

RECOMMENDED METHODS OF ANALYSIS AND SAMPLING

CODEX STAN 234-1999

PART I

**METHODS OF ANALYSIS AND SAMPLING BY ALPHABETICAL ORDER OF
COMMODITY CATEGORIES AND NAMES**

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<i>Commodity Standard</i>	<i>Provision</i>	<i>Method</i>	<i>Principle</i>	<i>Type</i>
Cereals, Pulses and Legumes and Derived Products				
Certain pulses	Moisture	ISO 665:1977 (confirmed 1995)	Gravimetry	I
Degermed maize (corn) meal and maize (corn) grits	Ash	AOAC 923.03 ISO 2171:1993 ICC Method No 104/1 (1990)	Gravimetry	I
Degermed maize (corn) meal and maize (corn) grits	Fat, crude	AOAC 945.38F; 920.39C	Gravimetry (ether extraction)	I
Degermed maize (corn) meal and maize (corn) grits	Moisture	ISO 712:1998 ICC Method No 110/1 (1986)	Gravimetry	I
Degermed maize (corn) meal and maize (corn) grits	Particle size (granularity)	AOAC 965.22	Sieving	I
Degermed maize (corn) meal and maize (corn) grits	Protein	ICC Method No 105/1 (1986)	Titrimetry, Kjeldahl digestion	I
Durum wheat semolina and durum wheat flour	Ash (semolina)	AOAC 923.03 ISO 2171:1993	Gravimetry	I
Durum wheat semolina and durum wheat flour	Moisture	ISO 712:1998 ICC Method 110/1 (1986)	Gravimetry	I
Durum wheat semolina and durum wheat flour	Protein (N x 5.7)	ICC Method No 105/1	Titrimetry, Kjeldahl digestion	I
Durum wheat semolina and durum wheat flour	Sampling	Described in the Standard (According to Codex Sampling Instructions)	-	-
Maize (corn)	Aflatoxins, total	AOAC 979.18	Holiday-Velasco mini column	II
Maize (corn)	Moisture	ISO 6540:1980 (confirmed 1994)	Gravimetry	I
Peanuts (raw)	Aflatoxins, total	AOAC 991.31	Immunoaffinity column (Aflatest)	II
Peanuts (raw)	Aflatoxins, total	AOAC 993.17	Thin layer chromatography	III

<i>Commodity Standard</i>	<i>Provision</i>	<i>Method</i>	<i>Principle</i>	<i>Type</i>
Peanuts (intended for further processing)	Aflatoxins, total	AOAC 975.36	Romer minicolmn	III
Peanuts (intended for further processing)	Aflatoxins, total	AOAC 979.18	Holaday-Velasco minicolumn	III
Pearl millet flour	Ash	AOAC 923.03	Gravimetry	I
Pearl millet flour	Colour	<i>Modern Cereal Chemistry</i> , 6th Ed., D.W. Kent-Jones and A.J. Amos (Ed.), pp. 605-612, Food Trade Press Ltd, London, 1969.	Colorimetry using specific colour grader	IV
Pearl millet flour	Fat, crude	AOAC 945.38F; 920.39C	Gravimetry (ether extraction)	I
Pearl millet flour	Fibre, crude	ISO 5498:1981 (B.5 Separation)	Gravimetry	I
Pearl millet flour	Moisture	ISO 712:1998 ICC Method No 110/1 (1986)	Gravimetry	I
Pearl millet flour	Protein	AOAC 920.87	Titrimetry, Kjeldahl digestion	I
Sorghum flour	Ash	AOAC 923.03 ISO 2171:1993 ICC Method No 104/1 (1990)	Gravimetry	I
Sorghum flour	Colour	<i>Modern Cereal Chemistry</i> , 6th Ed., D.W. Kent-Jones and A.J. Amos (Ed.), pp. 605-612, Food Trade Press Ltd, London, 1969.	Colorimetry using specific colour grader	IV
Sorghum flour	Fat, crude	AOAC 945.38F; 920.39C	Gravimetry (ether extraction)	I
Sorghum flour	Fibre, crude	ICC Method No 113 (1972) ISO 6541:1981 (confirmed 1996)	Gravimetry	I
Sorghum flour	Moisture	ISO 712:1998 ICC Method No 110/1 (1986)	Gravimetry	I
Sorghum flour	Particle size (granularity)	AOAC 965.22	Sieving	I
Sorghum flour	Protein	ICC Method No 105/1 (1986)	Titrimetry, Kjeldahl digestion	I
Sorghum flour	Tannins	ISO 9648:1988 (confirmed 1994)	Spectrophotometry	I

