

CODEX ALIMENTARIUS COMMISSION



Food and Agriculture
Organization of the
United Nations



World Health
Organization

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Agenda Item 11

CRD04

ORIGINAL LANGUAGE ONLY

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

43rd Session
Budapest, Hungary

13 – 18 May 2024

(Prepared by the Chair of the Inter Agency Meeting)

FINAL REPORT OF THE 34th MEETING OF INTERNATIONAL ORGANISATIONS WORKING IN THE FIELD OF METHODS OF ANALYSIS AND SAMPLING (INTER-AGENCY MEETING; IAM-34)

13.00 – 18.00h, Sunday, 12 May 2024

Present

Anne Bridges	AACC
Paul Wehling	AACC
Melanie Downs	AOAC INTERNATIONAL
Erik Konings	AOAC INTERNATIONAL
Katerina Mastovska	AOAC INTERNATIONAL
Darryl Sullivan	AOAC INTERNATIONAL (Vice Chair)
Scott Bloomer	AOCS
Ralf Josephs	BIPM
Verna Carolissen	CAC
Johnny Yeung	CAC
Zhang Ling Ping	CAC
Nagy Attila Eli	CCMAS Chair
Zsuzsa Farkas	CCMAS Vice-Chair
Duncan Arthur	CEN
Marcus Lacorn	ICC
Valentina Narducci	ICC
Aurelie Dubois	IDF
Richard Johnson	IDF
Anabel Mulet Cabero	IDF
Philippe Trossat	IDF
Vedika Kayasth	ISDI
Xavier Levigne	ISDI
Dustin Starkey	ISDI
Sandrine Espeillac	ISO
Richard Cantrill	MoniQA/USP-FCC (Chair)
Eystein Oveland	NMKL

Invited

Thea Rawn	Canada/EWG Chair of CPL Work Package
Patrick Gray	USA/Co-convenor of the Physical Working Group

Apologies

Marina Patriarca	Eurachem
David Hammond	IFU
Gina Clapper	USP-FCC (Secretariat)
Kristie Laurvick	USP-FCC (Secretariat)

1. Chair's Welcome / Introduction

The attendees were welcomed by Dr Sullivan, Vice Chair, who thanked Dr Nagy and Dr Farkas for kindly hosting the meeting at the Radisson Blu Beke Hotel. Dr. Cantrill, Chair, was delayed due to travel disruptions and is grateful for the assistance of Dr. Sullivan and AOAC INTERNATIONAL for leading the meeting.

2. Apologies

See above.

3. Introduction of Attendees

The Chair noted the presence of new delegates and also the absence of a number of familiar faces and asked for introductions.

4. Adoption of Agenda

The Agenda was adopted without changes.

5. Report of the Previous Meeting IAM-33, 2023

5.1 There were no corrections to the report of the 33rd meeting.

5.2 There were no matters arising not covered in other agenda items.

6. CCMAS43 Discussion Papers

6.1 Numeric performance criteria for the determination of nitrate and nitrite ions in certain food matrices.

A discussion paper will be presented to CCMAS. CCFA is seeking information on measurable levels and methods for nitrate or nitrite in food, aiming at lowering the levels of nitrates/nitrites. Appendix 2 reflects information from Codex members and observers about available methods and which matrices were validated. IDF noted for dairy products there was only 1 ML approved in Codex although others are in the step process, as additives. According to the CAC, the request is about identifying and setting residual MLs for relevant categories. Further discussion available on these MLs, including for dairy categories. There will be further discussion during the PWG and the Plenary.

