



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

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

AGENDA ITEM 11

Maximum levels for total aflatoxins and Ochratoxin A in nutmeg, dried chili and paprika, ginger, pepper, and turmeric and associated sampling plans (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 May 9th – 13th and 24th, 2022. This 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 by the CCCF, which may be useful for delegations from Arab countries to prepare their positions taking into account the needs and specificity of the region and the 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.

The focus of the analysis of agenda items 9, 10 and 11 of CCCF15, relates to **total aflatoxins and ochratoxin A** in food commodities: **establishing maximum levels and associated sampling plans.**

**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 11: Maximum levels for total aflatoxins and ochratoxin A in nutmeg, dried chili and paprika, ginger, pepper, and turmeric and associated sampling plans (at Step 4)

Documents:

- ❖ CX/CF 22/15/11
- ❖ CXC 78-2017

CCCF15 is invited to consider the proposed MLs for total aflatoxins (AFT) and ochratoxin A (OTA) in nutmeg, chili and paprika, ginger, pepper and turmeric and to adjourn the discussion on the sampling plans for future work.

Background

Nutmeg (*Myristica fragrans.*), chili and paprika (*Capsicum annum L.*), ginger (*Zingiber officinale L.*), pepper (*Piper nigrum L.*), and turmeric (*Curcuma longa L.*) in dried or dehydrated forms are spices prominently produced and traded globally in both whole and ground forms. These spices are reported to have higher susceptibility towards mycotoxin contamination compared to other spices.

The main objective of this MLs setting is to facilitate fair practices in international food trade and to protect public health by harmonizing the MLs of mycotoxins, specifically total aflatoxins (AFT) and ochratoxin A (OTA), in dried/dehydrated forms of nutmeg, chili and paprika, ginger, pepper, and turmeric.

In the following, all discussions, comments and decisions are summarized as evoked, discussed and agreed on since the launching of this work during the CCCF11 (2017) until CCCF14 (2021).

At CCCF11 (2017), India submitted a new work proposal for the establishment of individual MLs for AFT and OTA for five spices: nutmeg, chili and paprika, ginger, pepper and turmeric. CCCF agreed to start a new work on MLs for AFT and OTA in these spices through an EWG chaired by India. CAC40 (2017) approved the new work.

At CCCF12 (2018), the work was suspended to ensure implementation of the *Code of practice for the prevention and reduction of mycotoxins contamination in spices* (CXC 78-2017) and to resume discussion in 3 years' time, reconsidering the MLs based on new/additional data submitted to GEMS/Food.

CCCF14 (2021) agreed to re-establish the EWG, chaired by India, to:

- ❖ consider new or additional data available on 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 OTA in spices: nutmeg, chili and paprika, ginger, pepper and turmeric, respectively, for comments and consideration by CCCF15 (2022) and associated sampling plans taking into account the new and old datasets available on GEMS/Food.

Analysis

- ❖ The document related to this agenda item was made available very late, on April 12th, with an on-going circular letter for comments.
- ❖ The same rationale was used to propose the ML for RTE peanuts, as previously adopted by CCCF in recent years, and that to accept a maximum rejection rate of 5% (i.e. rejection rates of 5% or less may offer room for reduction of exposure to be implemented), taking into caution the rejecting rates in trade for some producing countries.



- ❖ Occurrence data from the GEMS/ Food database was collected between 2011 and 2021. However, two sets of simulations were performed considering hypothetical MLs for total aflatoxins (> 20 µg/kg), (> 15 to ≤ 20 µg/kg), (10- 15 µg/kg) and ND/0 values and for Ochratoxin A (10-15 µg/kg), (> 15 to ≤ 20 µg/kg), (> 20 µg/kg) and ND/0 values. The first set was for data collected from the entire fixed period (2011-2021). The second targeted data from after 2018, post adoption of the code of practice for the prevention and reduction of mycotoxins in spices, CXC 78-2017).
- ❖ Percentage rejections were noted to be higher for the Chilies, Nutmeg and Ginger. However, for Pepper and Turmeric the percentage rejections were lower (Annex I of document CX/CF 22/15/11). It is also noted that based on GEMS/Food cluster diets, the global average consumption of spices is 2.6 g/day which is lower when compared to tree nuts with an average consumption of 36.9 g/day. The Codex MLs for total aflatoxins are set at 10 µg/kg for ready to eat tree nuts and 15 µg/kg for tree nuts destined for further processing. Since the consumption of spices is very low comparing to tree nuts, setting a higher MLs may not affect consumer health.

Comments and Considerations

No circular letter was issued to date related to this agenda item. And, no particular comments were expressed besides the fact that delegations generally supported to resume work on the establishment of MLs for nutmeg, dried chili and paprika, ginger, pepper and turmeric and associated sampling plans.

Recommendations

In its 15th session, CCCF is considering:

- To endorse the establishment of the MLs as presented in **table 2** and their possible advancement for final adoption by CAC45 (2022);
- To continue work on sampling plans, taking into consideration ISO 948 (Spices and Condiments- Sampling) for the EWG future work.

Table 1: Proposed MLs for AFT and OTA in nutmeg, chilies, paprika, ginger, pepper and turmeric.

Food	ML (µg/kg) for AFT	ML (µg/kg) for OTA
Nutmeg	20	20
Chilies	20	20
Paprika	20	-
Ginger	20	20
Pepper	10 or 15 or 20*	20
Turmeric	10 or 15 or 20*	20

* Or for all the considered spices Chilies, Nutmeg, Ginger, Pepper and Turmeric: 20 µg/kg



Considerations for the Arab Region

- ❖ Arab codex delegations may consider to request the need to postpone the discussion of this agenda item until more time is allowed to consider the proposed standards.
- ❖ Monitoring data related to AFT and OTA in spices should be examined for products sold and produced in the region.
- ❖ Current risk management measures should be reviewed, in particular regulatory measures related to AFT and OTA in spices.
- ❖ A regional (Arab) Expert Working Group should be established, who could help in examining the above proposal and develop a risk analysis for to AFT and OTA in spices from the Arab region.

Conclusion

Given the late publication of the documents associated with this codex text (12 April 2022), it is recommended for Arab Codex delegations to consider requesting to postpone the discussion on this item, until the next session of CCCF (CCCF16).

