



**Food and Agriculture
Organization of
the United Nations**



**World Health
Organization**

Viale delle Terme di Caracalla, 00153 Rome, Italy - Tel: (+39) 06 57051 - Fax: (+39) 06 5705 4593 - E-mail: codex@fao.org - www.codexalimentarius.org

REP14/MAS

JOINT FAO/WHO FOOD STANDARDS PROGRAMME

CODEX ALIMENTARIUS COMMISSION

Thirty seventh Session

Geneva, Switzerland, 14-18 July 2014

REPORT OF THE THIRTY-FIFTH SESSION OF THE CODEX COMMITTEE ON METHODS OF ANALYSIS AND SAMPLING

Budapest, Hungary

3-7 March 2014

This report incorporates CL 2014/6-MAS.

CODEx ALIMENTARIUS COMMISSION **E**



**Food and Agriculture
Organization of
the United Nations**



**World Health
Organization**

Viale delle Terme di Caracalla, 00153 Rome, Italy - Tel: (+39) 06 57051 - Fax: (+39) 06 5705 4593 - E-mail: codex@fao.org - www.codexalimentarius.org

**CL 2014/6-MAS
March 2014**

TO: Codex Contact Points
Interested International Organizations

FROM: Secretariat, Codex Alimentarius Commission, Joint FAO/WHO Food Standards Programme
FAO, 00153 Rome, Italy

SUBJECT: Distribution of the Report of the 35th Session of the Codex Committee on Methods of Analysis and Sampling (REP13/MAS)

MATTERS FOR ADOPTION BY THE 36th SESSION OF THE COMMISSION:

Other Amendments to the Standards

1. Methods of Analysis and Sampling in Codex Standards at different steps (paras 18, 23, 24 and 26, Appendix II).

Governments and interested international organizations wishing to comment on the above document should do so in writing in conformity with the Guide to the Consideration of Standards at Step 8 and Step 5/8 (see Procedural Manual of the Codex Alimentarius Commission) to the above address before **30 May 2014**.

TABLE OF CONTENTS

Summary and Conclusions	page iv
Report of the 35 th Session of the Codex Committee on Methods of Analysis and Sampling	page 1
Summary Status of Work	page 12

Agenda Items

Paragraphs

Introduction	1-3
Opening of the Session	4-6
Adoption of the Agenda (Agenda Item 1)	7
Matters Referred to the Committee by the Codex Alimentarius Commission and other Codex Committees (Agenda Item 2)	8-17
Endorsement of Methods of Analysis Provisions in Codex Standards (Agenda Item 3)	18-31
Proposed Draft Principles for the Use of Sampling and Testing in International Food Trade: Explanatory Notes (Agenda Item 4)	32-54
Discussion Paper on Considering Procedures for Establishing Criteria (Agenda Item 5)	55-61
Discussion Paper on Elaboration of Procedures for Regular Updating of Methods (Agenda Item 6)	62-81
Discussion Paper on Sampling in Codex Standards (Agenda Item 7)	82-86
Report of Inter-Agency Meeting on Methods of Analysis (Agenda Item 8)	87
Other Business and Future Work (Agenda Item 9)	88
Date and Place of Next Session (Agenda Item 10)	89

Appendices

Appendix I – List of Participants	page 13
Appendix II – Status of Endorsement of Methods of Analysis and Sampling	page 27
Appendix III – Proposed Method Criteria, Methods of Analysis and Sampling Plans	page 32

SUMMARY AND CONCLUSIONS

The 35th Session of the Codex Committee on Methods of Analysis and Sampling reached the following conclusions:

Matters for consideration by the 37th Session of the Codex Alimentarius Commission

Draft and Proposed Draft Standards and Related Texts for adoption

The Committee forwarded:

- methods of analysis and sampling in Codex Standards at different steps for adoption (paras 18, 23-24 and 26, Appendix II).

Other matters of interest to the Commission:

The Committee:

- agreed to return to Step 2/3 for redrafting, comments and further discussion at the next session the proposed draft Explanatory Notes to the Principles for the use of sampling and testing in international trade (CAC/GL 83-2013) (para. 54) and to include practical examples for sampling plans to CAC/GL 83-2013 (paras 54 and 85); and
- agreed to further consider proposals for amendments to methods of analysis and proposals for sampling plans (paras 11, 27 and 29); development of procedures/guidelines for determining equivalency to Type I methods and development of a criteria approach for methods which use a "sum of components" (para. 61); to compile a single list of methods in CODEX STAN 234 and commodity standards and a conduct a validation exercise (para. 81).

Matters referred to other committees:

The Committee agreed:

- to provide proposals to CCFFP for sampling plans for the *Standard for Live Abalone and For Raw, Fresh Chilled or Frozen Abalone for Direct Consumption or for Further Processing; Standard for Smoked Fish, Smoke-Flavoured Fish and Smoke-Dried Fish*; and the Draft Standard for Fresh and Quick Frozen Raw Scallop Products (para.16); and replied to CCFFP that a sampling plan could be a reference to a specific table from the *General Guidelines on Sampling* (CAC/GL 50-2004) accompanied by an AQL (para.17);
- to request CCCF to consider alternative criteria for methods of analysis for DON in cereals and cereal- based products (para.19, Appendix III); and in relation to the sampling plan for DON to provide the rationale for the aggregate sample weight, to consider whether the 3 increment samples is sufficient for samples not more than 50kg and to consider whether the particle size should be specified for the test portion (para. 22);
- to request CCNFSDU to consider whether the new method for dietary fibre, AACCI 32-50.01|AOAC 2011.25 should be included in the CODEX STAN 234-1999 and if so, how it should be accommodated (para.30) and;
- to request commodity committees to submit practical examples for sampling plans for consideration by CCMAS (para. 85).

INTRODUCTION

1. The Codex Committee on Methods of Analysis and Sampling (CCMAS) held its thirty fifth Session in Budapest, Hungary from 3 to 7 March 2014, at the kind invitation of the Government of Hungary.
2. The Session was chaired by Professor Dr Árpád Ambrus, Chief Scientific Advisor, National Food Chain Safety Office (NFCSO). Ms Andrea Zentai, Food Safety Coordinator (NFCSO) acted as the Vice-Chairperson.
3. The Session was attended by delegates from 50 Member countries and one Member organization and Observers from 14 international organizations. The list of participants, including the Secretariats, is given in Appendix I to this report.

OPENING OF THE SESSION

4. The Session was opened by Dr Márton Oravecz the President of the National Food Chain Safety Office who welcomed delegates to Hungary. He reminded the delegates of the importance of Codex in protecting public health and promoting fairness in trade. He also pointed out that Codex standards were the main benchmark on which the Hungarian food industry was being governed and the work of CCMAS was important in supporting the Hungarian National Food Safety Monitoring programmes. He highlighted some of the important work of the Committee and wished the Committee successful deliberations.
5. Mr Vladimir Rakhmanin, the FAO Regional Representative for Europe and Central Asia and Dr Zsófia Pusztai Representative of WHO also addressed the Committee and expressed their continued support to the work of Codex.

Division of Competence¹

6. The Committee noted the division of competence between the European Union and its Member States, according to paragraph 5, Rule II of the Rules of Procedure of the Codex Alimentarius Commission, as presented in CRD 2.

ADOPTION OF THE AGENDA (Agenda Item 1)²

7. The Committee adopted the Provisional Agenda as its Agenda for the Session and agreed to establish an in-session working group, chaired by Germany, to consider written comments received and to prepare a revised Proposed Draft Principles for the Use of Sampling and Testing in International Food Trade: Explanatory notes.

MATTERS REFERRED TO THE COMMITTEE BY THE CODEX ALIMENTARIUS COMMISSION AND OTHER CODEX COMMITTEES (Agenda Item 2)³

8. The Committee noted that some matters were for information and that several matters would be considered under other agenda items.

Committee on Fish and Fishery Products (CCFFP)

9. The Committee recalled that CCFFP had requested the Committee to provide guidance on what is to be expected from CCFFP to include or consider in sampling plans for quality parameters or for the Committee to provide proposed sampling plans for consideration by CCFFP.
10. The Committee agreed to consider the proposed sampling plans in CRD 10 item by item and made the following amendments.

¹ CRD 2 (Annotated Agenda – Division of competence between the European Union and its Member States).

² CX/MAS 14/35/1.

³ CX/MAS 14/35/2; CX/MAS 14/35/2-Add.1; MAS 35 INF 1 (FAO/WHO information paper); CRD 10 (comments of Norway and NMKL); CRD 11 (comments of Egypt).

Standard for Live Abalone and For Raw, Fresh Chilled or Frozen Abalone for Direct Consumption or for Further Processing (CODEX STAN 312-2013)

II-8.6 Determination of biotoxins

11. The Committee noted that biotoxins should be considered as a contaminant and not a microbiological criterion and that CAC/GL 21-1997 was not applicable in this case, and therefore agreed to consider the proposed sampling plan for biotoxins at its next session as information was not sufficient at this time.

Standard for Smoked Fish, Smoke-Flavoured Fish and Smoked-Dried Fish (CODEX STAN 311-2013)

8.3 Histamine and 8.6 Determination of *Listeria monocytogenes* and *Clostridium botulinum*

12. The Committee agreed not to propose sampling plans for these provisions as these were not within the scope of CCMAS.

8.7 Determination of Parasites

13. It was clarified that parasites in this section are not related to consumer health issues, but to quality defects. The Committee agreed to propose an attribute sampling plan (CAC/GL 50, Section 4.2, Table 10) using AQL 6.5% and acceptance number $c = 0$. The same proposal was made for the Draft Standard for Fresh and Quick Frozen Raw Scallop Products.

Draft Standard for Fresh and Quick Frozen Raw Scallop Products

14. The Committee noted that while a specific request had not been made for proposals for sampling plans for this draft Standard, proposals in CRD 10 could be of assistance to CCFFP in the development of sampling plans for this draft Standard.

8.6 Determination of the presence of viscera

15. The Committee noted that the sampling plan for determination of the presence of viscera should depend on whether it is a source of biotoxins and could be considered as a health issue or a quality defect and that whether or not viscera would be found depends on the technology used for processing. The Committee agreed not to propose a sampling plan and that CCFFP should consider sampling plans for determination of the presence of viscera taking into account these matters.

Conclusion

16. The Committee agreed to propose sampling plans to CCFFP for the *Standard for Live Abalone and For Raw, Fresh Chilled or Frozen Abalone for Direct Consumption or for Further Processing (CODEX STAN 312-2013)*; *Standard for Smoked Fish, Smoke-Flavoured Fish and Smoked-Dried Fish (CODEX STAN 311-2013)*; and *Draft Standard for Fresh and Quick Frozen Raw Scallop Products (Appendix III, Part B)*.

17. The Committee clarified that a sampling plan in any standard should not be a simple reference to the *General Guidelines on Sampling (CAC/GL 50-2004)*, but could be a reference to a specific table in the Guidelines accompanied by an AQL.

ENDORSEMENT OF METHODS OF ANALYSIS PROVISIONS IN CODEX STANDARDS (Agenda Item 3)⁴

18. The Committee considered the methods proposed for endorsement and in addition to editorial changes, made the amendments and recommendations presented below (Appendix II).

Committee on Contaminants in Foods

Proposed Draft Maximum Level for Deoxynivalenol (DON) in Cereals and Cereal-Based Products and Associated Sampling Plans

Methods of Analysis

⁴ CX/MAS 14/35/3; CX/MAS 14/35/3-Add.1; CX/MAS 14/35/3-Add.2; CRD 3 (comments of Kenya); CRD 12 (comments of IDF); CRD 13 (comments of ISO); CRD 14 (comments of CEN and BSI); CRD 18 (comments of AACC International).

19. The Committee noted that the proposal was consistent with criteria of the methods of analysis for aflatoxins currently listed in *General Standard for Contaminants and Toxins in Food and Feed* (CODEX STAN 193-1995), which had been endorsed before the *Guidelines for Establishing Numeric Values for Method Criteria and/or Assessing Methods for Compliance thereof* was finalized by the Committee. The Committee, noting that the criteria of the methods for DON should be in line with the Guidelines, agreed not to endorse the criteria proposed by CCCF and proposed alternative criteria that the Committee can endorse, for consideration by CCCF (Appendix III, Part A).

Sampling Plans

20. Several delegations proposed that the aggregate sample weight for raw wheat and barley and for maize should be 10 kg instead of 1 kg as if each incremental sample was 100 g and if the number of incremental samples was 100, it would result in 10 kg and it was normal to deal with 10 kg samples in laboratories. Several other delegations were of the view that 1 kg was appropriate for raw wheat and barley and 5 kg for raw maize as this took into account the difference in kernel size between maize, wheat and barley and distribution of DON is generally less heterogeneous. The Committee was also informed that CCCF had carefully considered this matter and that the rationale for their decision was explained in REP13/CF.

