CODEX ALIMENTARIUS COMMISSION



Food and Agriculture Organization of the United Nations



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Agenda Item 2, 3, 4, 5, 7

MAS/37 CRD/14 ORIGINAL LANGUAGE ONLY

## JOINT FAO/WHO FOOD STANDARDS PROGRAMME

## CODEX COMMITTEE ON METHODS OF ANALYSIS SAMPLING

# Thirty-seventh<sup>th</sup> Session Budapest, Hungary, 22 – 26 February 2016

## (comments submitted by India)

Agenda Item 2 - Matters Referred to the Committee by the Codex Alimentarius Commission and Other Subsidiary Bodies (CX/MAS 16/37/2)

**General Comments:** 

COMMITTEE ON FISH AND FISHERY PRODUCTS-

## Sampling plans in standards for fish and fishery products:

Para 11: The text should be read as General Guidance on Sampling (CAC/GL 50-<u>2004</u>) instead of CAC/GL 50-2003.

Rationale: Typo-graphical error.

Para 15: The text should be read as CAC/GL 50-2004 instead of CAC/GL 50-2003.

Rationale: Typo-graphical error.

# COMMITTEE ON NUTRITION AND FOODS FOR SPECIAL DIETARY USES (CCNFSDU37)

# Examination of "ELISA G12" as a potential additional method for inclusion in Standard for Foods for Special Dietary Use for Persons Intolerant to Gluten (CODEX STAN 118-1979):

Para 17: India suggests including ELISA G12 methods for inclusion in CODEX STAN 118-1979.

**Rationale:** The determination of the presence of gluten in foodstuffs is mainly done by immunochemical method called ELISA. There has been literature based on using ELISA G12 to determine gluten content in Food and the results for using ELISA G12 has been comparable to official R5 method (Comparison of R5 and G12 Antibody-based ELISA used for the determination of the Gluten content in official food samples, Rupert Hocheggar et al, Foods 2015, 4, 654-664). Therefore, we may include ELISA G12 as a potential additional method in Codex Stan 118-1979.

#### Review of the Standard for Follow-Up Formula (CODEX STAN 156-1987):

# Essential Composition and Quality Factors (for older infants 6-12 months) (Section 3):

**Para 19:** A conversion factor of 5.71 is the most accurate for protein obtained from soybean sources. Hence, in cases when follow-up formula derives protein solely from soy sources, a factor of 5.71 is also the most appropriate one. Use of any other factors in such cases would grossly miscalculate the protein content in the product. For example, a factor 6.25 would highly overestimate the protein content in the infant formula which has only soy as protein source. Hence, using 6.25 (or similar other factor) for only-soy based product would result in actually much lesser protein in the product than declared/claimed, which would not only be cheating the consumer but also amount to providing sub-nutritional product to infants.

We therefore recommend that for infant formula deriving protein only from soy, a conversion factor of 5.71 should be used.

# Agenda Item 3 - ENDORSEMENT OF METHODS OF ANALYSIS PROVISIONS IN CODEX STANDARDS (CX/MAS 16/37/3)

**Specific Comments:** 

# COMMITTEE ON CONTAMINANTS IN FOODS (CCCF) (APPENDIX I)

Table 1 Subdivision of maize sublots according to lot weight:

Aggregate sample weight (kg) may be included as a separate column.

Rationale: The sequence of sampling goes as Lot, Sub lot, incremental, aggregate and laboratory sample.

#### Table 1 Subdivision of maize sublots according to lot weight:

#### Column 4: Minimum laboratory Sample Weight (kg)

Maize grain is heterogeneous in nature and in order to consider a true representation of the lot there should be an increase in weight of the laboratory sample taken. As per Table 1 the incremental samples for lot size of  $\geq$  1500 tonnes to <50 tonnes is mentioned as 3-100. Further as per Serial No. 3 of Appendix 1the suggested minimum weight is 100grams for lots  $\geq$ 0.5 tonnes. Considering the above, the calculation comes to 10000gm which is <u>10kg</u>.