6.2 Methods of analysis for precautionary allergen labelling. Codex Committee for Food Labelling has asked CCMAS to comment on Precautionary Allergen Labelling (PAL). A discussion paper was written by the Working Group on the following topics – terminology, required information for quantitative method validation, confirmatory methods, and currently available test methods. A few questions have arisen: What information is required for method endorsement? Is there a framework for determining acceptability for endorsement? Screening methods may be considered to be secondary methods, and how does that fit within the Codex typing systems? CAC noted CCFL is discussing whether they will request methods for endorsement and wondered if there is a database, how would it be made available to the member countries. It is possible numeric performance criteria could be worked out for ELISA methods, or performance criteria might be established since CEN has established performance requirements for ELISA methods in CEN 17855. Appendix M of AOAC OMA has been revised (in publication process) to include validation requirements for food allergen ELISA methods, but it does not contain guidance on PAL. AOAC INTERNATIONAL also noted most ELISA kits are calibrated to other proteins/source units, even though the antibody recognizes strictly a smaller region of protein – usually there is a “conversion” factor. It is important to know the epitopes. It was noted that methods for evaluating labelling exemptions of allergen-derived ingredients might be added in the future. Various SDOs had follow-up concerns covering use of antibodies, matrix effects, status of method validation, validation requirements for method acceptance, status of collaborative studies.

6.3 Harmonization of names and format for principles identified in CXS 234. Editorial changes can be made by sending a request to Codex Secretariat.

6.4 Approach for the placement of nitrogen conversion factors. There is a CRD proposing the nitrogen conversion factors be included in CSX 234. Is this a trade issue and does Codex need this information in CXS 234? After discussion, the consensus was agreement to maintain the conversion factors in the commodity standards.

6.5 Listing of Type IV methods in CXS 234 when a Type I method is listed for the same commodity and provision. IAM has written a position paper [CRD 8]. In summary, IAM does

not support the recommendations of the EWG: i.e. to continue with the selection of Type IV methods on a case-by-case basis when 'justifiable and motivating reason' is provided until appropriate selection criteria are developed; to re-establish the eWG to develop co-existence or equivalence criteria for Type I and Type IV.

This is for the following reasons: It is inappropriate to list a Type IV method next to a Type I for a specific commodity and provision because Type I is, by definition, the only method for establishing an accepted value of the measurand and applicable in disputes; in disputes situations, methods must have been validated according to the requirements of the CAC; Type IV methods should only be adopted when they provide critical data that cannot be produced using any other validated approach and are required to control a particular provision within the Codex system; CXS 234 is not intended to be a comprehensive list of all globally available test methods; and considering that CCMAS37 did not reach consensus on the use and scope of the equivalency approach, it seems appropriate to emphasize that the concept of equivalence cannot be applied when comparing Type I and Type IV methods.

7. Update on CXS 234 method review progress and the Working Group on Endorsement of Methods of Analysis and Sampling

7.1 Cereals, pulses, and legumes package.

This is the third year of work for this eWG, led by Canada, and the remaining, more challenging methods were reviewed. The eWG obtained information from the SDOs and then the eWG processed the information. It is proposed to include Ash methods with a very clear distinction between 550 vs 900 degrees C. Methods for color require replacement because the instrument referenced is no longer available. The SDOs have been asked to consider developing new methods.

Quinoa has two methods for moisture and the methods are not identical. The protein method for quinoa remains Type IV after further review of data supplied.

The challenge for fat methods for vegetable protein products is the need for hazardous chemicals and the methods are considered Type IV s they have not been validated for the matrix.

7.2 Fish and fisheries products package

No discussion.

7.3 Fruit juices package

CAC indicated little progress this year, but the work is ongoing.

7.4 Olive oil (Oils and fats package - previously deferred by CCMAS)

CCFO is revising olive and pomace oil standards and were mostly supported for endorsement in a prior virtual meeting. Two discussion points remain for the plenary regarding the methods for 1,2 DAG and PPP. CCFO asked CCMAS to retain methods and these two provisions NOT listed in the revised standard. CCFO has asked CCMAS to keep the methods in CXS 234 pending data collection and evaluation in a project to be run by CCFO for the next two meeting cycles.