21. Questions were also raised on whether 3 increment samples for a lot not more than 0.05 tonnes in Table 2 might not be sufficient; and whether particle size for a test portion could affect the result for compliance.

22. After some discussion, the Committee agreed not to endorse the sampling plan and to request CCCF (1) to provide the rationale why the aggregate sample weight was 1-5 kg; (2) to consider whether 3 increment samples is sufficient for samples not more than 50 kg; and (3) to consider whether particle size should be specified for the test portion.

Committee on Fish and Fishery Products

Performance Criteria for methods for the determination of marine biotoxins in the *Standard for Live and Raw Bivalve Molluscs*

I-8.6.1 Criteria for determination of Toxin Analogues by chemical methods

23. The Committee endorsed the criteria as proposed by CCFFP. The Committee noted that AOAC 2005.06 does not analyse all the substances in the table but covers major toxic components. It was also noted that it was helpful to provide to analysts information in the *Recommended Methods of Analysis and Sampling* (CODEX STAN 234-1999) on which methods of analysis meet the criteria.

I-8.6.2 Biological and Functional Methods to Determine Paralytic Shellfish Toxicity

24. The Committee endorsed AOAC 959.08 as well as AOAC 2011.27 (Receptor binding assay) as Type IV.

25. The Committee was informed that AOAC 959.08 is not feasible in some countries where saxitoxin (STX) reference materials are not available, noting that its trade is restricted by the Chemical Weapons Convention.

Proposals from Standards Developing Organizations to update the Methods in the *Recommended Methods of Analysis and Sampling* (CODEX STAN 234-1999)

Methods of Analysis for Milk and Milk Products and for Nutrition and Foods for Special Dietary Uses

26. The Committee agreed to update the methods as proposed in CX/MAS 14/35/3-Add.1. (Appendix II).

27. The Committee noted that there were some technical differences between the method, ISO 8968-1/2|IDF 20-1/2:2001, in the Standard (CODEX STAN 234-1999) and the newly proposed method ISO 8968-1|IDF 20-1:2014 and that it was not clear whether AOAC 991.20, listed as equivalent to the method in the Standard, is still equivalent to the newly proposed methods, including those for blend of skimmed milk and vegetable fat in powdered form; and reduced fat blend of sweetened condensed skimmed milk and vegetable fat and whether infant formula is covered by the scope of the AOAC method. The Committee agreed that the AOAC method should be retained for the time being and ask for clarification from AOAC for consideration at its next session.

28. The Committee agreed to delete IDF 165:1993 for antioxidants in milk fat products as the method is no longer available. It was noted that as the provision still exists in the *Standard for Milkfat Products* (CODEX STAN 280-1973), it would be necessary to identify a new method for the provision.

Other proposals

29. The Committee considered the proposals in CRDs 13 and 14. The Committee agreed to consider them at its next session as it was not clear which proposals were editorial and which were of a more substantial nature. The Committee encouraged the Standards Developing Organizations (SDOs) to submit documents regarding the update of the methods of analysis in the *Recommended Methods of Analysis and Sampling* (CODEX STAN 234-1999) prior to the Committee.

30. With regard to the general methods for dietary fibre that measure both the higher and the lower molecular weight fraction, the Committee noted that in addition to the currently adopted Type I methods (AOAC 2009.01|AACCI 32-45.01), AACCI 32-50.01|AOAC 2011.25 is available. The Observer from AACC International suggested that it should be classified as Type I if included in the Codex system. The Committee recalled that more than one Type I method cannot be endorsed for the same provision unless their scopes are different. The Committee agreed to request CCNFSDU to consider whether the new method should be included in the Standard and if so, how it should be accommodated.

31. The Committee endorsed its previous decision that “date” for the methods of analysis should be removed in the Standard (see also Agenda Item 6).

PROPOSED DRAFT PRINCIPLES FOR THE USE OF SAMPLING AND TESTING IN INTERNATIONAL FOOD TRADE: EXPLANATORY NOTES (Agenda Item 4)⁵

32. The Committee recalled that its last session returned the explanatory notes for redrafting by an electronic working group led by Germany, circulation for comments and consideration by this session. It further recalled its decision to establish an in-session working group to prepare a further revised draft based on the written comments received (see Agenda Item 1).

33. Before proceeding with a section by section consideration of the revised proposed draft explanatory notes contained in CRD 19, the Committee first considered the most appropriate place for the explanatory notes as this could have an impact on any changes made. Two possibilities for the placement of the explanatory notes were explored, either as an annex, similar to the approach taken in the *Guidelines on Measurement Uncertainty* (CAC/GL 54-2004) or to integrate the notes into the main document, *Principles for the Use of Sampling and Testing in International Food Trade* (CAC/GL 83-2013).

34. The Committee agreed that the notes would be best integrated within the main document, CAC/GL 83-2013, with the understanding that CAC/GL 83-2013 was not for further consideration and that the principles defined therein would remain unchanged, but that the introduction and scope might require some consequential amendment in order to explain the integration of the explanatory notes.

35. The Committee proceeded with consideration of the proposal in CRD 19 in order to agree on the text that would be integrated into the main document (CAC/GL 83-2013) and that an electronic working Group would be tasked with this integration and take into account the decisions and discussions below. The Committee noted that several editorial corrections were necessary and in addition made the following decisions or recommendations.

Principle 3

36. The Committee agreed to present the notes for this principle in the form of a statement rather than a question as follows: “*Probabilities of wrongly accepting or wrongly rejecting a lot or consignment can never be entirely eliminated because both samples taken and the measurement errors associated with the analysis are subject to random variation.*” This approach would also be taken throughout the document, where applicable.

37. The Committee agreed to use “acceptable quality level” in the text in line with the terminology from the *General Guidelines on Sampling* (CAC/GL 50-2004) and to insert a footnote to clarify that

⁵ CX/MAS 14/35/4, CX/MAS 14/35/4 Add.1 (comments of Brazil, Ghana, Japan, Kenya and New Zealand), CRD 5 (comments of Argentina), CRD 6 (comments of Mali), CRD 7 (comments of India), CRD 8 (comments of Mexico), CRD 11 (comments of Egypt), CRD 19 (revised proposed draft Explanatory Notes prepared by the in-session working group), CRD 20 (proposal for explanatory notes for Principle 6 prepared by New Zealand).

according to ISO 3534 on Standards and Vocabulary, the terminology used is “acceptance quality level”.

38. The Committee agreed to: (i) amend the 2nd sentence of the 5th paragraph to provide a more balanced statement with respect to both consumers and producers, to read: “*this means making sure that consumers are not exposed to an unduly high probability of accepting non-compliant product and that a compliant product is not exposed to an unduly high probability of rejection*”; and (ii) delete the last sentence, referring to the probabilities at which sampling plans are set to wrongly reject, as this could be better explained through the practical examples to be developed (see Agenda Item 7).

39. The second to last sentence of paragraph 7 was amended to read, “*Further details can be found in the General Guidelines for Food Import Control Systems (CAC/GL 47-2003)*.” The reference to the *Guidelines for the Development of Equivalence Agreements Regarding Food Import and Export Inspection and Certification Systems* was deleted in paragraph 8 as it would appear that the notes were giving an interpretation of the guidelines, which was not the intention.

40. The Committee agreed to retain the last paragraph as it was factually correct and showed the link with the other guidelines developed by CCFICS.

Principle 4

41. The Committee agreed to replace the first paragraph so as not to refer to risk, recalling its earlier discussions on this matter in the Committee and the agreement to delete a definition of risk as it was difficult to determine whether the risk being referred to was a risk to consumer health or an economic risk. The following statement was introduced: “*If sampling and testing procedures are not appropriate, there may be an unduly high probability of wrongfully accepting or wrongfully rejecting a lot or consignment which may lead to disputes between the interested parties.*”

42. The Committee also agreed to introduce an additional note to the paragraph, to indicate that producers should not apply the same sampling plan as receivers of commodities, as follows: “*note that it might not be appropriate for producers to apply the same sampling plan as those used by receivers of commodities.*”

43. The Committee agreed to delete the words “*as far as possible*” from the 2nd paragraph.

44. The Committee agreed to split the 5th bullet point in the third paragraph in order to provide more clarity to the two concepts being addressed: “*whether sampling plans will be on inspection by attributes basis or inspection by variables basis*” and “*parameters such as the AQL or LQ.*”

45. The Committee made amendments to the first bullet point in the fourth paragraph for better readability and clarity and agreed to replace “parameter” with “characteristics” and to apply this change throughout the document as appropriate. The text would read: “*For inspected characteristics that are qualitative*”.

46. The Committee agreed to delete “*by agreement between parties*” in paragraph 5 as it was redundant.

47. The Committee considered whether the term “non-homogenous” should be retained in paragraph 5 noting the term was consistent with CAC/GL 50-2004. However, views were presented that in the context of this section, non-homogenous lots referred to the probability of selecting items with a given level of a characteristic rather than to the level of the characteristic itself and that a footnote could be inserted to explain this aspect. The Committee did not take a decision on this rather technical matter and agreed that further consideration should be given to this aspect by the electronic working group.

Principle 5

48. In line with its earlier decision to present the notes in the form of a statement, the Committee amended this section by deletion of the question, as the text was self-explanatory. The second paragraph was moved to the top of the section for better flow and readability.

49. The Committee agreed to amend paragraph 3 by referring to “various guidelines” rather than “different guidelines” as it was more correct; to use the term “analytical measurement uncertainty” for consistency with paragraph 2; to amend the last paragraph by deletion of the second last sentence, “*The procedures for estimating measurement uncertainty and interpreting results should be agreed by the parties*”, as it was already covered by the preceding paragraph.

Principle 6

50. The Committee considered the proposal in CRD19 and an alternate proposal by New Zealand in CRD 20. The Committee noted that the notes on “fitness for purpose” as presented in CRD 19 placed emphasis on the laboratory component of the assessment procedure, while the proposal in CRD 20 tried to capture all three elements from Principle 2. It was therefore agreed that further work was required on providing a more balanced text for this section.

Other information

51. The Committee also considered a proposal to introduce a text that would introduce the practical examples to be provided in the annex and provide a link between the main document and the annex. The Committee agreed that such text was necessary and that it should be developed further.

Bibliography

52. The Committee agreed that the bibliography should be limited to only those references essential to the text.

Conclusion

53. The Committee agreed to establish an electronic working group led by Germany, with assistance of New Zealand and the Netherlands, open to all members and observers and working in English only, to (i) integrate the explanatory notes as agreed and amended; (ii) further develop text for Principles 4 and 6, and introductory text to link the Principles to the annex on practical examples, taking into account the discussion. The Committee further noted that CAC/GL 83-2013 was not open for discussion nor should be revised, but that the integration of the explanatory notes may result in consequential changes in order to explain the introduction of the explanatory notes and the annex on practical examples (see Agenda item 7).

Status of the Proposed Draft Principles for the Use of Sampling and Testing In International Food Trade: Explanatory Notes

54. The Committee agreed to return the explanatory notes to Step 2/3 for integration into the *Principles for the Use of Sampling and Testing in International Food Trade* and attach to it practical examples for sampling plans as an annex, for comment and consideration by the next session.

DISCUSSION PAPER ON CONSIDERING PROCEDURES FOR ESTABLISHING CRITERIA (Agenda Item 5)⁶

55. The Committee recalled that the last session of the committee had agreed that an electronic working group led by the United States of America would create a discussion paper considering procedures for establishing criteria for (i) multi-analyte methods that are used for specifications that require a combination of components, or use toxic equivalency factors (TEF) and (ii) Type I methods.

56. The Delegation of United States of America introduced the report of the electronic working group as presented in CX/MAS 14/35/5 and noted that there was general interest in the concept of developing criteria for Type I methods and/or multi-analyte methods, but that this was a starting point and no attempt was made to reach consensus on this. The Delegation highlighted the recommendations made and pointed out that the Committee would need to consider a number of factors when deciding on development of criteria for either Type I methods or for multi-analyte methods, such as: (i) when considering criteria for Type I methods, it may be possible to establish procedures for assessing equivalency between methods and not criteria. However, since not all Type I methods were created equal there may be instances where equivalency could not be established, (ii) in the case of multi-analyte methods, how to deal with TEFs, whether these should be left out of the standard as in the approach taken by CCFFP (see Agenda Item 3); (iii) whether a general approach was appropriate or whether different approaches would be necessary for multi-analyte methods (there might be differences between different toxins).

57. The Committee considered each of the recommendations.

⁶ CX/MAS 14/35/5, CRD 9 (comments of Thailand).

Recommendation 1 – The establishment of Criteria for the different circumstances (Type I and multi-analyte method) should be addressed separately both during the development of the criteria and within the Procedural Manual

58. There was general agreement with this recommendation.

Recommendation 2 – whether criteria for Type I methods should be established; or if a procedure for determining when methods have comparable performance should be developed; or if the current system should remain unchanged

59. There was general agreement that numerical criteria for Type I methods should not be developed, however procedures for establishing equivalency to Type I should be considered.

