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NEW CODEX STANDARDS RELEVANT TO DAIRY INDUSTRY

This bulletin includes technical and latest development on products, systems, techniques etc. reported in journals, companies' leaflets and books and based on studies and experience. The technical information on different issues is on different areas of plant operation. It is hoped that the information contained herein will be useful to readers.

The theme of information in this issue is **New Codex Standards Relevant to Dairy Industry**. It may be understood that the information given here is by no means complete.

In this issue:

- *Introduction*
- *New Standards Adopted*
- *Standards Revoked*
- *Standards Advanced or Deferred for Further Consideration*

1. INTRODUCTION

The Codex standards, including code of practices and guidelines, are recommended as reference point in international trade by the World Trade Organization (WTO). The work on development of Codex standards is carried out by various Committees of the Codex Alimentarius Commission (CAC) and finally approved by the Commission in its sessions.

The Codex standards are developed through an 8-Step procedure, as described in Technews Issue 22 (September-October 1999). The Codex Committees may submit to the Commission draft standards for final adoption at Step 8 or 5/8, which means that Steps 6 & 7 are recommended to be omitted; or at Step 5 Accelerated where there is urgency, in which case the final endorsement is made at Step 5 itself. The draft standards are also submitted to the Commission at Step 5, at which the Commission may adopt it provisionally and the draft standards would then be further considered by the respective Committees.

The important decisions of the 26th Session of the Commission (Rome, 30 June – 7 July 2003) were reported in Technews Issue 44 (May-July 2003).

The 27th Session of the Commission was held in Geneva from 28 June – 3 July 2004. The Commission considered, and took several decisions, on proposals submitted by different Codex committees. The important decisions of the Commission, relevant to the dairy sector, are presented in this issue.

2. NEW STANDARDS ADOPTED

The Codex Alimentarius Commission endorsed several standards and related texts at Step 8, 5/8 or 5 Accelerated of the Codex step procedure, as proposed by different Codex Committees. These standards have now become applicable. Such standards and related texts important for dairy industry are listed below along with their salient features:

a) Code of Hygienic Practice for Milk and Milk Products (ALINORM 04/27/13; Appendix II)

The Code was proposed by the Codex Committee on Food Hygiene. The objective of this Code is to apply the recommendations of the “Recommended Code of Practice: General Principles of Food Hygiene (RCP-1-1969, Rev.3 1997, Amend.1-1999)” to the particular case of milk and milk products. This Code is flexible enough to be applicable to the smallholder dairying system prevalent in our country: use of milking machine is not necessary, chilling of milk at village level is not mandatory, no time limit prescribed for collection of milk but it should be as soon as possible without its spoilage, use of milking parlours and feeding stalls is optional etc.

The Code includes a reference to the use of lactoperoxidase system in preservation of raw milk. The Commission has requested for an expert review by a Joint FAO/WHO Expert Consultation on the potential risks and benefits of the system Depending upon the outcome the Codex Committee on Food Hygiene will reconsider its earlier decision on non-suitability of milk and milk products, that have employed LP system, for use in international trade.

b) Code of Practice on Good Animal Feeding (ALINORM 03/38A; Appendix II and 04/27/38; Appendix II)

The Code, proposed by the Codex Task Force on Animal Feeding, has been developed to help ensure the safety of food for human consumption through adherence to good animal feeding practice at the farm level and good manufacturing practices (GMPs) during the procurement, handling, storage, processing, and distribution of animal feed and feed ingredients for food producing animals. It distinctly mentions that animal products, which could be a source of Bovine Spongiform Encephalopathy (BSE), should not be used for feeding directly to, or for feed manufacturing for, ruminants. It also includes provision for traceability.

c) Maximum Residue Limits (MRLs) (ALINORM 04/27/24; Appendix II and Appendix III)

The MRLs, proposed by the CCPR, that have been endorsed are given below:

Pesticide	Type of milk	MRL (ppm)
Carbaryl	Milks	0.05
Diphenylamine	Cattle milk	0.0004 (*) F
Piperonyl butoxide	Cattle milk	0.2 F
	Milk, excl. cattle milk	0.05 F
Fenamiphos	Milks	0.005 (*)
Methomyl	Milks	0.02 (*)
Propargite	Milks	0.1 (*) F
Oxamyl	Milks	0.02 (*)
Diflubenzuron	Milks	0.02 (*) F
Deltamethrin	Milks	0.05
Flutolanil	Milks	0.05 (*)
Imidacloprid	Milks	0.02 (*)
Lindane	Milks	0.01 (*)
Tebufenozide	Milks	0.01 (*)

