

CODEX ALIMENTARIUS COMMISSION



Food and Agriculture
Organization of the
United Nations



World Health
Organization

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Agenda Items 3.1, 4.1, 4.2, 6, 7.1, 7.2

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JOINT FAO/WHO FOOD STANDARDS PROGRAMME CODEX COMMITTEE ON METHODS OF ANALYSIS AND SAMPLING

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COMMENTS OF THAILAND

Thailand appreciates the great efforts in preparing information and documents for consideration by the Committee.

We would like to proposed our comments on the following agendas:

Agenda item 3.1: Methods of analysis and sampling submitted by Codex subsidiary bodies

Method for salt saturation in salted fish and dried salted fish of the Gadidae family of fishes

Thailand confirms our position in 48th CAC to retain the analytical method for salt saturation in salted fish and dried salted fish of the family Gadidae, along with footnote xii describing the calculation of percentage salt saturation and the sample preparation in Appendix VIII, Part 1 of CXS 234 (as detailed in CX/MAS 26/45/3, Appendix I, Part A and CX/MAS 26/45/2 para 12).

Agenda item 4.1: Review of methods of analysis in commodity standards (fish and fishery products, fats and oils, cereals, pulses and legumes and derived products)

Determination of fish content (declaration)

1. Proposed revised presentation of the provision of fish content included in CXS 234-1999

1.1 Standard for Quick Frozen Fish Sticks (Fish Fingers), Fish Portions and Fish Fillets — Breaded or in Batter (CXS 166-1989)

Determination of fish content (declaration), where there is reason to doubt the composition of the fish core (e.g. where non-fish ingredients may be present), for quick-frozen fish sticks (fish fingers), fish portions and fish fillets — breaded or in batter (CXS 166-1989), except for fully cooked products.

The proposed revised presentation

Commodity	Provision	Method	Principle	Type
Quick-frozen fish sticks (fish fingers) and fish portions and fish fillets- breaded or in batter	fish content (declaration)	<u>the following methods</u> <u>)See Appendix VI(</u>	<u>Calculation</u> <u>from</u>	
	Determination of Nitrogen	ISO 937	Titrimetry Distillation)kjeldahl(II
	Determination of Moisture	ISO 1442	Gravimetry	I
	Determination of Total fat	ISO 1443	Gravimetry	I

Commodity	Provision	Method	Principle	Type
	Determination of Ash	ISO 936	Gravimetry	I

Rationale

According to the standard, “Fish content” is the provision to be measured for the purpose of verifying the product compliance. The adopted methods for the determination of nitrogen (ISO 937), moisture (ISO 1442), total fat (ISO 1443), and ash (ISO 936) serve as intermediate analyses conducted solely for the purpose of calculating fish content and do not compliance criteria in themselves.

It would, therefore, be more appropriate to list these adopted methods under the main entry for the fish content provision within the same row as shown in the above table, rather than as separate main entries. This would more accurately reflect their function as intermediate analytical steps used solely for the calculation of fish content. To avoid any misunderstanding that they are independent compliance entries, these methods should not be presented as separate main entries.

Furthermore, to enhance clarity and understanding for users of CXS 234-1999, it is essential to include the phrase “the following methods (see Appendix VI)” in the method column. This would make clear that the fish content is determined by the calculation based on the results of the intermediate analyses conducted in accordance with Appendix VI of CXS 234.

2. Clarification on the calculation of % fish content in Appendix VI of CXS 234

This explanation is provided to clarify that the determination of fish content is based on calculation using the results of the intermediate analyses, and not on the individual analytical parameters as compliance criteria.