Recommendation 3 and 4 – establish a criteria approach for multi-analyte methods

60. There was general agreement that work should continue in this regard, that TEFs should not be contained within a specific analytical method and could be referenced either in the standard or elsewhere where they can be regularly updated and evaluated by internationally recognized procedures.

Conclusion

61. In view of the general discussion on the recommendations, the committee agreed to pursue the work further through the establishment of two electronic working groups, open to all members and observers and working in English only, as follows:

- (1) development of procedures/guidelines for determining equivalency to Type I methods, led by United States of America, to prepare a discussion paper which would consider different approaches for different classes of Type I methods; and
- (2) development of a criteria approach for methods which use a “sum of components”, led by United Kingdom. The working group would prepare a discussion paper that evaluates and discusses current options; and considers general guidelines and evaluates criteria for use on a case-by-case basis.

DISCUSSION PAPER ON ELABORATION OF PROCEDURES FOR REGULAR UPDATING OF METHODS (Agenda Item 6)⁷

62. The Committee recalled that at its last session, it had agreed to establish an electronic working group, chaired by Brazil, to prepare a discussion paper with proposals: on establishing a format for a single source document (database) to capture all methods in the scope of CCMAS; the process for updating references to methods of analysis; and a plan to prioritize the (re)endorsement of current methods in the *Recommended Methods of Analysis and Sampling* (CODEX STAN 234-1999) and commodity standards.

63. The delegation of Brazil as chair of the electronic working group, introduced the report of the working group (CX/MAS 14/35/6) and pointed out that the working group had generally agreed that CODEX STAN 234 and commodity standards contained a number of inconsistencies that included: making reference to outdated methods, errors and omissions, and use of the references that were not traceable. The Committee was informed that a proposal was made for development of a single reference for methods of analysis and that the working group had proposed a 5 step procedure for updating the standards which included: i) establishing a single workable list for all methods in CODEX STAN 234 and commodity standards; ii) establishing criteria for prioritisation of the methods of analysis; iii) dividing the priority list into work packages; iv) verifying the validity of each of the methods with the author; and v) consideration of the recommendations by CCMAS.

64. The Committee considered the proposals made and reached the following conclusions:

Establishing a single source (document/database) for methods of analysis

65. Several delegations supported establishing a workable list as a starting point for undertaking the review and proposed that such a list should allow sorting of the methods/standards and should also provide for assigning the methods' ownership.

⁷ CX/MAS 14/35/6, CRD 1 (report of Inter-Agency Meeting); CRD 3 (comments of Kenya), CRD 4 (comments of Ghana), CRD 6 (comments of Mali), CRD 9 (comments of Thailand), CRD 13 (comments of ISO), CRD 16 (comments of AOCS, AOAC and AACCI), CRD 22 (information on Table 1 prepared by Brazil).

66. Some observers noted that every stakeholder should work towards ensuring that methods are updated and that SDOs should always monitor Codex standards relevant to their scope of work and check whether references within such standards falling within their scope of work require updating, and that proposals for reviews should be brought to the attention of CCMAS.

67. Several delegations pointed out that the proposed list should be for internal use only and for purposes of updating CODEX STAN 234-1999 and other Codex standards; and that the Committee could consider if the list should be officially made publically available at a later stage. An observer also pointed out those methods of analysis should not be removed from commodity standards as lots of methods in some of these standards, such as the *General Standard for Fruit Juices and Nectars*, were not aimed at a specific provision.

Process to update methods of analysis

68. There was general agreement to develop a process for the update of methods of analysis but that such a process should be used on a trial basis before new procedures were considered for inclusion in the Procedural Manual. The period for review of 5 years as proposed by the working group was also questioned and a proposal was made to extend this to a period of 8 or 10 years.

Conclusion

69. The Committee agreed that the list to be compiled would be utilised for internal use of the Committee i.e. for updating the methods and that the mechanism for this process would first be tried before examining the necessity of having it recommended for inclusion in the Procedural Manual.

Criteria for prioritisation of the methods of analysis;

70. The Committee recalled that during the 34th Session, it had agreed to remove dates from standards as this would make their updating easier and that ISO 17025 required analysts to use the most recent versions of analytical methods and older version of methods are generally not available.

71. Several delegations supported the inclusion of dates in the single list for internal use and proposed that such dates would include: year of endorsement of the method by the Committee, date of publication of the standard, and year of the latest version, because this information would enable efficient management of methods and their review. Some observers clarified that during revision of standards, their reference numbers are changed only when there were significant technical changes made. They further pointed out that for revisions associated with minor changes such as editorial amendments or inclusion of information on collaborative studies, the standards normally retain their original reference numbers. Some delegations were of the view that assessment of analytical methods by the Committee was therefore necessary since it was not clear what SDOs called “minor” changes within the standards.

Conclusion

72. The Committee agreed to include in the list three types of dates i.e. date of publication of the standard, year of endorsement; year of the latest version.

Terminology in CODEX STAN 234-1999

73. The Committee considered the proposal to replace “provision” with “analyte” or “measurand”, as this created confusion for Spanish-speaking members, but did not conclude and agreed that this issue would require further discussion.

74. With regard to the term “all food”, the Committee agreed further consideration should be given to whether the terminology was appropriate, taking into account that the methods for all food are not validated for “all” foods.

Information Content for Table in the single source document

75. On the use of POD instead of LOD as proposed by the working group, it was clarified that this concept was still under discussion and should not be considered at the moment.

76. Some delegations noted that information on performance criteria of analytical methods as proposed in the Table was important for laboratories and that users of analytical methods should be aware of such information, while other delegations questioned the relevance of the performance criteria to the updating of methods, noting that such information was more relevant during the endorsement process. Observers did not support the inclusion of the performance criteria of analytical methods in the form as such data was considered proprietary information that can only be shared in a

restricted manner.

77. On the issue of who would be responsible for the completion of the information in the Table, it was clarified that the Table defines the roles of various stakeholders, including SDOs, commodity committees and CCMAS and therefore it would be completed by all concerned parties. Several observers, speaking as members of IAM, pointed out that it was in the interest of SDOs to always notify CCMAS whenever methods within the scope of their operations have changed, and that the endorsement of such methods by CCMAS was not their responsibility, and therefore CCMAS should be responsible for filling in the data in the form.

78. The Committee noted that the information on performance criteria of an analytical method would be required during endorsement by CCMAS, and agreed that such information would not be necessary at the time of identifying the analytical method that needed review, but agreed that this requirement would remain in the Table 1 (as presented in CRD 22), but that the concerns raised should be taken into account when developing the single source document.

Procedure for guiding the process for review of the methods

79. The Committee considered the draft procedure for reviewing the standards and agreed to the following 4–step procedure that would guide the process for review of the methods

1. Put all the methods into one single workable list - electronic working group
2. Select the methods to examine first using prioritization criteria – electronic working group
 - analytical methods directly linked with food safety
 - Type I and II methods (reference for disputes)
 - methods with inaccurate information
 - number of years since endorsement (the oldest first).
3. Divide the methods into workable packages – electronic working group
4. The SDOs will check the references of their methods; the Commodity Committees and/or CCMAS will confirm the applicability of these methods.

80. The Committee expressed gratitude to all SDOs that have continued to provide CCMAS with information regarding the status of various methods with respect to revision and update and for the information and support provided in the endorsement process.

Conclusion

81. The Committee agreed to establish, an electronic working group, led by Brazil, open to all members and observers, and working in English only, with the following terms of reference:

- a) compile a single workable list for all methods in CODEX STAN 234-1999 and commodity standards;
- b) divide the list into workable packages based on the criteria developed by the Committee for prioritisation of the methods of analysis;
- c) conduct a validation exercise on one pilot work package of which the results would be considered by the Committee at its next session.

DISCUSSION PAPER ON SAMPLING IN CODEX STANDARDS (Agenda Item 7)⁸

82. The Committee recalled that at its last session it had been agreed that the Inter-Agency Meeting (IAM) would develop a paper on sampling for consideration at this session. The Observer of ICUMSA, on behalf of IAM, introduced CX/MAS 14/35/7 and noted that the paper was comprehensive, and that the recommendations contained therein aim at helping the Committee to examine how best principles of sampling such as auto-control, uncertainty of measurement results, pragmatic approach to sampling, amongst others, can be demonstrated practically in standards.

83. The Committee had a general discussion on the recommendations, noted the information provided and made the following points:

⁸ CX/MAS 14/35/7; CRD 9 (comments of Thailand); CRD 21 (objectives for the electronic working group on examples of sampling plans).

- Commodity committees should be discouraged from simply referencing the *Guidelines on Sampling* (CAC/GL 50-2004), but be encouraged to develop their own sampling plans and in doing so should use CAC/GL 50-2004 and the *Principles for the Establishment or Selection of Codex Sampling Procedures* (Procedural Manual). Should commodity committees not be in a position to do so, CCMAS would be able to elaborate such sampling plans provided that the commodity committees provided information on the AQL or LQ. In cases where committees were no longer active, CCMAS could undertake the development of sampling plans where necessary.
- The Committee recognized that sampling was complex and inherently variable and that provision of practical examples would be able to assist Commodity Committees in developing sampling plans. It was noted that the sampling tools for mycotoxins available at FAO Website (<http://www.fstools.org/mycotoxins>) might be useful when developing such examples.
- In the development of practical examples, the following should also be considered: estimated uncertainty from sampling; auto-control procedures; and whether simple “pragmatic” sampling plans whether scientifically correct or not should be used. It was recognized -control procedures to be used by importers and competent authorities are within the remit of CCFICS, but that from a sampling perspective, CCMAS could undertake such work, and that collaboration with CCFICS was important.
- Recognized that the *Principles for the Establishment or Selection of Codex Sampling Procedures* might need to be revised to permit procedures besides acceptance sampling procedures to be used; but that the Committee was not in a position to undertake such work at this time until more information became available. On the issue of whether the scope of the Principles needed to be revised with respect to “net contents”, it was agreed to keep this open for future consideration and that it could be taken into account in the development of practical examples.

Conclusion

84. The Committee noted that the paper (CX/MAS 14/35/7) will serve as a useful reference for future work in the area of sampling.

85. Noting the points raised, the Committee agreed to develop practical examples of sampling plans and that these examples would be best placed as an Annex to the *Principles for the Use of Sampling and Testing in International Food Trade* (CAC/GL 83-2013) (see Agenda Item 4). For this purpose, the Committee agreed that other Codex Committees would be requested to submit practical examples for consideration by CCMAS.

86. The Committee also agreed that the electronic working group established under Agenda Item 4 would take up the development of practical examples taking into consideration the recommendations from the Discussion Paper on Sampling in Codex Standards (CX/MAS 14/35/7) and the discussion in the Committee (paragraph 83). The electronic working group would:

- Provide a brief explanation of the use of sampling and analytical measurement uncertainty in product control and testing compliance;
- Develop examples, including case-by-case advice of consideration of sampling uncertainty (definition), that fulfil the following criteria: matrix combinations vs measurand / provision:
 - Fruits/vegetables, fats/oils, fish/fishery products, milk/milk products, meat/meat products, natural mineral waters, cereals
 - Sensory inspection, food additives, food hygiene, pesticide residues, contaminants, residues of veterinary drugs
 - Packages/bulk material/foodstuff for consumption.
- Develop procedures for determining uncertainty of measurement results including sub-sampling, sample processing and analysis.
- Consideration of importing and exporting countries including control of production and testing compliance.

REPORT OF INTER-AGENCY MEETING ON METHODS OF ANALYSIS (Agenda Item 8)⁹

87. The Observer from AOCS representing IAM, presented CRD 1 to the Committee and highlighted the various issues that IAM had discussed with respect to the work of CCMAS and other related matters. The Committee thanked IAM for the report and their contribution to its work.

OTHER BUSINESS AND FUTURE WORK (Agenda Item 9)

88. The Committee noted that no other business had been put forward during the adoption of the Provisional Agenda.

DATE AND PLACE OF THE NEXT SESSION (Agenda Item 10)

89. The Committee was informed that its 36th Session was tentatively scheduled to be held in Budapest, Hungary from the 2 to 6 March 2015, the final arrangements being subject to confirmation by the Host Country and the Codex Secretariat.

⁹ CRD 1 (report of the Inter-Agency Meeting).

