



# *Technews*

**National Dairy Development Board**

**For Efficient Dairy Plant Operation**

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## **CODEX STANDARDS RELEVANT TO DAIRY INDUSTRY**

This bulletin includes technical information based on latest developments on products, systems, techniques etc. reported in journals, companies' leaflets and books and based on studies and experience. The technical information in 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 **Codex Standards Relevant to Dairy Industry**. It may be understood that the information given here is by no means complete.

### *In this issue:*

- **Introduction**
- **Relevant Standards/Guidelines/Codes**
- **Hygiene Requirements**
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**Very Happy New Year to all Readers**

## 1. INTRODUCTION

The international food standards/guidelines/codes formulated by the Codex Alimentarius Commission (CAC) are, as accepted by the World Trade Organization (WTO), the reference points for the global trade of food commodities. The national food standards are also largely being harmonized with those of Codex and the food industry would be required to comply with those standards/guidelines/codes even for foods produced for domestic consumption.

On several aspects, Codex standards are higher than the current national standards. In some areas, our present dairy operations do not fully comply with the Codex guidelines/codes. The dairy industry needs to continue to take earnest actions in the direction of ensuring that their operations comply with Codex guidelines/codes and their products meet Codex standards.

There is a growing awareness in the dairy industry about Codex standards/guidelines/codes relevant to dairy industry. The *Technews* issue 33 (July–August 2001) provided information on them as approved by the CAC till the year 2001. The information on development on standards relevant to dairy industry was provided in the subsequent issues of *Technews* (issues 44, May-July 2003; 51, July-August 2004; 57, July-August 2005; 63, July-August 2006; and 69, July-August 2007). This issue of *Technews* provides information on Codex standards relevant to dairy industry as applicable today. Codex has standards on dairy products, additives, contaminants and nutrition; guidelines and codes of practices for different operations and requirements. A list of all the relevant Codex standards/guidelines and codes is provided with website address from where their full texts can be obtained.

## 2. RELEVANT STANDARDS / GUIDELINES / CODES

The list of all the Codex standards/guidelines/codes relevant to dairy industry is provided in the Annex. Full texts of these documents can be downloaded from the website: [http://www.codexalimentarius.net/web/standard\\_list.do?lang=en](http://www.codexalimentarius.net/web/standard_list.do?lang=en). In the table in the Annex, the information is provided area-wise.

The product standards include details on raw-materials, ingredients, composition, food additives, contaminants, hygienic requirements, labelling requirements, and methods of sampling and analysis.

## 3. HYGIENE REQUIREMENT

A high importance has been laid on implementing good hygienic practices in every stage of food chain to control microbiological contamination.

The '*Recommended International Code of Practice: General Principles of Food Hygiene*' is an important document which provides guidelines for good hygienic practices throughout the food chain, including primary production. The document recommends the application of the hazard analysis and critical control point (HACCP) system in the entire food chain, wherever applicable, and includes its details in an annex.

Specific '*Code of Hygienic Practice for Milk and Milk Products*' has also been developed by the Codex. The objective of this Code is to apply the recommendations of the '*Recommended International Code of Practice: General Principles of Food Hygiene*' to the particular case of milk and milk products. The Code is flexible enough to be applicable to the smallholder dairying system prevalent in our country.

#### 4. CHEMICAL CONTAMINANTS

The main emphasis of Codex standards is ensuring food safety. Therefore, Codex has set maximum residue limits (MRLs) and maximum limits (MLs), as appropriate, for such chemical contaminants that may cause health risk. These include pesticides and veterinary drugs residues, toxic metals and mycotoxins. The Codex also provides Guideline Levels (GLs) for other chemical contaminants, namely vinyl chloride monomer and acrylonitrile, and radionuclides.

The tables below provide MRLs, MLs or GLs, as appropriate, established by the Codex and under the Prevention of Food Adulteration Rules, 1955 (PFA) for these contaminants. Blank cells indicate that a limit/level has not been specified. Some relevant information on units used to express the quantity of these contaminants is provided below:

- Milligram/Kilogram (mg/kg)= Microgram/Gram ( $\mu\text{g/g}$ ) = Parts per million (ppm)
- Microgram/Kilogram ( $\mu\text{g/kg}$ ) = Nanogram/Gram (ng/g) = Parts per billion (ppb)
- 1 Milligram =  $10^{-3}$  Gram
- 1 Microgram =  $10^{-6}$  Gram
- 1 Nanogram =  $10^{-9}$  Gram

