

# CODEX ALIMENTARIUS COMMISSION



Food and Agriculture  
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## Agenda Item 11

CX/CF 18/12/11-Add.1

### JOINT FAO/WHO FOOD STANDARDS PROGRAMME CODEX COMMITTEE ON CONTAMINANTS IN FOODS

12<sup>th</sup> Session  
Utrecht, The Netherlands, 12 - 16 March 2018

#### PROPOSED DRAFT MAXIMUM LEVELS FOR TOTAL AFLATOXINS AND OCHRATOXIN A IN NUTMEG, CHILI AND PAPRIKA, GINGER, PEPPER AND TURMERIC AND ASSOCIATED SAMPLING PLANS (AT STEP 4)

*Comments submitted at Step 3 by Canada, Colombia, Egypt, India, Japan, Kenya, Republic of Korea,  
Uruguay and USA*

#### CANADA

Canada wishes to express its appreciation to India for once again leading the electronic Working Group (eWG) on the *Proposed Draft Maximum Levels for Total Aflatoxins and Ochratoxin A in Nutmeg, Chili and Paprika, Ginger, Pepper and Turmeric and Associated Sampling Plans*.

The eWG proposed maximum levels (MLs) of 20 or 30 µg/kg for total aflatoxins (AFT) and of 20 µg/kg for ochratoxin A (OTA) in nutmeg, chili, paprika, ginger, pepper and turmeric in order to address immediate trade concerns without compromising food safety. The eWG indicated that the proposed MLs also largely reflect those that are specified by most spice producing and exporting countries.

The worldwide achievability rates with the proposed MLs for nutmeg, paprika and chili for both total AFT and OTA are less than 95%, as is the achievability rate for OTA in ginger. Other Codex eWGs tasked with either updating existing MLs (lead in various foods) or proposing new MLs (cadmium in cocoa and chocolate) generally consider target achievability rates of approximately 95% or greater for a given food commodity with a proposed ML when MLs are being set based on contaminant concentrations that are as low as reasonably achievable (ALARA). Canada suggests that a similar approach be taken in the case of total AFT and OTA in spices, as individual spices have notably different total AFT and OTA concentrations. Given that spices generally represent a negligible dietary source of total mycotoxin exposure and that higher MLs for certain spices would therefore not be expected to result in a human safety concern, Canada suggests that further consideration be given to setting MLs for mycotoxins in individual spices that target an achievability rate of approximately 95% or greater for all spices.

#### COLOMBIA

Colombia is pleased to state that it is in agreement with the PROPOSED DRAFT MAXIMUM LEVELS FOR TOTAL AFLATOXINS AND OCHRATOXIN A IN NUTMEG, CHILLI AND PAPRIKA, GINGER, PEPPER AND TURMERIC, AND ASSOCIATED SAMPLING PLANS, and that it does not support the maximum levels for aflatoxin and ochratoxin defined in the draft. Consistent with the General Standard for Contaminants and Toxins in Food and Feed, and specifically in order to establish a ML which must be as low as reasonably achievable, it reckons that it should be noted that the aflatoxins and ochratoxins as contaminants are a major public health concern, and that the ML should comply with ALARA principles.

Colombia therefore reckons that more data should be gathered in the GEMS and requests JECFA to make a risk assessment.

The above is the consensus reached in the Food Contaminants Subcommittee of Colombia.

#### EGYPT

We would like to thank the committee on this great work, and inform you that Egypt applies the maximum level (10 µg/ kg) for the total aflatoxins in nutmeg, chili, paprika, ginger, pepper and turmeric.

While apply the maximum level (15 µg/ kg) for ochratoxin A in nutmeg, chili, paprika, ginger, pepper and turmeric.

#### INDIA

**Comment:** India supports an ML of 30 µg/kg for AFT and 20 µg/kg for OTA in all the spices (Nutmeg, Chili and Paprika, Ginger, Pepper, and Turmeric).

**Rationale:**

1. The unharmonized MLs for total aflatoxin and ochratoxin A in spices across countries poses trade barriers. It is evident from the table 1 of the EWG report, MLs are ranging from 5µg/kg to 30µg/kg, thus there is an urgent need to fix Codex MLs for mycotoxins in spices i.e. for total aflatoxin and ochratoxin A in order to address immediate trade concerns without compromising food safety aspects.
2. It can be observed from the Table 4 and 5 of the EWG report, for chillies that there are high level of rejections in chilli and rejections tripled while going from ML of 30 µg/kg (8.6%) to 10 µg/kg (25.11%) in case of total aflatoxin. Similarly, in the case of Nutmeg, rejection percent is doubled while going from ML of 30 µg/kg (33.77%) to 10 µg/kg (66.49%) for total aflatoxin. Similar trend is observed in the case of ochratoxin A as well.
3. From the GEMS data, it can be observed, that average intake of all spices is very less and hence, proposed MLs for AFT and OTA in spices will not have much impact on dietary exposure of aflatoxins.
4. In Indian legislation, an ML of 30 µg/kg for AFT in spices is prescribed.

