

CODEX ALIMENTARIUS COMMISSION



Food and Agriculture
Organization of the
United Nations



World Health
Organization

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Agenda Item 8

MAS/40 CRD/21

ORIGINAL LANGUAGE ONLY

JOINT FAO/WHO FOOD STANDARDS PROGRAMME

CODEX COMMITTEE ON METHODS OF ANALYSIS SAMPLING

40th Session

Budapest, Hungary, 27 – 31 May 2019

FINAL REPORT OF THE 31st MEETING OF INTERNATIONAL ORGANISATIONS WORKING IN THE FIELD OF METHODS OF ANALYSIS AND SAMPLING (INTER-AGENCY MEETING; IAM-31)

13.30 – 18.00h, Saturday, 25th May 2019

Present

Anne Bridges AACCI
Paul Wehling AACCI
Darryl Sullivan AOACI
Erik Konings AOACI
John Szpylka AOACI
Palmer Orlandi AOACI
Scott Bloomer AOCS
Ralf Josephs BIPM
Duncan Arthur CEN
Viktor Kasza HU
Attila Eli Nagy HU
Andrea Zentai HU
Aurelie Dubois IDF
Steve Holroyd IDF
Philippe TrossatIDF
David Hammond IFU
Dustin Starkey ISDI
Joseph Thompson ISDI
Sandrine Espeillac ISO
Marcel de Vreeze ISO
Nina Skall Nielsen NMKL
Richard Cantrill USP/MoniQA/IND (Chair)
Gina Clapper USP (Secretariat)

Invited

Greg Noonan USFDA

Apologies

Richard Ten Eyck	AAFCO
Melissa Phillips	AOACI
Erich Dumelin	AOCS/IND
Ray Shillito	BASF
Gracia Brisco	CAC
Verna Carolissen	CAC
Marina Patriarca	Eurachem
Steve Ellison	Eurachem
Gretel Bescoby	FOSFA
Amine Jbeily	ICC
Michaela Pichler	ICC
Roger Wood	ICUMSA/IND
Marie-Noelle Bourquin	ISO
Zoltan Mester	IUPAC
Roland Poms	MoniQA
Michael Sussman	USDA
Jeff Moore	USP
Kristie Laurvick	USP

1. Chair's Welcome / Introduction

The attendees were welcomed by Dr Cantrill who thanked Dr Nagy and Dr Zentai for kindly hosting the meeting at the Hungarian National Food Chain Safety Office.

2. Apologies

See above.

3. Introduction of Attendees

See above.

4. Adoption of Agenda

The Agenda was adopted with the following changes:

- 4.1** Anne Bridges (AACCI) added Gluten methods to Agenda item 7.
- 4.2** Erik Konings (AOACI) added CRD4/revising CCMAS scope to Agenda item 8.
- 4.3** David Hammond (IFU) added an update from IFU under Agenda item 9.

5. Report of the Previous Meeting IAM-30, 2018

There were no corrections to the report of the 30th meeting. The document will soon be available on www.moniqua.org/iam.

5.1 Matters arising from the Previous Meeting Not Otherwise on the Agenda

None presented.

6. Update on document: Comprehensive guidance for the process of submission, consideration and endorsement of methods for inclusion in CXS 234

Kudos to the team who drafted the document last summer and early fall (Cantrill, Clapper, Hammond, Sullivan, and van den Bijgaart). The draft guidance document on endorsement was submitted to Greg Noonan for submission to the relevant eWG for comment. The final document from the eWG would be considered under CCMAS Agenda item 4. The document was written to provide answers to a number of questions previously raised in CCMAS during the revision of CXS 234, particularly the dairy methods package.

A number of issues raised by commenters were discussed by IAM delegates. Time was spent discussing “Is the method validated or fit for purpose?”; “How much detail does CCMAS need to include with a method to meet CCMAS review requirements?”; “Understanding different method requirements for analytical purposes and control purposes”; “Although the method is listed within CXS 234, was the question of fitness for purpose ever considered?” Highlighting the quinoa standard, it was noted that the moisture method selected was not the ISO cereals method, but an alternative ISO method. So, is it truly fit for purpose?