<i>Commodity Standard</i>	<i>Provision</i>	<i>Method</i>	<i>Principle</i>	<i>Type</i>
Sorghum grains	Ash	AOAC 923.03 ISO 2171:1993 ICC Method No 104/1 (1990)	Gravimetry	I
Sorghum grains	Fat, crude	AOAC 945.38F, 920.39C	Gravimetry (ether extraction)	I
Sorghum grains	Moisture	ISO 6540:1980 (confirmed 1994)	Gravimetry	I
Sorghum grains	Protein	ICC Method No 105/1 (1986)	Titrimetry, Kjeldahl digestion	I
Sorghum grains	Tannins	ISO 9648:1988 (confirmed 1994)	Spectrophotometry	I
Soy protein products	Ash	AOAC 923.03 ISO 2171:1993 (Method B)	Gravimetry	I
Soy protein products	Fat	CAC/RM 55-1976 - Method 1	Gravimetry (extraction)	I
Soy protein products	Fibre, crude	ISO 5498:1981	Gravimetry	I
Soy protein products	Moisture	AOAC 925.09	Gravimetry (vacuum oven)	I
Soy protein products	Protein	AOAC 955.04D (using factor 6.25)	Titrimetry , Kjeldahl digestion	II
Vegetable protein products	Ash	AOAC 923.03 ISO 2171:1993 (Method B)	Gravimetry, Direct	I
Vegetable protein products	Fat	CAC/RM 55-1976 - Method 1	Gravimetry (extraction)	I
Vegetable protein products	Fibre, crude	AACC (1982) 32-17	Ceramic fiber filtration	I
Vegetable protein products	Moisture	AOAC 925.09	Gravimetry (vacuum oven)	I
Vegetable protein products	Protein	AOAC 955.04D (using factor 6.25)	Titrimetry, Kjeldahl digestion	II
Wheat flour	Ash	AOAC 923.03 ISO 2171:1993 ICC Method No 104/1 (1990)	Gravimetry	I
Wheat flour	Fat acidity	AOAC 939.05	Titrimetry	I
Wheat flour	Moisture	ISO 712:1998 ICC Method No 110/1 (1986)	Gravimetry	I
Wheat flour	Particle size (granularity)	AOAC 965.22	Sieving	I

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Wheat flour	Protein	ICC Method No 105/1 (1986)	Titrimetry, Kjeldahl digestion	I
Wheat gluten	Denaturation of gluten	AACC Method 38-20	Pharinography	I
Wheat gluten	Fibre, crude	AOAC 962.09	Ceramic fiber filtration	I
Wheat gluten	Protein	AOAC 976.05 (using factor 6.25)	Titrimetry, Kjeldahl digestion	II
Wheat gluten	Sampling	ISO 2170:1980	-	-
Whole and decorticated pearl millet grains	Ash	AOAC 923.03	Gravimetry	I
Whole and decorticated pearl millet grains	Fat, crude	AOAC 945.38F; 920.39C	Gravimetry (ether extraction)	I
Whole and decorticated pearl millet grains	Fibre, crude	ISO 5498:1981 (B.5 Separation)	Gravimetry	I
Whole and decorticated pearl millet grains	Moisture	ISO 712:1998 ICC Method No 110/1 (1986)	Gravimetry	I
Whole and decorticated pearl millet grains	Protein	AOAC 920.87	Titrimetry, Kjeldahl digestion	I
Whole maize (corn) meal	Ash	AOAC 923.03 ISO 2171:1993 ICC Method No 104/1 (1990)	Gravimetry	I
Whole maize (corn) meal	Fat, crude	AOAC 945.38F; 920.39C	Gravimetry (ether extraction)	I
Whole maize (corn) meal	Moisture	ISO 712:1998 ICC Method No 110/1 (1986)	Gravimetry	I
Whole maize (corn) meal	Particle size (granularity)	AOAC 965.22	Sieving	I
Whole maize (corn) meal	Protein	ICC Method No 105/1 (1986)	Titrimetry, Kjeldahl digestion	I
Cocoa Products and Chocolate				
Cocoa products and chocolate	Arsenic	AOAC 952.13 (Codex general method)	Colorimetry (diethyldithiocarbamate)	II
Chocolate	Ash, total	AOAC 972.15	Gravimetry (at 600°C)	I

<i>Commodity Standard</i>	<i>Provision</i>	<i>Method</i>	<i>Principle</i>	<i>Type</i>
Chocolate	Cocoa butter, percentage of	AOAC 963.15 IOCCC 14-1972	(Gravimetry (Soxhlet extraction))	I
Chocolate	Cocoa solids, fat-free	AOAC 931.05	Oven evaporation and factor	I
Chocolate	Copper	AOAC 960.40 (Codex general method)	Colorimetry (diethyldithiocarbamate)	II
Chocolate	Fat, total	AOAC 963.15	Gravimetry (Soxhlet extraction)	I
Chocolate	Lead	AOAC 986.15 (Codex general method)	Anodic stripping voltammetry	II
Chocolate	Moisture / Loss on drying	AOAC 931.04 IOCCC 1-1952	Gravimetry	I
Cocoa (cacao) nib, cocoa (cacao) mass, cocoa press cake and cocoa dust (cocoa fines), for use in the manufacturing of cocoa and chocolate products	Ash insoluble in HCl	AOAC 972.15	Gravimetry (at 600°C)	I
Cocoa (cacao) nib, cocoa (cacao) mass, cocoa press cake and cocoa dust (cocoa fines), for use in the manufacturing of cocoa and chocolate products	Ash, total	AOAC 972.15	Gravimetry (at 600°C)	I
Cocoa (cacao) nib, cocoa (cacao) mass, cocoa press cake and cocoa dust (cocoa fines), for use in the manufacturing of cocoa and chocolate products	Cocoa shell	AOAC 968.10 and 970.23	Spiral vessel count, Stone cell count	I
Cocoa (cacao) nib, cocoa (cacao) mass, cocoa press cake and cocoa dust (cocoa fines), for use in the manufacturing of cocoa and chocolate products	Copper	AOAC 971.20 (Codex general method)	Atomic absorption spectrophotometry	II

