ANALYSIS OF AGENDA ITEMS IN PREPARATION FOR THE 16th SESSION OF THE CODEX COMMITTEE ON CONTAMINANTS IN FOOD (CCCF16)

18 to 21 April 2023 (physical plenary meeting)

26 April 2023 (virtual report adoption)

AGENDA ITEM 9: 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 16th session of the **Codex Committee on contaminants in Foods (CCCF16)**, scheduled to take place face to face from 18 to 21 April 2023 (physical plenary meeting) and 26 April 2023 (virtual report adoption). 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 considering 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.

**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 9: 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)

Document

- CX/CF 23/16/9

The CCCF16 is invited to consider the proposed ML for total aflatoxins and ochratoxin A in nutmeg, dried chili and paprika, ginger, pepper and turmeric and associated sampling plans (at Step 4).

Background

- At the CCCF11 (2017), India submitted a new work proposal for the establishment of individual maximum levels (MLs) for total aflatoxins (AFT) and ochratoxin A (OTA) for five spices: nutmeg, chili and paprika, ginger, pepper, and turmeric. Based on this, the Committee agreed to start new work on MLs for AFT and OTA in nutmeg, chili and paprika, ginger, pepper, and turmeric through an Electronic Working Group (EWG) chaired by India. The 40th Session of the Codex Alimentarius Commission approved the new work.
- AT the CCCF12, the work was suspended in 2018 to ensure implementation of the Code of practice for the prevention and reduction of mycotoxins in spices (CXC 17-2017) and to resume discussion in 3 years' time to reconsider the MLs based on new/additional data submitted to GEMS/Food Database.
- At the CCCF15(2022), the committee noted that there was no consensus on a single ML for AFT in all spices and noted the following comments:
  - Delegations supporting a single ML noted that a much lower ML could be set and proposed an **ML of 10 µg/kg.**
  - The proposed ML for AFT could be divided into two groups, one **for dried chilies and paprika, nutmeg and ginger at 20 µg/kg** and another for **dried pepper and turmeric at an ML lower than 20 µg/kg.**
  - An **ML of 20 µg/kg** could be established noting that spices were consumed in low amounts and had a lesser impact on public health concerns, but its trade was significant and that a harmonized ML for AFT in spices (and also an ML for OTA) would prevent trade impediments.
- CCCF15 agreed to return the MLs and sampling plan to Step 2/3 for further consideration; II. To re-establish the EWG chaired by India, working in English to prepare new proposals for MLs for AFT and OTA in spices (nutmeg, dried chili and paprika, ginger, pepper, and turmeric) and an associated sampling plan.

Analysis

Proposed MLs:

Total Aflatoxins Proposed MLs for:

- Dried Chili Pepper and Nutmeg: 20 µg/kg
- Ginger, Black & White pepper, and Turmeric: Since majority of the samples are reported ND and percentage of rejections are also not a major concern; it is redundant to fix any MLs for these spices.

Ochratoxin A Proposed MLs for:

- Dried Chili Pepper and Nutmeg: 20 µg/kg
- Ginger, Black & White Pepper and Turmeric Since majority of the samples are reported ND and percentage of rejections are also not a major concern; it is redundant to fix any MLs for these spices.

Proposed sampling plan:

Spices with large particle size

- Number of incremental samples: 100

- Weight of the aggregate sample = **20 kg** which shall be mixed and to be divided into two equal laboratory samples of 10 kg before grinding. Each laboratory sample of 10 kg shall be separately ground finely and mixed thoroughly to achieve complete homogenisation
- The number of incremental samples of 100 g to be taken depends on the weight of the lot, with a minimum of 10 and a maximum of 100.
- In cases where the aggregate sample weights are <20 kg, the aggregate sample shall be divided into laboratory samples according to following guidance:
  - < 12 kg: no division into laboratory samples.
  - > 12 kg division into two laboratory samples.
- The number of incremental samples of 100 g to be taken depends on the weight of the lot, with a minimum of 10 and a maximum of 100.
  - Decision rule: If the aflatoxin test result is less than or equal to the ML in both test samples, then accept the lot. Otherwise reject the lot.

Spices with small particle size

- Number of incremental samples: 100
- Weight of the aggregate sample = **10 kg**
- For lots of **spices <15 tonnes** the sampling plan shall be used with:
  - Number of incremental samples 5 to 100, depending on the lot weight,
  - Aggregate sample weights from 0,5 to 10 kg.

Powdered spices

- Number of incremental samples: **50**
- Weight of the aggregate sample: **2 kg**
- For lots of powdered **spices < 15 tonnes** the sampling plan shall be used with
  - Number of incremental samples: 3 to 50, depending on the lot weight,
  - aggregate sample weights from 0,1 to 2.0 kg

Comments and Considerations

- Some Arab countries (Egypt, Saudi Arabia) commented on this proposal and expressed general support for the proposed approaches, with the recommendation (from KSA) to explicit the portion size.
- The UE consider that the proposed Sampling does not provide for:
  - sampling provisions traded in bulk.
  - incremental sample size and size of the bulk (aggregate) sample.
  - a distinction in sampling provisions for spices with larger particle size (e.g., nutmeg) and spices with low particle size (e.g., spices in powder)
- Canada questions whether the proposed sample weights of 20 kg for large-particle spices and 10 kg for small-particle spices could pose a problem for sampling and sample preparation (e.g., homogenization), as 10 kg or 20 kg of spices, whether fresh or ground, would occupy orders of magnitude greater volume than other commodities (e.g., grain or nut products). Furthermore, Canada questions whether the comparatively higher cost of spices per kg relative to that of grain would result in large costs to the importer/manufacturer and whether there is potential that this could become a trade impediment.

Conclusion and Recommendations

- Arab codex delegations may support adoption of proposed ML of 20 µg/kg for Dried Chili Pepper and Nutmeg and recommend to not set a Codex ML for the other spices (Ginger, Black & White Pepper, and Turmeric), as there is no trade impediment to be foreseen.
- Arab codex delegations may recommend seeking support from CCMAS to address the concerns related to the sampling protocol proposed for spices being tested for mycotoxins. In particular, some attention could be given to

(1) be explicit on the weight of the test portion

(2) To review the proposed sample weights (20 kg for large-particle spices and 10 kg for small-particle spices) as it could pose a problem for sampling, knowing the higher cost of spices per kg relative to that of grain which would result in large costs to the importer/manufacturer and there is potential that this could become a trade impediment.