(*) = At or about the limit of determination

F = Residue is fat soluble for milk

d) Code of Practice for the Prevention and Reduction of Lead Contamination in Foods (ALINORM 04/27/12; Appendix XVI)

Lead is a toxic heavy metal whose chronic exposure at relatively low levels can result in damage to the kidneys and liver, and to the reproductive, cardiovascular, immune, hematopoietic, nervous, and gastrointestinal systems. Short-term exposure to high amounts of lead can cause gastrointestinal distress, anemia, encephalopathy, and even death. The most critical effect of low-level lead exposure is reduced cognitive and intellectual development in children. The Code elaborated by the CCFAC intends to provide control measures and actions to be taken in order to prevent and reduce lead contamination in foods from farm till the consumer.

e) Amendment to the Guidelines for Production, Processing and Labelling of Organically Produced Foods: Revised Annex II Permitted Substances (ALINORM 04/27/22, Appendix IV)

The list of permitted substances for use during organic production of foods has been revised and includes substances for use in soil fertilizing and conditioning and substances for plant pest and disease control.

f) Guidelines on Use of Health and Nutrition Claims (ALINORM 04/27/22; Appendix III)

These guidelines developed by the Codex Committee on Food Labelling relate to the use of nutrition and health claims

in food labelling and, where required by the authorities having jurisdiction, in advertising. The guidelines apply to all foods for which health and nutrition claims are made, but these claims are not permitted for foods for infants and young children except where specially provided for in relevant Codex standards or national legislation.

g) Principles and Guidelines for the Exchange of Information in Food Safety Emergency Situations (ALINORM 04/27/30; Appendix II)

This document is a revision of the earlier Codex Guidelines for the Exchange of Information in Food Control Emergency Situations. Revised by the Codex Committee on Food Import and Export Certification Systems (CCFICS), the document provides guidance for the use by national governments and regional economic integration organizations for the exchange of information in food safety emergency situations.

3. STANDARDS REVOKED

The Codex Alimentarius Commission (CAC) revoked, as proposed by the different Codex Committees, some standards. The revoked standards are now not applicable. The important standards for dairy industry that have been revoked in this Session are listed below:

a) Recommended International Code of Hygienic Practice for Dried Milk: CAC/RCP 31-1983, (ALINORM 04/27/13, paragraph 53)

The Dried Milk Code has been revoked since the relevant

provisions of this Code have been incorporated in the Code of Hygienic Practice for Milk and Milk Products (ALINORM 04/27/13; Appendix II) adopted in this Session.

b) Codex Maximum Residue Limits for Pesticide Residue (ALINORM 04/27/24; Appendix V)

The MRLs revoked are given below:

Pesticide residue	Type of milk	MRL (ppm)
Carbaryl	Milk products	0.1 T
	Milks	0.1 T
Methomyl	Milks	0.02
Propargite	Milks	0.1
Diflubenzuron	Milks	0.05
Deltamethrin	Milks	0.02
Bendiocarb	Milks	0.05
Tebufenozide	Cattle milk	0.01
T = Temporary MRL		

4. STANDARDS ADVANCED OR DEFERRED FOR FURTHER CONSIDERATION

The Commission endorsed several standards and related texts at Step 5 as proposed by the different Codex Committees, which will now be circulated for comments of the member countries at Step 6 and for further consideration at forthcoming sessions of the respective Committees. The consideration of some standards submitted at Step 8 was deferred until its next session. Standards and related texts important for dairy industry, which fall in the above categories are listed below alongwith their salient features.

a) Risk Analysis Principles Applied by the Codex Committee on Food Additives and Contaminants (ALINORM 04/27/12; Appendix II)

This document was submitted by the Codex Committee on Food Additives and Contaminants (CCFAC) at Step 8. The Commission deferred its consideration on this until its next session pending its endorsement by the Codex Committee on General Principles.