Appendix VI of CXS 234 describes the calculation of % fish content, taking into account % total nitrogen, % non-fish flesh nitrogen and carbohydrate, as follows:

The percentage fish content, corrected for the non-fish flesh nitrogen contributed by the carbohydrate coating, is calculated as follows; however, “% fish” in the formula should be amended to “% fish content.”

$$\% \text{ Fish content} = \frac{(\% \text{ total nitrogen} - \% \text{ nonfish nitrogen})}{\text{N factor} * } \times 100$$

*appropriate N (nitrogen) factor

The non-fish flesh nitrogen is calculated as follows:

% non-fish flesh nitrogen = % carbohydrate X 0.02

Where the carbohydrate is calculated by difference:

% carbohydrate = 100 – (%water + % fat + % protein + % ash)

References

Determination of nitrogen: ISO 937

Determination of moisture: ISO 1442

Determination of total fat: ISO 1443

Determination of ash: ISO 936

Average nitrogen factors to be used for fish flesh for specific fish species used as raw material for the product can be found at the following website:

<http://www.fao.org/in-action/globefish/fishery-information/resource-detail/en/c/338604/>

<http://www.fao.org/fishery/topic/1514/en>

Agenda item 4.2: Retyping of ISO 1871 for determining protein in quinoa

In our view, ISO 1871 method for determining protein in quinoa should be retained as Type IV, not retyped as Type I for the following reasons:

1. ISO 1871 method is a general guidance for determining protein with Kjeldahl digestion principle, not a standard operating procedure which defines instruction of analytical of protein in quinoa. Therefore, it should not be retyped as Type I method for the determination of protein in quinoa.
2. The data presented in CX/MAS 26/45/5 lack the important performance characteristics that appear in most ISO methods of analysis such as:

- 1) Number of participating laboratories after removal of outliers
- 2) Mean value
- 3) Repeatability standard deviation (Sr)
- 4) Repeatability limit (r)
- 5) Reproducibility standard deviation (SR)
- 6) Reproducibility limit (R)
- 7) %CVR

Agenda item 6: Methods of analysis for precautionary allergen labelling

We agree, in principle, with the draft response from CCMAS to the request from CCFL47 and support its forwarding to CCFL.

Agenda item 7.1: Review of sampling plans in CXS 234-1999

Our comments on the matter are as follows:

1. We support Option 1 to include information on sampling plans in CXS 234-1999 in Part B in an electronic database. The inclusion of sampling plans and methods of analysis information in one document, CXS 234-1999, would allow searching for both within a single document, facilitating and enhancing search efficiency.
2. Moreover, it is proposed that CCMAS should elaborate guidance for the development of sampling plans for each commodity group. The document will serve as guidance for relevant commodity committees in developing sampling plans for testing product compliance with the commodity standards.

It is expected that such sampling plans would be based on statistical principles and be practical. The guidance should be included in the same database as CXS 234-1999.

3. We have no objection to the proposed format for presenting sampling plan information, as outlined in the tables "Example of Proposed Format of Sampling Plan Information," "Location of Sampling Plan Information," and "Example of Proposed Format for Selection of Methods based on Method Performance Criteria."

We support the proposal of the EWG regarding the details of the sampling plan information presented in the Annex.

4. How CCMAS could assist with the process of developing sampling plans

Commodity Committees that are currently active should be responsible for developing sampling plans for their respective products. However, as these committees may lack statistical expertise, CCMAS should provide technical assistance and support. This will ensure that the sampling plans are on a statistical basis and are practical

In cases where Commodity Committees are adjourned sine die and no sampling plans exist, CCMAS should be responsible for developing sampling plans for the relevant commodities.

5. Establishment of a new EWG should be proposed to continue discussions

We support the establishment of a new EWG to continue discussions on defining the content of the database, how information from the current CXS 234 will be included, and the functionality of the database system (such as creating new entries, editing existing entries, and the display of information). This also includes the management system of the database.

Agenda item 7.2: Sampling plans for bulk materials/heterogeneous lots including mycotoxins

1. We have no objection to the proposed new work for the development of general guidance on acceptance sampling plans for bulk materials/heterogeneous lots, including mycotoxins.

The guidance should be included as an Annex to CXG 50, which currently mainly covers sampling plans for homogeneous lots. This would make CXG 50 cover sampling plans for both homogeneous and heterogeneous lots within a single document.

2. Meanwhile, in our view, the attached table in CX/MAS 26/48/10, which is technical information and specific data/examples for each individual mycotoxin, should not be included in CXG 50. We propose that it should be Codex internal information, which is expected to support CCCF in the review General Standard for Contaminants and Toxins in Food and Feed (CXS 193-1995).