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SW Pacific CODEX

PREPARATION FOR THE 55th SESSION OF THE CODEX COMMITTEE ON FOOD ADDITIVES

(CCFA55)

March 18, 2025

SW Pacific CODEX

CCFA

Agenda Item 3 (a & b)

3 (A) Matters of Interest Arising from FAO/WHO and from the 99th Meeting of the Joint FAO/WHO Expert Committee on Food Additives (JECFA) - *CX/FA 25/55/3*

3 (B) Proposed Draft Specifications for the Identity and Purity of Food Additives Arising from the 99th JECFA Meetings - *CX/FA 25/55/4*

Matters for Information from FAO

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COMPREHENSIVE REVIEW

Comprehensive REVIEWS in Food Science and Food Safety WILEY

Recent and emerging food packaging alternatives: Chemical safety risks, current regulations, and analytical challenges

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Abstract

Food contact materials should not release their constituent substances into food at levels harmful to human health nor change the food composition, taste, or odor unacceptably. The historical evolution of food packaging shows that the use of plastics has increased dramatically, because of its convenience, lightweight, and cost effectiveness, but carries a significant environmental impact. Influenced by trends such as growing awareness of the environmental footprint and stricter safety requirements, conventional packaging is now progressively evolving toward new alternatives. All stakeholders in the agrifood system are involved in the journey to transform food packaging to more sustainable alternatives, while maintaining the important functionalities of suitable food packaging. The current most promising food packaging alternatives are presented in this review with their benefits, limitations, and associated potential safety hazards, with a focus on chemical hazards. Although some potential hazards are common to conventional packaging, others are specific to the new alternatives. Identification of potential chemical hazards associated with these new packaging alternatives is important to anticipate any risks posed to consumer safety. With much diversity in packaging types and rules aimed at ensuring safety drastically varying between jurisdictions, it is not always easy to determine the best way to assess the safety of food packaging. International guidance on principles for safe food packaging could help drive global harmonization and would play a crucial role in ensuring a consistent and science-based framework for the safety and compliance of new and emerging food packaging.

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FAO's work in the area of food packaging

FAO has published reports, and policy briefs related to - **Food safety in a circular economy** – with a focus on food packaging waste and recycling, considering that there is growing evidence that contaminants, whether microbiological, chemical or physical, can be introduced and potentially accumulate during these circular processes.

FAO is continuing to work on the food safety implications of **food contact materials (FCMs),** exploring innovations, and new solutions in this area.

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COMPREHENSIVE REVIEW

Comprehensive REVIEWS in Food Science and Food Safety WILEY

Addressing the safety of new food sources and production systems

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Abstract

New food sources and production systems (NFPS) are garnering much attention, driven by international trade, changing consumer preferences, potential sustainability benefits, and innovations in climate-resilient food production systems. However, NFPS can introduce new challenges for food safety agencies and food manufacturers. Most food safety hazards linked to new foods have been identified in traditional foods. However, there can be some food safety challenges that are unique to new foods. New food ingredients, inputs, and processes can introduce unexpected contaminants. To realize the full potential of NFPS, there is a need for stakeholders from governments, the food industry, and the research community to collectively work to address and communicate the safety of NFPS products. This review outlines known food safety hazards associated with select NFPS products on the market, namely, plant-derived proteins, seaweeds, jellyfish, insects, microbial proteins, as well as foods derived from cell-based food production, precision fermentation, vertical farming, and 3D food printing. We identify common elements in emerging NFPS regulatory frameworks in various countries/regions. Furthermore, we highlight current efforts in harmonization of terminologies, use of recent scientific tools to fill in food safety knowledge gaps, and international multi-stakeholder collaborations to tackle safety challenges. Although there cannot be a one-size-fits-all approach when it comes to the regulatory oversight for ensuring the safety of NFPS, there is a need to develop consensus-based structured protocols or workflows among stakeholders to

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FAO's work on new foods and production systems

- **New food sources and production systems (NFPS)** can play a critical role in the transformation of the agrifood systems. However, with increasing attention on these novel foods, questions are arising regarding their safety and regulatory oversight.

- A review was published outlining known food safety hazards associated with NFPS products, in particular, **plant-derived proteins, seaweeds, jellyfish, insects, and microbial proteins as well as foods derived from cell-based food production, precision fermentation, vertical farming, and 3D food printing**.