8. Other CCMAS Papers

8.1 CCMAS agenda and FAO/WHO matters.

CRD 9 - FAO fisheries department committee on fisheries and fowls are examining microplastics –CCMAS is asked to look for methods for microplastic contamination and SDOs are requested to suggest methods. AOACI indicated interest in determining number, size, and shape of particles although there was uncertainty about applicable matrixes. ISO developing a standard for microplastics in water, but not meat at this time.

8.2 Endorsement of Methods of Analysis Provisions and Sampling Plans in Codex Standards. No comments were made on the methods for spices, performance criteria for lead and cadmium methods, or methylmercury sampling in fish.

8.3 Review of methods of analysis in CXS 234 (covered under agenda items 6 & 7)

No additional comments were made.

8.4 Information document: General Guidelines on Sampling (CXG 50-2004) – e-book with sampling plan applications.

New Zealand and Germany are co-leading this WG. There are a few remaining questions to be answered and a discussion will be held during the CCMAS Plenary.

- 8.5 Criteria to select Type II methods from multiple Type III methods – selection rules. This work was completed last year and will not be raised during the current meeting.

9. Update by IAM members and IAM Housekeeping/Standing Items

- 9.1 Progress in the incorporation of change of methods/method corrections into Codex Alimentarius Commission documents.

The CCMAS Chair asked if there was a list of methods containing hazardous chemicals and the SDOs responded it has been discussed but a list has not been compiled. NMKL asked what happens if an endorsed method is revised and CAC Secretariat responded the SDO should notify the Secretariat and CCMAS will evaluate through the PWG. IDF offered when they changed methods a new number is applied therefore CCMAS is automatically notified. Details of addressing the above issues can be found in the informational document: *Comprehensive guidance for the process of submission, consideration and endorsement of methods for inclusion in CXS 234*.

- 9.2 Method Validation/Statistical Update.

9.2.1 Revision of ISO 5725

Revision of ISO 5725 Accuracy (trueness and precision) of measurement methods and results the revision of part 1 and part 3 were published in 2023.

Part 1: General principles and definitions

Part 3: Intermediate precision and alternative designs for collaborative studies

The ISO committee in charge of the revision is now focusing on the revision of Part 5 “Alternative methods”, which passed the CD stage, the enquiry stage is expected this year. Part 6 “Use in practice of accuracy values” is still at an early stage of revision (working draft), with a consultation among the members to collect information on their countries' use of precision and trueness values. The ISO committee has a plenary meeting in June in Portugal.

- 9.3 Brief Exchange of Reports and Information/Concerns of Members

9.3.1 Conferences, symposia, workshops, white papers, publications etc.

- 9.3.1.1 After some discussion related to conferences, it is proposed to hold a pre-meeting two months before the IAM and then hold a post-meeting two weeks after IAM. No objections were raised.

9.3.1.2 ISO -- Among the new topic to come into TC34:

The revision of the Dumas method (ISO 16634 part 1: Oilseeds and animal feeding stuffs and part 2: Cereals, pulses and milled cereal products). The Dumas method for milk and milk products (ISO 14891:2002 | IDF 185:2002) will also be revised.

A future proposal is to develop an ISO standard project on “Principles for production of cell cultured products”.

- 9.3.1.3 BIPM – The Consultative Committee for Amount of Substance: Metrology in Chemistry and Biology (CCQM) has established a ‘Task Group for Food Measurements’ to further develop the strategy, to identify gaps in measurements needs to food and feed safety and to identify unmet stakeholder engagement opportunities. A virtual external stakeholder meeting planned for October 2024 with CODEX CCMAS and IAM members being potential external stakeholders. <https://www.bipm.org/en/committees/cc/ccqm/wg/ccqm-tg-food>

- 9.3.1.4 See Annex A for additional updates from AACC, AOAC INTERNATIONAL, Eurachem, ICC, and NMKL.

