CODEX ALIMENTARIUS COMMISSION

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Food and Agriculture Organization of the United Nations

World Health Organization

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CL 2025/03-CF
February 2025

TO	Codex Contact Points Contact Points of international organizations having observer status with Codex
FROM	Secretariat, Codex Alimentarius Commission, Joint FAO/WHO Food Standards Program
SUBJECT	**Request comments on the application of maximum levels to multi-ingredient products**
DEADLINE	**10 May 2025**

BACKGROUND

1. At the 17th Session of the Codex Committee on Contaminants in Foods (CCCF17, 2024), during the discussion on maximum levels (MLs) for mycotoxins in spices, questions arose about MLs for spice mixtures.
2. CCCF17 considered a proposal prepared by the Codex and host Secretariats (CRD37) to include a note in the *General standard for contaminants in food and feed* (CXS 193-1995) on the application of individual ML of ingredients to the whole mixture based on their relative proportions in the product as a starting point.
3. Several views were expressed on the proposal, and it was also noted that the question was not limited to spices but other mixtures and that the General Standard already contained guidance on how to deal with mixtures.
4. CCCF17 noted that the Codex Secretariat could issue a circular letter (CL)[1] requesting comments on the necessity and content of further guidance for multi-ingredient products.[2]
5. This CL requests comments on the necessity and content of further guidance for multi-ingredient products when an ML has already been established or will be established for mixtures.
6. The Annex to this CL provides further background information to support the submission of comments, including two possible scenarios involving MLs for mixtures (of)/multi-ingredient products. Such scenarios are not exhaustive, and Codex members and observers may wish to provide other possible scenarios and comment on them according to the points raised in point 7 below.

REQUEST FOR COMMENTS ON THE NECESSITY AND CONTENT OF FURTHER GUIDANCE FOR MULTI-INGREDIENT PRODUCTS

7. Codex members and observers are kindly invited to, considering the information provided in the Annex to this CL, comment on:

    (a) the necessity for further guidance for multi-ingredient products and

    (b) if there is a need for guidance, provide proposals on whether there should be:

        (i) an amendment (addition) to the current guidance in the General Standard (CXS 193-1995), Annex I, section on the establishment of maximum levels considering the scenarios given in paragraph 5 of the Annex and other potential scenarios members or observers may identify; or

        (ii) an addition of a note to the ML(s) in question; or

        (iii) any other suitable proposal.

[1] https://www.fao.org/fao-who-codexalimentarius/committees/committee/related-circular-letters/en/?committee=CCCF
https://www.fao.org/fao-who-codexalimentarius/resources/circular-letters/en/

[2] REP24/CF17, para. 29
https://www.fao.org/fao-who-codexalimentarius/meetings/detail/en/?meeting=CCCF&session=17

GUIDANCE ON THE PROVISION OF COMMENTS

8. Comments should be submitted through the Codex Contact Points of Codex Members and Observers using the OCS.
9. Contact Points of Codex Members and Observers may login to the OCS and access the document open for comments by selecting "Enter" in the "My reviews" page, available after login to the system.
10. Contact Points of Codex Members and Observers are requested to provide general comments at the document level. Additional guidance on the OCS comment categories and types can be found in the OCS Frequently Asked Questions (FAQs)[3].
11. Other OCS resources, including the user manual and short guide, can also be found on the Codex website[4].
12. For questions on the OCS, please contact Codex-OCS@fao.org.

[3] http://www.fao.org/fileadmin/user_upload/codexalimentarius/doc/OCS/Codex_OCS_FAQs_2017-11-06.pdf
[4] https://www.fao.org/fao-who-codexalimentarius/resources/ocs/en/

Annex
(For information)

1. According to *Criteria for the establishment of maximum levels in food and feed*, Annex 1 of the *General Standard for Contaminants in Food and Feed* (CXS 193-1995), the section on the establishment of maximum levels, states that:

    - Guidance is desirable regarding the possible application of MLs established for primary products to processed products and multi-ingredient products. When products are concentrated, dried or diluted, use of the concentration or dilution factor is generally appropriate in order to be able to obtain a primary judgement of the contaminant levels in these processed products. The maximum contaminant concentration in a multi-ingredient food and feed can likewise be calculated from the composition of the food and feed. Information regarding the behaviour of the contaminant during processing (e.g. washing, peeling, extraction, cooking, drying, etc.) is, however, desirable to give more adequate guidance. When contaminant levels are consistently different in processed products related to the primary products from which they are derived, and sufficient information is available about the contamination pattern, it may be appropriate to establish separate maximum levels for these processed products. This also applies when contamination may occur during processing. In general, however, MLs should preferably be set for primary agricultural products and may be applied to processed, derived and multi-ingredient food and feed by using appropriate conversion factors. When these factors are sufficiently known, they should be mentioned in the suffix to the maximum level following the format of list of MLs as defined in Annex II.

2. However, during CCCF17, concerns were expressed that the composition of multi-ingredient products such as spice mixtures is not often known. Therefore, proposals were made to include a pragmatic solution in case the relative proportions of the ingredients were unknown; the lowest ML of the individual ingredients could be applied to the whole mixture.

3. Consideration should be given to whether the current provision in CXS 193-1995 (as per the bullet point above) is sufficient or if additional text to this bullet point and/or a footnote to the ML is needed.

4. Should a footnote be an option, the following proposal, considering the discussion at CCCF17, could be considered for application to MLs for spices (or other) mixtures where XXX is the relevant contaminant:

    If relative proportions of the mixture ingredients are unknown, and guidance of CXS 193-1995 on MLs for multi-ingredient products cannot be applied, countries or importers may decide to apply the lowest ML of the mixture ingredients to the whole mixture. If the concentration of XXX is below or equal to this ML, no further testing is required, and the sample is determined to be compliant with the ML. If the XXX concentration is above the lowest ML, follow-up inquiries on the relative proportions of ingredients shall be conducted to determine if the xxx concentration is compliant.

5. Examples of application:

    (i) A mixture is made of spices A, B, C, and D in unknown relative proportions. Spice A has an ML of 2 mg/kg, and spices B, C, and D have no MLs. The ML of 2 mg/kg can be applied to the whole mixture. The mixture can be considered compliant if the analyzed concentration is below 2 mg/kg. If the ML of 2 mg/kg is exceeded, the relative proportions of ingredients should be determined. As there are no other MLs to consider, the ML to be applied depends on the relative proportion of spice A in the whole mixture.

        (a) Should the relative proportion of spice A be 1/3 of the whole mixture, an ML of 3*2 = 6 mg/kg can be applied for the whole mixture.

    (ii) A mixture is made of spices A, B, and C in unknown relative proportions. Spice A has an ML of 3 mg/kg, spice B has an ML of 6 mg/kg, and spice C has an ML of 9 mg/kg. The ML of 3 mg/kg can pragmatically be applied to the whole mixture. The mixture can be considered compliant if the analyzed concentration is below 3 mg/kg. If the ML of 3 mg/kg is exceeded, the relative proportions of ingredients should be determined. The ML to be applied depends on the determined relative proportions of the spices in the mixture:

        (b) Should the spices be present in equal proportions, the ML to be applied is the sum of (1/3*3) + (1/3*6) + (1/3*9) = 6 mg/kg.

        (c) Should the relative proportion of spice A be 1/2 of the whole mixture (two quarters), and the other spices in relative proportions of 1/4 each, the ML to be applied is the sum of (1/2*3) + (1/4*6) + (1/4*9) = 5.25 mg/kg.