- The review emphasizes also the need for collective work among stakeholders from governments, the food industry and the research community to address and communicate on the safety of NFPS products.

Food safety in personalized nutrition: a focus on food supplements and functional foods

- FAO is finalizing a report that will provide a comprehensive analysis of the food safety and regulatory implications associated with **personalized nutrition**, focusing specifically on **food supplements and functional foods**.

- It will illustrate examples of **regulatory frameworks for these products** across different countries and provide insights into trends and innovations.

- The report will also examine consumer behaviour and will offer different perspectives for a way forward in this regard.

Alternative animal source foods: A comprehensive review of the evidence on their benefits and risks for nutrition, environment, livelihoods, and food safety

FAO will produce a comprehensive review with related recommendations for the current state of evidence on this topic.

FAO has commissioned a series of background reviews of the evidence on the benefits and risks of **A-ASFs (Alternative Animal Source Foods)** for nutrition, environment, socio-economic considerations, and food safety.

FAO's work will include **defining A-ASFs and their sub-categories and developing a glossary of relevant terminology and synonyms**.

Matters for information from WHO

- **Optimal intake of animal source foods**: undergoing work on the optimal intake of animal source foods.

- **Ultra Processed Food**: undergoing work on a guidance on the consumption of highly processed foods.

- **Lower-sodium salt substitutes**: WHO published the guideline on the use of lower-sodium salt substitutes (LSSS) to guide policymakers and stakeholders in reducing population sodium intake and lowering the risk of hypertension and related noncommunicable diseases.

- **Global elimination of industrially produced trans-fatty acids**: In 2018, WHO called for the global elimination of industrially produced trans-fatty acids (TFA) by 2023. By the end of 2023, 53 countries implemented best-practice policies, protecting 3.7 billion people globally. While the global elimination target was not fully achieved, remarkable progress was made across all regions.

Matters for Information from WHO

◦ **Call for new experts to join the Joint FAO/WHO Expert Committee on Food Additives (JECFA):** new call for new experts to join the JECFA in the spring of 2025, open until October 2025.

◦ **New Approach Methodologies (NAMs) in Future Food Safety Risk Assessment workshop:** from 18 to 20 June 2025 in Singapore. This event, co-organized by the World Health Organization (WHO) and Nanyang Technological University (NTU) Singapore, aims to bridge the gap between scientific innovation and regulatory frameworks in food safety.

◦ **WHO Alliance for Food Safety**: On 6-8 May 2024, the WHO Nutrition and Food Safety department hosted the inception meeting (hybrid) for the WHO Alliance for Food Safety in Geneva, Switzerland. Meeting organized in collaboration with the US Centers for Disease Control and Prevention Division of Foodborne Waterborne and Environmental Disease (DFWED US CDC) and the Food And Drug Administration (US FDA). **Outcomes:** to improve foodborne disease surveillance and improve capacity to collect, analyze, and use data related to foodborne diseases and food monitoring to be used for risk assessment and risk management decisions.

◦ **Codex Trust Fund:** In 2024, the Codex Trust Fund (CTF) launched its **project output repository** which provides access to resource material and products developed with CTF2 support.

Matters for information from the 99th meeting of the Joint FAO/WHO Expert Committee on Food Additives (JECFA)

The results of the 99th meeting (Geneva, 11 June - 20 June 2024) of JECFA on certain food additives are available as follows:

- The meeting report and the toxicological and dietary exposure monograph (WHO Food Additive Series No 90).
- The specification monograph 34 resulting from the 99th JECFA meeting.

JECFA 101 meeting postponed / JECFA 102 meeting will be abbreviated.

WHO will need to evaluate the possibility of assessing fewer food additives and may also consider a reduction in the frequency and duration of future JECFA meetings in general.

Food and Agriculture Organization of the United Nations

World Health Organization

JOINT FAO/WHO EXPERT COMMITTEE ON FOOD ADDITIVES

Ninety-ninth meeting (Safety evaluation of certain food additives)

11–20 June 2024

SUMMARY AND CONCLUSIONS

Issued on 5 July 2024

The Ninety-ninth meeting of the Joint Food and Agriculture Organization of the United Nations (FAO)/World Health Organization (WHO) Executive Committee on Food Additives (JECFA) was held in Geneva from 11 to 20 June 2024. The purpose of the meeting was to evaluate the safety of certain food additives. The present meeting was the Ninety-ninth in a series of similar meetings. The tasks before the Committee were to (a) further elaborate principles governing the evaluation of food additives and enzymes; (b) undertake safety evaluations of certain food additives and enzymes; (c) review and prepare specifications for certain food additives and enzymes; and (d) review specifications for certain flavouring agents.

