codex alimentarius commission

FOOD AND AGRICULTURE ORGANIZATION OF THE UNITED NATIONS

WORLD HEALTH ORGANIZATION

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JOINT FAO/WHO FOOD STANDARDS PROGRAMME
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DISCUSSION PAPER ON OCHRATOXIN A (OTA) IN COFFEE

Comments to the Discussion Paper submitted by Japan, Peru and ICO

JAPAN

Japan would like to thank the Government of Brazil and other electronic Working Group members for preparing the Discussion Paper on Ochratoxin A (OTA) in Coffee. Regarding this paper, we are pleased to submit the following additional information and comments.

Since the new result of our examination on the OTA in raw and roasted coffee beans retailed in Japan has been published, we would like to propose to rewrite paragraph 30 and to insert new paragraph 53bis. as follows;

30. OTA was detected at levels ranging from 0.1 to 17.4 µg/kg (Nakajima et al., 1997) and from 0.1 to 4.6 µg/kg (Trucksess et al., 1999), and recently in green coffee beans retailed in Japan, OTA was determined in 2 out of 11 samples (LOQ=0.1µg/kg) at 0.14 and 0.76 µg/kg (Sugita-Konishi, et al., 2006).

53bis. Sugita-Konishi et al. (2006) analyzed 9 market samples of roasted coffee beans and determined OTA in 3 samples ranging from 0.11 to 0.33 µg/kg (LOQ=0.1 µg/kg) .

Also, we would like to add the data of 53bis. into Table 3 as follows;

Retail country	N^0 positive/ N^0 samples	Range of OTA (µg/kg)	Reference
Japan	3/9	0.11 – 0.33	Sugita-Konishi et al. (2006)

In line with these changes, the new article by Sugita-Konishi *et al.* should be added to the list of the references.

#. Sugita-Konishi, Y., Nakajima, M., Tabata, S., Ishikuro, E., Tanaka, T., Norizuki, H., Itoh, Y., Aoyama, K., Fujita, K., Kai, S., Kumagai, S. Occurrence of aflatoxins, ochratoxin A, and fumonisins in retail foods in Japan. J Food Prot., 69(6), 1365-1370, 2006.)

PERU

Peru expresses its agreement to what is set out in the Discussion Paper on Ochratoxin A in coffee, emphasizing the importance of implementing good practices in the coffee chain (production, cultivation, harvesting, processing, transportation, storage and marketing) in order to reduce the risk of mould formation and therefore the possible presence of Ochratoxin A (OTA) in coffee, to a minimum. The principal risk of OTA contamination in coffee is the presence and development of fungi due to unsuitable harvesting, drying and storage practices.

It is also necessary that initiatives be taken in coffee-producing countries to develop integrated policies for safety management throughout the coffee chain and to reduce the risks due to the presence of OTA to a minimum.

A few recommendations are made below for good practices in the coffee chain within the classification category by the International Coffee Organization "Other mild arabica coffees", in which emphasis is placed on the prevention of OTA formation and which are included in the Peruvian Technical Standard *NTP 209.312 COFFEE. [Good practices for the prevention of mould formation]* ; it should be pointed out that Peru will put this Peruvian Standard forward at the 2008 Session of the CCLAC for evaluation as future Codex Standard.

In growing and harvesting:
- Harvest selectively so that only ripe cherries are picked.
- Cherries that have dried on the tree and have fallen to the ground are susceptible to mould, and should therefore not be mixed with the harvested cherries.
- Eliminate all possible defects such as mouldy cherries, decomposing cherries, perforated cherries, foreign bodies, etc.
- Process the harvested cherries as fast as possible.

In wet processing:
- Keep the processing facilities and drying areas in good condition.
- Remove any beans that may be floating.
- Remove the pulp on the same day as harvesting.
- Wash the beans well so that no mucilage or pulp adheres.
- Check the water quality and the cleanness of equipment before the washing process.

In drying:
- The drying process must be carried out as fast as possible.
- If drying takes place in areas exposed to the sun, the beans must be stirred several times to obtain a uniform drying.
- Dry sufficiently until a uniform moisture content is achieved of 10 to 12%.
- No interruption of the drying process must be permitted.
- The clean and dry coffee beans must not be stored together with waste and husks, since cross-contamination may occur.

In transportation and storage:
- Avoid the storage and transportation of coffee beans with high levels of humidity (coffee 'mote'). A dry coffee bean has the property of being able to absorb moisture from the ambient air (hygroscopic), so that re-wetting of the beans must be prevented.

Finally, it is recommended to consider within the bibliography the Guidelines for the Prevention of Mould Formation in Coffee, elaborated by OIC / FAO / FCPB in April 2006, within the framework of the Project for "the enhancement of coffee quality through the prevention of mould formation".

ICO

ICO would like the following comments to be considered by the Committee:

1. In paragraph 12 reference is made to the conclusions of the EFSA Scientific Panel on Contaminants, which established a 120 ng/kg b.w. as the tolerable weekly intake for OTA. However the paper omits to state that the panel, which has produced the most recent (2006) assessment, also concluded that there is no evidence to classify OTA as a human renal or other area carcinogen. I note that previous toxicology evaluations cited date from 2001 or earlier. I consider that the EFSA study constitutes the latest objective and authoritative reviews and should therefore be given more weight than found in the paper.

2. With respect to the section dealing with occurrence of OTA in coffee I believe that insufficient prominence has been given to the reduction of OTA globally following the implementation of the major project sponsored by the ICO, funded by the Common Fund for Commodities (CFC) and implemented by the FAO, designed to prevent the formation of OTA. As a result, the figures quoted do not represent the current position, where there has been a significant reduction of OTA in coffee. The dietary exposure of OTA from coffee assessed in 2002 and cited in paragraph 65 of the paper is therefore almost certainly excessive in view of the reduction effected by the project.

3. Although reference is made to the project in paragraph 67 under the heading of “Prevention of OTA in coffee” insufficient emphasis is put on the Guidelines established by the project. The project has a website, www.coffee-OTA.org which provides detailed information on the issue and prevention strategies. In particular, it contains the document entitled “Guidelines for the Prevention of Mould Formation in Coffee”. In view of this I query whether a Codex Code of Practice is really necessary, and I strongly advise consultation with the FAO Nutrition and Consumer Projection Division on the his matter. However should Members consider that a Codex Code of Practice for the prevention of reduction of OTA in coffee needs to be established it should, as proposed, be based on the FAO guidelines. There would then be little need of significant further research in coffee producing countries since a very wide range of such countries has already been involved in the project.