This document of the Codex Committee on Food Additives and Contaminants (CCFAC) addresses the respective applications of risk analysis principles by the CCFAC and the Joint FAO/WHO Expert Committee on Food Additives (JECFA). The document provides the conditions under which the CCFAC could endorse the maximum use level for food additives and the Maximum Levels (MLs) for contaminants.

b) Codex Committee on Food Additives and Contaminants Policy for Exposure Assessment on Contaminants and Toxins in Foods or Food Crops (ALINORM 04/27/12; Appendix XIV)

This document was submitted by the Codex Committee on Food Additives and Contaminants (CCFAC) at Step 8. The Commission deferred its consideration on this until its next session pending its endorsement by the Codex Committee on General Principles.

Exposure assessment is one of the four components of risk assessment within the risk analysis framework adopted by Codex (Codex Procedural Manual, 13th Edition) as the basis for all standard-setting processes. The document outlines

steps in contaminant data selection and analysis undertaken by JECFA when requested by CCFAC to conduct a dietary exposure assessment.

- c) Proposed Draft Standard for a Blend of Evaporated Skimmed Milk and Vegetable Fat (ALINORM 04/27/11; Appendix III)**
- d) Proposed Draft Standard for a Blend of Skimmed Milk and Vegetable Fat in Powdered Form (ALINORM 04/27/11; Appendix IV)**
- e) Proposed Draft Standard for a Blend of Sweetened Condensed Milk and Vegetable Fat (ALINORM 04/27/11; Appendix V)**

The above three Proposed Draft Standards were advanced to Step 6 by the Commission. These standards apply to a blend of evaporated skimmed milk or skimmed milk or sweetened condensed skimmed milk, as the case may be, with vegetable fat intended for direct consumption in conformity with the description provided in these standards.

- f) Proposed Draft Revised Standard for Cheddar (ALINORM 04/27/11; Appendix VI)**
- g) Proposed Draft Revised Standard for Danbo (ALINORM 04/27/11; Appendix VII)**
- h) Proposed Draft Revised Standard for Whey Cheeses (ALINORM 04/27/11; Appendix XXII)**

The Commission advanced these Proposed Draft Revised Standards to Step 6. These Draft Revised Standards propose some revisions in the current standards of these products.

**i) Proposed Draft Revised Standard for Infant Formula
(ALINORM 04/27/26; Appendix V)**

This is a revision of an existing standard. The approach taken in the revision is to develop the standard in two Sections: Section 'A' covering formula for healthy infants and Section 'B' on infant formula for special medical purposes. The Commission adopted Section A of the draft revised standard at Step 5 as proposed by the Codex Committee on Foods for Special Dietary Uses. Section B of the proposed draft revised standard is under elaboration at Step 3.

**j) Proposed Draft Maximum Residue Limits for
Pesticides (ALINORM 04/27/24; Appendix IV)**

The Commission adopted the Proposed Draft MRLs of the following pesticides at Step 5 and advanced them to Step 6 for further consideration:

Pesticide	Type of milk	MRL (ppm)
Pirimiphos-methyl	Milks	0.01
Acephate	Milks	0.02
Methamidophos	Milks	0.02
Carbosulfan	Milks	0.03 (*)
Cyprodinil	Milks	0.0004 (*)
Famoxadone	Milks	0.03 F
Methoxyfenozide	Milks	0.01

(*) = At or about the limit of determination
F = Residue is fat soluble for milk

k) Draft Code of Practice for the Prevention and Reduction of Inorganic Tin Contamination in Canned Foods (ALINORM 04/27/12; Appendix XXI).

The Commission advanced the Proposed Draft Code to Step 6. Tin is used to protect the steel base from corrosion both externally and internally when in contact with foods. The inorganic tin present in canned foods due to dissolution of the tin coating may cause gastric irritation in some individuals from exposure to high levels. The document provides the measures for the prevention and reduction of inorganic tin contamination in canned foods.

l) Draft Revised Guideline Levels for Radionuclides in Foods for Use in International Trade (ALINORM 04/27/12; Appendix XXII)

The Commission adopted the proposed draft guideline levels at Step 5 and advanced them to Step 6. The Guideline Levels apply to radionuclides in foods destined for human consumption and traded internationally, which are inherently contained in the food or have been incorporated into the food from any source.

The next (28th) Session of the Commission is tentatively scheduled for 4-9 July 2005 in Rome.

The complete Report of the 27th Session of the Codex Alimentarius Commission can be accessed at Codex website <http://www.codexalimentarius.net>.

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Please send your letters to :

Dr. N.N. Varshney
National Dairy Development Board
PB No.40
Anand 388001
Gujarat

Fax No. (02692) 260157
Email : nnv@nddb.coop