**Table 1: Maximum residue limits (MRLs) of pesticides in milk (unless otherwise mentioned) set by Codex and PFA**

S. No.	Pesticide	MRL in milk mg/kg, (mg/kg=ppm)			
		Codex		PFA	
		Limit	Remark	Limit	Remark
1.	2, 4- D	0.01		0.05	MMP
2.	Abamectin	0.005, Cattle & goat milks			
3.	Acephate	0.02			
4.	Aldicarb	0.01	*		

S. No.	Pesticide	MRL in milk mg/kg, (mg/kg=ppm)			
		Codex		PFA	
		Limit	Remark	Limit	Remark
5.	Aldrin and dieldrin	0.006	F	0.15	Fat Basis, MMP, applies to aldrin and dieldrin singly or in combination, expressed as dieldrin
6.	Amitraz	0.01	V, *		
7.	Bentazone	0.05	*		
8.	Bifenazate	0.01, Milks	*		
		0.05, Milk fats			
9.	Bifenthrin	0.05, Cattle milk	*		
10.	Bitertanol	0.05	*		
11.	Carbaryl	0.05			
12.	Carbendazim	0.05	*	0.10	Fat Basis, MMP
13.	Carbofuran	0.05	*	0.05	Fat Basis, MMP, Sum of carbofuran and 3-hydroxy carbofuran expressed as carbofuran
14.	Carbosulfan	0.03	*		
15.	Chlordane	0.002	F	0.05	Fat Basis, MMP, Cis- and trans-chlordane
16.	Chlormeqaut	0.5, Cattle, goat & sheep milks			
17.	Chlorpropham	0.0005, Cattle milk	F, *		
18.	Chlorpyrifos	0.02, Cattle, goat & sheep milks		0.01	Fat Basis, MMP
19.	Chlorpyrifos-methyl	0.01	*		
20.	Clethodim	0.05	*		
21.	Clofentezine	0.01, Cattle milk	*		
22.	Cyfluthrin and beta-cyfluthrin	0.01	F, V, Used also as veterinary drug		
23.	Cyhexatin	0.05	V, *, MMP		

S. No.	Pesticide	MRL in milk mg/kg, (mg/kg=ppm)			
		Codex		PFA	
		Limit	Remark	Limit	Remark
24.	Cypermethrin (including alpha – cypermethrin)	0.05	F, V	0.01	Fat Basis, MMP, Sum of isomers
25.	Cyprodinil	0.0004	*		
26.	Cyromazine	0.01	V, *		
27.	DDT	0.02	F	1.25	Fat Basis, MMP, Applies to DDT, DDD and DDE, singly or in combination
28.	Deltamethrin	0.05	F		
29.	Diazinon	0.02	F, V		
30.	Dichlorvos	0.02	*		
31.	Dicofol	0.10	F		
32.	Diflubenzuron	0.02	F, *		
33.	Dimethenamid – P	0.01	*		
34.	Dimethoate	0.05, Cattle, goat & sheep milks	*		
35.	Dimetipin	0.01	*		
36.	Diphenylamine	0.0004, Cattle milk	F, *		
37.	Diquat	0.01	*		
38.	Disulfoton	0.01, Cattle, goat & sheep milks			
39.	Dithiocarbamate	0.05	*		
40.	Endosulfan	0.01, Milks			
		0.1, Milk fats			
41.	Ethephon	0.05, Cattle, goat & sheep milks	*		
42.	Ethoprophos	0.01	*		
43.	Famoxadone	0.03	F		
44.	Fenamiphos	0.005	*		
45.	Fenbuconazole	0.05, Cattle milk	*		
46.	Fenbutatin oxide	0.05	*		
47.	Fenhexamid	0.01	F, *		
48.	Fenitrothion	0.002	*	0.05	Fat Basis, MMP
49.	Fenpropathrin	0.10, Cattle milk	F		
50.	Fenpropimorph	0.01			

S. No.	Pesticide	MRL in milk mg/kg, (mg/kg=ppm)			
		Codex		PFA	
		Limit	Remark	Limit	Remark
51.	Fenpyroximate	0.005, Cattle milk	F, *		
52.	Fenvalerate	0.10	F	0.01	Fat Basis, MMP
53.	Fipronil	0.02, Cattle milk			
54.	Fludioxonil	0.01			
55.	Flumethrin	0.05, Cattle milk	F, V		
56.	Flusilazole	0.01, Cattle milk	*		
57.	Flutolanil	0.05	*		
58.	Glufosinate ammonium	0.02	*		
59.	Glyphosate	0.05	*		
60.	Heptachlor	0.006	F	0.15	Fat Basis, MMP, Applies to heptachlor and its epoxide expressed as heptachlor
61.	Hexachlorocyclohexane (gamma i.e. lindane)	0.01	*	0.01	
				0.20	Fat Basis, MP
62.	Imidacloprid	0.02	*		
63.	Indoxacarb	0.1, Milks			
		2.0, Milk fats			
64.	Kresoxim-methyl	0.01	*		
65.	Methamidophos	0.02			
66.	Methidathion	0.001			
67.	Methomyl	0.02	*		
68.	Methoprene	0.10	F		
69.	Methoxyfenozide	0.01			
70.	Myclobutanil	0.01, Cattle milk	*		
71.	Novaluron	0.40, Milks			
		7.0, Milk fat			
72.	Oxamyl	0.02	*		
73.	Oxydemeton-methyl	0.01	*		
74.	Paraquat	0.005	*	0.01	Paraquat Dichloride expressed as paraquat cations