SUMMARY STATUS OF WORK

SUBJECT MATTER	STEP	ACTION BY:	DOCUMENT REFERENCE (REP14/MAS)
Methods of Analysis and Sampling in Codex Standards at different steps	-	Governments 37 th CAC	Paras 18, 23, 26 Appendix II
Proposed Draft Principles for the Use of Sampling and Testing in International Food Trade – Explanatory notes and practical examples	2/3	Electronic Working Group (Germany/New Zealand/ the Netherlands) Governments 36 th CCMAS	Paras 53-54 and 86
Discussion paper on development of procedures/guidelines for determining equivalency to Type I methods	-	Electronic Working Group (United States of America) 36 th CCMAS	Para. 61
Discussion paper on criteria approach for methods which use a “sum of components”	-	Electronic Working Group (United Kingdom) 36 th CCMAS	Para. 61
Review and update of methods in CODEX STAN 234-1999	-	Electronic Working Group (Brazil) 36 th CCMAS	Para. 81
Follow-up on methods of analysis and sampling plans	-	36 th CCMAS	Paras 11, 27, 29

APPENDIX I

**LIST OF PARTICIPANTS
LISTE DES PARTICIPANTS
LISTA DE PARTICIPANTES**

CHAIRPERSON – PRÉSIDENT - PRESIDENTE

Prof. Dr. Árpád Ambrus

Chief Scientific Advisor
National Food Chain Safety Office
Tábornok u. 2/B.
H-1143, Budapest, Hungary
Phone: +36-1- 368-8815/108
Fax: +36-1-387-9400
E-mail: ambrusadr@yahoo.co.uk

CHAIR'S ASSISTANT - ASSISTANT DU PRÉSIDENT - ASISTENTE DEL PRESIDENTE

Ms Andrea Zentai

Food Safety Coordinator
National Food Chain Safety Office
Department for Food Safety Risk Assessment
Tábornok u. 2/B.
H-1143, Budapest, Hungary
Phone: +36-1-368-8815/117
Fax: +36-1-387-9400
E-mail: zentaia@nebih.gov.hu

**MEMBER COUNTRIES
PAYS MEMBRES
PAÍSES MIEMBROS****ALGERIA / ALGÉRIE / ARGELIA****Mr Ahmed Rachid**

Sous-directeur
Ministère du Commerce
Cité Zerhouni Mokhtar El Mohammadia Alger
16000 Alger, Algeria
Phone: +213 21 89 07 72
Fax: +213 21 89 02 51
E-mail: r_nourou@yahoo.fr

ANGOLA**Dr António Sebastião**

Membro do CODEX Angola
Largo António Jacinto -
Ministério da Agricultura
7o Andar
527 Luanda, Angola
Phone: +244923504374
Fax: +244 202232 3724
E-mail: tonimbaxi@yahoo.com.br

Mr Teresa António Vieira

Membro do CODEX Angola
Luanda, Angola
Phone: +92361 5874
E-mail: ildaketlin@yahoo.com.br

ARGENTINA / ARGENTINE**Ms Veronica Maria Torres Leedham**

Directora
Servicio Nacional de Sanidad y Calidad
Agroalimentaria (SENASA); Laboratorio
Talcahuano 1660
1640 Martinez-Provincia de Buenos Aires, Argentina
Phone: +54 11 4836 0067
Fax: +54 11 4836 0068
E-mail: vtorres@senasa.gov.ar

AUSTRALIA / AUSTRALIE**Ms Karina Budd**

Director
Residue Chemistry & Laboratory Performance
Evaluation Section, National Residue Survey
Department of Agriculture, Fisheries and Forestry
GPO Box 858
2601 Canberra, ACT, Australia
Phone: +61 2 6272 5795
Fax: +61 2 6272 4023
E-mail: karina.budd@daff.gov.au

Mr Richard Coghlan

Laboratory service manager
National Measurement Institute; Department of
Industry
PO Box 138, North Ryde, NSW
1670 Sydney, Australia
Phone: +61 2 9449 0161
Fax: +61 2 9449 0297
E-mail: Richard.Coghlan@measurement.gov.au

Ms Danielle Fenn

Senior client coordinator
National Association of Testing Authorities
Level 1, 675 Victoria St, Abbotsford
3067 Melbourne, Australia
Phone: +61392748200
E-mail: danielle.fenn@nata.com.au

BANGLADESH**Mr S M Abu Sayed**

Assistant director
Bangladesh Standards and Testing Institution
Certification Marks
116/A, Tejgaon Industrial Area
1208 Dhaka, Bangladesh
Phone: +88 02 9131582, +88 017 11199074
Fax: +88 02 8870288, +88 02 9131581
E-mail: sayedbsti@gmail.com; smabu.sayed@gmail.com

BELGIUM / BELGIQUE / BÉLGICA**Mr Rudi Vermeylen**

Expert
Belgian Federal Agency for the Safety of the food
chain
Laboratories Administration
Kruidentuinlaan, 55
1000 Brussels, Belgium
Phone: +3222118732
Fax: +3222118739
E-mail: rudi.vermeylen@favv.be

BRAZIL / BRÉSIL / BRASIL**Ms Maria Do Céu Albuquerque**

Assistant
National Health Surveillance Agency
SIA Trecho 5 AE
57 Bloco D
71205-50 Brasília, Brazil
Phone: +556134625472
Fax: +61 34625469
E-mail: maria.albuquerque@anvisa.gov.br

Dr Ivone Delazari

Food safety consultant
Brazilian Association of Food Industries
Av. Brigadeiro Faria Lima, 1478, 11th floor
01451-001 São Paulo, Brazil
Phone: +55 11 3030 1394
E-mail: detec@abia.org.br

Mr Laércio Goularte

Technical director
SFDK Laboratório de Análise de Produtos Ltda
Av. Aratãs, 754, Moema
04081-004 São Paulo-SP, Brazil
Phone: +55 11 5097 7888
Fax: +55 115042 1844
E-mail: lgoularte@sfdk.com.br

Ms Lina Oliveras

Engineer
National Health Surveillance Agency
João Bastian, 34
91460-010 PORTO Alegre - RS, Brazil
Phone: +55 51 2103 9824
E-mail: lina.yamachita@gmail.com

Mrs Maria De Fátima Araújo Almeida Paz

Chemist
National Agriculture Laboratory
Ministry of Agriculture, Livestock and Food Supply
Av. Almirante Barroso 5384, Castanheira-Zip
Code-66645-250
66645-250 Belém, Brazil
Phone: +55 91 3243 3355
Fax: +55 91 3243 3355
E-mail: maria.paz@agricultura.gov.br;
fatima.paz@ufra.edu.br

Dr Alice Sakuma

Chemist
Instituto Adolfo Lutz Health Secretary
Av Dr. Arnaldo 355
01246-902 São Paulo, Brazil
Phone: +5511-30682915
E-mail: alice@ial.sp.gov.br; alice523@gmail.com

Ms Lígia Schreiner

Regulation National Health Surveillance Specialist
National Health Surveillance Agency - ANVISA
SIA Trecho 5 Área Especial 57, Bloco D, 2 andar
71.205.050 Brasília - DF, Brazil
Phone: +55 61 3462 5399
Fax: +55 61- 3462-5315
E-mail: ligia.schreiner@anvisa.gov.br;
alimentos@anvisa.gov.br

Ms Marta Severo

Federalinspector agricultural
Ministry of Agriculture, Livestock and Food Supply
Av. Farrapos, No 285, SALA 604
90220-004 Porto Alegre/Rio Grande Do Sul, Brazil
Phone: +55 51 32866399
Fax: +55 51 32866399
E-mail: marta.severo@agricultura.gov.br

Mr Nilton Silva

Analyst and researcher in health and technology
Fundação Ezequiel Dias
Rua Conde Pereira Carneiro, 80, Gameleira
Belo Horizonte, Brazil
Phone: +55 31 3314 4905
Fax: +55 31 3314 4667
E-mail: niltoncs@gmail.com;
nilton.couto@funed.mg.gov.br

Mr Fabio Silva

Regulation National Health Surveillance Specialist
National Health Surveillance Agency- ANVISA
SIA Trecho 5 Área Especial 57, Bloco D, 2 andar
71.205.050 Brasilia, Brazil
Phone: +55 61-3462-5388
Fax: +55 61- 3462-5315
E-mail: fabio.silva@anvisa.gov.br

CAMEROON/ CAMEROUN/ CAMERÚN**Mr Zakariaou Ahmadou**

Head of Analysis Center
Ministry of Mines, Industry and Technological
Development
MINMIAT Yaoundé
237 Yaoundé, Cameroon
Phone: +99 72 4354
Fax: +22 22 62 20
E-mail: Zakahmadou@yahoo.fr

Ms Kone Sim Kayitavu Ingratia Marie Luz

Chef de Bureau de la sécurité sanitaire des aliments
CNCOSAC/Ministry of Mine,
Industry and Technological Development
15800 Yaoundé, Cameroon
Phone: +237 7757 4283
E-mail: kayitavu@yahoo.fr

CANADA / CANADÁ**Mr Stan Bacler**

Senior science advisor
Health Canada; Bureau of Chemical Safety
251 Sir Frederick Banting Driveway
K1A 0L2 Ottawa, Canada
Phone: +613-957-0870
Fax: +613-954-4674
E-mail: stanley.bacler@hc-sc.gc.ca

Mr Jeffrey Van De Riet

National manager
Canadian Food Inspection Agency;
Food Safety Science Directorate
1992 Agency Drive
B3B 1Y9 Dartmouth, Nova Scotia, Canada
Phone: +(902) 426-3245
Fax: +(902) 426-0314
E-mail: jeffrey.vanderiet@inspection.gc.ca

**CENTRAL AFRICAN REPUBLIC / RÉPUBLIQUE
CENTRAFRICAINE / REPÚBLICA
CENTROAFRICANA****Mr Ernest Lango-Yaya**

Chef of Bacteriology and Food Microbiology Service
Health Ministry, National Laboratory
1426 Bangui Central African Republic
Bangui, Central African Republic Central African
Phone: +236 75044605/7217008
E-mail: elangoyaya@gmail.com; langoyaya@yahoo.fr

CHILE / CHILE / CHILE**Mr Marcelo Soto**

Encargado Laboratorio Residuos de Plaguicidas;
ISP (National Health Institute)
Marathon1000, Ñuñoa, Santiago
Santiago, Chile
Phone: +(56 2) 5755499
E-mail: msoto@ispch.cl

CUBA / CUBA / CUBA**Ms Iglesias León Nuris**

Jefe Departamento Química y Toxicología
Instituto de Nutrición e Higiene de Alimentos
Infanta No. 1158 entre Llinás y Clavel, La Habana
10300 Ciudad de La Habana, Cuba
Phone: +537 8300022
E-mail: nc@ncnorma.cu; nuris@sinha.sld.cu

**CZECH REPUBLIC /
RÉPUBLIQUE TCHÉQUE /
REPÚBLICA CHECA****Mr Jindrich Fialka**

Director
Ministry of Agriculture of the Czech Republic;
Food Production and Legislation Department
Tesnov 17
11705 Prague 1, Czech Republic
Phone: +420221812465
Fax: +420222314117
E-mail: jindrich.fialka@mze.cz

Mr Martin Kubik

Czech Agriculture and Food Inspection Authority
Za Opravnou 300/6
15000 Prague 5, Czech Republic
Phone: +420257199540
Fax: +420257199541
E-mail: martin.kubik@szpi.gov.cz

EGYPT / ÉGYPTE / EGIPTO**Ms Mariam Barsoum**

Food Standards Specialist
Egyptian Organization for Standardization and
Quality
Food Standards
Cairo, Egypt
Phone: +20222845531
Fax: +20222845504
E-mail: eos_mariam@yahoo.com

ESTONIA/ ESTONIE**Ms Mari Reinik**

PhD, head of the laboratory
Health Board; Tartu Laboratory Põllu la
Põllu 1a
Tartu, Estonia
Phone: +372 53433030
Fax: +372 7447422
E-mail: marireinik@terviseamet.ee

**EUROPEAN UNION /
UNION EUROPÉENNE / UNIÓN EUROPEA****Mr Risto Holma**

Administrator Responsible for Codex Issues
European Commission
DG for Health and Consumers
Rue Froissart 101
1049 Brussels, Belgium
Phone: +322 2998683
Fax: +322 298566
E-mail: risto.holma@ec.europa.eu

Mr Marco Mazzara

Joint Research Center Ispra
Molecular Biology and Genomics Unit
Via Fermi 1,
21020 Ispra, Italy
Phone: +39 0332 78 5773
Fax: +39 0332 78 9333
E-mail: marco.mazzara@jrc.ec.europa.eu

Mr Franz Ulberth

Joint Research Center
JRC.D.5
Retieseweg 111
Geel, Belgium
Phone: +32-14-571316
Fax: +32-571 783
E-mail: franz.ulberth@ec.europa.eu

FINLAND / FINLANDE / FINLANDIA**Ms Taija Rissanen**

Senior Officer
Finnish Food Safety Authority Evira
Mustialankatu 3
00790 Helsinki, Finland
Phone: +358 50 5746308
E-mail: taija.rissanen@evira.fi