Dr D. Benford served as Chairperson and Dr R. Cantrill served as Vice-chairperson. Mr K. Petersen and Ms A. Vlachou served as joint secretaries.

The Committee evaluated the safety of four food additives and four processing aids, and revised the specifications for 10 flavouring agents.

The report of the meeting will be published in the WHO Technical Report Series (No. 1056). The report will summarize the main conclusions of the Committee in terms of acceptable daily intakes (ADIs) and other toxicological, dietary exposure and safety recommendations. Information on deliberations and conclusions with regards to the specifications for the identity and purity of certain food additives, enzymes examined by the Committee and the flavouring agents will also be included.

The participants are listed in Annex 1. Information of a general nature that the Committee wishes to disseminate quickly is provided in Annex 2. A related checklist to assist sponsors in the provision of information required for the safety assessment of enzyme preparations for use in foods is provided in Annex 3. Recommendations made by the Committee at the Ninety-ninth JECFA meeting are summarized in Annex 4.

Toxicological monographs summarizing the data that were considered by the Committee in establishing ADIs will be published in WHO Food Additives Series No. 90. New and revised specifications for the identity and purity of the compounds will be published in FAO JECFA Monographs No. 34.

More information on the work of JECFA is available at: http://www.fao.org/food-safety/scientific-advice/jecfa/en/ and https://www.who.int/foodsafety/en/.

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Actions required as a result of changes in Acceptable Daily Intake (ADI) status and other toxicological recommendations and recommendations related to specifications from JECFA

At its 99th meeting, JECFA:

(i) evaluated the safety of four food additives and four processing aids;
(ii) revised the specifications for three food additives and 10 flavouring agents; and
(iii) Established specifications for four processing aids.

CCFA55 is invited to consider the recommended actions (presented in the Annex to this document) which might be required following the evaluations of these food additives.

No new data on the microbiological effects were submitted for natamycin and nisin of relevance to the request from CCFA. In addition, no new toxicological data were submitted for nisin. For polyglycerol esters of fatty acids, no new toxicological data were submitted or found in a literature search.

JECFA would like to remind CCFA of the limited resources and recommends that CCFA place greater emphasis on ensuring the availability of new data before a food additive is prioritized for JECFA re-evaluation.

It was concluded that food category mapping between the FoodEx2 categories used for the food consumption data and GSFA food categories was needed, which will enable more refined estimates of dietary exposure to be undertaken.

Food Additives Evaluated Toxicologically and/or Considered for Specifications at the 99th JECFA Meeting

INS	Additive	Recommended action by CCFA
#	Adenosine-5¢-monophosphate deaminase from Aspergillus sp	JECFA could not complete the safety evaluation
163(xi)	Butterfly pea flower extract	JECFA could not complete the safety evaluation
#	Endo-1,4 β xylanase from Bacillus subtilis expressed in Bacillus subtilis	ADI "not specified"
#	Endo-1,4 β xylanase from Rasamsonia emersonii expressed in Aspergillus Niger	ADI "not specified"
#	Glucosidase from Aspergillus niger expressed in Trichoderma reesei exhibiting αglucosidase and transglucosidase activity	ADI "not specified"

Food Additives Evaluated Toxicologically and/or Considered for Specifications at the 99th JECFA Meeting

INS	Additive	Recommended action by CCFA
235	Natamycin	JECFA re-affirmed the ADI of 0–0.3 mg/kg bw
234	Nisin A	JECFA reaffirmed the ADI of 0–2 mg/kg bw
475	Polyglycerol esters of fatty acids	JECFA reaffirmed the ADI of 0–25 mg/kg bw

FAO JECFA Monographs 34, 2025

FLAVOURING AGENTS CONSIDERED FOR SPECIFICATIONS ONLY

Flavouring agent	No.	Specifications
S-methyl thioacetate	482	R
S-methyl 3-methylbutanethioate	487	R
4,5-dihydro-3(2H) thiophenone	498	R
2-methyltetrahydrothiophen-3-one	499	R
1-Butanethiol	511	R
o-Toluenethiol	528	R
bis(Methylthio)methane	533	R
3-Mercaptohexyl acetate	554	R
3-Mercaptohexyl butyrate	555	R
3-Mercapto-2-pentanone	560	R