9.4 Website Update

Over the years we have discussed how difficult it can be to find IAM documents. We seem to have difficulty finding a permanent spot for the files. MoniQA, AOAC INTERNATIONAL, and USP are looking into options for hosting archived and new files.

9.5 Update by Chair, Vice-Chair and Secretariat

The Chair had travel disruptions but was available to raise the following items. The chair was pleased to note such a large and enthusiastic attendance. He highlighted the issue of the late arrival of comments and proposals for the evaluation of new and replacement methods noting that a timeline is laid out in *Comprehensive guidance for the process of submission, consideration, and endorsement of methods for inclusion in CXS 234*. He thanked the Vice-Chair for their support of IAM by filling in during this meeting. Virtual meetings were suggested for the provision of feedback on this meeting and for preparation for future meetings. Details will be circulated to member and invitees once established. The Chair noted the sponsorship of the refreshment break by USP. The attendees supported the current Chair, Vice-Chair, and Secretariat for a further year. The Secretariat thanks Anne Bridges & Paul Wehling from AACC, Scott Bloomer from AOCS, and Sandrine Espeillac from ISO for sending their notes to facilitate the writing of this report.

10. Any Other Business

10.1 WG for sweetness is still considered active though there has not been any activity.

10.2 Erik Konings is retiring before the end of May. Congratulations!!

11. Provisional Date and Place of Next Meeting

Tentatively set for the first week of May 2025, but Codex Secretariat needs to confirm with Hungarian Delegation.

12. Close of Meeting

The meeting was adjourned by thanking the hosts and participants.

Cereals & Grains Association



Join us at the inaugural **Chemistry, Quality, and Technology Conference**, an all-new event – and meeting format – from Cereals & Grains Association. This conference will explore emerging research in cutting-edge areas, leveraging our association’s 100+ years of expertise in [analytical methods](#). Anyone invested in the latest developments in cereal grain research and application should join us as we discover and innovate solutions to advance the future of cereal grain science.

Submissions for technical abstracts are now open. [Submit your methods-based research by June 6](#)



Cereals & Grains – Chemistry,
Quality, and Technology Conference
*Advancing the Future of Cereal Grain
Science*

*AOAC International***AOAC INTERNATIONAL updates for 34th IAM report, Agenda item 9.3**

AOAC INTERNATIONAL will hold Annual Meeting on August 23-28, 2024 in Baltimore, MD, USA (<https://www.aoac.org/2024-annual-meeting-exposition/>). Below are highlights and updates on selected AOAC programs and projects. Information about upcoming events, standard development initiatives, calls for comments, methods, experts etc. can be obtained through AOAC's weekly e-newsletter Spectrum (to subscribe: <https://multibriefs.com/optin.php?aoac>).

• Nutrients:

- Stakeholder Program on Infant Formula and Adult Nutritionals (SPIFAN):
 - New standard development for milk fat globule membrane (MFGM) proteins
 - Extension of applicability of previously approved SPIFAN methods to Foods for Special Medical Purposes (FSMPs) and follow-up infant formula
 - Methods considered for Official Method status: Phospholipids, A1/A2 beta-Casein, and Vanillin, Ethyl Vanillin, Methyl Vanillin, and Coumarin
- New programs/projects in development:
 - Novel Foods from Alternative Protein Sources – new program to be launched soon; first project focused on total amino acid analysis
 - Whey Protein Hydrolysates (WPH) – new program in funding stage; focus on methods needed for WPH characterization, such as molecular weight distribution, degree of hydrolysis etc.
- New programs being considered to address gaps and needs in:
 - Vitamin analysis in foods and dietary supplements
 - Carbohydrates analysis (dietary fiber, available carbohydrates etc.)
- AOAC expert review panel on dietary fiber will review and consider AOAC 2022.01 for AOAC Final Action Official Method status recommendation on May 23, 2024

• Chemical contaminants and residues:

- Recently developed standards (Standard Method Performance Requirements, SMPRs) – in the process of developing AOAC First Action Official methods:
 - AOAC SMPR 2023.002 for Pyrrolizidine Alkaloids
 - AOAC SMPR 2023.003 for PFAS in Food
 - AOAC SMPR 2024.001 for Pesticide Residues in Color Additives from Natural Sources
 - AOAC SMPR 2023.004 for Residual Solvents in Color Additives from Natural Sources
 - AOAC SMPR 2024.002 for Trace Elemental Contaminants (As, Cd, Hg, Pb) – call for methods open
- AOAC First Action Official methods with collaborative studies expected to start in 2024/25:
 - 2- and 3-MCPD, 2- and 3-MCPD esters and glycidyl esters in infant and adult/pediatric nutritional formula by GC-MS/MS (initiated)
 - Acrylamide in coffee, cereals, baby food, cocoa, petfood, potato products, vegetable crisps, and biscuit by LC-MS/MS
 - Chlorate and perchlorate in a broad range of food commodities, including baby food, nutritional formulas and ingredients by LC-MS/MS
 - Furan and alkyl furan in infant formula, baby foods, fruit juices, cereals, and coffee by HS-GC-MS

- Highlights of current projects:
 - SMPR development for Ethylene Oxide Residues
 - SMPR development for Trace Elements (additional elements)
 - SMPR development for PFAS in Food Packaging and other Food Contact Materials
 - Working groups organized by AOAC Southeast Asia Section (with a goal leading to AOAC standard and official method development):
 - Pesticides in Spices and Culinary Herbs
 - Cyanide (from Cyanogenic Glycosides) in Cassava and other Commodities
- **Gluten & Food Allergens:**
 - Recently developed AOAC standard guidelines:
 - Qualitative Food Allergen Validation Guidelines
 - Qualitative Gluten Method Validation Guidelines
 - Quantitative Gluten Method Validation Guidelines
 - Current initiative highlight:
 - Development of end-user guidance (starting with method verification)
- **Microbiology:**
 - New standard development initiative on metagenomics – call for WG members open (<https://www.aoac.org/news/metagenomics-working-group-volunteers-needed/>) – development of metagenomics counterparts to the recently developed amplicon sequencing standards
 - SMPR for *Cyclospora cayetanensis* – call for consensus (<https://www.aoac.org/news/call-for-draft-smpr-consensus-cyclospora-cayetanensis/>)
 - SMPR for *Legionella* in water (potable and nonpotable) – still possible to join the WG (<https://www.aoac.org/news/legionella-in-water-wg-volunteers-needed/>)
 - Planned initiative: update of AOAC microbiology validation guidelines (OMA Appendix J)

Eurachem

Report on Eurachem activities to the 34th INTERAGENCY MEETING (IAM 34)

Budapest, 12th May 2024

[Eurachem](#), an organisation founded in 1989, is a network of national and other organisations, focusing on promoting the quality of analytical results, including their metrological traceability. It develops guidance aimed at addressing all aspects of the measurement cycle, from the customer request to the laboratory report. It also provides opportunities for their dissemination, as well as a forum for discussion, through the organisation of workshops and training events, primarily addressed to laboratories performing analytical measurements, but open to all other interested parties (e.g. accreditation bodies, regulators, customers).

Eurachem guides and other publications are freely available from the [Eurachem website](#), including, when available, translations by Eurachem members or by other organisations. Workshop materials are also available from the website and, in some cases, on the [Eurachem YouTube channel](#).

Recent activities:

Guides:

- Eurachem Guide “Accreditation of microbiological laboratories” 3rd edition, 2023. It includes two new Annexes addressing how to report confidence intervals and how to evaluate the contribution of sampling to the overall uncertainty of the result.
- Eurachem Guide “Terminology in Analytical Measurement: Introduction to VIM 3” 2nd Edition, 2023. Revised to ensure consistency with updates of international standards related to laboratory work.