It was noted that the document recommends the involvement of the regional and commodity committees at an early stage, and also the relevant SDOs so that the work of CCMAS can be expedited. Further, some of the comments received when reviewing the Dairy Package were regarding methods only validated on a few matrices and whether they can be extended to similar matrices such as milk vs cream.

The IAM delegates agreed that methods should meet the needs of all stakeholders AND Codex Alimentarius.

Overlaps between the draft guidance document and the preamble to CXS 234 would be identified and addressed during the development of this guidance.

7. Update on method review process (as agreed at CCMAS 39)

7.1 ISO/AOACI/IDF

Dubois reported AOACI, and IDF/ISO conducted separate reviews and then worked together to align. A report can be found in the relevant CCMAS papers. The review process also led to the identification of other methods to carry out the review and involve eWG members. AOACI created a rubric which did deviate from the eWG instructions, but it did help in the concentration and resolution of proposed changes. It was also noted that some of the dairy methods do not contain validation data/performance data, although this may exist in various publications. Such issues may be addressed when such methods are up for review.

7.2 AACCI

Bridges noted that the approach proposed by New Zealand on the Dairy Package was a great help and AACCI decided to wait to review the Cereals, Pulses and Legumes Package until the consideration of the Dairy Package by CCMAS had been undertaken. It was noted there are fewer organizations working with cereals (ISO, AOACI, and AACCI). Provided the Dairy Package is endorsed during CCMAS40, AACCI should have the working sheets for the Cereal Package ready during the 4th quarter of 2019 and will work directly with the SDOs involved. The IAM secretariat will distribute the example of the review document to IAM.

7.3 AOACI

Sullivan reported Melissa Phillips has developed the rubrics for the rest of the AOACI methods for non-dairy applications. The AOACI review committee has momentum and will continue the reviews with fats and oils methods and then; cereals methods review will follow in concert with AACCI. The AOAC rubric has been shared with all the other SDOs.

7.4 AOCS

AOCS hired a consultant to complete the initial review and used the AOACI rubric as a starting point. Reviews were completed, compiled, and sent to CAC in April 2019. At this time, comments are received from ISO/TC 34/SC 11 Secretariat. Since more comments are expected, a working group will be formed including AOCS, AOACI, ISO and NMKL.

7.5 NMKL

NMKL is also using the AOACI rubric to start reviewing the NMKL methods. There are joint methods with AOACI in the review package.

7.6 Gluten method review/gluten-free

AACCI informed the IAM on the CCMAS40 agenda under cereals, pulses, and legumes, there is a call to update the gluten-free methods (Agenda item 3.2). The market has changed exponentially since the original endorsement was made. The currently CXS 234 endorsed method has been updated by both AACCI and AOACI and both SDOs would like CCMAS to update the endorsement and limit the scope to the matrices validated in collaborative trials. AOAC 2018.15 is a new method for gluten in oat-based foods and will ask the PWG consider adding this for CCMAS consideration.

8. CCMAS Papers –

8.1 Matters Referred to the Committee by the Codex Alimentarius Commission and Other Subsidiary Bodies

8.2 Cantrill reminded the SDOs they can use this mechanism to update CCMAS on SDO activities. Espeillac stated ISO supplies a report to CAC each year. The latest report will be distributed to IAM members.

8.3 Endorsement of Methods of Analysis Provisions and Sampling Plans in Codex Standards (see Agenda 7)

Noonan indicated the PWG would start with items brought forward under CCMAS Agenda item 3 and will also consider gluten. The submissions for herbs and spices may generate considerable comment. The Dairy Package will be reviewed, starting with Appendix 1.

