

CODEX ALIMENTARIUS COMMISSION



Food and Agriculture
Organization of the
United Nations



World Health
Organization

Viale delle Terme di Caracalla, 00153 Rome, Italy - Tel: (+39) 06 57051 - E-mail: codex@fao.org - www.codexalimentarius.org

Agenda Items 19(a)

CRD02

ORIGINAL LANGUAGE

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

13th Session

Yogyakarta, Indonesia, 29 April – 3 May 2019

REPORT OF THE IN-SESSION WORKING GROUP ON PRIORITY LIST OF CONTAMINANTS AND NATURALLY OCURRING TOXICANTS PROPOSED FOR EVALUATION BY JECFA

I. Introduction

The in-session working group (WG) was held on 30 April 2019 and chaired by Dr. Lauren Posnick Robin (United States). Dr. Eileen Abt (United States) served as Rapporteur. Dr. Markus Lipp (FAO/JECFA Secretariat) and Dr. Kim Petersen (WHO/JECFA Secretariat) assisted the Chair.

II. Current Priority List

The current Priority List (REP18/CF) reviewed at the meeting included: 1) dioxins 2) inorganic arsenic, 3) scopoletin, 4) ergot alkaloids, 5) ciguatoxins, and 6) trichothecenes (T2 and HT2).

Based on responses to a Circular Letter request (CL 2019/11-CF) and discussion during the WG, countries provided the WG with status updates on contaminants and natural toxins on the current Priority List. The information provided by countries included updates on information being requested (see table below).

As a result of discussion in the working group, the following updates were made to items currently in the priority list: inorganic arsenic was revised to arsenic, inorganic and organic (exploratory), and dioxins, to dioxins and dioxin-like PCBs. The JECFA Secretariat reminded member countries that there was an Ad-hoc FAO/WHO Expert Meeting on Ciguatera Food Poisoning in 2018 and a meeting report is expected in Fall 2019. Therefore, ciguatoxins was removed from the priority list.

The WG noted that scopoletin has been on the priority list for some time without updates on data availability, and the WG agreed to request the Codex Secretariat to send an inquiry to CCNASWP about whether they wished to retain scopoletin on the priority list.

III. New Proposals for Priority List

The WG noted that a possible updated impact assessment on aflatoxins in ready-to eat (RTE) peanuts was discussed at last year's in-session WG (CF12/CRD02), but that the topic is not on the priority list. The JECFA Secretariat noted that it would be helpful to include this topic on the priority list so JECFA could plan for a possible updated impact assessment. The WG agreed to add aflatoxins in peanuts (updated impact assessment) to the priority list, pending data to address shortcomings cited by the 2016 JECFA impact assessment (83rd report of the Joint FAO/WHO Expert Committee on Food Additives).

Conclusions

A prioritization exercise was performed where member countries identified their top candidates in the updated priority list for consideration for review by JECFA. This exercise identified ergot alkaloids, arsenic (inorganic and organic), and dioxins and dioxin-like PCBs as top priorities. This prioritization will help prepare JECFA for its next assessment, which is anticipated to be held in 2020.

IV. Recommendation to the Committee

1. The 13th Session of the CCCF should consider requesting the Codex Secretariat to ask CCNASWP whether (a) they wished to retain scopoletin on the priority list and, if so, (b) when suitable data would be forthcoming.
2. The 13th Session of the CCCF should consider including the contaminants and naturally occurring toxicants identified in the table below on the priority list of contaminants and naturally occurring toxicants proposed for evaluation by JECFA.

**PRIORITY LIST OF CONTAMINANTS AND NATURALLY OCCURRING TOXICANTS FOR EVALUATION
BY JECFA**

Contaminants and Naturally Occurring Toxicants	Background and Question(s) to be Answered	Data Availability (When, What)	Proposed By
Dioxins ¹ and dioxin-like PCBs	Full evaluation (toxicological assessment and exposure assessment) to update 2001 JECFA assessment and incorporate data on developmental effects from in utero exposures.	EFSA assessment available September 2018 Canada: occurrence data on foods of animal origin Brazil: occurrence data on milk, raw eggs, fish, and fat (poultry and mammals)	Canada
Arsenic (inorganic and organic)	Inorganic: 2011 JECFA evaluation based on cancer effects. This evaluation would focus on non-cancer effects (neurodevelopmental, immunological and cardiovascular) and could inform future risk management needs. NOTE: needs to be put in context to cancer risk assessment. Organic: (exploratory)	USA: occurrence data on rice cereals, and rice and non-rice products; 2016 risk assessment; 2016 draft action level for inorganic arsenic in rice cereal. USA: Studies <ul style="list-style-type: none"> • Pilot neurodevelopmental study of inorganic arsenic impacts on rat behavior (2019); follow-up study expected in 2020 • Toxicokinetic studies on metabolism and disposition of inorganic and organic arsenic and metabolites in mice (various life stages) (2018-19) • Developmental toxicity test in <i>C. elegans</i> on inorganic arsenic (2018) and ongoing study on organic arsenic. • Non-governmental report, Effects of Inorganic Arsenic in Infant Rice Cereal on Children's 	USA

		<p>Neurodevelopment (2017)</p> <p>Brazil: inorganic arsenic occurrence data in rice, poultry, pork, fish, and cattle meat</p> <p>Japan and China: occurrence data on rice and rice products</p> <p>AU/NZ: total diet study; inorganic arsenic occurrence data in rice</p> <p>India: occurrence data in rice</p> <p>Turkey: occurrence data in rice</p> <p>EU: inorganic arsenic occurrence data</p>	
Scopoletin	Full evaluation (toxicological assessment and exposure assessment) in fermented Noni juice	CCNASWP still working on standard for noni juice and data availability	FAO/WHO Coordinating Committee for North America and South-West Pacific (CCNASWP)
Ergot alkaloids ²	Full evaluation (toxicological assessment and exposure assessment)	<p>EFSA (2012) report</p> <p>EU: occurrence data; assessment on exposures to ergot alkaloids (EFSA report published in May 2017)</p> <p>Canada: occurrence data (commodity specific and unprocessed cereal grains), and data on processing factors through production chain</p> <p>AU/NZ: occurrence data on cereals (1 year of data)</p> <p>Japan: occurrence data in wheat, barley, and wheat products</p>	EU; Canada
Trichothecenes (T2 and HT2)	Update of risk assessment, including	Brazil: occurrence data in cereals	83 rd JECFA, recommendation supported by CCCF11.

	exposure assessment (T2, HT2, DAS)	<p>Canada: occurrence data (commodity specific and unprocessed cereal grains)</p> <p>EU: Report by EFSA on dietary exposure, including an HBGV; occurrence data.</p> <p>Japan: occurrence data in raw cereals</p>	
Aflatoxins in peanuts	Updated impact assessment	<p>Pending data to address previous shortcomings cited by JECFA impact assessment (2016)</p> <p>India: occurrence data on aflatoxins in ready-to-eat peanuts (approx. 9000 data points)</p>	JECFA

¹Lower priority: JECFA evaluation to build on the ongoing work at national and regional re-assessment of dioxins.

²Ergot is mentioned in quality chapter, suggestion for integration into GSCTFF.