CODEX ALIMENTARIUS COMMISSION

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World Health Organization

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Agenda Item 20 **CX/CF 21/14/18**

March 2021

JOINT FAO/WHO FOOD STANDARDS PROGRAMME

CODEX COMMITTEE ON CONTAMINANTS IN FOODS

14th Session
(virtual)
3-7 and 13 May 2021

JOINT FAO/WHO EXPERT COMMITTEE ON FOOD ADDITIVES (JECFA) EVALUATIONS

- **PRIORITY LIST OF CONTAMINANTS FOR EVALUATION BY JECFA**
- **FOLLOW-UP TO THE OUTCOMES OF JECFA EVALUATIONS**

(Prepared by the Codex Secretariat
with the assistance of
the JECFA and Host Country Secretariats)

BACKGROUND

1. Due to the COVID19 pandemic, CCCF14 will be convened in virtual mode. The current agenda is extensive and complex, and as such, it requires focused discussion so that the Committee can address all the items and make decisions to advance matters in the Step Procedure or to provide guidance to continue progressing work in 2021 for consideration by CCCF15 (2022).

2. In view of the limited time available for discussion in plenary, the different dynamics applying to virtual and physical meetings, and the limited comments received on compounds for evaluation / re-evaluation by JECFA as well as the limited number of compounds identified for follow-up to the outcomes of JECFA evaluations, no pre/in-session of working groups to consider these matters will be established by CCCF14 at this plenary meeting. Instead, the Codex and Host Country Secretariats, with the assistance of the JECFA Secretariat, have prepared this paper in order to facilitate decisions by CCCF14 on the next steps for consideration of the priority lists and follow-up to JECFA evaluations at the next session of the Committee.

3. CCCF14 is invited to consider the recommendations made in relation to the priority list and the follow-up to the outcomes of JECFA evaluations with a view to their endorsement and further consideration at CCCF15.

4. This report should be read in conjunction with information presented under Agenda Item 2 (CX/CF 21/14/2-Add.1) and Agenda Item 3 (CX/CF 21/14/3) and relevant documents indicated in the footnotes.

Priority list of contaminants for evaluation by JECFA

5. CCCF13 (2019) agreed[1] to request comments and/or information on the priority list of contaminants for consideration by CCCF14 and its in-session Working Group on Priorities. Comments were requested through CL 2020/24-CF and compiled in CX/CF 21/14/18-Add.1. Due to the limited comments received, which did not introduce major changes in the priority list as agreed by CCCF13, the Codex Secretariat updated the table, including changes arising from the outcomes of JECFA evaluations, as shown in the Annex for consideration by CCCF14.

6. CCCF13 agreed that arsenic (inorganic and organic) and dioxin and dioxin-like PCBs would continued to be considered as top priorities for future JECFA evaluations. Additional information on dioxins and dioxin-like PCBs are provided in CX/CF 21/14/3.

7. Specific considerations for scopoletin are provided under Agenda Item 2 (CX/CF 21/14/2-Add.1) which supports the retention of this compound in the priority list for further consideration at CCCF15.

1 REP19/CF, para. 168, Appendix X

Recommendations on the priority list

8. CCCF is invited to :

   (a) Note the reply from CCNASWP15 on the need to retain scopoletin in the priority list and agree to further consider this compound at its next session based on information provided in CX/CF 21/14/2-Add.1 on the toxicological review of scopoletin.

   (b) Endorse the priority list as provided in the Annex of this document.

   (c) Agree to continue requesting comments on the priority list of contaminants for evaluation by JECFA

   (d) Agree to re-convene the in-session working group on priorities at its next session.

Follow-up to the outcomes of JECFA evaluations

9. CCCF13 noted[2] that there was no follow-up to the outcomes of JECFA evaluations for consideration at its Session.

10. The executive summary of the JECFA Meeting, including the full reports and monographs (as available), can be found on the FAO[3] and WHO[4] websites. Specific links are provided for ad hoc FAO/WHO expert meetings mentioned below.

Marine biotoxins – Ciguatoxins (Ad Hoc FAO/WHO Expert Meeting on Ciguatera Fish Poisoning[5], 2018)

11. CCCF11 (2017) agreed[6] to request scientific advice from FAO and WHO to allow the Committee to develop appropriate risk management options to address this matter and included in the priority list for contaminants for evaluation by JECFA.

12. The report of the FAO/WHO Expert Meeting is now available for consultation (See Agenda Item 3, CX/CF 21/14/3)

Pyrrolizidine alkaloids (JECFA80, 2015)

13. CCCF05 (2011) agreed[7] to include pyrrolizidine alkaloids in the priority list. JECFA80 (2015) evaluated PAs and informed CCCF10 (2016) that that the report was being finalised, consequently CCCF did not discuss any follow-up action at the time awaiting the final publication of the report. The monograph was published in 2020.

Trichothecenes (T-2 and HT-2) (JECFA90, 2020)

14. CCCF11 (2017) requested[8] JECFA to update the risk assessment including an exposure assessment on T-2 and HT-2, these compounds were evaluated by JECFA 90. The evaluation included analytical methods, sampling protocols, effects of processing, prevention and control, levels and patterns of contaminants in food commodities, and dietary exposure assessment data for T-2 and HT-2 that had become available since the last JECFA evaluation in 2001. The toxicological evaluation and overall risk assessment will follow at a future JECFA meeting. The executive summary of the JECFA 90 Meeting is available on the FAO and WHO websites.

15. The full report and monographs may not yet be available for consideration by CCCF14. In view of this, no recommendations for further actions are proposed for consideration by the Committee at this Session.