It was unclear when changes done to the review of the dairy package would be published: either right after endorsement/approval by CCMAS and CAC or whether it would await the availability of the revised format (revision of structure of 234). Therefore, IAM agreed to recommend the changes to be incorporated into CXS 234 as soon as endorsed in the format deemed most appropriate by the secretariat.

Noonan also mentioned he'd carry out future reviews differently with initial step using a small group of experts to develop a preliminary position.

8.4 Guidance on Endorsement (see Agenda 6)

In addition to details already discussed above, some topics remain open for discussion. In a discussion of "identical" some delegates suggested the methods must have the same validation data. IAM delegates are not necessarily in agreement. Do we need to update the definition of "identical"?

It was noted during a detailed discussion on the equivalence of ISO 660 and various AOCS methods that ISO 660 contained all the options in the other methods and as such these methods should be considered equivalent though they are not identical as written. It was also true that the methods are the same in principle. The discussion on whether two methods are identical could be reduced when methods are more prescriptive. Allowing more options in a single publication without separating them as identifiable parts makes it difficult to distinguish it from other methods based upon a restricted number of options. Reproducibility may also suffer when the methods with too many options are performed. Future methods could be very specific in terms of key method parameters.

8.5 Revision of the Recommended Methods of CXS 234 – preamble and structure

It was noted there are punctuation differences in the separation of methods between the preamble and the proposed guidance document. IAM members need to be vigilant and be sure the documents are consistent and reflect the guidance document.

8.6 Revision of the Guidelines on Measurement Uncertainty

NMKL has recently revised Procedure No. 5. It includes examples on food analysis methods and was updated to include a section on correction for bias in food analysis. NMKL suggests including NMKL Procedure No. 5 as a reference in CXG 54 document.

8.7 Revision of the General Guidelines on Sampling

No comments were made on this topic

8.8 CRD 4 - CCMAS as nodal committee for methods at Codex

This topic is a result of a discussion started in 2018 during IAM30. Konings drafted a proposal on behalf of IAM and translated it into French and Spanish. AOACI will propose this discussion during Other Business when the CCMAS40 agenda is adopted in plenary. A single database for ALL analytical methods to verify Codex provisions would be very useful. The document includes a proposal to include other Codex committees, not currently involved with CCMAS or included in the scope of CCMAS.

9. Update IAM members

9.1 News releases for information at CCMAS (see Agenda 8.1)

Dubois shared the information sent by Codex to Observers: "In preparation of the upcoming 42nd session of the Codex Alimentarius Commission (CAC42), I would like to inform you that the Codex Secretariat has dedicated a new section of its website to Codex observers. The page gives all

Observer organizations an opportunity to highlight activities that are relevant to the work of Codex (e.g. information about events, new work streams, statistics, publications or any other interesting news items) by submitting articles to david.massey@fao.org and codex@fao.org.

“With the publication of the new webpages Codex will no longer be requesting submission of INF Documents to CAC sessions.

You are however invited to directly comment on specific items of the CAC agenda (e.g. submitting comments to codex@fao.org that will be compiled in Conference Room Documents/CRDs) and by responding in the usual way to Circular Letters (via the Online Commenting System that will be compiled in Comment documents) related to specific items under discussion and contribute to the discussion of these items during the session.

There have been several changes to the Agenda of the CAC this year, among which is the removal of a specific Agenda Item related to Observers.”

We also always look forward to you engaging with Codex on social media (Twitter) using @FAOWHOCodex and #CodexCAC42 during the session.”

9.2 CEN/TC 275 Working Group 0

Arthur reported that the document will be balloted by CEN/TC 275 in June and, subject to Dr Wood revising the document, it will be considered at the CEN meeting in September 2019. Progress will be reported during the next IAM.

9.3 Method Validation/Statistical Update

9.3.1 AOACI Expert Review Panel Methods Progress – use of proficiency test data

Sullivan indicated the first study on Turmeric (2016.16) is completed using PT data to develop precision data and it will be presented for approval as Final Action during the AOACI Annual Meeting in September 2019. There was question regarding how permission to use the data for purposes other than PT was obtained. Subscribers were asked to sign a waiver before receiving the samples, so the data could be used for this purpose. Also discussed was the PT study included blind duplicates.