Ms Sara Heilimo

Quality Manager
Finnish Customs Laboratory
P.O. Box 53
FI-02151 Espoo, Finland
Phone: +358-40 3323238
E-mail: sara.heilimo@tulli.fi

Ms Mervi Rokka

Researcher
Finnish Food Safety Authority Evira
Mustialankatu 3
00790 Helsinki, Finland
Phone: +358295304425
E-mail: mervi.rokka@evira.fi

FRANCE / FRANCIA**Mr Jean-Luc Deborde**

Manager of the Laboratory of Strasbourg
SCL - Ministère de l'Economie et des Finances
Laboratoire SCL de Strasbourg
13, Chemin du routoir
67400 Illkirch, France
Phone: +33 3 88 66 48 96
Fax: +33 3 88 67 18 32
E-mail: jean-luc.deborde@scl.finances.gouv.fr

GERMANY / ALLEMAGNE / ALEMANIA**Mr Gerd Fricke**

Head of department
Federal Office of Consumer Protection and Food
Safety
Department 1 - Food, Feed and Commodities
Mauerstraße 39-42
D-10117 Berlin, Germany
Phone: +49 30 18444 10000
Fax: +49 30 18444 10009
E-mail: gerd.fricke@bvl.bund.de

Ms Petra Gowik

Head of department
Federal Office of Consumer Protection and Food
Safety (BVL)
Mauerstraße 39-42
D-10117 Berlin, Germany
Phone: +49 30 18445 8000
Fax: +49 30 18444 8099
E-mail: Petra.Gowik@bvl.bund.de

Mr Claus Wiezorek

Chemical and Veterinary Laboratory MEL
(CVUA-MEL)
Joseph-König-Straße 40
D-48147 Münster, Germany
Phone: +49 251 9821 237
E-mail: claus.wiezorek@cvua-mel.de

Mr Katrin Zur

Deputy Head of Unit
Federal Office of Consumer Protection and Food
Safety (BVL)
Mauerstr. 39-42
10117 Berlin, Germany
Phone: +49 30 18 445 8128
Fax: +49 30 18 445 8099
E-mail: katrin.zur@bvl.bund.de

GHANA**Ms Marian Ayikuokor Komey**

SNR. Regulatory officer
Food and Drugs Authority
P. o. Box CT 278, Cantonments
+233 ACCRA, Ghana
Phone: +233 208 560 185
E-mail: riankom2@yahoo.com

Ms Eno Buruwaa Boateng-Kagyah

Regulatory Officer
 Food and Drugs Authority
 P. o. Bos CT 2783, Cantonments
 +233 ACCRA, Ghana
 Phone: +233 244 687 368
 E-mail: buruwaab@yahoo.com

Mr Derry Panyin Arko Dontoh

Standards officer
 Ghana Standards Authority
 P. o. Box MB 245
 +233 ACCRA, Ghana
 Phone: +233 244 765 964
 Fax: +233 302 500231
 E-mail: ddontoh@gsa.gov.gh

GREECE / GRÈCE / GRECIA**Mr Ioannis Gardikis**

Deputy Head of Food Division
 General Chemical State Laboratory; Food Division
 16, An. Tsoha
 115 21 Athens, Greece
 Phone: +30 210 6479447
 Fax: +30 210 6425313
 E-mail: i.gardikis@gcsl.gr; foodiv@gcsl.gr

Mr Guido Sala Chiri

Administrator
 General Secretariat of the Council of the European Union
 DG B 2 B
 rue de la Loi 175
 B-1048 Brussels, Belgium
 Phone: +32 2 281 5734
 Fax: +32 2 281 6198
 E-mail: secretariat.codex@consilium.europa.eu

Ms Stavroula Skoulika

Supervisor of Chemical Laboratory
 Hellenic Food Authority; Directorate of Laboratory Controls
 124, Kifisias Ave & 2, Iatridou str
 115 26 Athens, Greece
 Phone: +30 210 2725314
 Fax: +30 210 2725328
 E-mail: skoulika@efet.gr

HUNGARY / HONGRIE / HUNGRÍA**Ms Marianna Dömölki**

Quality Expert
 Ministry of Rural Development
 Kossuth tér 11.
 H-1055 Budapest, Hungary
 Phone: +361 7953908
 Fax: +361 7950096
 E-mail: marianna.domolki@vm.gov.hu

Ms Zsuzsa Farkas

Food safety referent
 National Food Chain Safety Office
 Department of Data analysis and evaluation
 Tábornok u. 2. B.
 1143 Budapest, Hungary
 Phone: +36-1-368-8815/120
 Fax: +36-1-387-9400
 E-mail: farkaszs@nebih.gov.hu

Ms Veronika Gál

Food safety coordinator
 National Food Chain Safety Office
 Directorate for Food Safety Risk Assessment
 Tábornok u. 2.
 1143 Budapest, Hungary
 Phone: +36-1-368-8815/104
 Fax: +36-1-387-9400
 E-mail: galv@nebih.gov.hu

Ms Zsuzsanna Horváth

Food safety referent
 National Food Chain Safety Office
 Department of Public Communication
 Tábornok u. 2. B.
 1143 Budapest, Hungary
 Phone: +36-1-368-8815/115
 Fax: +36-1-387-9400
 E-mail: horvathzsu@nebih.gov.hu

Mr Viktor Kasza

Administrator
 National Food Chain Safety Office
 Keleti Károly u. 24.
 1024 Budapest, Hungary
 Phone: +36 70 436 0408
 E-mail: kaszav@nebih.gov.hu

Ms Andrea Károlyi

Head of laboratory
 National Food Chain Safety Office
 Lehel u. 43-47.
 1135 Budapest, Hungary
 Phone: +36 1 329 5052
 Fax: +36 1 270 9287
 E-mail: krolyia@nebih.gov.hu

Mr Erik Maloschik

National Food Chain Safety Office
 Lehel u. 43-47.
 1135 Budapest, Hungary
 Phone: 1/329-7017 132
 E-mail: maloschike@nebih.gov.hu

Ms Ágnes Palotásné Gyöngyösi

Head of Division
 Ministry of Rural Development; Department of Food Processing
 Kossuth tér 11.
 1055 Budapest, Hungary
 Phone: +36 1 795 3677
 Fax: +36 1 795 0096
 E-mail: agnes.gyongyosi@vm.gov.hu

Ms Ágnes Petró

Food safety coordinator
National Food Chain Safety Office
Mester u. 81.
1095 Budapest, Hungary
Phone: +36 1 456 3010
Fax: +36 1 215 1574
E-mail: petroag@nebih.gov.hu

Ms Éva Sugár

MSc observer
Lónyay u. 47. IV. em. 19.
1093 Budapest, Hungary
Phone: +36-30-390-6946
E-mail: sugar.eva@gmail.com

Ms Ágnes Szegedyné Fricz

Deputy Head of Department
Ministry of Rural Development
Department of Food Processing
Kossuth Lajos tér 11.
1055 Budapest, Hungary
Phone: +36 1 795 3759
Fax: +36 1 795 0096
E-mail: agnes.fricz@vm.gov.hu

Mr Tamás János Szigeti

Business developing and sales manager
WESSLING Hungary Ltd.
Fóti út 56.
1047 Budapest, Hungary
Phone: +36 30/396-9109
E-mail: szigeti.tamas@wessling.hu

Ms Csilla Kurucz

Standardization manager
Hungarian Standards Institution (MSZT)
Standardization Department
Horváth Mihály tér 1.
H-1082 Budapest, Hungary
Phone: +30-217-1153
E-mail: cs.kurucz@mszt.hu

INDONESIA / INDONÉSIE**Mr Harmoko**

Staff of Laboratory for Quality Testing of Goods
Ministry of Trade
J1. Raya Bogor km. 26, Ciracas
13740 Jakarta, Indonesia
Phone: +62 21 8703881, +62 21 8772100
Fax: +62 21 8710477, +62 21 8772100
E-mail: mokoindonesia@yahoo.com

Ms Anna Melianawati

Head of Division for Standard Implementation
National Standardization Agency of Indonesia
Manggala Wanabakti Building, Block IV.
4th Fl JI Gatot Subroto
10270 Jakarta, Indonesia
Phone: +62 21 5747043, ~44
Fax: +62 21 5747045
E-mail: anna@bsn.go.id

IRELAND / IRLANDE / IRLANDA**Ms Ita Kinahan**

State chemist
The State Laboratory
Young's Cross, Celbridge
Co. Kildare, Ireland
Phone: +353 1 5057001
E-mail: lta.Kinahan@statelab.ie

JAPAN / JAPON / JAPÓN**Dr Yoshifumi Kaji**

Senior food safety coordinator
Ministry of Health, Labour and Welfare
Office of International Food Safety, Department of
Food Safety
1-2-2 Kasumigaseki, Chiyoda-ku
100-8916 Tokyo, Japan
Phone: +81-3-3595-2326
Fax: +81-3-3503-7965
E-mail: codexj@mhlw.go.jp

Mr Tomonori Shiokawa

Assistant director
Ministry of Health, Labour and Welfare
Inspection and Safety Division, Department of Food
Safety
1-2-2, Kasumigaseki, Chiyoda-ku
100-8916 Tokyo, Japan
Phone: +81-3-3595-2337
Fax: +81-3-3503-7964
E-mail: codexj@mhlw.go.jp

Dr Takanori Ukena

Deputy Director
Ministry of Agriculture, Forestry and Fisheries
Food Safety and Consumer Affairs Bureau
1-2-1, Kasumigaseki, Chiyoda-ku
100-8950 Tokyo, Japan
Phone: +81-3-3502-8731
Fax: +81-3-3597-0329
E-mail: takanori_ukena@nm.maff.go.jp

Mr Toyohiro Egawa

Assistant director
Ministry of Agriculture, Forestry and Fisheries
Food Safety and Consumer Affairs Bureau
1-2-1 Kasumigaseki Chiyoda-ku
100-8950 Tokyo, Japan
Phone: +81-3-3502-8731
Fax: +81-3-3597-0329
E-mail: toyohiro_egawa@nm.maff.go.jp

Dr Takahiro Watanabe

Section chief
National Institute of Health Sciences
Division of Foods
1-18-1, Kamiyoga, Setagaya-ku
158-8501 Tokyo, Japan
Phone: +81-3-3700-1141
Fax: +81-3-3707-6950
E-mail: tawata@nihs.go.jp

Dr Rieko Matsuda

Senior researcher
National Institute of Health Sciences
Division of Biomedical Food Research
1-18-1, Kamiyoga, Setagaya-ku
158-8501 Tokyo, Japan
Phone: +81-3-3700-1141
Fax: +81-3-3707-6950
E-mail: matsuda@nihs.go.jp

Dr Kazuhiro Fujita

Technical advisor
Association of Registered Inspection Agency on
Food Hygiene
7-4-41, Saitoasagi, Ibaraki-shi
567-0085 Osaka, Japan
Phone: +81-72-641-8959
Fax: +81-72-641-8970
E-mail: fujitak@jfrl.or.jp

KENYA / KENYA**Mr Robert Njuguna Koigi**

Senior analytical chemist
Kenya Plant Health Inspectorate Service
P.O. Box 49592-00100
Nairobi, Kenya
Phone: +254-722-427112
E-mail: koigi@kephis.org

Ms Grace Nyawira Muchemi

Head of laboratory
Pest Control Produce Board
Registration and Analysis
13794-00800 Nairobi, Kenya
E-mail: muchemi.grace@gmail.com

MEXICO / MEXIQUE**Ms Irma Rossana Sánchez Delgado**

Verificador o Dictaminador Especializado C
Dirección Ejecutiva de Operación Internacional
Comisión Federal para la Protección Contra Riesgos
Sanitarios (COFEPRIS)
Secretaría de Salud
Monterrey 33 piso 5 Col. Roma
6700 Distrito Federal, Mexico
Phone: +52 55 5080 52 11 41
E-mail: irsanchez@cofepris.gob.mx

Mr César Omar Gálvez González

Gerente de Análisis y Desarrollo de Pruebas
Microbiológicas
Comisión de Control Analítico y Ampliación de
Cobertura Comisión Federal para la Protección
contra Riesgos Sanitarios (COFEPRIS)
Secretaría de Salud
Calzada de Tlalpan 4492,
Col Toriello Guerra. Del. Tlalpan.
14050 Mexico, Mexico
Phone: +55 50 80 5200 ext:2007
E-mail: cgalvez@cofepris.ob.mx

Mr Raúl Zavala Morales

Gerente de Análisis y Desarrollo de Pruebas
Fisicoquímicas
Comisión de Control Analítico y Ampliación de
Cobertura
Comisión Federal para la Protección contra
Riesgos Sanitarios (COFEPRIS)
Secretaría de Salud
Calzada de Tlalpan 4492, Col. Toriello Guerra.
14050 Mexico
Phone: +52 5080 5200 Ext 2008
E-mail: rzavalam@cofepris.gob.mx