Tropane alkaloids (Ad Hoc FAO/WHO Expert Meeting on (–)-hyoscyamine, (+)-hyoscyamine and (–)-scopolamine[9], 2020)

16. The findings of an ad hoc Expert Consultation on these compounds are reported under Agenda Item 3 (CX/CF 21/14/3). This Ad Hoc Expert Consultation was convened to respond to a direct request for scientific advice from the World Food Program (WFP) after poisoning incidents from the distributed food aids . To date, WFP has not made a specific request to CCCF to develop any risk management measures in relation to these contaminants.

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2 REP19/CF, para. 169
3 http://www.fao.org/3/cb2379en/cb2379en.pdf
4 https://www.who.int/groups/joint-fao-who-expert-committee-on-food-additives-(jecfa)/
5 http://www.fao.org/documents/card/en/c/ca8817en/
6 REP17/CF, Appendix XII
7 REP11/CF, para. 92
8 REP17/CF, para. 151
9 http://www.fao.org/3/cb1857en/CB1857EN.pdf

Cadmium and Ergot alkaloids (JECFA91, 2021)

17. CCCF13 (2019) agreed[10] to prioritize ergot alkaloids, amongst other chemicals, as top priorities for future JECFA evaluations.

18. In addition, when considering MLs for cadmium in chocolates and cocoa-derived products, CCCF13 also identified[11] the need for more updated occurrence data for cadmium in food. The JECFA Secretariat followed-up on this request by issuing a call for data on cadmium in chocolates and cocoa-derived products in 2019 which led to the scheduling of cadmium on the agenda of JECFA91.

19. The findings of the evaluation of these compounds are reported under Agenda Item 3 (CX/CF 21/14/3). The executive summary of the JECFA91 Meeting is available on the FAO and WHO websites. A webinar was organized to present the JECFA findings on cadmium and the recordings are available on the Codex website for consultation as needed[12]. The full report and monographs may not yet be available for consideration by CCCF14. In view of this, no recommendations for further actions are proposed for consideration by the Committee at this Session.

20. Considerations related to the exposure assessment of cadmium with particular focus on chocolates and cocoa-derived products will be considered under Agenda Items 5 and 6.

Recommendations on the follow-up to the outcomes of the JECFA evaluations

21. CCCF is invited:

(i) To consider the development of discussion paper(s) to considering the outcomes of the relevant JECFA evaluations and FAO/WHO ad-hoc expert meetings to assess data and information available to determine if risk management measures should be developed and if so, what would be the best risk management options available to the Committee for consideration by CCCF15.

(ii) To further consider the outcomes of the JECFA90 and 91 evaluations at a future session when the full reports and monographs from these Meetings become available

10 REP19/CF, para. 168
11 REP19/CF, para. 56
12 http://www.fao.org/fao-who-codexalimentarius/meetings/detail/en/?meeting=CCCF&session=14

ANNEX
PRIORITY LIST OF CONTAMINANTS FOR EVALUATION BY JECFA
Revised based on comments received in reply to CL 2020/24-CF
as contained in CX/CF 21/14/18-Add.1

Contaminants	**Background and question(s) to be answered**	**Data availability (when, what)**	**Proposed by**
Dioxins 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 Brazil: Occurrence data on milk, raw eggs, fish, and fat (poultry and mammals) Canada: Occurrence data on foods of animal origin	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)	Australia/New Zealand: Total diet study; inorganic arsenic occurrence data in rice Brazil: Occurrence data on total arsenic in rice, poultry, pork, fish, and cattle meat, inorganic arsenic occurrence data in rice Canada: Occurrence data on inorganic and total arsenic in a variety of commercial foods. EU: Inorganic arsenic occurrence data India: Occurrence data in rice Japan and China: Occurrence data on rice and rice products Turkey: Occurrence data in rice 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 • 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 *C. elegans* on inorganic arsenic (2018) and ongoing study on organic arsenic. • Non-governmental report, Effects of Inorganic Arsenic in Infant Rice Cereal on Children's Neurodevelopment (2017)	USA

Contaminants	Background and question(s) to be answered	Data availability (when, what)	Proposed by
Scopoletin	Full evaluation (toxicological assessment and exposure assessment) in fermented noni juice	CCNASWP still working on standard for noni juice and data availability. CCNASWP15 agreed[13] to request CCCF to retain scopoletin on the priority list and to call upon Codex members to generate and submit data to support the conduct of the safety evaluation by JECFA. CCNASWP15 also requested FAO and WHO to organize a new call for data for the safety evaluation of scopoletin. FAO reminded that a full dataset including exposure and toxicity is required. A consultant was hired by the Codex Secretariad to undertake a toxicological review of scopoletin as presented in the Annex to CX/CF 21/14/2-Add.1.	CCNASWP
~~Ergot alkaloids[1]~~	~~Full evaluation (toxicological assessment and exposure assessment)~~	~~EFSA (2012) report~~ ~~EU: occurrence data; assessment on exposures to ergot alkaloids (EFSA report published in May 2017)~~ ~~Canada: occurrence data (commodity specific and unprocessed cereal grains), and data on processing factors through production chain~~ ~~NZ: occurrence data on cereals (1 year of data)~~ ~~Japan: occurrence data in wheat, barley, and wheat products~~	~~EU; Canada~~
~~Trichothecenes (T2 and HT2)~~	~~Update of risk assessment, including exposure assessment (T2, HT2, DAS)~~	~~Brazil: occurrence data in cereals~~ ~~Canada: occurrence data (commodity specific and unprocessed cereal grains)~~ ~~EU: Report by EFSA on dietary exposure, including an HBGV; occurrence data.~~ ~~Japan: occurrence data in raw cereals~~	~~JECFA83 (2016), recommendation supported by CCCF11 (2017).~~

~~[1]Ergot is mentioned in quality chapter, suggestion for integration into GSCTFF.~~

[13] REP20/NASWP, paras. 74, 83, Appendix II