9.3.2 Revision of ISO 5725 – update

There are 4 parts of this standard under revision. Espeillac reported the following updates:

Part 2: repeatability and reproducibility

DIS ballot: January-April 2019

The main changes compared to the previous edition:

Restructuring for consistency with current ISO Directives;

Permission is given to use alternative scrutiny and outlier detection tests provided that the performance is similar;

Permission is given to apply modern statistical methods available for calculations of the relevant precision and trueness characteristics;

Guidance on the number of laboratories required for a precision study has been included;

Information on the computation of critical values has been included.

Part 4: trueness

DIS ballot: January-April 2019

The main changes compared to the previous edition:

Restructuring for consistency with current ISO Directives

Clearly recognizing the requirements of the accepted reference values using in bias evaluation experiments and introducing the uncertainties of the accepted reference values

Changing examples with a current used measurement method.

Part 1: General principles and definitions:

Still at preliminary stage of revision.

Part 3: Alternative designs for accuracy studies:
Still at an early stage of revision.

Comments submitted to the ISO committee in charge of the revision (ISO/TC 69/SC 6) on the differences between ISO 5725 and IUPAC, and the need of harmonization. These protocols are not totally identical (2 main differences: the choice of Outliers tests and cell means), which can result in inconsistent calculations of precision data in food sector, depending if the method is validated with ISO 5725, or with the IUPAC/AOACI protocol.

Answer to this comment: this difference is not due to a change to the provisions of ISO 5725, the authors of the current IUPAC document chose to use a different outlier rejection probability and automatic rejection with explicit provision for repeated testing, departing from the provisions of ISO 5725 at that time. We agree that this is likely to exclude more cell means but cannot comment on why IUPAC felt that this would be appropriate. No other sector appears to have found it necessary to change the outlier testing probabilities. Although this new draft has introduced similar provisions for limited repeat outlier testing to clarify previously ambiguous provision, the general principle of maintaining consistency with past practice there does not appear to be a case for changing 5725 probabilities or procedure to match the IUPAC protocol.

9.4 International Fruit and Vegetable Juice Association

IFU represents the global fruit and vegetable industry and are now translating their methods into Arabic, Chinese, French, Japanese, and Spanish. The first document to be translated will be Simplified Quality Guidelines for a fruit juice laboratory. This document highlights some important aspects of ISO 17025, such as the documentation and control of methods, training and competence, records for specific analytical methods and the use of Shewhart charts to monitor performance of analysts. The other methods which will be translated in this trial will be Brix (soluble solids), relative density, titratable acidity and sulfur dioxide.

Another project has been the production of a series of 5 short videos covering the important IFU methods in order to assist in the implementation of some of the IFU methods used in all juice QA labs. These videos cover the measurement of soluble solids by refractive index and relative density measurement, titratable acidity, sulfur dioxide and a general procedures video.

10. IAM Housekeeping/Standing Items

10.1 Exchange of Reports and Information/Concerns of Members:

Konings reported on recent discussions between AOACI/ISO/IDF and representatives from government, academia and industry in China. In 2018 the Chinese Society of Inspection and Quarantine (CSIQ) was tasked by the National Food Safety Risk Assessment Center (CFSA) to manage the GB (Chinese National Standards) follow-up evaluation program. One of the important elements of this program is to compare GB with international methods with the objective to align. A first pilot with two GB's was executed. Method gaps were identified together with suitable international standards. Further data will be generated to confirm and then revise GB where applicable. Bloomer (AOCS) and Clapper (USP) indicated each organization employed native speakers of Chinese and offered assistance in this process to AOACI.

10.2 Conferences, symposia, workshops, white papers, publications, etc., Members should send items to Ms. Clapper and copy Dr. Cantrill for inclusion on the IAM website.