<i>Commodity Standard</i>	<i>Provision</i>	<i>Method</i>	<i>Principle</i>	<i>Type</i>
Cocoa (cacao) nib, cocoa (cacao) mass, cocoa press cake and cocoa dust (cocoa fines), for use in the manufacturing of cocoa and chocolate products	Lead	AOAC 972.25 (Codex general method)	Atomic absorption spectrophotometry	II
Cocoa butter confectionery	Ash, total	AOAC 972.15	Gravimetry (at 600°C)	I
Cocoa butter confectionery	Cocoa butter	AOAC 963.15 IOCCC 14-1972	Gravimetry (Knorr tube extraction, Soxhlet extraction)	I
Cocoa butter confectionery	Copper	AOAC 971.20 (Codex general method)	Atomic absorption spectrophotometry	II
Cocoa butter confectionery	Lead	AOAC 972.25 (Codex general method)	Atomic absorption spectrophotometry	II
Cocoa butter confectionery	Milk protein	IOCCC 17-1973 AOAC 939.02	Titrimetry, Kjeldahl digestion; after extraction of milk proteins	II
Cocoa butter confectionery	Milkfat	IOCCC 5-1960 AOAC 945.34; 925.41B; 920.80	Titrimetry/Distillation	I
Cocoa butter confectionery	Moisture	IOCCC 26-1988 AOAC 977.10	Karl Fischer	II
Cocoa butter confectionery	Sugars	AOAC 980.13	Liquid chromatography	II
Cocoa butters	Copper	AOAC 990.05 ISO 8294:1994 IUPAC 2.631 (Codex general method)	Atomic absorption spectrophotometry (direct graphite furnace)	II
Cocoa butters	Copper	AOAC 960.40 (Codex general method)	Colorimetry (diethyldithiocarbamate)	III
Cocoa butters	Fatty acids, free	IUPAC 2.201	Titrimetry	II
Cocoa butters	Iodine value	IUPAC 2.205	Titrimetry	I
Cocoa butters	Iron	AOAC 990.05 ISO 8294:1994 IUPAC 2.631 (Codex general method)	Atomic absorption spectrophotometry (direct graphite furnace)	II

<i>Commodity Standard</i>	<i>Provision</i>	<i>Method</i>	<i>Principle</i>	<i>Type</i>
Cocoa butters	Iron	BS 684 Section 2.17:1976	Colorimetry	III
Cocoa butters	Lead	AOAC 934.07	Colorimetry (dithizone)	II
Cocoa butters	Lead	IUPAC Method (<i>Pure and Appl. Chem.</i> 63)	Atomic absorption Spectrophotometry, graphite furnace	III
Cocoa butters	Melting behaviour (i) Slip point (ii) Clear melting point	IOCCC 4-1961	Melting point measurement	I
Cocoa butters	Refractive index	IUPAC 2.102	Refractometry	II
Cocoa butters	Saponification value	IUPAC 2.202	Titrimetry	II
Cocoa butters	Unsaponifiable matter	IUPAC 2.401	Gravimetry	I
Cocoa powders (cocoa) and dry cocoa-sugar mixtures	Ash, total (in cocoa mass and cocoa press cake)	AOAC 972.15	Gravimetry (at 600°C)	I
Cocoa powders (cocoa) and dry cocoa-sugar mixtures	Cocoa butter	IOCCC 14-1972 and 18-1973	Through total fat and total sterol content by GLC	I
Cocoa powders (cocoa) and dry cocoa-sugar mixtures	Copper	AOAC 960.40 (Codex general method)	Colorimetry (diethyldithiocarbamate)	II
Cocoa powders (cocoa) and dry cocoa-sugar mixtures	Lead	AOAC 986.15 (Codex general method)	Anodic stripping voltammetry	II
Cocoa powders (cocoa) and dry cocoa-sugar mixtures	Lead	AOAC 934.07	Colorimetry (dithizone)	III
Cocoa powders (cocoa) and dry cocoa-sugar mixtures	Moisture / Loss on drying	AOAC 931.04 IOCCC 1-1952	Gravimetry	I
Cocoa powders (cocoa) and dry cocoa-sugar mixtures	Sugars	AOAC 980.13	Liquid chromatography	II
Composite and filled chocolate	Centre in composite and filled chocolate	Method described in ALINORM 83/23, p. 27	Gravimetry	III
Composite and filled chocolate	Coating in composite and filled chocolate	Method described in ALINORM 83/23, p. 27	Gravimetry	III