MOROCCO / MAROC / MARRUECOS**Mr Mounir Rahlaoui**

Microbiology laboratory manager
Estate Institution for Control and Coordination of
Food Exports (EACCE);
Ministère de l'Agriculture
72, Angle Bd Med Smiha et Rue Med El Bâamrani.
Casablanca, Morocco
Phone: +(212) 5 22 305 104 / (212) 5 2
Fax: +(212) 5 22 305 168 / (212) 5 2
E-mail: rahlaoui@eacce.org.ma

Mr Said Zantar

Coordinateur de l'unité de Recherche
Institut National de la Recherche Agronomique;
Ministère de l'Agriculture
Inra, 78 Bd Slidi Mohammed Ben Abdellah
Tanger, Morocco
Phone: +212661758018
Fax: +212539394523
E-mail: zantar_said@hotmail.com

**NETHERLANDS / PAYS-BAS /
PAÍSES BAJOS****Mr Henk Van Der Schee**

Senior scientist
Dutch Food and Consumer Product Safety Authority
(NVWA)
Catharijnesingel 59 3411 GG
Utrecht, Netherlands
Phone: +31 6 1503 6231
E-mail: henk.van.der.schee@vwa.nl

Mr Grishja Van Der Veer

Researcher
RIKILT, Wageningen UR
PO Box 230
6700 AE Wageningen, Netherlands
Phone: +31 317 480 356
E-mail: grishja.vanderveer@wur.nl

**NEW ZEALAND / NOUVELLE ZELANDE /
NUEVA ZELANDA****Mr Paul Dandsted**

Manager
Ministry for Primary Industries; Food Assurance
25 The Terrace
6140 Wellington, New Zealand
Phone: +64-4-8942536
E-mail: paul.dansted@mpi.govt.nz

Mr Roger Kissling

Fonterra Co-Operative Group Ltd
Private Bag 885
3450 Cambridge, New Zealand
Phone: +64-7-823 3706 (EXT 79706)
E-mail: roger.kissling@fonterra.com

Ms Susan Morris

Specialist adviser residues
Ministry for Primary Industries; Standards
25 The Terrace
6140 Wellington, New Zealand
Phone: +64-4-29-894 2403
E-mail: susan.morris@mpi.govt.nz

NORWAY / NORVÉGE / NORUEGA**Ms Astrid Nordbotten**

Senior adviser
Norwegian Food Safety Authority
Mattilsynet, HK-TA STU., P.O. Box 383
N-2381 Brumunddal, Norway
Phone: +47 2321 6698
Fax: +47 2321 7001
E-mail: astrid.nordbotten@mattilsynet.no

Mr Stig Valdersnes

Researcher
National Institute of Nutrition and Seafood Research
Postboks 2029 Nordnes
N-5817 Bergen, Norway
Fax: +47 55905299
E-mail: stig.valdersnes@nifes.no

**PEOPLE'S REPUBLIC OF CHINA /
RÉPUBLIQUE POPULAIRE DE CHINE /
REPÚBLICA POPULAR DE CHINA****Ms Jia He**

Senior engineer/section chief
The Animal, Plant & Food stuff Inspection Center of
Tianjin Entry-Exit Inspection and Quarantine Bureau
158#Jingmen Avenue, Free Trade Zone, Tianjin
300461 Tianjin, China
Phone: +86-13920384667
Fax: +86-22-66273158
E-mail: hhjabc@163.com

Mr Chi-Kin Tsang

Senior chemist
Center of Food Safety
43/F, Queensway Government Offices
66 Queensway
Hong Kong, China
Phone: +852 2867 5022
Fax: +852 2893 3547
E-mail: cktsang@fehd.gov.hk

Dr Wai-Cheung Chung

Senior chemist
Centre of Food Safety
4/F, Public Health Laboratory Centre 382
Nam Cheong Street Kowloon
Hong Kong, China
Phone: +852 2319 8439
Fax: +852 2116 4335
E-mail: swcchung@fehd.gov.hk

Mr Bin Wu

Senior engineer/Vice Director
Animal, Plant & Food Inspection Center,
Jiangsu Entry-Exit Inspection and Quarantine
Bureau, CHINA
99# Zhonghua RD, Nanjing, China
210001 Nanjing, China
Phone: +86-13951707588
Fax: +86-25-52345180
E-mail: wub@jsciq.gov.cn

POLAND / POLOGNE / POLONIA**Ms Magdalena Swiderska**

Head of Central Laboratory of Agricultural and Food
Quality Inspection
Central Laboratory of Agricultural and Food Quality
Inspection
11/13 Reymonta Str.,
60-791 Poznan, Poland
Phone: +48 61 8679034
Fax: +48 61 8679019
E-mail: mswiderska@ijhars.gov.pl

**KOREA, REPUBLIC OF /
CORÉE, REPUBLIQUE DE /
COREA, REPÚBLICA DE****Mr Han-Sub Chang**

Research scientist
National Agricultural Products Quality Management
Service (NAQS)
Consumer information and Food Safety Division
5-3, block Gimcheonhyeoksindosi, Nam-Myeon
740-870 Gimcheon-si, Gyeongbuk, Republic of
Korea
Phone: +82-54-429-4138
Fax: +82-54-429-4144
E-mail: jjhs@korea.kr

Ms Eun-Jin Choi

Scientific officer
Ministry of Food and Drug Safety
Osong Health Technology Administration Complex
187 Osongsaengmyeong2(i)-ro, Osong-eup
363-700
Cheongwon-gun, Chungcheongbuk-do, Republic of
Korea
Phone: +82-43-719-2431
Fax: +82-43-719-2400
E-mail: cej1@korea.kr

Mr Jaeho Ha

Principal researcher
Korea Food Research Institute
1201-62, Anyangpangyo
463-746 Seongnam-si, Republic of Korea
Phone: +82 31 780 9127
Fax: +82 31 780 9280
E-mail: jhkfri@kfri.re.kr

Ms Hyeyoung Kwon

Research scientist
Rural Development Administration
126 Suin-ro
441-707 Suwon, Republic of Korea
Phone: +82-31-290-0516
Fax: + 82-31-290-0506
E-mail: kwonhy91@korea.kr

Ms Guiim Moon

Senior researcher
National Institute of Food & Drug Safety Evaluation;
Osong Health Technology Administration Complex
187 Osongsaengmyeong2(i)-ro, Osong-eup
363-700
Cheongwon-gun, Chungcheongbuk-do, Republic of Korea
Phone: +82-43-719-4505
Fax: +82-43-719-4500
E-mail: luna@korea.kr

Mr Sang-Soon Yun

Research scientist
National Agricultural Products Quality Management
Service (NAQS)
46, Wolmyeong-ro 220beon-gil, Heungdeok-gu
361-300 Cheongju-si, Chungcheongbuk-do,
Republic of Korea
Phone: + 82 43 279 4165
Fax: + 82 43 279 4155
E-mail: yss0520@korea.kr

SERBIA / SERBIE**Mrs Milica Rankov Šicar**

C.E.O. of Samples Booking and Analysis
Supervision Dpt.
SP Laboratorija
Industrijska 3
Bečej 21220, Republic of Serbia
Phone: +381 21 6811 779
Fax: +381 21 6912 545
E-mail: milica.rankov-sicar@victoriagrollp.rs

Mrs Marija Vujić-Stefanović

Deputy C.E.O. of Genetical and Physical-Chemical
Analysis Dpt.
SP Laboratorija
Industrijska 3
Bečej 21220, Republic of Serbia
Phone: +381 21 6811 613
Fax: +381 21 6912 545
E-mail: marija.vujic-stefanovic@victoriagroup.rs

**RUSSIAN FEDERATION /
FÉDÉRATION DE RUSSIE /
FEDERACIÓN DE RUSIA****Mr Konstantin Eller**

Head of division
Institute of Nutrition RAMS;
Food Analytical Chemistry Division
Ustinsky proezd 2/14
109240 Moscow, Russian Federation
Phone: +7 495 698 5392
Fax: +7 495 698 5407
E-mail: eller@ion.ru

Ms Svetlana Seliunina

Director of the department
Federal Center of Hygiene and Epidemiology;
Department on Scientific Supply
Russian Federation
Phone: +7 916 117 37 70
E-mail: plotniki2005@rambler.ru

SLOVAKIA / SLOVAQUIE / ESLOVAQUIA**Ms Iveta Vojsova**

Head of delegation
State Veterinary and Food Institute, Dolný Kubín;
Dept. of Chemistry and Toxicology
Veterinary and Food Institute, Botanická 15
842 52 Bratislava, Slovakia
Phone: +421 2 60258 322
E-mail: yvojsova@svuba.sk

SPAIN / ESPAGNE / ESPANA**Mr Pedro A. Burdaspal**

Head of Chemical Area and Nutritional Evaluation
Spanish Food Safety and Nutrition Agency;
Food National Center
Carretera de Majadahonda a Pozuelo, km 5,2
28220 Madrid, Spain
Phone: + 34 913380203
Fax: + 34 913380980
E-mail: pburdaspal@msssi.es

SUDAN / SOUDAN / SUDÁN**Ms Nahla Ahmend**

Deputy Director of Inspection Department
Sudanese Standards and Metrology Organization;
Inspection Department
Sudanese Standards and Metrology Organization,
P.O. Box 13573
+249 Khartoum, Sudan
Phone: +249122635657, +249912207959
Fax: +249183765726
E-mail: nahlaaw2000@hotmail.com

Mr Osman Elkhidir Ahmend

Branch manager
Sudanese Standards & Metrology Organization;
Branch Manager
Eljamaa street
+11111 Khartoum, Sudan
Phone: +249912350086
E-mail: osmankh123@hotmail.com

SWEDEN / SUÈDE / SUECIA**Ms Ulla Edberg**

Head of Chemical Division 2
National Food Agency; Chemical Division 2
Box 622
SE-751 26 Uppsala, Sweden
Phone: +46 18 17 56 60
Fax: +46 18 10 58 48
E-mail: ulla.edberg@slv.se

Mr Joakim Engman

Chemist
National Food Agency; Chemical Division 2
Box 622
SE 751 26 Uppsala, Sweden
Phone: +46 18 17 56 81
Fax: +46 18 10 58 48
E-mail: joakim.engman@slv.se

SWITZERLAND / SUISSE / SUIZA**Mr Gérard Gremaud**

Scientific advisor
Federal Food Safety and Veterinary Office
Schwarzenburgstrasse 155
3003 Bern, Switzerland
Phone: +41 31 322 95 56
E-mail: gerard.gremaud@blv.admin.ch

Mr Erik Konings

Expert
Nestec Ltd.; Nestlé Research Center
Vers-chez-les-Blanc
1000 Lausanne 26, Switzerland
Phone: +41 21 785 82 83
E-mail: erik.konings@rdls.nestle.com

THAILAND / THAILANDE / THAILANDIA**Ms Usa Bamrungbhuet**

Director Office of Standard Development
Ministry of Agriculture and Cooperatives;
National Bureau of Agricultural Commodity and Food
Standards
50 Phaholyothin Road, Lad Yao, Chatuchak
10900 Bangkok, Thailand
Phone: +66 (2) 561 2277 ext. 1440
Fax: +66 (2) 561 3373
E-mail: usa@acfs.go.th

Ms Chitlada Booncharoen

Standards officer
National Bureau of Agricultural Commodity and Food
Standards (ACFS);
Office of Standard Development,
National Bureau of Agricultural Commodity and Food
Standard
50 Kaset - Klang, Phahol Yothin Road, Chatuchak
10900 Bangkok, Thailand
Phone: +66 (2) 561 2277 ext. 1446
Fax: +66 (2) 561 3357
E-mail: chitlada@acfs.go.th; chitr@hotmail.com

Ms Phawanat Bunnag

Department of Agriculture
50 Phaholyothin Rd, Ladyao, Chatuchak
10900 Bangkok, Thailand
Phone: +662-579-0574
Fax: +662-940-5472
E-mail: phawanat7855@gmail.com

Ms Chanchai Jaengsawang

Advisor
Department of Medical Sciences
Tiwanan Road, Nonthaburi
11000 Nonthaburi, Thailand
E-mail: chan48@ymail.com

Ms Kularb Kimsri

The Federation of Thailand Industries
60 New Rachadapiser Rd., Klongtoey
10900 Bangkok, Thailand
Phone: +66-2-625-7507
Fax: +66-2-631-0662
E-mail: kularb@cpf.co.th

Ms Tipawan Ningnoi

Medical Scientist
Department of Medical Sciences
Bureau of Quality and Safety of Food
Ministry of Public Health
11000 Nonthaburi, Thailand
Phone: +66-2-951 0000 ext. 99630
Fax: +66-2-951 0000 ext. 99619
E-mail: tipawan.n@dmse.mail.go.th