S. No.	Pesticide	MRL in milk mg/kg, (mg/kg=ppm)			
		Codex		PFA	
		Limit	Remark	Limit	Remark
75.	Penconazole	0.01, Cattle milk	*		
76.	Permethrin	0.10	F		
77.	Phorate	0.01	*	0.05	Fat Basis, MMP, Sum of phorate, its oxygen analogue and their sulphoxide and sulphones expressed as phorate
78.	Piperonyl butoxide	0.20, Cattle milk	F		
		0.05, Milk excl. cattle milk	F		
79.	Pirimicarb	0.01	*		
80.	Pirimiphos-methyl	0.01		0.05	Fat Basis, MMP
81.	Prochloraz	0.05	*		
82.	Profenofos	0.01	*		
83.	Propamocarb	0.01	*		
84.	Propargite	0.10	F, *		
85.	Propiconazole	0.01	*		
86.	Pyraclostrobin	0.03			
87.	Quinoxifen	0.01, Milks			
		0.2, Milk fats			
88.	Spinosad	1, Cattle milk	V		
		5, Cattle milk fat			
89.	Tebuconazole	0.01, Cattle milk	*		
90.	Tebufozide	0.01	*		
91.	Terbufos	0.01	*		
92.	Thiabendazole	0.2, Cattle milk. Also used as veterinary drug			
93.	Thiacloprid	0.05			
94.	Triadimefon	0.05	*		
95.	Triadimenol	0.01	*		
96.	Triazophos	0.01, Cattle milk	*		
97.	Trifloxystrobin	0.02	*		
98.	Vinclozolin	0.05, Cattle milk	*		



S. No.	Pesticide	MRL in milk mg/kg, (mg/kg=ppm)			
		Codex		PFA	
		Limit	Remark	Limit	Remark
Additional MRLs in PFA					
1.	Benomyl			0.10	Fat Basis, MMP
2.	Chlorfenvinphos			0.20	Fat Basis, MMP, Applies to alpha and beta isomers
3.	Edifenfos			0.01	Fat Basis, MMP
4.	Ethion			0.50	Fat Basis, MMP, Applies to ethion and its oxygen analogue expressed as ethion
5.	Fenthion			0.05	Fat Basis, MMP, Sum of fenthion, its oxygen analogue and their sulphoxides, and sulphones, expressed as fenthion
6.	Hexachlorocyclohexane (HCH) (alpha)			0.05	
7.	Hexachlorocyclohexane (beta)			0.02	
8.	Hexachlorocyclohexane (delta)			0.02	
9.	Monocrotophos			0.02	MMP
10.	Phenthoate			0.01	Fat Basis, MMP
11.	Trichlorfon			0.05	
<p>* = at or about the limit of determination F = residue is fat soluble<sup>a</sup> MMP = for milk and milk products MP = for milk products V = MRL accommodates external animal treatment</p> <p>(<sup>a</sup> For a milk product with a fat content less than 2%, the MRLs applied should be half those specifies in milk. The MRL for the milk products with a fat content of 2% or more should be 25 times the maximum residue limit specified for milk, expressed on a fat basis.)</p>					

