Working Group at CCCF15, chaired by Canada, to make recommendations on standards revision.

Forward Work-Plan for CCCF (Agenda Item 19)

Review of contaminant/staple food combinations for future work of CCCF
The Host Country Secretariat gave a brief overview with some illustrative examples of the proposed work plan, to provide an approach/methodology or screening method to identify a list of contaminant/staple food combinations. . There will be a circular letter requesting comments on the proposed approach/methodology. The Host Country, JECFA, and Codex Secretariats will further develop the paper for consideration by CCCF15 (2022).

Project plan for the evaluation of implementation of COPs of CCCF
The Committee discussed the proposal for a pilot project that was introduced at CCCF13 (2019) to evaluate the implementation of COPs for consideration as part of a future work plan. The Codex Secretariat, in consultation with FAO, WHO, and the Host Country Secretariat, will continue exploring how to progress this project and how it could help monitor the use of Codex

standards and contribute to a forward work plan. The Codex Secretariat will keep CCCF informed on progress.

JECFA Evaluations (Agenda Item 20)

Priority list of contaminants for evaluation by JECFA
The Codex Secretariat updated the priority list based on the outcomes of recent JECFA evaluations. The updates included removing ergot alkaloids, modifying the entry for trichothecenes (T2 and HT2) to reflect the completed exposure assessment, and new information on data availability for arsenic. It was proposed that scopoletin be kept on the priority list to await data from countries to support a JECFA evaluation.

Follow-up work to the outcomes of JECFA evaluations and FAO/WHO expert consultations
The European Union reported on the results of JECFA evaluations for pyrrolizidine alkaloids (PAs, full monograph available), trichothecenes (exposure assessment available), and ergot alkaloids (full monograph not yet available), as well as the results of FAO/WHO expert consultations, for ciguatera poisoning and tropane alkaloids [(-) scopolamine and (+) hyoscyamine]. The Codex Secretariat noted interest from CCCF on edible insects but proposed seeking guidance from CCEXEC on how to proceed with work on risk management measures and work cohesively with other Codex committees on cross cutting issues.

CCCF agreed that with time permitting, the EU would prepare a discussion paper on possible follow-up actions for PAs, such as a revised COP. CCCF also agreed to request guidance from CCEXEC on the best approach for Codex to address the safety of edible insects.

Other Business and Future Work (Agenda Item 21)

The Committee noted that no other business had been proposed.

Date and Place of the Next Session (Agenda Item 22)

CCCF15 is scheduled to be held in approximately one year, final arrangements subject to confirmation by the Host Country and the Codex Secretariat.