ANALYSIS OF AGENDA ITEMS AND PREPARATION FOR THE 15th SESSION OF THE CODEX COMMITTEE ON CONTAMINANTS IN FOOD

9th – 13th and 24th MAY 2022 Virtual Meeting

AGENDA ITEM 8

Maximum levels for methylmercury in certain fish species and associated sampling plan (orange roughy and pink cusk-eel) (at Step 4)

Objectives

This document offers a review and analysis of the agenda items planned for discussion at the 15th session of the Codex Committee on Contaminants in Food (CCCF), scheduled to take place virtually from May 9th– 13th and 24th, 2021. The document is intended for possible use by the Codex communities of practice promoted by GFoRSS and PARERA, as part of their contribution to enhancing awareness and supporting effective participation in international food standard setting meetings (Codex meetings) by representatives from members and observers.

The analysis provided in this document offers a factual review of agenda items, their background and a discussion of some considerations. This analysis is indicative in nature and does not represent an official position of the organizations mentioned above (PARERA and GFoRSS), their membership or their management. It provides a synthesis and analysis of the work currently under discussion in the CCCF committee, which may be useful for delegations from Arab countries to prepare their positions taking into account the needs and specificity of the region and potential impact of the proposed food standards.

This analysis is prepared as part of the **Codex Initiative for the Arab region : Arab *Codex Initiative***, implemented by PARERA and GFoRSS, hosted and coordinated by the Arab Industrial Development, Standardization and Mining Organization (AIDSMO) and funded by the US Codex Office, US Department of Agriculture.

**It is important to note that experts – members of the Expert Working Group (EWG) – do not represent the organizations and / or jurisdictions to which they are affiliated. The selection and participation in the EWG proceedings is based on each expert's own credentials and experience which should not be misconstrued as the country's / delegation's / organization's position to which they belong.*

Agenda Item 8: Maximum levels for methylmercury in certain fish species and associated sampling plan (orange roughy and pink cusk eel) (at Step 4)

Documents:

- *REP21/CF, Appendix VI*
- *CX/CF 22/15/8*
- *CX/CF 22/15/8-Add.1*

CCCF15 is invited to consider:

1. Proposed MLs for orange roughy and pink cusk-eel
   - 0.8 mg/kg methylmercury for orange roughy
   - 1.0 mg/kg methylmercury for pink cusk-eel; and
   - to advance these MLs for final adoption by the Codex Alimentarius Commission
2. Sampling plan

Background

CCCF11 (2017) agreed to the concept of establishing maximum levels (MLs) for methylmercury in fish species based on the "As Low As Reasonably Achievable" (ALARA) principle, in line with the criteria for establishing MLs in the General Standard for Contaminants in Food and Feed (CXS 193-1995) (REP17/CF, para 126). The committee agreed to establish an Electronic Working Group (EWG), chaired by The Netherlands, and co-chaired by New Zealand and Canada, to prepare proposals for MLs for tuna as a group, alfonsino, kingfish/amberjack, marlin, shark, dogfish and swordfish.

CCCF12 (2018) agreed that consistent with the approach taken for the establishment of MLs for lead, the methylmercury ML proposal that would be agreed upon would be based on the next higher ML resulting in a trade rejection rate lower than 5%. The Committee agreed upon MLs for tuna species (1.2 mg/kg), alfonsino (1.5 mg/kg), marlin (1.7 mg/kg) and shark (1.6 mg/kg). No consensus was achieved for an ML for swordfish and it was agreed to discontinue work on an ML for this species.

CCCF12 also noted that for future ML development, data on both methylmercury and total mercury would need to be available, as it was shown that for certain fish species the ratio of methylmercury to total mercury was very low and for the data analysis it could not always be assumed that total mercury would be mostly present as methylmercury

CCCF12 agreed to establish an EWG chaired by New Zealand and co-chaired by Canada to prepare a discussion paper presenting a proposal for establishment of MLs for additional fish species. The paper was to clearly identify the fish species for which MLs should be established

CCCF13 (2019) agreed to consider issues related to sampling plans for methylmercury in fish as part of the re-established EWG examining the feasibility of MLs for additional fish species.

CCCF14 (2021) agreed CCCF14 agreed to:

- Start new work on MLs for methylmercury in orange roughy and pink cusk eel and to amend the project document accordingly. This new work was approved by CAC44.
- Request that JECFA issue a call for new data to be submitted to GEMS/Food for orange roughy and pink cusk-eel that would support revision of the discussion paper to proceed with the establishment of MLs for orange roughy and pink cusk-eel.
- Continue further work on the sampling plan and that further work on the sampling plan could follow the approach proposed in Appendix III of CX/CF 21/14/11 and that further work should ensure the practicality of the sampling plan.

Analysis

- Proposed MLs for orange roughy and pink cusk-eel, based on the data analysis and information presented in Appendix I
- The discussion paper on the sampling plan based on information presented in Appendix II
- No specific recommendation was made in REP21/CF for this EWG to work with the EWG on data collection, analysis and presentation; one member noted that for recommendations from the EWG to be considered if possible, such as those relating to minimum sample size.
- There was no specific trade criterion defined on which to base ML setting
- No new data for orange roughy or pink-cusk-eel was submitted to the GEMS/Food database in 2021.

General Comments

- MLs for orange roughy and pink cusk-eel were presented to the EWG members during the comment period; however, no comments were received on the proposed MLs.
- When setting MLs for methylmercury, consideration should also be given to selenium content in fish as some research reported that mercury is toxic because it binds to selenium enzymes, thereby preventing the enzymes' proper function, so it is the ratio of selenium to mercury in fish that determines methylmercury's toxicity and not its absolute level in fish.
- Samples collected for both orange roughy and pink cusk-eel were not of sufficient geographic variability: 90% of capture production of orange roughy is from one region.
- The JECFA Secretariat announced that FAO/WHO would be convening another expert meeting to update the risk/benefit of fish consumption which had been done around 10 years ago, and would consider the claims around selenium and if there were sufficient clinical evidence to support this, then it would be taken into account.
- The relevance of making comparisons between the trade value of marlin to orange roughy and pink cusk-eel and how this demonstrates protection against a trade issue.
- All cusk-eel is not pink cusk-eel and the trade comparator should be based only on pink-cusk eel, noting 80% of cusk-eels is represented by pink cusk-eel and not reflected in estimates.
- Uncertainties and questions related to the Trade data and criteria related to Orange roughy and pink cusk-eel, as well as the lack of progress in the sampling plan would not support to advance this standard further in the step process

Conclusions and Recommendations

- It may be recommended to request to return this standard to step 2, with the need to offer more clarifications on the trade data and criteria for Orange roughy and pink cusk-eel and until more progress is achieved on the sampling plan.