**Table 2: Maximum residue limits (MRLs) of veterinary drugs in milk set by Codex**

S. No.	Veterinary Drug	MRL in milk, µg/kg (µg/kg = ppb)	
		Codex	PFA
1.	Albendazole	100	
2.	Benzylpenicillin	4, Cattle milk	
3.	Ceftiofur	100, Cattle milk	
4.	Chlortetracycline	100, Cattle and sheep milk	
5.	Clenbuterol	0.05, Cattle milk	
6.	Cyfluthrin	40, Cattle milk. Used also as pesticide	
7.	Cyhalothrin	30, Cattle milk. Used also as pesticide	
8.	Cypermethrin & alpha-cypermethrin	100, Cattle milk	
9.	Deltamethrin	30, Used also as pesticide	
10.	Dihydrostreptomycin	200, Cattle and sheep milk	
11.	Diminazene	150, Cattle milk	
12.	Doramectin	15, Cattle milk	
13.	Eprinomectin	20, Cattle milk	
14.	Febantel	100, Cattle and sheep milk	
15.	Gentamicin	200, Cattle milk	
16.	Imidocarb	50, Cattle milk	
17.	Isometamidium	100, Cattle milk	
18.	Ivermectin	10, Cattle milk	
19.	Lincomycin	150, Cattle milk	
20.	Neomycin	1500, Cattle milk	
21.	Pirlimycin	200*, Cattle milk	
22.	Spectinomycin	200, Cattle milk	
23.	Spiramycin	200, Cattle milk	
24.	Sulfadimidine	25, Cattle milk	
25.	Thiabendazole	100, Cattle and goat milks. Covers residues from feed containing residues resulted from agricultural use. Used also as pesticide	
26.	Tilmicosin	50, Sheep milk. Temporary	
27.	Trichlorfon	50, Cattle milk. Used also as pesticide	Specified as pesticide

S. No.	Veterinary Drug	MRL in milk, µg/kg (µg/kg = ppb)	
		Codex	PFA
Veterinary Drugs with synonyms			
1.	Fenbendazole	Included in Febantel	
2.	Metrifonate	Included in Trichlorfon	
3.	Oxfendazole	Included in Febantel	
4.	Oxytetracycline	Included in Chlortetracycline	
5.	Procaine benzylpenicillin	Included in Benzylpenicillin	
6.	Streptomycin	Included in Dihydrostreptomycin	
7.	Tetracycline	Included in Chlortetracycline	
* JECFA evaluated the effect of pirlimycin on starter cultures and for this reason recommended an MRL of 100 µg/kg. Codex members may adopt national/ regional MRLs in order to address this technical aspect for trade of fresh liquid milk intended for processing using starter culture.			

**Table 3: Maximum limits for toxic metals in milk & milk products set by Codex and PFA**

Metal	ML, mg/kg (mg/kg=ppm)			
	Codex		PFA	
	Limit	Remark	Limit	Remark
Arsenic			0.1	For milks
			1.1	For milk Products
			0.05	For infant milk substitutes and infant foods
			0.5	For ice cream, iced lollies and similar frozen confections
Cadmium			1.5	For other foods (hence applies to milk and milk products)
			0.1	For infant milk substitutes and infant foods

Metal	ML, mg/kg (mg/kg=ppm)			
	Codex		PFA	
	Limit	Remark	Limit	Remark
Copper			30	For foods not specified (hence applies to milk and milk products)
			15 but not less than 2.8	For infant milk substitutes and infant foods
Lead	0.02	Concentration factor applies for partially and wholly dehydrated milks  Applies also to secondary milk products* as consumed and ready to use infant formulae	2.5	For foods not specified (hence applies to milk and milk products)
			0.2	For infant milk substitutes and infant foods
			1.0	For ice cream, iced lollies and similar frozen confections
Mercury			1.0	For other foods (hence applies to milk and milk products)
Methyl-mercury (calculated as element)			0.25	For all foods (hence applies to milk and milk products)
Tin	150	Canned milk beverages	250	For foods not specified (hence applies to milk and milk products)
	250	Canned milk products other than canned milk beverages	5.0	For infant milk substitutes and infant foods
Zinc			50	For foods not specified (hence applies to milk and milk products)
			50 but not less than 25	For infant milk substitutes and infant foods
* Product which have undergone simple processing such as removal or part removal of certain ingredients e.g. water, milk fat etc.				

**Table 4: Maximum levels (MLs) for mycotoxins in milk and milk products set by Codex and PFA**

Contaminant	MRL in milk, µg/kg (µg/kg = ppb)	
	Codex	PFA
Aflatoxin	0.5 (Aflatoxin M <sub>1</sub> )	30, Applicable to milk and milk products
		0.5 (Aflatoxin M <sub>1</sub> ), likely to be applicable from 1 March 2008

**Table 5: Guideline levels for other contaminants in milk and milk products set by Codex**

Contaminant	mg/kg (mg/kg=ppm)
	Codex
Vinyl chloride monomer	0.01
Acrylonitrile	0.02

**Table 6: Guideline levels for radionuclides in infant foods & other foods (including milk and milk products) set by Codex**

Contaminant	Becquerel/kg
	Codex
241-Am, 238-Pu, 239-Pu, 240-Pu	10*
	1 <sup>#</sup>
90-Sr, 106-Ru, 129-I, 131-I, 235-U	100
134-Cs, 137-Cs, 35-S (represents the value of organically bound sulphur), 60-Co, 89-Sr, 103-Ru, 144-Ce, 192-Ir	1000
3-H (represents the value of organically bound tritium),	10000*
14-C, 99-Tc	1000 <sup>#</sup>

\* Guideline levels for foods other than infant foods (after reconstitution, not for dried or concentrated foods) which have been contaminated following a nuclear or radiological emergency including accidents and malevolent actions.

