



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

13th Session
Yogyakarta, Indonesia, 29 April – 3 May 2019

DISCUSSION PAPER ON THE ESTABLISHMENT OF MAXIMUM LEVELS FOR TOTAL AFLATOXINS IN
CEREALS (WHEAT, MAIZE, SORGHUM AND RICE), FLOUR AND CEREAL-BASED FOODS FOR
INFANTS AND YOUNG CHILDREN

Comments submitted by European Union, Kenya, United States of America

European Union

1) As regards the recommendations provided in §17 of CX/CF 19/13/15, the EU

- can agree with the selected food categories for which a possible ML for total aflatoxin should be considered;
- does not agree with the exclusion of whole wheat flour;
- is of the opinion that rice flour should be included and that it can possibly be grouped with polished rice;
- is of the opinion that parboiled rice should not be excluded at this stage;
- if following the call for data it is confirmed that the aflatoxin contamination in parboiled rice is very low, it can then be decided to no longer pursue the possible setting of a maximum level in parboiled rice;
- is of the opinion that sorghum should be included given its contribution to the exposure to aflatoxins in several GEMS/Food clusters;
- agrees with a call for data on total aflatoxin occurrence for the selected food categories (taking into account the comments above).

2) The project document provided in Appendix I should be updated in accordance with the decisions taken as regards food categories to be covered, in particular the food categories mentioned in point 2 of the project document.

3) The text under point 3 of the project document has to be deleted and be replaced by the following:

“MLs for aflatoxins in cereals and cereal products, considering

- the Policy of the Codex Committee on Contaminants in Foods for exposure Assessment of Contaminants and Toxins in Foods or Food Groups (Procedural Manual Section IV); and
- the criteria for the establishment of maximum levels in food and feed established in Annex I of General Standard for Contaminants and Toxins in Food and Feed (CXS 193-1995) .

4) In point 5 of the Project document it is indicated that “*The establishment of MLs for AFs in cereal and cereal-based products will contribute to the reduction of AFs intake what was already indicated as mandatory in the risk assessment performed by JECFA.*”. This sentence might be confusing as it could be understood that the establishment of MLs was indicated as mandatory in the risk assessment performed by JECFA. This is not correct as JECFA recommended “*that efforts continue to reduce aflatoxin exposure using valid intervention strategies, including the development of effective, sustainable and universally applicable preharvest prevention strategies*”.

¹ Comments of Republic of Korea have been removed and compiled in CRD23.

Therefore, it is proposed to replace the last sentence under point 5 by the following: “*JECFA recommended that that efforts continue to reduce aflatoxin exposure using valid intervention strategies, including the development of effective, sustainable and universally applicable preharvest prevention strategies.*”

The establishment of MLs for AFs in cereal and cereal products will contribute to the protection of consumers’ health.”

5) As regards the table provided in §16 of the background document in Appendix II of CX/CF 19/13/15, the EU wishes to make the following comments:

- It is unclear why there is no ML for aflatoxin total suggested for sorghum and cereal based foods for infants and young children.
- It is not appropriate to suggest the same ML for whole wheat flour as for wheat grain destined for further processing, given that cereals destined for further processing have to undergo an additional treatment/processing that has proven to reduce the level of aflatoxins before being used as ingredients in foodstuffs, otherwise processed or offered for human consumption. The EU is of the opinion that it is appropriate at this stage to suggest for whole wheat flour the same ML as for flour, meal, semolina and flakes derived from wheat.

Kenya

GENERAL COMMENT

We would like to thank the electronic working group for the good work on Discussion paper on the establishment of MLs for AFTs in cereals (wheat, maize, sorghum and rice), flour and cereal-based foods for infants and young children. We noted that the existing codex standard does not cover infants and young children and we believe it will be applicable to vulnerable group too.

COMMENTS

Kenya supports the discussion paper and the work of the EWG to be advanced to the next level

JUSTIFICATION

Infants and young children are more vulnerable to Aflatoxins

United States of America

- The United States can support beginning work on some categories (e.g., maize grain; flour, meal, semolina and flakes derived from maize) to examine public health benefits from reducing exposure to aflatoxins from cereal grains.
- The United States requests the following revisions to the project document.
 - If wheat is included, in the commodity list in Section 2, for products derived from wheat, stipulate “excluding whole wheat flour and other whole grain fractions if appropriate,” considering that wheat meal and flakes are whole grain products.
 - In Section 3, main aspects to be covered, add:
 - Availability of geographically representative data
 - Practicalities of grain testing and handling at proposed MLs
 - Health impact of MLs for each commodity
- If work begins, the EWG should consider the following concerns:
 - Availability and use of geographically representative data: The current dataset is largely based on European Union (EU) data and represents samples that have met existing EU MLs; a more globally representative dataset must be used. The question of geographically representative data must be considered for each commodity, not for the dataset as a whole.
 - CCCF (or JECFA) should examine the health impact of hypothetical MLs to determine if implementation would meaningfully reduce chronic dietary exposure to aflatoxins, including to determine if similar health impacts can be achieved at lower sample rejection rates. For example, based on the analysis in Table 3 in Appendix II, setting an ML for maize of 20 µg/kg (compared with none) reduces mean aflatoxins intake from 2.3 µg/kg to 0.6 µg/kg, but setting an ML of 5 µg/kg (compared with 20 µg/kg) only further reduces the mean aflatoxins intake to 0.3 µg/kg, while more than doubling the percentage of samples that would be rejected.

- The analysis should consider the impact of large year-to-year variations in contamination that occur due to climatic factors. While a product (e.g., maize grain) may meet hypothetical MLs in nine out of ten years, rejections may be concentrated in one year and be at a much higher rate than the 10-year average. The underlying data should be analyzed to estimate the worst-case rejection level and the resulting effect on grain supplies for those years.
- The analysis should consider testing methodology and practicalities of grain handling and field inspection:
 - The limit of quantitation for rapid field tests used in official grain inspections in the U.S. market is 5 µg/kg. Establishing MLs that require more sensitive tests (such as HPLC/tandem MS) could significantly impact the costs of rice and wheat exports to countries that adopt the new Codex MLs, as well as causing delays in transport and shipment.
 - Grain blending is an accepted practice in the wheat industry. Blending to meet a new ML will occur and exclude wheat lots entirely only in unusual circumstances. Thus, new costs may be incurred to manage aflatoxin while achieving only a very limited reduction in aflatoxin in exported wheat or in aflatoxin dietary intake.
- The analysis should consider the impact on food security for grain importing regions that will be most impacted by potential increased grain costs and decreased availability.
- The United States recommends not initiating new work on rice flour due to its low impact on aflatoxins exposure worldwide.
- The United States does not recommend initiating new work for whole wheat flour.