

CODEX ALIMENTARIUS COMMISSION



Food and Agriculture
Organization of the
United Nations



World Health
Organization

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Agenda Item 4.3

CX/MAS 21/41/6

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

41st Session

Virtual

17 – 21 and 25 May 2021

REVIEW OF METHODS OF ANALYSIS IN CXS 234 CEREALS, PULSES AND LEGUMES WORKABLE PACKAGE

(Prepared by the AACCI (C&G))

Introduction

1. CCMAS38 (2017) agreed to continue efforts on the workable packages for the review and update of the *General Standards for Methods of Analysis and Sampling* (CXS 234-1999) as described in CX/MAS 17/38/6. CCMAS also agreed to pilot this effort through an update of all methods related to milk and milk products with the assistance of IDF, ISO and AOAC (REP 17/MAS, paras 58-59).
2. CCMAS39 (2018) agreed to proceed with the update on workable packages for (i) cereals, pulses and legumes; and (ii) fats and oils. CCMAS39 agreed that the work on cereals, pulses and legumes would be led by AACCI (cereals, pulses and legumes). All interested members and SDOs were invited to assist in this work as appropriate. The same protocol followed by IDF, ISO and AOAC in the revision of the dairy group workable package would be followed and enhanced.
3. AACCI reviewed the methods of cereals, pulses and legumes and presented their report, CX/MAS 19/40/3 Add.1 to CCMAS40 (2019) for consideration.
4. CCMAS40 agreed that with assistance from AOAC and ISO would continue working on the cereals, pulses and legumes working packages and present reports (or preliminary reports) for consideration by the next session.¹ :

Review of Methods in Standard 234 (CXS 234-1999) for the Cereals, Pulses and Legumes and Derived Products.

5. To provide a framework for review of the Standard on Methods of Analysis and Sampling (CXS 234 – 1999) hereafter referred to as CXS234, AACC (now Cereals & Grains Association, C&G) prepared workbooks containing the information from the Standard, including the current information for the Method of analysis and the Provisions associated with each Method listed.
6. A cross check was made for methods listed in commodity and regional standards, that are not already included in CXS 234, for the same group of Products. When appropriate these methods were added to the lists for review.
7. For some Provisions there are equivalent methods listed from different Standards organizations.
8. There are three standards organizations that provide the majority of the methods listed. These are AOAC, ICC and ISO. Separate workbooks were prepared for each of these Standards organizations.
9. The workbooks contain separate worksheets for each method. In addition, a summary sheet is completed for each workbook.

¹ REP20/MAS, para. 28

10. The workbooks were headed as follows:

Codex Standards Reviewed	ISO Standard/ ICC Standard/ AOAC Standard	Provision	Codex Standard For:	Year of Standard	Standard Current (Yes/No)?	Validation data available (Yes/No)?
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11. All Products listing the same method were included on the same worksheet. This allowed the expert reviewing the method status to complete the method review for all Products and report in a single evaluation session.

CXS 169- 1989	ISO 712	Moisture	Whole and Decorticated Pearl Millet Grains			
CXS 154-1985	ISO 712	Moisture	Whole Maize (Corn) Meal			
CXS 152-1985	ISO 712	Moisture	Wheat Flour			

12. Each Standards organization received workbooks specific for their methods as listed in CXS 234.

13. The organizations were asked to complete the workbooks as prepared.

14. Three Standards organizations cover most of the methods for review and received workbooks: ISO received 10 workbooks, ICC received 3 workbooks and AOAC received 19 workbooks.

15. When a Standards organization recommended a new (or replacement) method, they were asked to complete the worksheet for the current method and a duplicate worksheet for the proposed new method. This will allow all new method recommendations to be considered by CCMAS with the appropriate information provided.

16. Where information is obtained from worldwide Commodity or Regional Standards and considered for inclusion into CXS 234, it is anticipated that those committees will be advised of the information obtained. They will be asked to consider and support the addition of the method into CXS 234 (when appropriate).

17. **Current Status of Work.**

- Workbooks have been returned from ISO and ICC.
- AOAC has enlisted expert scientists and is working to review the workbooks sent to them.
- Follow up work to review each workbook returned will be completed by C&G. As some methods are equivalent between Standards organization, this work is on hold until all workbooks have been received.

18. The methods used in this section of CXS 234 cover a long-time period, and many different matrices. In addition, in many instances the equivalent methods have not been reviewed for many years. To complete the review carefully and research the published supporting materials can take an expert considerable time for each method.

19. Volunteer expert scientists at AACCC (C&G) will review the returned workbooks. In addition, they are looking to double check for methods in regional and worldwide commodity standards, that have not been added to CXS 234.

20. C&G will resolve any questions that arise in the summary reviews and address directly with the Standards organizations. We will then prepare a report for CCMAS member countries to review.

21. The Standards organizations experts, who have worked with us (and are continuing to work with us) are thanked for their efforts over the past year, under difficult circumstances, that were (and in some cases continue to be) unprecedented for all methods and laboratory-based scientists.

Recommendations

22. The Committee is invited:

- note the update provided; and
- agree that AACCI (C&G) should continue to work on the cereals, pulses and legumes workable package and report to the next session of the Committee.