<i>Commodity Standard</i>	<i>Provision</i>	<i>Method</i>	<i>Principle</i>	<i>Type</i>
Fats and Oils and Related Products				
Fats and oils	Acidity	IUPAC 2.201 ISO 660:1996	Titrimetry	I
Fats and oils	Arsenic	AOAC 952.13 (Codex general method) IUPAC 3.136	Colorimetry (diethyldithiocarbamate)	II
Fats and oils	Arsenic	AOAC 942.17 (Codex general method)	Colorimetry (molybdenum blue)	III
Fats and oils	Arsenic	AOAC 985.16 (Codex general method)	Atomic absorption spectrophotometry	III
Fats and oils	Baudouin test (modified Villavecchia or sesameseed oil test)	AOCS Cb 2-40	Colour reaction	I
Fats and oils	Carotenoids, total	BS 684 Section 2.20	Spectrophotometry	II
Fats and oils	Copper	AOAC 990.05 ISO 8294:1994 IUPAC 2.631 (Codex general method)	Atomic absorption Spectrophotometry (direct graphite furnace)	II
Fats and oils	Crismmer value	AOCS Cb 4-35	Turbidity	I
Fats and oils	Fatty acid composition	IUPAC 2.301+2.302+2.304 ISO 5509:1978+5508:1990	Gas chromatography of methyl esters	II
Fats and oils	Halphen test	AOCS Cb 1-25	Colorimetry	I
Fats and oils	Insoluble impurities	IUPAC 2.604 ISO 663:1992	Gravimetry	I
Fats and oils	Iron	AOAC 990.05 ISO 8294:1994 IUPAC 2.631 (Codex general method)	Atomic absorption spectrophotometry (direct graphite furnace)	II

<i>Commodity Standard</i>	<i>Provision</i>	<i>Method</i>	<i>Principle</i>	<i>Type</i>
Fats and oils	Lead	AOAC 994.02 IUPAC 2.623 ISO 12193:1994 (Codex general method)	Atomic absorption spectrophotometry (direct graphite furnace)	II
Fats and oils	Matter volatile at 105°C	IUPAC 2.601 ISO 662:1996	Gravimetry (open-drying)	I
Fats and oils	Peroxide value	IUPAC 2.501 (as amended) AOCS Cd 8b-90	Titrimetry using <i>iso</i> -octane	I
Fats and oils	Refractive index	IUPAC 2.102 ISO 6320:1995	Refractometry	II
Fats and oils	Reichert & Polenske values	IUPAC 2.204	Titrimetry	I
Fats and oils	Relative density	IUPAC 2.101	Pycnometry	II
Fats and oils	Saponification value	IUPAC 2.202 ISO 3657:1988 (confirmed 1992)	Titrimetry	I
Fats and oils	Slip point	ISO 6321:1991	Open ended capillary tube	I
Fats and oils	Soap content	BS 684 Section 2.5	Gravimetry	I
Fats and oils	Sterol composition	ISO 6799:1991 IUPAC 2.403	Gas chromatography	II
Fats and oils	Titre	IUPAC 2.121 ISO 935:1988	Thermometry	I
Fats and oils	Tocopherol composition	IUPAC 2.432	HPLC	II
Fats and oils	Unsaponifiable matter	IUPAC 2.401 (part 1-5) ISO 3596-1:1996	Titrimetry after extraction with diethyl ether	I
Margarine	Fat	IUPAC 2.801	Gravimetry	I
Margarine	Milkfat	CAC/RM 15-1969	Titrimetry	I
Margarine	Sodium chloride	AOAC 971.27 (Codex general method)	Potentiometry	II
Margarine	Vitamin A	AOAC 960.45	Spectrophotometry	II

<i>Commodity Standard</i>	<i>Provision</i>	<i>Method</i>	<i>Principle</i>	<i>Type</i>
Margarine	Vitamin D	AOAC 936.14	Bioassay	II
Margarine	Vitamin E	IUPAC 2.411	TLC followed by spectrophotometry or GLC	II
Margarine	Water	CAC/RM 17-1969	Gravimetry	I
Minarine	Fat	IUPAC 2.801	Gravimetry	I
Minarine	Milkfat	CAC/RM 15-1969	Titrimetry	I
Minarine	Sodium chloride	AOAC 971.27 (Codex general method)	Potentiometry	II
Minarine	Vitamin A	AOAC 960.45	Spectrophotometry	II
Minarine	Vitamin D	AOAC 936.14	Bioassay	II
Minarine	Vitamin E	IUPAC 2.411	TLC followed by spectrophotometry or GLC	II
Minarine	Water	CAC/RM 17-1969	Gravimetry	I
Olive oil	Sesameseed oil test	AOCS Cb 2-40	Colorimetry	I
Palm oil	Density, apparent	ISO 6993:1995 with the appropriate conversion factor	Pycnometry	I
Palm oil	Slip point	AOCS 3-25 (1992)	Open ended capillary tube (for 60°C)	I
Fish and Fishery Products				
Fish and fishery products	Mercury	AOAC 977.15	Flameless atomic absorption spectrophotometry	III
Fish and fishery products: Frozen fish and fishery products	Thawing and cooking procedures	Described in the Standards	Thawing and heating	I
Canned crab meat	Drained weight	Described in the Standard	Weighing	I
Canned crab meat	Net weight	Described in the Standard	Weighing	I
Canned finfish (mackerel and jack mackerel)	Net weight	Described in the Standard	Weighing	I