**JAPAN**

Japan expresses its appreciation for the efforts of India, Chair of the electronic working group on the "Proposed draft maximum levels for total Aflatoxins and Ochratoxin A in nutmeg, chili and paprika, ginger, pepper and turmeric and associated sampling plans". Japan would like to provide the following comments in response to the request for comments of CL 2018/7-CF.

Japan strongly supports the recommendation that it is necessary to reduce mycotoxin levels in spices by implementing the Code of practice for the prevention and reduction of mycotoxins in spices (CXC 78-2017), but Japan does not support setting two provisional group MLs; one for AFT, and the other for OTA, in all spices. The reasons are:

- ✓ There is no general consensus within the EWG on any proposed draft MLs.
- ✓ The criteria for the establishment of maximum levels in food and feed in GSCTFF (CXS 193-1995) stipulates that where possible, MLs should be based on GMP and/or GAP considerations to establish at as low as reasonably achievable and necessary to protect the consumer. However, there is insufficient evidence to prove good practice in the discussion paper.
- ✓ The GSCTFF stipulates that MLs may be set for product groups when sufficient information is available about the contamination pattern for the whole groups. However, there is no scientific support on setting group MLs due to the limited data and information availability.
- ✓ There has not been any discussion on sampling plans for the MLs in the EWG. As for mycotoxins, internationally agreed sampling plans are necessary to enforce the MLs in Member countries.

Japan proposes that the Committee hold the proposed draft MLs and sampling plan at Step 4 for the time being (or for several years) and reconsider these MLs once sufficient number of occurrence data of mycotoxins in spices are available after implementation of the COP (CXC 78-2017).

**KENYA****GENERAL COMMENT**

Kenya would like to thank the EWG led by India preparing this document to be circulated to members for comment

**PROPOSED DRAFT MAXIMUM LEVELS FOR TOTAL AFLATOXINS AND OCHRATOXIN IN NUTMEG, DRIED CHILLI AND PAPRIKA, GINGER, PEPPER AND TURMERIC****AFLATOXINS, TOTAL (AFT)**

Commodity/ ProductName	MaximumLevel (ML) µg/kg	Portion of the Commodity/Product to which the ML applies	Notes/Remarks
Nutmeg, Chili and Paprika, Ginger, Pepper and Turmeric	[30][20]		

**OCHRATOXINA(OTA)**

<b>Commodity/ ProductName</b>	<b>MaximumLevel (ML) µg/kg</b>	<b>Portionofthe Commodity/Product towhichtheML applies</b>	<b>Notes/Remarks</b>
Nutmeg, Chili and Paprika, Ginger, Pepper and Turmeric	20		

**COMMENT:** We support the Revision of MLs and possibly establish MLs for specific spices based on available new occurrence data after three years of implementing of the code of practice.

For aflatoxin we propose the adoption of **20µg/kg** of total aflatoxin in nutmeg, chili and paprika, ginger, pepper and turmeric.

**Rationale:** The code of practice was adopted in 2017. It is premature to set MLs after a year of adopting a COP. Comparative analysis of occurrence data generated before and after the implementation of the COP will not only be an assessment of the effectiveness of the COP but will lead to setting of better health and trade protective limits.

**REPUBLIC OF KOREA**

The Republic of Korea supports the establishment of MLs for AFT and OTA for selected spices (nutmeg, chili and paprika, ginger, pepper and turmeric). However, it would be appropriate to propose MLs for AFT and OTA based on ALARA principle (ex. 5% rejection rate) to be consistent with the approaches used for establishing MLs for other contaminants, such as lead and methylmercury.

**URUGUAY**

We are grateful for the opportunity to comment.

With regard to point 3, Uruguay proposes the following ML for all spices: Total **aflatoxins: 20 µg/kg**.

**UNITED STATES OF AMERICA (USA)**

The U.S. appreciates the work that India has done in preparing the recommendations on maximum levels (MLs) for total aflatoxins (AFT) and ochratoxin A (OTA) in nutmeg, chili and paprika, ginger, pepper, and turmeric.

The U.S. can support an ML of 20 µg/kg for AFT for all the spices (nutmeg, chili and paprika, ginger, pepper, and turmeric).

However, the U.S. questions the appropriateness of the proposed ML of 20 µg/kg for OTA for all the spices given the high rejection rates at 20 µg/kg for nutmeg, paprika, chili, and ginger (e.g., 56.06% for paprika, Table 5 Annex II).

As suggested in paragraph 6 (page 2), the U.S. recommends that the EWG re-evaluate the OTA MLs after a new GEMS call for OTA data, as the data used to support the proposed ML for OTA in spices appear to be less recent data (pre-2015) from a limited number of countries. Given the high rejection rates for aflatoxin in some spices, reevaluation of AFT data may be appropriate as well.

In addition, the U.S. considers it premature to recommend re-evaluation of the MLs after 3 years of implementing the Code of practice for the prevention and reduction of mycotoxins in spices (CXS 78-2017), as recommended in paragraph 9 (page 2), since no MLs have been finalized.

Before proposed MLs for AFT and OTA move forward in the Step process, the U.S. suggests that a discussion of appropriate sampling plans be included in the next version of the document for comments.