



Food and Agriculture  
Organization of the  
United Nations



World Health  
Organization

**CODEX**  
**ALIMENTARIUS**  
INTERNATIONAL FOOD STANDARDS

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Virtual 12:00-13:00 CEST

 Languages: English

# Codex Committee on Methods of Analysis and Sampling

## **Guidelines on Sampling CXG 50 - 2004: Information Document**

**Webinar summary**

**CCMAS44**

### **Webinar: Guidelines on Sampling CXG 50 - 2004: Information Document**

Sampling plans specify how many samples are taken and how those samples are taken, how those samples are tested and how the results are used to decide whether a lot of product complies with a particular provision. As such, sampling plans are a necessary part of Codex standards in order to ensure harmonization in the framework of Codex.

#### Aim of the webinar

The webinar will present a brief overview of the CXG 50: Information Document; consider one example and show how a sampling plan can be obtained via classical approaches and via the Bayesian approach. The procedures will also be demonstrated using the app.

#### Summary

1. Why are we doing this?
  - Quote from Procedural Manual “it is essential that analytical results be interpreted in the same way if there is to be harmonisation within the framework of Codex”
  - This is the role of sampling plans, as in the Principles for the use of sampling and testing international food trade (CXG83-2013) a sampling plan should define (list)
  - Previous CXG50 did not provide advice on handling of measurement uncertainty or bulk materials
  - Role of CCMAS is to develop guidance on sampling for use by commodity committees and others
2. Basic principles
  - Whenever sampling methods are used there will be risks of making incorrect decisions
  - Acceptance sampling is the scientific approach for lot inspection
  - Decisions on lot acceptance are made based on the quality of the lot (e.g. percentage nonconforming) and allowable risks
  - Measurement uncertainty is allowed for [only] when non-negligible

Codex methods of sampling are designed to ensure that fair and valid sampling procedures are used when food is being tested for compliance with a particular Codex commodity standard.

Valid = Following the principles of acceptance sampling

Fair = having reasonable PR and CR commensurate with the risks and costs of incorrectly (needs work) considering CXG50 will apply mostly to commodity defects and compositional characteristics, not to food safety





3. What we've done
  4. Demo
    - Attributes plans
    - Variables plans with negligible and non-negligible measurement uncertainty
    - Plans for compositional proportions
  5. Bayesian plans (outline)
    - Conformance probability approach
    - Utility function approach
  6. Bulk materials (proposed new work)
    - Key points
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