<sup>#</sup> Guideline levels for infant foods when intended for use as such.

## 5. ANNEX : IMPORTANT CODEX STANDARDS

### A. Product Standards

S. No.	Details				Revision		Amendment	
	Reference	No.	Year	Title	No.	Year	No.	Year
<b>Milk Products</b>								
1.	CODEX STAN A	1	1971	Butter	1	1999	2	2006
2.	CODEX STAN A	2	1973	Milkfat Products	1	1999	2	2006
3.	CODEX STAN A	3	1971	Evaporated Milks	1	1999		
4.	CODEX STAN A	4	1971	Sweetened Condensed Milks	1	1999		
5.	CODEX STAN A	6	1978	Cheese	1	1999	2	2006
6.	CODEX STAN A	7	1971	Whey Cheeses	1	1999	2	2006
7.	CODEX STAN A	8a	1978	Named Variety Process(ed) Cheese and Spreadable Process(ed) Cheese				
8.	CODEX STAN A	8b	1978	Process(ed) Cheese and Spreadable Process(ed) Cheese				
9.	CODEX STAN A	8c	1978	Process(ed) Cheese Preparations				
10.	CODEX STAN A	9	1976	Cream and Prepared Creams	1	2003		
11.	CODEX STAN A	15	1995	Whey Powders	1	2003	2	2006

S. No.	Details				Revision		Amendment	
	Reference	No.	Year	Title	No.	Year	No.	Year
12.	CODEX STAN A	18	1995	Edible Casein Products	1	2001		
13.	CODEX STAN	207	1999	Milk Powders and Cream Powders				
14.	CODEX STAN	208	1999	Cheeses in Brine (Group Standard)			1	2001
15.	CODEX STAN	221	2001	Unripened Cheese including Fresh Cheese				
16.	CODEX STAN	243	2003	Fermented Milk				
17.	CODEX STAN	250	2006	Blend of Evaporated Skimmed Milk and Vegetable Fat				
18.	CODEX STAN	251	2006	Blend of Skimmed Milk and Vegetable Fat in Powdered Form				
19.	CODEX STAN	252	2006	Blend of Sweetened Condensed Skimmed Milk and Vegetable Fat				
20.	CODEX STAN	253	2006	Dairy Fat Spreads				
21.	CODEX STAN	256	2007	Fat Spreads and Blended Spreads				
22.	CODEX STAN	262	2007	Mozzarella				
23.	CODEX STAN	263	1966	Cheddar	1	2007		
24.	CODEX STAN	264		Danbo	1	2007		
25.	CODEX STAN	265	1966	Edam	1	2007		
26.	CODEX STAN	266	1966	Gouda	1	2007		

S. No.	Details				Revision		Amendment	
	Reference	No.	Year	Title	No.	Year	No.	Year
27.	CODEX STAN	267	1966	Havarti	1	2007		
28.	CODEX STAN	268	1966	Samsøe	1	2007		
29.	CODEX STAN	269	1967	Emmentaler	1	2007		
30.	CODEX STAN	270	1968	Tilsiter	1	2007		
31.	CODEX STAN	271	1968	Saint Paulin	1	2007		
32.	CODEX STAN	272	1968	Provolone	1	2007		
33.	CODEX STAN	273	1968	Cottage Cheese incl. Creamed Cottage Cheese	1	2007		
34.	CODEX STAN	274	1969	Coulommiers	1	2007		
35.	CODEX STAN	275	1973	Cream Cheese	1	2007		
36.	CODEX STAN	276	1973	Camembert	1	2007		
37.	CODEX STAN	277	1973	Brie	1	2007		
38.	CODEX STAN	278	1978	Extra Hard Grating Cheese	1	2007		
<b><i>Foods For Special Dietary Uses</i></b>								
39.	CODEX STAN	72	1981	Infant Formula and Formulas for Special Medical Purposes Intended for Infants	1	2007	4	1997
40.	CODEX STAN	156	1987	Follow-up formula			1	1989