So ideally the minimum <u>aggregate/laboratory sample weight (kg) should be 10 kg</u> for all lot size of  $\geq$  1500 tonnes to  $\geq$ 50 tonnes and for <50 it should be  $\leq$ 10kg and not 1 kg as suggested in the table. In addition to this, the <u>laboratory samples</u> may be considered by further dividing the aggregate samples (kg) into two for taking decision of lots >3 tonnes.

Accordingly Table 1 and 2 may be modified considering the incremental sample quantity as 100gm mentioned in appendix 1 SI no. 3 and accordingly Aggregate sample weight 9kg) may be included as a separate column.

| Lot weight (t)   | Maximum Weight or<br>minimum number of<br>sub lots | Number of incremental sample | Aggregate sample<br>Weight (kg) |
|------------------|--|------------------------------|---------------------------------|
| ≥ 1500           | 500 tonnes   | 100                          | 10                              |
| > 300 and < 1500 | 3 sublots  | 100                          | 10                              |
| ≥ 100 and ≤ 300  | 100 tonnes   | 100                          | 10                              |
| ≥ 50 and < 100   | 2 sublots  | 100                          | 10                              |
| < 50             | -  | 3-100*                       | ≤10                             |

Table 1. Subdivision of maize sublots according to lot weight

| Table 2. Number of incremental | I samples to be taken de | epending on the weight of the lot |
|--------------------------------|--------------------------|-----------------------------------|
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| Lot weight (t) | Number of incremental sample | Aggregate sample Weight (kg) |
|----------------|------------------------------|------------------------------|
| ≤ 0.05         | 3                            | 1                            |
| > 0.05 - ≤ 0.5 | 5                            | 1                            |
| > 0.5 - ≤ 1    | 10                           | 1                            |
| > 1 - ≤ 3      | 20                           | 2                            |
| > 3 - ≤ 10     | 40                           | 4                            |
| > 10 - ≤ 20    | 60                           | 6                            |
| > 20 - < 50    | 100                          | 10                           |

**Rationale:** To bring more clarity in the tables with respect to aggregate samples consolidating from Incremental samples which provides the representation of the whole lot/sublot.

#### SAMPLING PLAN DESIGN CONSIDERATIONS

#### Material to be sampled

**Para 8:** The sampling frequency (SF) is the number of packages sampled. All weights should be in the same mass units such as kg.

#### The text may be modified as under:

The sampling frequency (SF) is every n<sup>th</sup> package of lot/sub lot from which the incremental samples should be drawn (decimal figures should be rounded to the nearest whole number). All weights should be in the same mass units such as kg.

**Rationale:** The number of packages sampled is on the basis of incremental samples of lot and sampling frequency is the selection pattern or frequency so the definition of sampling frequency should be modified.

# Packaging and Transportation of Samples

Para 15: Each laboratory sample .....additional information likely to be of assistance to the analyst.

# The text may be modified as under:

Each laboratory sample taken for official use shall be sealed at the place of sampling and identified. <u>The</u> <u>laboratory sample shall be sealed and labelled in such a manner that they cannot be opened without</u> <u>damaging the seal.</u> A record must be kept of each sampling, permitting each lot to be identified unambiguously and giving the date and place of sampling together with any additional information likely to be of assistance to the analyst.

Rationale: To ensure that samples are received to ascertain chain of custody and avoid any contamination.

# SAMPLE PREPARATION

Para 18: The laboratory sample...... cleaned to prevent fumonisin cross-contamination.

# The text may be modified as under:

The laboratory sample should be finely ground and mixed thoroughly using a process that approaches as complete homogenisation as possible. Complete homogenisation implies that particle size is extremely small and the variability associated with sample preparation approaches zero. <u>The laboratory must be able to</u> <u>demonstrate that the homogenisation procedure used, achieves complete homogenisation.</u> After grinding, the grinder should be cleaned to prevent fumonisin cross-contamination.