10.2.1 AOACI Europe – NMKL – NordVal International symposium **2-3 June 2019, Oslo, Norway** – Speeding towards omics

10.2.2 NMKL workshop on MALDI-ToF **4 June 2019, Oslo, Norway**

10.2.3 ISO/TC 69/SC 6 (ISO 5725), **17-21 June 2019, Nagoya, Japan**

- 10.2.4** IDF/ISO Analytical Week, **21-25 June 2019, Prague, CZ**
- 10.2.5** ISO/TC 34/SC 19 Bee products: **27-28 June 2019, Paris, France**
- 10.2.6** ISO/TC34/SC 9 Food microbiology, **9-12 July 2019, Milano, Italy**
- 10.2.7** ISO/TC 34/SC 12 Sensory analysis: **24-26 July 2019, York, UK**
- 10.2.8** AOACI Annual Meeting, **6-12 September 2019, Denver, CO, USA**
- 10.2.9** IDF World Dairy Summit, “Milk for Life”, **23-23 September 2019, Istanbul, Turkey**
- 10.2.10** ISO/TC 34/SC 17 Food safety (ISO 22000) **16-18 October 2019, Ottawa, Canada**
- 10.2.11** 3rd MoniQA International Symposium Food Fraud Prevention and Effective Food Allergen Management, **30 Oct – 1 Nov 2019, USP, Rockville, MD, USA**
- 10.2.12** Cereals and Grains 19 (AACCI), **3-5 November 2019, Denver, CO, USA**
- 10.2.13** ISO/TC 34/SC 16 Biomarkers: **19-21 November, Saitama, Japan**
- 10.2.14** ISO/TC 34/SC 11 (Fats and Oils): **12-13 February 2020, SC 2 (oleaginous) 14 February 2020, Sydney, Australia**
- 10.2.15** ISO/TC 34 Food products: **Mauritius, 2020 (tbc)**

10.3 Incorporation of change of methods/method corrections in the Codex Alimentarius Commission – In response to a request for clarification on how to update method references in CXS-234 during the revision of CXS-234, CAC encouraged the SDOs to report their changes to the PWG and continue to copy the Codex Secretariat as well. SDOs were further encouraged to participate in the eWG.

- Commodity Committees will in the future use boilerplate text instructing people to refer to STAN 234 for methods of analysis
- AACCI is staying as a brand but the association is changing to another name at its upcoming annual meeting.
- ISO has been asked to consider the formation of a new TC related Laboratory Design

10.4 Website Update

Unfortunately the website is not as available to members as was envisioned. The Chair has been in contact with MoniQA leadership and this should be remedied. Please visit www.moniqua.org/iam to access information. The login requirement will be removed so that the historical documents are freely available.

Update by Chair and Secretariat

The Chair asked the participants to consider if the current arrangement for Chair and Secretariat should continue for a further year. No objections were voiced. AOAC reiterated their willingness to succeed as the Chair of IAM in the future.

11. Any Other Business

- 11.1** We need to add dates/version within the documents we distribute as IAM to for traceability. Members agreed.
- 11.2** de Vreeze mentioned the recent circulation of a proposal at ISO for a new Technical Committee on laboratory design, submitted by SAC (Chinese ISO member). It will stipulate technical design requirements for a diverse range of laboratories (including food and agricultural product) with different functions and responsibilities and will include e.g. site selection and design planning, layouts, laboratory staff and smart laboratory (big data, cloud computing, block chain).
- 11.3** Espeillac mentioned the recent CEN initiative to create a new CEN Technical Committee on Food Authenticity (first meeting 14th of June 2019)

12. Provisional Date and Place of Next Meeting

The CCMAS Chair confirmed the dates for CCMAS41 as 10-15 May 2020. IAM will meet before CCMAS41, though the date is not confirmed at this time.

- 13.** The meeting was adjourned by a toast thanking the hosts and participants enjoyed a small reception.