<i>Commodity Standard</i>	<i>Provision</i>	<i>Method</i>	<i>Principle</i>	<i>Type</i>
Canned salmon	Defectives	Described in the Standard	Classification	I
Canned salmon	Net weight	Described in the Standard	Weighing	I
Canned sardines and sardine-type products	Net weight	Described in the Standard	Weighing	I
Canned shrimps or prawns	Drained weight	Described in the Standard	Draining	I
Canned shrimps or prawns	Net weight	Described in the Standard	Weighing	I
Canned shrimps or prawns	Size, determination of	Described in the Standard	Number per 100 g	I
Canned tuna and bonito	Net weight	Described in the Standard	Weighing	I
Quick frozen blocks of fish fillet, minced fish flesh and mixtures of fillets and minced fish flesh	Net content of frozen fish blocks covered by glaze	Described in the Standard	Gravimetry	I
Quick frozen blocks of fish fillet, minced fish flesh and mixtures of fillets and minced fish flesh	Parasites	Described in the Standard	Visual examination	I
Quick frozen blocks of fish fillet, minced fish flesh and mixtures of fillets and minced fish flesh	Proportion of fish fillet and minced fish	AOAC 988.09	Physical separation	I
Quick frozen blocks of fish fillet, minced fish flesh and mixtures of fillets and minced fish flesh	Sodium chloride	AOAC 971.21 (Codex general method)	Potentiometry	II
Quick frozen fish fillets	Net weight of products covered by glaze	Described in the Standard	Water spraying and sieving	I
Quick frozen fish sticks (fish fingers) and fish portions - Breaded or in batter	Histamine	AOAC 977.13	Fluorimetry	II
Quick frozen fish sticks (fish fingers) and fish portions - Breaded or in batter	Net weight	Described in the Standard	Weighing	I
Quick frozen fish sticks (fish fingers) and fish portions - Breaded or in batter	Proportion of fish fillet and minced fish	AOAC 988.09	Gravimetry	I

<i>Commodity Standard</i>	<i>Provision</i>	<i>Method</i>	<i>Principle</i>	<i>Type</i>
Quick frozen fish sticks (fish fingers) and fish portions - Breaded or in batter	Proportion of fish fillet and minced fish (for certain fish species with soft flesh, such as hakes from the Southern Hemisphere)	Described in the Standard	Gravimetry	IV
Quick frozen fish sticks (fish fingers) and fish portions - Breaded or in batter	Sodium chloride	AOAC 971.27 (Codex general method)	Potentiometry	II
Foods for Special Dietary Uses				
Special foods	Ash	AOAC 942.05	Gravimetry	I
Special foods	Calcium	AOAC 984.27	ICP emission spectrometry	III
Special foods	Calories by calculation	Method described in CAC/VOL IX-Ed.1, Part III	Calculation method	III
Special foods	Carbohydrates	Method described in CAC/VOL IX-Ed.1, Part III	Calculation	III
Special foods	Chloride	AOAC 971.27 (Codex general method)	Potentiometry	II
Special foods	Dietary fibre, total	AOAC 985.29	Gravimetry (enzymatic digestion)	I
Special foods	Fat	CAC/RM 55-1976	Gravimetry (extraction)	I
Special foods	Fat in foods not containing starch, meat or vegetable products	CAC/RM 1-1973, B-2	Gravimetry	I
Special foods	Fill of containers	CAC/RM 46-1972	Weighing	I
Special foods	Folic acid	AOAC 944.12	Microbioassay	II
Special foods	Linoleate (in the form of glycerides)	AOAC 922.06; 969.33; 963.22	Acid hydrolysis, preparation of methyl esters and gas chromatography	II
Special foods	Linoleate (in the form of glycerides)	AOAC 922.06; 979.19	Acid hydrolysis and spectrophotometry	III