**Rationale:** The sentence may be incorporated so that the labs involved in testing should ensure sample homogeneity during sample preparation.

# COMMITTEE ON SPICES AND CULINARY HERBS (CCSCH) (APPENDIX II)

# METHODS OF ANALYSIS FOR CUMIN

Moisture should be ISO 939:1980 instead of ISO 939: 1980.

Column 5: Extraneous Vegetable Material:

The text should be amended as:

Extraneous Matter instead of Extraneous Vegetable Material .

Rationale: The same has been mentioned in ISO 927:2009 and ASTA 14.1

# METHODS OF ANALYSIS FOR DRIED THYME

Column 5: Extraneous Vegetable Material:

The text should be amended as:

# Extraneous Matter instead of Extraneous Vegetable Material .

**Rationale:** In order to align the same wording with that of reference methods of ISO & ASTA , the word "Extraneous Matter" may be given instead of "Extraneous Vegetable Material".

# Agenda Item 4 - DEVELOPMENT OF PROCEDURES/GUIDELINES FOR DETERMINING EQUIVALENCY TO TYPE I METHODS (CX/MAS 16/37/4)

# Para 27: Questions for discussion

- i) If general procedures for evaluating equivalence are established, where will they reside? In the Codex Procedural Manual or in a Guidance/Information document?
- General procedures for evaluating equivalence should be incorporated in the guidance/ information documents of the Codex, with its citation made in Codex Procedural Manual.
- ii) For methods measuring a composition or characteristic (e.g. moisture content) it would be required that the two methods be equivalent across the entire range of the method. However, for provisions where a maximum limit is established would it be acceptable to establish equivalency around that limit, but not worry about equivalency at some value well above the limit?

# Where a maximum limit is established, <u>yes</u>, it would be acceptable to establish equivalency around that limit.

Rationale: As both the methods would give the concurrent results.

- iii) This paper has focused primarily on quantitative methods, but procedures for qualitative may also be useful. Such procedures would have a very different format/approach, so would they be included in a single document or would separate documents be developed for quantitative and qualitative methods?
- Quantitative and qualitative methods should be included in a single document.

Rationale: Easily accessible and feasible to have both the methods in one single document.

## Agenda Item 5 - CRITERIA APPROACH FOR METHODS WHICH USE A "SUM OF COMPONENTS" (CX/MAS 16/37/5)

## **Specific Comment**

#### Background Para 6:

iii) A number of delegations were concerned that the tentative recommendations have been made on the assumption that all the analyte components included within a sum or components approach are equally weighted in terms of risk and the recommendations do not take into account instances where one (or more) analytes included within such an approach are 'more important' than the others. The issue of how to take into account 'analyte weighting' needs to be discussed and agreed by the eWG/CCMAS.

India is of the view that as on today, the Codex ML of total aflatoxin (B<sub>1</sub>, B<sub>2</sub>, G<sub>1</sub> and G<sub>2</sub>) in peanuts is 15  $\mu$ g/kg and only total of all the four analyte needs to be reported for trade point of view. India would like to suggest that the LOD i.e. 1/5 of ML i.e. the total aflatoxin as 15X1/5 = 3  $\mu$ g/kg and LOQ as 2/5 of ML i.e. 15 X 2/5 = 6  $\mu$ g/kg.

In view of above, India does not agree for the LOD and LOQ of individual analyte of aflatoxin as LOD as 0.75  $\mu$ g/kg and LOQ as 1.50  $\mu$ g/kg. The LOD and LOQ of individual would be considered only when the ML of individual analyte would be adopted by the Codex.

## Agenda Item 7 - REVIEW AND UPDATE OF METHODS IN CODEX STAN 234-1999 (CX/MAS 16/37/7)

General Comment:

Para 24:

# Bullet 4: Nitrogen/ protein or Total protein content or Protein

# The text may be modified as under:

Nitrogen or Total protein content or Protein.

**Rationale:** To bring in more clarity on the point as it is repetitive.