## B. Food Hygiene

S. No.	Details				Revision		Amendment	
	Reference	No.	Year	Title	No.	Year	No.	Year
1.	CAC/RCP	1	1969	General Principles of Food Hygiene-Recommended International Code of Practice	4	2003	1, 1	1999, 2003
2.	CAC/RCP	21	1979	Code of Hygienic Practice for Foods for Infants and Children				
3.	CAC/RCP	23	1979	Recommended International Code of Hygienic Practice for Low Acid and Acidified Low Acid Canned Foods	2	1993		
4.	CAC/RCP	40	1993	Code of Hygienic Practice for Aseptically Processed and Packaged Low-Acid Foods				
5.	CAC/RCP	46	1999	Code of Hygienic Practice for Refrigerated Packaged Foods with Extended Shelf-Life				
6.	CAC/RCP	47	2001	Code of Hygienic Practices for Transport of Food in Bulk and Semi-Packed Food			1	2001
7.	CAC/RCP	57	2004	Code of Hygienic Practice for Milk and Milk Products				
8.	CAC/RCP	54	2004	Code of Practice for Good Animal Feeding				

S. No.	Details				Revision		Amendment	
	Reference	No.	Year	Title	No.	Year	No.	Year
9.	CAC/RCP	61	2005	Code of Practice to Minimize and Contain Antimicrobial Resistance				
10.	CAC/GL	13	1991	Preservation of Raw Milk by Lactoperoxidase System				
11.	CAC/GL	21	1997	Principles for the Establishment and Application of Microbiological Criteria for Foods				
12.	CAC/GL	30	1999	Principles and Guidelines for the Conduct of Microbiological Risk Assessment				
13.	CAC/GL	61	2007	Application of General Principles of Food Hygiene to the Control of <i>Listeria monocytogenes</i> in Ready-to-Eat Foods				

### C. Food Additives

S. No.	Details				Revision		Amendment	
	Reference	No.	Year	Title	No.	Year	No.	Year
1.	CODEX STAN	192	1995	General Standard for Food Additives	8	2007		
2.	CAC/GL	3	1989	Simple Evaluation of Food Additive Intake				

S. No.	Details				Revision		Amendment	
	Reference	No.	Year	Title	No.	Year	No.	Year
3.	CAC/GL	9	1987	General Principles for the Addition of Essential Nutrients to Foods			2	1991
4.	CAC / GL	10	1979	Advisory List of Mineral Salts and Vitamin compounds for Use in Foods for Infants and Children			2	1991
5.	CAC / GL	29	1985	General Requirements for Natural Flavourings				
6.	CAC / GL	36	1989	Class Names and the International Numbering System for Food Additives	6	2001	4	2006
7.	CAC / GL	55	2005	Guidelines for Vitamin and Mineral Food Supplements				
8.	CAC / MISC	3		Inventory of Processing Aids				
9.	CAC / MISC	6		List of Codex Advisory Specifications for Food Additives	12	2001		

#### D. Contaminants

S. No.	Details				Revision		Amendment	
	Reference	No.	Year	Title	No.	Year	No.	Year
1.	CAC/MRL	1		Maximum Residue Limits for Pesticides		2006		
2.	CAC/MRL	2		Maximum Residue Limits for Veterinary Drugs in Food		2006		

S. No.	Details				Revision		Amendment	
	Reference	No.	Year	Title	No.	Year	No.	Year
3.	CAC/MRL	3		Extraneous Maximum Residue Limits (EMRLs)		2001		
4.	CODEX STAN	193	1995	General Standard for Contaminants and Toxins in Foods	3	2007	1, 1	2001, 2004
5.	CAC/RCP	38	1993	Control of the Use of Veterinary Drugs				
6.	CAC/RCP	45	1997	Reduction of Aflatoxin B1 in Raw Materials and Supplemental Feedingstuffs for Milk-Producing Animals				
7.	CAC/RCP	49	2001	Source Directed Measures to Reduce Contamination of Foods with Chemicals				
8.	CAC/RCP	56	2004	Code of Practice for the Prevention and Reduction of Lead Contamination in Foods				
9.	CAC/RCP	60	2005	Code of Practice for the Prevention and Reduction of Tin Contamination in Canned Foods				
10.	CAC/RCP	62	2006	Code of Practice for the Prevention and Reduction of Dioxin and Dioxin-like PCB Contamination in Food and Feeds				

S. No.	Details				Revision		Amendment	
	Reference	No.	Year	Title	No.	Year	No.	Year
11.	CAC/GL	6	1991	Guideline Levels for Vinyl Chloride Monomer and Acrylonitrile in Food and Packaging Material				
12.	CAC/GL	16	1993	Guidelines for the Establishment of a Regulatory Programme for Control of Veterinary Drug Residues in Foods				