<i>Commodity Standard</i>	<i>Provision</i>	<i>Method</i>	<i>Principle</i>	<i>Type</i>
Special foods	Loss on drying	AOAC 934.01 AOAC 925.23	Gravimetry	I
Special foods	Loss on drying (milk based)	AOAC 925.23 IDF Standard 21B:1987 ISO 6731:1989	Gravimetry	I
Special foods	Nicotinamide for foods not based on milk	AOAC 961.14	Colorimetry	II
Special foods	Nicotinamide for milk-based foods	AOAC 944.13	Microbioassay	II
Special foods	Pantothenic acid/enriched foods	AOAC 945.74	Microbioassay	II
Special foods	Pantothenic acid/non-enriched foods	<i>The Analyst</i> 89 (1964):1, 3-6, <i>ibid.</i> 232 US Dept Agr., <i>Agr. Handbook</i> 97 (1965)	Microbioassay	IV
Special foods	Phosphorous	AOAC 986.24	Colorimetry (molybdovanadate)	II
Special foods	Protein efficiency ratio (PER)	AOAC 960.48	Rat bioassay	I
Special foods	Protein, crude	Method described in CAC/VOL IX-Ed. 1, Part III	Titrimetry, Kjeldahl digestion	I
Special foods	Riboflavin	AOAC 970.65	Fluorometry	II
Special foods	Sodium and potassium	ISO 8070:1987 (confirmed 1992) IDF Standard 119A:1987	Flame emission spectrophotometry	II
Special foods	Sodium and potassium	AOAC 984.27	ICP emission spectrometry	III
Special foods	Thiamine	AOAC 942.23	Fluorometry	II
Special foods	Vitamin A	AOAC 974.29	Colorimetry	IV
Special foods	Vitamin A in foods in which carotenes have been added as a source of vitamin A	AOAC 941.15	Spectrophotometry	III
Special foods	Vitamin B ₁₂	AOAC 952.20	Microbioassay	II

<i>Commodity Standard</i>	<i>Provision</i>	<i>Method</i>	<i>Principle</i>	<i>Type</i>
Special foods	Vitamin B ₆	AOAC 961.15	Microbioassay	II
Special foods	Vitamin C	AOAC 967.22	Microfluorometry	II
Special foods	Vitamin C	AOAC 967.21	Colorimetry (dichloroindophenol)	III
Special foods	Vitamin D	AOAC 936.14	Rat bioassay	IV
Special foods	Vitamin D (D ₃ , milk based infant formula)	AOAC 992.26	Liquid chromatography	II
Special foods	Vitamin E	AOAC 971.30	Colorimetry	IV
Special foods	Vitamin E (milk based infant formula)	AOAC 992.03	Liquid chromatography	II
Foods with low-sodium content (including salt substitutes)	Iodine	AOAC 925.56	Titrimetry	II
Foods with low-sodium content (including salt substitutes)	Silica (colloidal, calcium silicate)	AOAC 950.85N	Gravimetry	IV
Infant formula and follow-up formula	Dietary fibre, total	AOAC 991.43	Gravimetry (enzymatic digestion)	I
Infant formula and follow-up formula	Iodine (milk based formula)	AOAC 992.24	Ion-selective potentiometry	II
Infant formula and follow-up formula	Pantothenic acid	AOAC 992.07	Microbioassay	II
Infant formula and follow-up formula	Pantothenic acid	<i>The Analyst</i> 89 (1964)(1) 3-6, 232 US Dept Agr., <i>Agr. Handbook</i> 97 (1965)	Microbioassay	IV
Infant formula and follow-up formula	Vitamin A	AOAC 974.29	Colorimetry	IV
Infant formula and follow-up formula	Vitamin A (retinol isomers)	AOAC 992.04	Liquid chromatography	II
Infant formula and follow-up formula	Vitamin A (retinol)	AOAC 992.06	Liquid chromatography	II
Infant formula and follow-up formula	Vitamin K ₁	AOAC 992.27	Liquid chromatography	II
Fruit Juices				
Fruit juices	Arsenic	AOAC 952.13 (Codex General method)	Colorimetry (diethyldithiocarbamate)	II
Fruit juices	Arsenic	AOAC 942.17 (Codex General method)	Colorimetry (molybdenum blue)	III

<i>Commodity Standard</i>	<i>Provision</i>	<i>Method</i>	<i>Principle</i>	<i>Type</i>
Fruit juices	Arsenic	AOAC 986.15 (Codex General method)	Atomic absorption spectrophotometry	III
Fruit juices	Ascorbic acid, L-	AOAC 967.22	Microfluorometry	II
Fruit juices	Carbon dioxide	IFJU Method No 42, 1976	Titrimetry (back-titration after precipitation)	IV
Fruit juices	Copper	AOAC 971.20 (Codex general method)	Atomic absorption spectrophotometry	II
Fruit juices	Essential oils	AOAC 944.06; 942.08	Babcock method	I
Fruit juices	Essential oils (Citrus fruit juices)	IFJU Method No. 45A, 1972	Distillation and titration	I
Fruit juices	Expression of results as m/m	IFJU Method No 1, 1989 & IFJU General sheet, 1971	Pycnometry	I
Fruit juices	Fermentability, test of	IFJU Method No 18, 1974	Microbiological method	I
Fruit juices	Fill of containers	CAC/RM 46-1972	Weighing	I
Fruit juices	Iron	IFJU Method No 15, 1964	Photometry	II
Fruit juices	Lead	AOAC 972.25 (Codex general method)	Atomic absorption spectrophotometry	II
Fruit juices	Mineral impurities insoluble in HCl	AOAC 941.12C	Gooch filtration	I
Fruit juices	Salt, added	AOAC 971.27 (Codex general method)	Potentiometry	II
Fruit juices	Salt, added	IFJU Method No 37, 1968	Electrochemical titrimetry	III
Fruit juices	Sampling	IFJU Method No 1, 1989	-	-
Fruit juices	Soluble solids	IFJU Method No 8B, 1968	Refractometry	I
Fruit juices	Sugars	IFJU Method No 4, 1985	Titrimetry	I
Fruit juices	Sulphur dioxide	IFJU Method No 7, 1968	Titrimetry after distillation	II
Fruit juices	Tin	AOAC 980.19 (Codex general method)	Atomic absorption spectrophotometry	II
Fruit juices	Titratable acids, total	IFJU Method No 3, 1968	Titrimetry	I
Fruit juices	Viscosity, apparent	AOAC 967.16	Capillary viscometry	I