Information leaflets – short documents covering key points of Eurachem guidance:

- You talk, we understand – The way out of the tower of Babel. An introduction to terminology in measurement (rev. 2023)
- Interlaboratory comparisons other than proficiency testing (2024)

Workshops and training events:

- Eurachem Training event: Recent developments in Quality Assurance, Nicosia (Cyprus), 12th - 13th of March 2024.
- 10th International Eurachem Workshop on Proficiency Testing in Analytical Chemistry, Microbiology and Laboratory Medicine, in cooperation with CITAC and EQALM, Windsor, UK, 25th - 28th of September 2023.
- Eurachem and AOAC Europe Webinar “Trends & challenges for Non-Targeted Methods. Part 2: NTMs – qualitative or quantitative?”, On-line event, 6th of June 2023.
- Workshop “Ensuring reliable and accurate results of analytical processes”, Bern (Switzerland), 22nd -23rd of May 2023.
- Training event: ISO 15189:2022 - The New Standard For The Competence Of Medical Laboratories, Nicosia (Cyprus), 16th – 17th of March 2023.

On-going activities (relevant for IAM):

Guidance revisions:

- Eurachem Guide “The Fitness for Purpose of Analytical Methods”. Third Edition in the final stages of editing.
- Eurachem Guide “Quality in Analytical Chemistry. An aid to Accreditation” (4th draft).
- Eurachem Guide on selection and use of reference materials.
- EA-4/21 INF:2018 ‘Guidelines for the assessment of the appropriateness of small interlaboratory comparisons within the process of laboratory accreditation’ (within the joint EA-Eurachem-Eurolab WG on Proficiency Testing).
- Annual revision of the Eurachem reading list (a compilation of relevant documents in support of the quality of analytical work) - the 2024 review to be published shortly on the website.

Development of guidance on:

- validation of measurement procedures that include sampling (1st draft).
- method validation and response curves; extent of validation/verification; examples of validation and verification.
- validation of non-targeted methods, in collaboration with AOAC-Europe.
- evaluation of measurement uncertainty from in house precision and trueness tests.
- harmonisation during the implementation of ISO/IEC 17043 (within the joint EA-Eurachem-Eurolab WG on Proficiency Testing)
- role of sampling in the context of conformity assessment and calculation of coverage factors for expanded measurement uncertainty, including free software (RANOVA4), in collaboration with the Royal Society of Chemistry Analytical Methods Committee.

Surveys of:

- current practices for performance evaluation in qualitative and interpretative PT schemes - review of the collected information.
- laboratory needs for guidance in the selection and use of reference materials (just open).

Future and coming events:

- Eurachem Workshop “Quality Assurance in Chemical, Medical and Microbiological Laboratories” to be held on the 13th and 14th of May 2024, in conjunction with the Eurachem General Assembly. Main topics: Internal Quality Control; Method validation; Measurement Uncertainty and Traceability of results; External quality control / Proficiency Testings.
- Eurachem General Assembly, Vilnius (Lithuania), 16th and 17th of May 2024, hosted by EURACHEM - Lietuva.
- Online webinar together with ISO/TC334 “Production of qualitative Reference Materials” – 19th of September 2024.
- Eurachem week 2025: 26th – 30th of May – Bucharest-Romania.
- 11th International Eurachem Workshop on Proficiency Testing in Analytical Chemistry, Microbiology and Laboratory Medicine, in cooperation with CITAC and EQALM, September 2026, Alicante (Spain).

Stay tuned and stay in touch with Eurachem by [subscribing to our mailing list](#), or following us on X ([@EurachemEurope](#), [@EurachemEvents](#)), on [LinkedIn](#) and [YouTube](#).