### E. Labelling

S. No.	Details				Revision		Amendment	
	Reference	No.	Year	Title	No.	Year	No.	Year
1.	CODEX STAN	1	1985	General Standard for the Labelling of Prepackaged Foods	1	1991	2, 1, 1	2001, 2003, 2005
2.	CODEX STAN	146	1985	Labelling of and Claims for Prepackaged Foods for Special Dietary Use				
3.	CODEX STAN	180	1991	Labelling of and Claims for Foods for Special Medical Purposes				
4.	CAC/GL	1	1979	General Guidelines on Claims	1	1991		
5.	CAC/GL	2	1985	Guidelines on Nutrition Labelling	1	1993	2	2006
6.	CAC/GL	23	1997	Guidelines on Use of Nutrition and Health Claims			2	2004

S. No.	Details				Revision		Amendment	
	Reference	No.	Year	Title	No.	Year	No.	Year
7.	CAC/GL	35	1985	Packing Media (Composition and Labelling)				

## F. Methods of Analysis and Sampling

S. No.	Details				Revision		Amendment	
	Reference	No.	Year	Title	No.	Year	No.	Year
1.	CODEX STAN	228	1989	General Methods of Analysis for Contaminants	1	2004		
2.	CODEX STAN	229		Analysis of Pesticide Residues: Recommended Methods		1993	1	2003
3.	CODEX STAN	234		Recommended Methods of Analysis and Sampling	1	2006		
4.	CAC/GL	33	1999	Methods of Sampling for Pesticide Residues for the Determination of Compliance with MRLs				
5.	CAC/GL	37	2001	Use of Recovery Information in Analytical Measurement (Adoption by IUPAC reference)				
6.	CAC/GL	40		Analysis of Pesticide Residues: Guidelines on Good Laboratory Practice in Pesticide Residue Analysis	1	2003		

S. No.	Details				Revision		Amendment	
	Reference	No.	Year	Title	No.	Year	No.	Year
7.	CAC/GL	41		Analysis of Pesticide Residues: Portion of Commodities to which Codex MRLS Apply and which is Analyzed		1993		
8.	CAC/GL	49	2003	Harmonized IUPAC Guidelines for Single – Laboratory Validation of Methods of Analysis				
9.	CAC/GL	50	2004	General Guidelines on Sampling				
10.	CAC/GL	54	2004	Guidelines on Measurement Uncertainty				
11.	CAC/GL	59	2006	Estimation of Measurement Uncertainty				

### G. General Standards

S. No.	Details				Revision		Amendment	
	Reference	No.	Year	Title	No.	Year	No.	Year
<b>Terminology</b>								
1.	CODEX STAN	206	1999	Use of Dairy Terms				
2.	CAC / MISC	5	1993	Glossary of Terms and Definitions (Veterinary Drugs Residues in Foods)				
3.	CAC/RCP	20	1979	Code of Ethics for International Trade in Food	1	1985		

S. No.	Details				Revision		Amendment	
	Reference	No.	Year	Title	No.	Year	No.	Year
<b><i>International Trade</i></b>								
4.	CAC/GL	17	1993	Guideline Procedures for the Visual Inspection of Lots of Canned Foods				
5.	CAC/GL	19	1995	Guidelines for Exchange of Information in Food Control Emergency Situations	1	2004		
6.	CAC/GL	20	1995	Principles for Food Import and Export Certification and Inspection				
7.	CAC/GL	25	1997	Exchange of Information between Countries on Rejections of Imported Foods				
8.	CAC/GL	26	1997	Design, Operation, Assessment and Accreditation of Food Import and Export Inspection and Certification Systems				
9.	CAC/GL	27	1997	Assessment of the Competence of Testing Laboratories Involved in the Import and Export Control of Foods				
10.	CAC/GL	28	1995	Food Control Laboratory Management: Recommendations	1	1997		



S. No.	Details				Revision		Amendment	
	Reference	No.	Year	Title	No.	Year	No.	Year
11.	CAC/GL	34	1999	Judgement of Equivalence Agreements Regarding Food Imports and Export Inspection and Certification Systems				
12.	CAC/GL	38	2001	Design, Production and Use of Generic Official Certificates	2	2007		
13.	CAC/GL	47	2003	Food Import Control Systems	1	2006		
14.	CAC/GL	53	2003	Guidelines on Judgement of Equivalence of Sanitary Measures Associated with Food Inspection and Certification Systems				
15.	CAC/GL	60	2006	Principles for Traceability / Product Tracing as a Tool within a Food Inspection and Certification System				
<b>Others</b>								
16.	CAC/RCP	8	1976	Code of Practice for Processing and Handling of Quick Frozen Foods	2	1983		
17.	CAC/GL	8	1991	Formulated Supplementary Foods for Older Infants and Young Children				