<i>Commodity Standard</i>	<i>Provision</i>	<i>Method</i>	<i>Principle</i>	<i>Type</i>
Fruit juices	Volatile acids	IFJU Method No 5, 1985	Titrimetry after distillation	I
Fruit juices	Zinc	AOAC 969.32 (Codex general method)	Atomic absorption spectrophotometry	II
Fruit juices	Zinc	AOAC 986.15 (Codex general method)	Atomic absorption spectrophotometry	III
Milk and Milk Products				
Milk products	Iron	NMKL 139 (1991) (Codex general method)	Atomic absorption spectrophotometry	II
Milk products	Iron	IDF Standard 103A:1986 ISO 6732:1985 (confirmed 1995)	Photometry (bathophenanthroline)	IV
Milk products	Sampling	IDF Standard 50C:1995 ISO 707:1997 AOAC 968.12	General Instructions for obtaining a sample from a bulk	-
Milk products	Sampling	IDF Standard 113A:1990 ISO 5538:1987 (confirmed 1992)	Inspection by attributes	-
Milk products	Sampling	IDF Standard 136A:1992 ISO 8197:1988 (confirmed 1993)	Inspection by variables	-
Milk products	Sampling of milk from bulk tanks	AOAC 970.26	Instructions for obtaining a sample	-
Milk products (products not completely soluble in ammonia)	Milkfat	IDF Standard 126A:1988 ISO 8262-3:1987	Gravimetry (Weibull-Berntrop)	I
Butter	Lead	AOAC 972.25 (Codex general method)	Atomic absorption spectrophotometry	II
Butter	Milk solids-not-fat	IDF Standard 80:1977 ISO 3727:1977 AOAC 920.116	Gravimetry	I
Butter	Milkfat	IDF Standard 80:1977 ISO 3727:1977 AOAC 920.116	Gravimetry	I
Butter	Salt	IDF Standard 12B: 1988 ISO 1738:1997 AOAC 960.29	Titrimetry (Mohr: determination of chloride, expressed as sodium chloride)	II

<i>Commodity Standard</i>	<i>Provision</i>	<i>Method</i>	<i>Principle</i>	<i>Type</i>
Butter	Salt	IDF Standard 179:1997 AOAC 971.27 (Codex general method)	Potentiometry (determination of chloride, expressed as sodium chloride)	III
Butter	Sampling	IDF Standard 50C:1995 ISO 707:1997 AOAC 968.12	General Instructions for obtaining a sample from a bulk	-
Butter	Vegetable fat	IDF Standard 54:1970 ISO 3594:1976 (confirmed 1996) AOAC 970.50A	Gas liquid chromatography	II
Butter	Vegetable fat	IDF Standard 32:1965 ISO 3595:1976 (confirmed 1996) AOAC 955.34A	Phytosterol acetate test	III
Butter	Water	IDF Standard 80:1977 ISO 3727:1977 AOAC 920.116	Gravimetry	I
Cheese	Citric acid	IDF Standard 34C:1992	Enzymic method	II
Cheese	Citric acid	ISO 2963:1997 AOAC 976.15	Photometry	III
Cheese	Milkfat	IDF Standard 5B: 1986 ISO 1735:1987 AOAC 933.05	Gravimetry (Schmid-Bondzynski-Ratslaff)	I
Cheese	Sampling	IDF Standard 50C:1995 ISO 707:1997 AOAC 968.12	General Instructions for obtaining a sample from a bulk	-
Cheese (and cheese rind)	Natamycin	IDF Standard 140A:1992 ISO 9223:1991 (confirmed 1996)	Molecular absorption spectrophotometry & HPLC after extraction	II
Cheeses in brine	Milkfat in dry matter	IDF Standard 5B:1986 ISO 1735:1987 AOAC 933.05	Gravimetry (Schmid-Bondzynski-Ratslaff)	I

