

ROLE, FUNCTIONING AND PRINCIPAL WORK OF THE CODEX COMMITTEE ON ANALYSIS METHODS AND SAMPLING

Summary of the talk presented by Mrs Laurence LEONETTI (ALF) at CECALAIT's AGM 2005

Codex is a term which can refer to either the "Codex Alimentarius Commission" in charge of the elaboration and adoption of the Codex documents, or to the "Codex Alimentarius", or food code, constituted of 13 volumes.

Created in 1961 by FAO and WHO, the Codex Alimentarius commission is an inter-governmental authority which joins together 182 countries representing 5 continents. The IDF is member of this commission as a technical adviser for the milk and dairy products committee, and as an observer for the other committees. Codex is divided into general subject committees, commodity committees (e.g.: fats and oils, fish and fishery products, or milk and milk products), regional coordinating committees and intergovernmental task forces. Codex elaborates definitions, general principles, general standards, product standards, recommendations, codes of practice or code of hygienic practice, and guidelines, applicable to all foodstuffs. Its purpose is to facilitate world trade, to protect consumer health and to harmonise the national legislations. These documents, which are addressed to the Codex authorities, to the governments and to food professionals are periodically revised and are valid for 10 to 30 years. Their elaboration is long (5 to 8 years) within the work group context .

CODEX COMMITTEE ON ANALYSIS METHODS AND SAMPLING (CCMAS)

In the domain of dairy analysis, the role of the general subjects committee on analysis methods and sampling is to approve and to adopt reference analysis methods proposed by the commodity committee of milk and dairy products.

This committee, presided and vice-presided by Hungary, examines, defines and adopts the methods

proposed by the sectorial committees and also, documents of a general order relating to work applying to all foodstuffs.

Several agents of the DGCCRF, the DGAL, the SGCI and the professional world participate in this committee which meets yearly in Budapest.

The methods to be approved are classified in 4 types (cf. table below). The official analysis methods elaborated by international organisations, the routine and the horizontal methods are studied in priority.

Classification of the methods:

	Definition
Type I	Method defining a value which it is only possible to obtain at the end of the method per se and which is the only one used to establish the accepted value of the measured element (e.g.: total acidity, expressed as lactic acid, in the fermented milks)
Type II	Reference method, when type I methods are not applicable. Chosen among type III methods . Its use is recommended in the case of a dispute and for calibration (e.g.: fat content in cheese by gravimetry)
Type III	Alternative method. Answers to the whole criteria defined by the CCMAS for the control, the inspection or the regulation (ex: vitamin A content in fat mixes by HPLC)
Type IV	Temporary method. Traditional method or of recent application, but for which the required criteria by the CCMAS have not yet been determined e.g.: no interlaboratory study (e.g.: enumeration of micro-organisms in the leaves of the fermented milks)

The documents adopted and the work in process, within the context of this committee, are presented below:

DOCUMENTS ADOPTED BY THE CCMAS

- **The "criteria" approach:** it is inspired by the European Commission decision 2002/657 relating to the performances of the analysis methods and the interpretation of results. Its

principle is to have, for each specification of a Codex standard, performance criteria that the method can respect.

- **The validation by only one laboratory:** In certain specific cases, and when the validated interlaboratory methods are not available, it is possible to validate the method by only one laboratory.

- **Guidelines for food sampling** : this document proposes various sampling plans according to the type of foodstuffs and the health risk. It can be used by each product commodity to select the sampling plans judged to be adapted to its sector.
- **Directives on the uncertainty of measure**: This document, which applies to quantitative analysis, gives an international definition and the expression of the results of the measure of uncertainty. It can be estimated by different procedures, particularly, those described by the ISO (Guide for the expression of the measure of uncertainty) and EURACHEM (Guide EURACHEM / CITAC).

WORK IN PROCESS AND RESULTS OF THE 26th SESSION OF THE COMMITTEE (4-8th April 2005)

As the elaboration process of the document is long, the different work (at different stages) described below, is in process:

Use of the analytical results:

A document relating to the use of the analytical results was adopted and will be integrated, after its adoption by the general principle committee and the Codex commission, to the "Manual of the Codex procedures". As this type of document does not exist yet, it would permit interpretation of the analytical results at the Codex level and at the level of the various systems according to the countries. It recommends the products committee to integrate, for each specification mentioned in a Codex standard, the information concerning the sampling plans, the measure of uncertainty, the recuperation and the significant figures.

Settlement of disputes:

France must write a directive for the settlement of disputes concerning analytical methodology or laboratory performance. Its objective is to establish a

settlement procedure of the dispute in the case of a disagreement on an analytical result between an importing and an exporting laboratory. It recommends settlement without new analyses or new sampling according to a 3 stage procedure .

Analytical terminology:

A third task on analytical terminology is in process. The objective is to revise the definitions for the Codex to ensure coherence with the analytical terminology used by other international authorities (standardisation organisations such as ISO). The French delegation leans on the terminology published by the AFNOR. 64 terms are under revision. The definitions, which can be quickly harmonised, will be amended and enclosed in the "Manual of procedures of Codex". These, which are in the process of revision, within the context of international organisations, will be integrated once they have been revised.

Evaluation methods:

The text concerning the directive for the evaluation of acceptable methods for Codex has progressed to stage 6. It supplies a framework for the countries and the Codex committees to evaluate the acceptability of a method. To be accepted, criteria such as accuracy, applicability, detection and determination limits, linearity, precision, intra-laboratory repeatability, inter-laboratory reproducibility, recuperation, selectivity and sensitivity, must be appreciated. For that, a definition of each term and an estimation procedure of these criteria are given.

As all this work is important for the food industry and for consumers, it is capital that the dairy interprofession contributes to them at a national level (via the government) and an international level (via the IDF and the IDF France – ALF). It is necessary to be implicated in this work because the orientations taken at an international level will have an impact at European and national levels.