Marina Patriarca

Eurachem Liaison to Codex Alimentarius

Rome, 9th of May 2024

ICC

Please find below an update of our upcoming events:

International Conference „Grains for one health“ 25-28 November 2024

Taipei, Taiwan

<https://icc-onehealth.com/>

8th Whole Grain Summit 2025

Date: 24-26. March 2025 in Detmold, Germany

21st ICC Conference 2025

Jubilee conference 70 Years ICC!

Date: 22-26 September 2025 at BOKU, Austria

The second and the third event will be announced on the ICC website <https://icc.or.at/events> in due time

NMKL



Nordic-Baltic Committee on Food Analysis

Report to IAM 2024


About

Standardizing *microbiology*, *sensory* and *chemistry* methods and procedures, and providing certification of alternative methods (proprietary rapid kits) through our certification body NordVal International.

- NMKL [Annual Report 2023](#)
- NMKL [Newsletters](#)

Recent chemistry publication

- [NMKL 205, 2023](#). TRACE ELEMENTS SPECIES – Tributyltin (TBT). Determination in seafood by isotope dilution GC-ICP-MS after acid extraction and derivatization.

 NORDIC-BALTIC COMMITTEE ON FOOD ANALYSIS	METHOD No. 205 Ed. 2023
TRACE ELEMENTS SPECIES – Tributyltin (TBT). Determination in seafood by isotope dilution GC-ICP-MS after acid extraction and derivatization.	
The method describes the determination of the butyltin specie tributyltin (TBT) at low levels in seafood using gas chromatography inductively coupled plasma isotope dilution mass spectrometry (GC-ICP-IDMS).	
<hr/>	
NMKL c/o Institute of Marine Research, P.O. Box 1870, Nordnes, NO-5817 Bergen Norway	
NMKL methods procedures are available for purchase at http://www.nmkl.org/ .	
NMKL invites all readers and users of the methods and procedures to submit comments and considerations on its contents to the NMKL secretariat at post@nmkl.org .	
<small>©NMKL. The NMKL publications (methods and procedures) are copyright-protected by NMKL. Neither the publications nor any extract from them may be reproduced, stored in a retrieval system or transmitted to others in any form or by any means, electronic, photocopying, recording or otherwise, without prior written permission being secured. Reproduction may be subjected to royalty payments. Violators may be prosecuted.</small>	
<hr/>	
This NMKL method <u>has not</u> been validated in an interlaboratory study.	
Note to validation: This NMKL method has been validated in a single laboratory study in 2013 based on NMKL procedure 4 and has since then been used in routine analyses in an ISO 17025 accredited laboratory with successful repeated participations in proficiency tests (Section 14).	
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NMKL Method No. 205. TRACE ELEMENTS SPECIES – Tributyltin (TBT). Year 2023. Page 1 / 13	



Chemistry work in final stage

Report to IAM 2024

- NMKL 206, 2024. Moisture. Gravimetric determination in food products.
(Replaces the withdrawn NMKL 23 Moisture and ash)
- NMKL 179, 2024, Ed. 2. pH. Determination in foods.
- NMKL Procedure 4, 2024, Ed. 4. Validation of chemical analytical methods.
- NordVal International Protocol 2. Validation of alternative chemical methods.
(Third-party review of alternative methods for food-related testing)



The calculation sheet by NMKL to set numeric method performance criteria for Codex based on ML (maximum level) and the Horwitz' ratio is available here:
<https://www.nmkl.org/resources/method-development/>



Upcoming Events

Report to IAM 2024

- [NMKL Workshop on Validation and Certification of Alternative Methods for Food Analysis](#)
28 May, Vilnius, Lithuania. English language.
- [NMKL General Microbiology Course in Food Analysis for Laboratory Personnel](#)
27-28 November, Helsinki, Finland. Finnish language, slides in English.
Intended to be held in several NMKL countries in national languages during 2025.
- [78th NMKL Annual Meeting for members and invitees](#)
1-3 September 2024, Reykjavik, Iceland

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