Ms Varatip Somboonyarithi

Director
Fishery Technological Development Division
Department of Fisheries
50 Kaset - Klang, Phahol Yothin Road, Chatuchak
10900 Bangkok, Thailand
Phone: +66 (2) 9406130-45
Fax: +66(2) 561 1400, 940 6200
E-mail: varatip98@gmail.com
or varatips@fisheries.go.th

Ms Supanoi Subsinserm

Food technologist, Senior Professional
Fish Inspection and Quality Control Division
Department of Fisheries
50 Paholyothin Road, Kaset-klang, Chatuchak
10900 Bangkok, Thailand
Phone: +662 558 0150-5 Ext. 13300
Fax: +662 558 0139
E-mail: supanois@dof.mail.go.th; supanois@ymail.com;
supanois@yahoo.com

Mr Pairoj Tomrongopas

Director
Bureau of Quality Control of Livestock Products
Department of Livestock Development, Ministry of
Agriculture and Cooperatives
91 Mu.4, Tiwanon Rd., Bangkadee Subdistrict,
Muang District
Pathumthanee, Thailand
Phone: +662-967-9700 # 1111
Fax: +662-967-9755
E-mail: tamrongopas@gmail.com

Mr Somchai Wongsamoot

Senior veterinarian officer
Bureau of Quality Control of Livestock Products
Ministry of Agriculture and Cooperatives
91 Mu.4, Tiwanon Rd., Bangkokdee Subdistrict,
Muang District
Pathumthanee, Thailand
Phone: +662-967-9702
Fax: +662-963-9212
E-mail: somchai_6@yahoo.com

TUNISIA / TUNISIE / TÚNEZ**Ms Jelassi Emna**

Engineer
12, rue de l'usine, - Charguia 2
2035 Tunis, Tunisia
Phone: +71 940 198
Fax: +71 941 080

TURKEY / TURQUIE / TURQUÍA**Ms Nilüfer Altunbas**

Food engineer
The Ministry of Food, Agriculture and Livestock
The General Directorate of Food and Control-Codex
Division
Eskisehir Yolu 9.km Lodumlu
06530 Ankara, Turkey
Phone: +903122587755
Fax: +903122587760
E-mail: nilufer.altunbas@tarim.gov.tr

TURKMENISTAN / TURKMÉNISTAN**Mr Guychgeldi Shyberdiyev**

Head of State
Registration of Food Products Department
State Sanitary Epidemiologic Service at the Ministry
of Health and Medical Industry of Turkmenistan;
Experimental Industrial Centre
Street 2026, building 70
744012 Ashgabat, Turkmenistan
Phone: +99 312 92 04 83 (w); +99363 535281

**UNITED KINGDOM / ROYAUME-UNI /
REINO UNIDO****Mr Duncan Arthur**

Public Analyst Scientific Services Limited
28-32 Brunel Road
W3 7XT London, United Kingdom
Phone: +44 208 222 6073/6070
Fax: +44 208 222 6080
E-mail: DuncanArthur@PublicAnalystServices.co.uk

Mr Andrew Damant

Head of Scientific Methods on Laboratory Policy
Food Standards Agency Scientific Methods and
Laboratory
Policy Branch, Analysis and Research
Division, Aviation
WC2B 6NH London, United Kingdom
Phone: +44 0207 276 8757
Fax: +44 0207 276 8910
E-mail: andrew.damant@foodstandards.gsi.gov.uk

Ms Chelvi Leonard

Scientific Methods and Laboratory Branch
Food Standards Agency
Aviation House, 125Kingsway
WC2B 6NH London, United Kingdom
Phone: +44 0207 276 8969
Fax: +44 0207 276 8910
E-mail: chelvi.leonard@foodstandards.gsi.gov.uk

Mr Michael Walker

Consultant referee analyst
LGC
Queens Road, Teddington
TW11 OLY, United Kingdom
Phone: +44 0 7738 179 985
E-mail: Michael.Walker@lgcgroup.com

**TANZANIA REPUBLIC OF / TANZANIE /
TANZANIA****Ms Agnes Mnenev**

Director Testing Calibration and Packaging Services
Tanzania Bureau of Standards
Testing Calibration and Packaging Services
P.O. Box 9524
+255 Dar Es Salaam, United Republic of Tanzania
Phone: + 255 754 562850
Fax: +255 22 245 0959
E-mail: anjaumnenev@gmail.com

Mr Rajabu Salim Mziray

Manager
Tanzania Food and Drugs Authority
Food Analysis Department
P.O. Box 77150
+255 Dar Es Salaam, United Republic of Tanzania
Phone: +255 22450512
Fax: +25522450793
E-mail: rmziray@yahoo.com

Ms Asha Mohamed Khamis Omar

Food Analyst
Zanzibar Bureau of Standards; Testing
P.O. Box 1136
+255 Zanzibar, United Republic of Tanzania
Phone: +255714700097
E-mail: asha.mohammed@zbs.go.tz

**UNITED STATES OF AMERICA /
ETATS-UNIS D'AMÉRIQUE /
ESTADOS UNIDOS DE AMÉRICA****Ms Marie Maratos**

International issues analyst
US Codex Office; U.S. Department of Agriculture
1400 Independence Ave, Room 4861, SW
20250 Washington, DC, USA
Phone: +12026904795
Fax: +12027203157
E-mail: marie.maratos@fsis.usda.gov

Dr Gregory Noonan

Research chemist
Division of Analytical Chemistry,
Center for Food Safety and Applied Nutrition
U.S. Food and Drug Administration
5100 Paint Branch Parkway, (HFS-245)
20740 College Park, MD, USA
Phone: +1-240-402-2250
Fax: +1-301-436-2634
E-mail: gregory.noonan@fda.hhs.gov

Dr Timothy Norden

Branch chief
Grain Inspection, Packers and Stockyards
Administration
Technology & Science Division, U. S. Department of
Agriculture
10383 Ambassador Dr.
64153 Kansas City, MO, USA
Phone: +1.816.891.0470
Fax: +1.816.891.8070
E-mail: timothy.norden@gipsa.usda.gov

UGANDA / OUGANDA**Dr Kyokwijuka Benon**

Assistant Commissioner
Ministry of Agriculture, Animal Industry & Fisheries
Department of Animal Production & Marketing
P.O. Box 34518
Kampala, Uganda
Phone: +256-414-320578
Phone2: +256-772-586710
Fax: +256-414-321245
E-mail: bkyokwijuka@agriculture.go.ug

URUGUAY**Ms Laura Flores**

Consultor senior
Laboratorio Tecnológico del Uruguay;
Coordinación de Calidad
Avenida Italia 6201
11500 Montevideo, Uruguay
Phone: +26013724 INT 1252
Fax: +26013724 INT 1280
E-mail: lflores@latu.org.uy

ZIMBABWE / ZIMBABWE / ZIMBABUE**Mr Livingstone Munyaradzi Musiyambiri**

Director
Ministry of Health and Child Welfare;
Gvt Analyst Laboratory
P.O. Box CY231, Causeway
Harare, Zimbabwe
Phone: +2634792026/7
E-mail: mlmuyambiri@yahoo.com

**INTERNATIONAL ORGANISATIONS
ORGANISATIONS INTERNATIONALES
ORGANIZACIONES INTERNACIONALES****AACC INTERNATIONAL****Dr Anne Bridges**

Technical leadership chair
AACC International; AACCI Headquarters
3340 Pilot Knob Road
55121 St Paul, MN, USA
Phone: +1.651.454.7250
E-mail: annebridges001@earthlink.net

Mr Paul Wehling

Senior scientist
General Mills Inc
330 University Ave SE
55414 Minneapolis, MN, USA
Phone: +1 763-764-4360
E-mail: Paul.Wehling@genmills.com

AOAC**Mr Darryl Sullivan**

Secretary
AOAC International
N2743 Butternut RD
53955 Poynette, USA
Phone: +608 692-4233
E-mail: darryl.sullivan@covance.com

Dr John Szpylka

Director of chemistry N.A.
AOAC International; Silliker Laboratories
111 East Wacker Drive
Chicago, Illinois, USA
Phone: +1 312 938 5249
Fax: +1 312 729 1320
E-mail: john.szpylka@silliker.com

AOCS**Mr Richard Cantrill**

Chief science officer
AOCS; Technical Services
2710 South Boulder Drive
IL 61802 Urbana, USA
Phone: +1 217 693 4830
Fax: +1 217 351 8091
E-mail: Richard.Cantrill@aoacs.org

Mr Ray Shillito

Manager
Technical Coordination Seed & Trait Safety
Bayer Crop Science LP
407 Davis Drive / Tech 3
NC 27560 Morrisville, USA
Phone: +1 919 549 5684
E-mail: ray.shillito@bayer.com

AOECS**Ms Hertha Deutsch**

Codex and Regulatory Affairs
AOECS-Association of European Coeliac Societies
Anton Baumgartner Strasse 44/C5/2302
1230 Vienna, Austria
Phone: +43 1 6671887
E-mail: hertha.deutsch@utanet.at

Ms Tünde Koltai

Board director
Association of European Coeliac Society
Rue de la Press
1000 Brussels, Belgium
Phone: +36 303857802
E-mail: theboard@aoecs.org

EURACHEM**Dr Stephen Ellison**

Science Fellow
Observer Organisation (Eurachem)
LGC Limited Queens Road
TW11 0LY Teddington, UK
Phone: +44 208 943 7325
E-mail: s.ellison@lqcgroupp.com

FAO**Ms Eleonora Dupouy**

Food safety officer
Regional Office for Europe and Central Asia
Benczur u. 34.
1068 Budapest, Hungary
Phone: +36 30 473 23 27
Fax: +36 1 351 70 29
E-mail: eleonora.dupouy@fao.org

IADSA**Mr Xavier Lavigne**

International Alliance of Dietary/Food Supplement
Associations
Rue de l'Association 50
1000 Brussels, Belgium
Phone: +32 2 209 11 55
Fax: +32 2 223 30 64
E-mail: secretariat@iadsa.org

ICUMSA**Dr Roger Wood**

Chairman
Inter-Agency Meeting
ICUMSA - International Commission for
Uniform Methods of Sugar Analysis
Fir Tree Lodge 65 Colney Lane Cringleford
NR4 7RG Norwich, UK
Phone: +44 7725 419921
E-mail: roger.shirley@btinternet.com

IDF**Ms Aurélie Dubois-Lozier**

Standards Officer
International Dairy Federation
Boulevard Auguste Reyers, 70/B
1030 Brussels, Belgium
Phone: +3223256745
E-mail: adubois@fil-idf.org

Dr Jaap Evers

Senior regulatory strategist
FIL-IDF New Zealand c/o Fonterra Co-operative
Group Ltd.
Private Bag 11 029
Palmerston North, New Zealand
Phone: +64 6 350 46 13
Fax: +64 6 350 4676
E-mail: jaap.evers@fonterra.com

IFU**Mr David Hammond**

IFU delegate at CCMAS
IFU
14, rue de Turbigo
75001 Paris, France
Phone: +33147422928
Fax: +33147422928
E-mail: ifu@ifu-fruitjuice.com

ISO**Ms Sandrine Espeillac**

Standardization project manager
ISO TC34 "Food Products" secretary
International Organization for Standardization
(AFNOR)
11 rue Francis de Pressensé
93571 La Plaine Saint-Denis Cedex, France
Phone: +33 1 41 62 86 02
Fax: +33 1 49 17 90 00
E-mail: sandrine.espeillac@afnor.org

Mr Marcel De Vreeze

Secretariat of ISO/TC 34/SC 5
Milk and milk products;
Nederlands Standardization Institute (NEN)
P.O. Box 5059
2600 GB Delft, Netherlands
Phone: +31 15 2690 125
Fax: +31 15 2690 204
E-mail: marcel.devreeze@nen.nl

NMKL**Ms Hilde Skår Norli**

Secretary General
Nordic Committee on Food Analysis; NMKL
Norwegian Veterinary Institute
750 Sentrum
Oslo, Norway
Phone: +4723216249
E-mail: nmkl@vetinst.no

CODEX SECRETARIAT***Ms Verna Carolissen***

Food standards officer
Joint FAO/WHO Food Standards Programme
Viale delle Terme di Caracalla
00153 Rome, Italy
Phone: +39 06 57055629
Fax: +39 06 5705 4593
E-mail: Verna.Carolissen@fao.org

Mr Patrick Sekitoleko

Food standards officer
Codex Alimentarius Commission
Viale delle Terme di Caracalla
00153 Rome, Italy
Phone: +09 06 570 566 26
Fax: +39 06 570 545 93
E-mail: Patrick.Sekitoleko@fao.org

Dr Hidetaka Kobayashi

Food standards officer
Joint FAO/WHO Food Standards Programme
Viale delle Terme di Caracalla
00153 Rome, Italy, Italy
Phone: +39 06 570 53218
Fax: +39 06 570 53057
E-mail: hidetaka.kobayashi@fao.org