S. No.	Details				Revision		Amendment	
	Reference	No.	Year	Title	No.	Year	No.	Year
18.	CAC/GL	32	1999	Production, Processing, Labelling and Marketing of Organically Produced Foods	1	2001	1,1,1	2003, 2004, 2007
19.	CAC/GL	44	2003	Principles for the Risk Analysis of Foods Derived from Modern Biotechnology				
20.	CAC/GL	46	2003	Guidelines for the Conduct of Food Safety Assessment of Foods Produced Using Recombinant –DNA Microorganisms				
21.	CAC / MISC	2	1976	Statement on Infant Feeding				
22.	CAC / MISC	4		Classification of Foods and Animal Feeds			1	2001

## **NEWS SECTION**

### ***Indian Food Laws***

- **Notification GSR 707 (E) of 12 November 2007 of the Ministry of Health and Family Welfare:** The notification amends PFA Rule 83 to allow use of additives permitted in the Rules, in addition to those permitted as per Table 3 of Appendix C, in identified food products,

e.g. emulsifiers and stabilizers as per PFA Rule 60. The dairy products affected are dairy based drinks – flavoured and/or fermented, canned *rasgulla*, dry mixes of *rasgulla*, and packed *paneer*.

- **Draft notification GSR 751 (E) of 5 December 2007 of the Ministry of Health and Family Welfare:** The draft notification proposes to amend the Rule 42, Subrule (ZZZ), clause (1) which provides the format for declaring presence of artificial sweeteners on the label of the food package. The new format proposed is as follows:

‘(i) This contains .....(Name of the artificial sweeteners)’

The draft notification also proposes to include follow-up formula in the list of products for mandatory certification by the Bureau of Indian Standards (BIS) by amending Rule 49, sub-rule (19).

- **Notification GSR 792 (E) of 29 December 2007 of the Ministry of Health and Family Welfare:** It is a corrigendum to the GSR 773 (E) of 29 December 2006 of the Ministry of Health and family Welfare that amended Subrule (2) of Rule 57-A pertaining to ‘Crop Contaminants’ by specifying a maximum limit of aflatoxin M1 in milk as 0.5 µg/kg in line with that in the Codex standards and was scheduled to become applicable from 30 March 2007 (refer *Technews* issue 66, January-February 2007). Subsequently, the date of applicability of GSR 773 (E) was extended by nine months through the GSR 242 (E) of 28 March 2007 (refer *Technews* issue 67, March-April 2007). The GSR 792 (E) now extends the date of its applicability further, and accordingly the provisions of GSR 773 (E) would now be applicable from 1 March 2008.

### ***Codex Alimentarius Commission (CAC)***

- The 8<sup>th</sup> Session of the Codex Committee on Milk and Milk Products (CCMMP) is scheduled during 4-8 February 2008 in Queenstown, New Zealand. Some of the important agenda items

included for discussion are: Codex model export certificate for milk and milk products; amendments to the Codex standard for fermented milks to include provisions for fermented milk drinks; and revised standard for processed cheese.

- The period January – March 2008 also features meetings of the following Codex Committees:
  - Codex Committee on Methods of Analysis and Sampling, (CCMAS), 10-14 March 2008, Budapest, Hungary.
  - Codex Committee on Contaminants in Foods, 31 March – 01 April 2008, The Hague, Netherlands



**Issues of *Technews* during 2007**

<b>Issue</b>	<b>Month</b>	<b>Theme</b>
<b>66</b>	<b>Jan-Feb</b>	<b>Management of Water in Dairy Plants</b>
<b>67</b>	<b>Mar-Apr</b>	<b>Quality and Treatment of Water in Dairy Industry</b>
<b>68</b>	<b>May-Jun</b>	<b>Electrical Energy Conservation in Dairy Plants</b>
<b>69</b>	<b>Jul-Aug</b>	<b>New Codex Standards Relevant to Dairy Industry</b>
<b>70</b>	<b>Sep-Oct</b>	<b>Milk and Health</b>
<b>71</b>	<b>Nov-Dec</b>	<b>Codex Standards Relevant to Dairy Industry</b>

## **CODEX STANDARD RELEVANT TO DAIRY INDUSTRY**

**I find this bulletin:**

Useful ☐ Informative ☐

Only entertaining ☐ Boring ☐

I think the format of this bulletin needs/does not need change.

I would like information in any subsequent issue on \_\_\_\_\_

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