Agenda Item 4 (a)

CODEX ALIMENTARIUS COMMISSION

Food and Agriculture Organization of the United Nations

World Health Organization

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Agenda Item 4(a)

Endorsement and/or revision of maximum levels for food additives and processing aids in Codex standards

CCFA

Endorsement of the food additive provisions forwarded by CCLAC23, as outlined in the REP24/LAC document, for the regional standard for Castilla lulo (naranjilla).

Endorsement of the food additive provisions in the standard for fresh curry leaves (for adoption by CAC at Step 5/8), forwarded by CCFFV23.

Agenda Item 4 (a)

At CCFA55 (2025)

Delegates will be invited to consider the endorsement of the following food additive provisions

CX/FA 25/55/5 4

Annex

CCLAC

REGIONAL STANDARD FOR CASTILLA LULO (NARANJILLA) (Latin America and the Caribbean) (for adoption by CAC48 at Step 5/8)[4]

Food additive provision	Note
8 FOOD ADDITIVES No food additives are permitted.	For information only.

CX/FFV 22/22/8 2

Appendix I

PROPOSAL FOR NEW WORK ON DEVELOPMENT OF A STANDARD FOR CASTILLA LULO

(Submitted by Colombia)

BACKGROUND

Castilla lulo[1] (*Solanum quitoense* Lam.), is a fruit of the *Solanaceae* family, is a globose berry, with a yellow-orange skin when ripe, covered with trichomes (lint). Internally, it is divided into four compartments in which is the juicy bittersweet pulp of greenish–yellowish color, and with numerous small seeds.

Source: Corporación Colombiana de Investigación Agropecuaria - AGROSAVIA

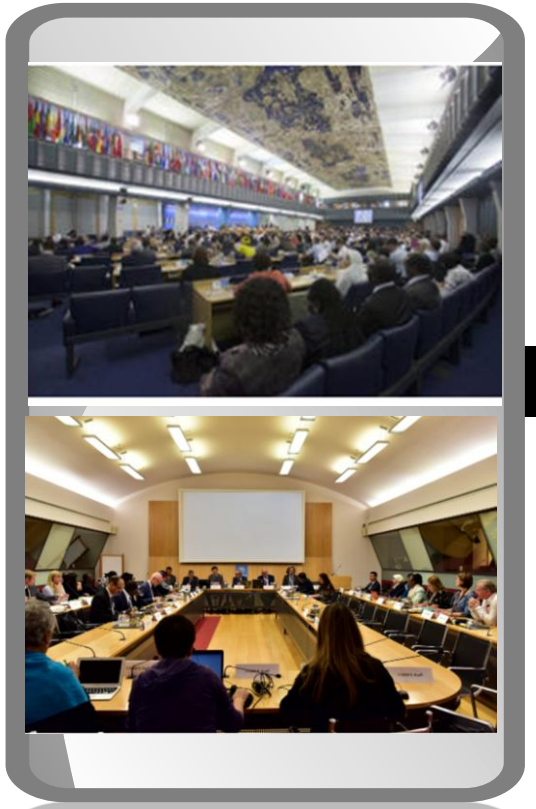
Source: https://agronegocios.uniandes.edu.co/2011/10/10/investigacion-del-lulo-en-narino/

CCFFV

STANDARD FOR FRESH CURRY LEAVES (for adoption by CAC at Step 5/8)[5]

Food additive provision	Note
8 FOOD ADDITIVES No food additives are permitted in foods conforming to this standard.	For information only.

RECOMMENDATION



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Codex delegations might give their support for the endorsement of the food additive provisions in the draft standard for Castilla lulo (naranjilla) and fresh curry leaves to prevent further delays.

The current drafts do not allow any food additives.

This endorsement is crucial for the standard's adoption at Step 5/8 during CAC48.


thank you
danke
謝謝
ngiyabonga
teşekkür ederim
gracias
merci
obrigado
bedankt
dziękuje
go raibh maith agat
mochchakkeram
sukriya
kop khun krap
terima kasih
dank je
tapadh leat
arigatô
dakujem
grazie
sagolun
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спасибо
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faafetai lava
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