Appendix II**STATUS OF ENDORSEMENT OF METHODS OF ANALYSIS AND SAMPLING**

- A. Milk and Milk Products
- B. Nutrition and Foods for Special Dietary Uses
- C. Fish and Fishery Products

A. Milk and Milk Products

Products	Provisions	Method	Principle	Type
Blend of evaporated skimmed milk and vegetable fat	Milk protein in MSNF ¹	ISO 8968-1/2 IDF 20-1/2: 2001 2014 / AOAC 991.20	Titrimetry (Kjeldahl)	IV
Reduced fat blend of Evaporated skimmed milk and vegetable fat	Milk protein in MSNF ¹	ISO 8968-1/2 IDF 20-1/2: 2001 2014 / AOAC 991.20	Titrimetry (Kjeldahl)	IV
Blend of skimmed milk and vegetable fat in powdered form	Milk protein in MSNF ¹	ISO 8968-1/2 IDF 20-1/2: 2001 2014 / AOAC 991.20	Titrimetry (Kjeldahl)	IV
Reduced fat blend of skimmed milk powder and vegetable fat in powdered form	Milk protein in MSNF ¹	ISO 8968-1/2 IDF 20-1/2: 2001 2014 / AOAC 991.20	Titrimetry (Kjeldahl)	IV
Blend of sweetened condensed skimmed milk and vegetable fat	Milk protein in MSNF ¹	ISO 8968-1/2 IDF 20-1/2: 2001 2014 / AOAC 991.20	Titrimetry (Kjeldahl)	IV
Reduced fat blend of sweetened condensed skimmed milk and vegetable fat	Milk protein in MSNF ¹	ISO 8968-1/2 IDF 20-1/2: 2001 2014 / AOAC 991.20	Titrimetry (Kjeldahl)	IV
Cheese, unripened including fresh cheese	Milk Protein	ISO 8968-1/2 IDF 20-1/2: 2001 2014 / AOAC 991.20 and 991.23	Titrimetry (Kjeldahl)	I
Cream and prepared creams	Milk protein	ISO 8968-1/2 IDF 20-1/2: 2001 2014 / AOAC 991.20	Titrimetry (Kjeldahl)	I
Edible casein products	Milk protein (total N x 6.38 in dry matter)	ISO 8968-1 IDF 20-1:2014 IDF 92:1979 / ISO 5549:1978	Titrimetry (Kjeldahl) digestion	IV I
Evaporated milks	Milk protein in MSNF ¹	ISO 8968-1/2 IDF 20-1/2: 2001 2014 / AOAC 991.20 /AOAC 945.48H	Titrimetry (Kjeldahl)	I
Fermented milks	Milk Protein	ISO 8968-1/2 IDF 20-1/2: 2001 2014 / AOAC 991.20	Titrimetry (Kjeldahl)	I
Milk powders and cream powders	Milk protein	ISO 8968-1/2 IDF 20-1/2: 2001 2014 / AOAC 991.20	Titrimetry (Kjeldahl digestion)	I

¹ Milk total solids and MSNF content include water of crystallization of lactose

Products	Provisions	Method	Principle	Type
Milk fat products	Antioxidants (phenolic)	IDF 165:1993	Reversed phase gradient liquid chromatography	II
Milk products obtained from fermented milks heat treated after fermentation	Milk Protein	ISO 8968-1/2 IDF 20-1/2:20012014 / AOAC 991.20	Titrimetry (Kjeldahl)	I
<i>IDF/ISO: The line above could be removed since it is covered by the provision Fermented milk</i>				
Sweetened Condensed Milks	Milk protein in MSNF¹	ISO 8968-1/2 IDF 20-1/2:20012014 / AOAC 991.20 AOAC 945.48H	Titrimetry (Kjeldahl)	I
Whey powders	Milk protein (total N x 6.38)	ISO 8968-1/2 IDF 20-1/2:20012014 / AOAC 991.20	Titrimetry (Kjeldahl)	I
Whey powders	Protein (total N x 6.38)	IDF 92:1979 / ISO 5549:1978	Titrimetry, Kjeldahl digestion	IV

* The Committee at its 36th Session will consider whether the AOAC method is equivalent to the IDF/ISO method taking into consideration the information that will be provided by AOAC.

B. Nutrition and Foods for Special Dietary Uses

Products	Provisions	Method	Principle	Type
Infant formula	Crude protein*	ISO 8968-1/2 IDF 20-1/2:20012014 / AOAC 991.20**	Titrimetry (Kjeldahl)	I

* Determination of Crude Protein

The calculation of the protein content of infant formulas prepared ready for consumption may be based on N x 6.25, unless a scientific justification is provided for the use of a different conversion factor for a particular product. The value of 6.38 is generally established as a specific factor appropriate for conversion of nitrogen to protein in other milk products, and the value of 5.71 as a specific factor for conversion of nitrogen to protein in other soy products

** The Committee at its 36th Session will consider whether the AOAC method is equivalent to the IDF/ISO method taking into consideration the information that will be provided by AOAC.

C. Fish and Fishery Products

I-8.6 Determination of Biotoxins

The method selected should be chosen on the basis of practicability and preference should be given to methods which have applicability for routine use.

I-8.6.1 Criteria for determination of Toxin Analogues by chemical methods

Methods shall meet the numerical criteria listed in Table 1 and may either meet the minimum applicable range, or LOD and LOQ criteria listed.

Table 1. Criteria for determination of Toxin Analogues by Chemical Methods

Toxin Group	Toxin	Minimum applicable range (mg/kg)	LOD (mg/kg)	LOQ (mg/kg)	Precision (RSD _R) (%) No more than	Recovery percent	Applicable methods that meet the criteria
STX Group	Saxitoxin (STX)	0.05 – 0.2	0.01	0.02	44%	50 – 130	AOAC 2005.06 NMKL 182:2005 EN 14526:2004 AOAC 2011.02 NMKL 197:2013
	NEO	0.05 – 0.2	0.01	0.02	44%	50 – 130	
	dcSTX	0.05 – 0.2	0.01	0.02	44%	50 – 130	
	GTX1	0.05 – 0.2	0.01	0.02	44%	50 – 130	
	GTX2	0.1 – 0.5	0.03	0.06	38%	50– 130	
	GTX3	0.1 – 0.5	0.03	0.06	38%	50– 130	
	GTX4	0.05 – 0.2	0.01	0.02	44%	50 – 130	
	GTX5	0.1 – 0.5	0.03	0.06	38%	50– 130	
	GTX6	0.1 – 0.5	0.03	0.06	38%	50– 130	
	dcGTX2	0.1 – 0.5	0.03	0.06	38%	50– 130	
	dcGTX3	0.1 – 0.5	0.03	0.06	38%	50– 130	
	C1	0.1 – 0.5	0.03	0.06	38%	50– 130	
	C2	0.1 – 0.5	0.03	0.06	38%	50– 130	
	C3	0.5 – 1.5	0.1	0.2	32%	50– 130	
C4	0.5 – 1.5	0.1	0.2	32%	50– 130		
OA Group	OA	0.03 – 0.2	0.01	0.02	44%	60-115	See reference below
	DTX1	0.03 – 0.2	0.01	0.02	44%	60-115	
	DTX2	0.1 – 0.5	0.03	0.06	38%	60-115	
Domoic Acid	DA	14 – 26	2	4	20%	80-110	
AZA Group	AZA1	0.03 – 0.2	0.01	0.02	44%	40 - 120	See reference below
	AZA2	0.03 – 0.2	0.01	0.02	44%	40 - 120	
	AZA3	0.03 – 0.2	0.01	0.02	44%	40 - 120	

Reference:

http://aesan.msssi.gob.es/en/CRLMB/web/procedimientos_crlmb/crlmb_standard_operating_procedures.shtml Harmonised-SOP-LCMS-OA-Version4.pdf

Total toxicity is estimated as the sum of the molar concentrations of detected analogs multiplied by the relevant specific toxicity equivalency factors (TEFs). Internationally scientifically validated TEFs must be used. The science behind TEFs is developing. Current internationally validated TEF's will be found on the FAO website. Information on TEFs could be incorporated in this standard at a future date.

Methods should be validated and used for the relevant toxin analogues that may contribute to total toxicity. Currently known toxin analogues to consider are listed in Table 1.

Where toxin analogues that are not listed in Table 1 are determined the competent authority must assess the contribution of these analogs to total toxicity whilst conducting further investigations.

I-8.6.2 Biological and Functional Methods to Determine Paralytic Shellfish Toxicity

Commodity	Provision	Method	Principle	Type
Live and raw bivalve molluscs	Paralytic shellfish toxicity	AOAC 959.08	Mouse bioassay	Type IV
Live and raw bivalve molluscs	Paralytic shellfish toxicity	AOAC 2011.27	Receptor binding assay	Type IV

APPENDIX III

PROPOSED METHOD CRITERIA, METHODS OF ANALYSIS AND SAMPLING PLAN

A. Proposed Method Criteria for DON in Raw Cereal grains (wheat, maize and barley)

(For consideration by CCCF)

Provision	ML (mg/kg)	LOD	LOQ	Precision on HorRat	Minimum applicable range (mg/kg)	Recovery	Applicable methods that meet criteria	Principle
deoxynivalenol	2	0.2	0.4	≤2	1 – 3	80 – 110%		

B. Proposed Sampling Plan for Fish and Fishery Products

(For consideration by CCFFP)

STANDARD FOR LIVE ABALONE AND FOR RAW, FRESH CHILLED OR FROZEN ABALONE FOR DIRECT CONSUMPTION OR FOR FURTHER PROCESSING (CODEX STAN 312-2013)

II-8.1 Sampling

II-8.2 Sensory and Physical Examination

Attribute sampling plan, CAC/GL 50, Section 4.2, Table 10 using AQL 6,5%.

Comments: Qualitative measures (defect/not defect) are assumed. For information about the probability of lot acceptance at AQL 6,5%, see Table 13 and Figure 8.

II-8.3 Determination of net weight

Sampling plans by variables with unknown standard deviation (s-method), CAC/GL 50 section 4.3, Table 14.

Comments: The mean value is measured, a quantitative measure, and therefore sampling plans by variables are appropriate.

II-8.4 Determination of Count per Unit Weight or Volume

Attribute sampling plan, CAC/GL 50, Section 4.2, Table 10 using AQL 6,5%.

Comments: Qualitative measures (complying/not complying) are assumed. For information about the probability of lot acceptance at AQL 6,5%, see Table 13 and Figure 8.

II-8.6 Determination of Biotoxins

To be considered by the next session of the CCMAS

STANDARD FOR SMOKED FISH, SMOKE-FLAVOURED FISH AND SMOKED-DRIED FISH (CODEX STAN 311-2013)

8.2 Sensory and Physical Examination

Attribute sampling plan, CAC/GL 50, Section 4.2, Table 10, using AQL 6,5%.

Comments: Qualitative measures (defect/not defect) are assumed. For information about the probability of lot acceptance at AQL 6,5%, see Table 13 and Figure 8.

8.4 Determination of net weight

Sampling plans by variables with unknown standard deviation (s-method), CAC/GL 50 section 4.3, Table 14.

Comments: The mean value is measured, a quantitative measure, and therefore sampling plans by variables are appropriate.

8.7 Determination of Parasites

Attribute sampling plan, CAC/GL 50, Section 4.2, Table 10, using AQL 6,5% and acceptance number=0.

DRAFT STANDARD FOR FRESH AND QUICK FROZEN RAW SCALLOP PRODUCTS

8.2 Sensory and Physical Examination

Attribute sampling plan, CAC/GL 50, Section 4.2, Table 10 using AQL 6,5%.

Comments: Qualitative measures (defect/not defect) are assumed. For information about the probability of lot acceptance at AQL 6,5%, see Table 13 and Figure 8.

8.3 Determination of pieces and count

Attribute sampling plan, CAC/GL 50, Section 4.2, Table 10 using AQL 6,5%.

Comments: Qualitative measures (defect/not defect) are assumed. For information about the probability of lot acceptance at AQL 6,5%, see Table 13 and Figure 8.

8.4 Determination of net weight

Sampling plans by variables with unknown standard deviation (s-method), CAC/GL 50 Section 4.3, Table 14.

Comments: The mean value is measured, and hence it is a quantitative measure and therefore sampling plans by variables are appropriate.

8.5 Determination of Parasites

Attribute sampling plan, CAC/GL 50, Section 4.2, Table 10, using AQL 6,5% and acceptance number=0.

8.6 Determination of the presence of viscera

No proposal (see Agenda Item 2)

Determination of added water

Attribute sampling plan, CAC/GL 50, Section 4.2, Table 10 using AQL 6,5%.

Comments: Qualitative measures (complying/not complying) are assumed. For information about the probability of lot acceptance at AQL 6,5%, see Table 13 and Figure 8.

** Comments in this paper are for information purpose only and not intended to be incorporated into the standards.*