<i>Commodity Standard</i>	<i>Provision</i>	<i>Method</i>	<i>Principle</i>	<i>Type</i>
Cheeses in brine	Sampling	IDF Standard 50C:1995 ISO 707:1997 AOAC 968.12 A representative piece of cheese is placed on a cloth or on a sheet of non-absorbent paper for 5 to 10 min. A slice of 2-3 cm is cut off and sent to the laboratory in a sealed insulated box for analysis.	General Instructions for obtaining a sample from a bulk	-
Cream	Milkfat	IDF Standard 16C:1987 ISO 2450:1985 AOAC 920.111A	Gravimetry (Röse-Gottlieb)	I
Cream	Solids	IDF Standard 21B:1987 ISO 6731:1989 AOAC 920.107	Gravimetry (drying at 102°C)	I
Edible casein products	Acids, free	IDF Standard 91:1979 (confirmed 1986) ISO 5547:1978 (confirmed 1993)	Titrimetry (aqueous extract)	IV
Edible casein products	Ash (including P ₂ O ₅)	IDF Standard 90:1979 (confirmed 1986) ISO 5545:1978	Furnace, 825°C	IV
Edible casein products	Copper	AOAC 985.35	Atomic absorption spectrophotometry	II
Edible casein products	Copper	IDF Standard 76A:1980 ISO 5738:1980 (confirmed 1995) AOAC 960.40 (Codex general method)	Colorimetry (diethyldithiocarbamate)	III
Edible casein products	Lactose	IDF Standard 106:1982 ISO 5548:1980 (confirmed 1996)	Photometry (phenol and H ₂ SO ₄)	IV
Edible casein products	Lead	AOAC 972.25 (Codex general method)	Atomic absorption spectrophotometry	II
Edible casein products	Lead	AOAC 982.23 (Codex general method)	Anodic stripping voltammetry	III
Edible casein products	Lead	IDF Standard 133A:1992	Spectrophotometry (1,5-diphenylthiocarbazone)	III
Edible casein products	Lead	NMKL 139 (1991) (Codex general method)	Atomic absorption spectrophotometry	III

<i>Commodity Standard</i>	<i>Provision</i>	<i>Method</i>	<i>Principle</i>	<i>Type</i>
Edible casein products	Milkfat	IDF Standard 127A:1988 ISO 5543:1986 (confirmed 1996)	Gravimetry (Schmid-Bondzynski-Ratslaff)	I
Edible casein products	Moisture	IDF Standard 78C:1990 ISO 5550:1978	Gravimetry (drying at 102°C)	I
Edible casein products	pH	IDF Standard 115A:1989 ISO 5546:1979 (confirmed 1996)	Electrometry	IV
Edible casein products	Protein (total N x 6.38 in dry matter)	IDF Standard 92:1979 (confirmed 1986) ISO 5549:1978 (confirmed 1993)	Titrimetry, Kjeldahl digestion	IV
Edible casein products	Sampling	IDF Standard 50C:1995 ISO 707:1997 AOAC 968.12	General Instructions for obtaining a sample from a bulk	-
Edible casein products	Sediment (scorched particles)	IDF Standard 107A:1995 ISO 5739:1983	Visual comparison with standard disks, after filtration	IV
Evaporated milks	Milkfat	IDF Standard 13C: 1987 ISO 1737:1985 AOAC 945.48G	Gravimetry (Röse-Gottlieb)	I
Evaporated milks	Protein (in milk solids-not-fat)	AOAC 945.48H	Titrimetry, Kjeldahl digestion	I
Evaporated milks	Sampling	IDF Standard 50C:1995 ISO 707:1997 AOAC 968.12	General Instructions for obtaining a sample from a bulk	-
Evaporated milks	Solids	IDF Standard 21B:1987 ISO 6731:1989 AOAC 925.23A	Gravimetry (drying at 102°C)	I
Milk powders and cream powders	Milkfat	IDF Standard 9C: 1987 ISO 1736:1985 AOAC 932.06	Gravimetry (Röse-Gottlieb)	I
Milk powders and cream powders	Protein (in milk solids-not-fat)	IDF Standard 20B:1993 AOAC 991.20-23	Titrimetry, Kjeldahl digestion	I

<i>Commodity Standard</i>	<i>Provision</i>	<i>Method</i>	<i>Principle</i>	<i>Type</i>
Milk powders and cream powders	Sampling	IDF Standard 50C:1995 ISO 707:1997 AOAC 968.12	General Instructions for obtaining a sample from a bulk	-
Milk powders and cream powders	Scorched particles	IDF Standard 107A:1995 ISO 5739:1983	Visual comparison with standard disks, after filtration	IV
Milk powders and cream powders	Solubility	IDF Standard 129A:1988 ISO 8156:1987	Centrifugation	I
Milk powders and cream powders	Acidity, titratable	IDF Standard 86:1981	Titrimetry, titration to pH 8.4	I
Milk powders and cream powders	Water	IDF Standard 26A:1993	Gravimetry (drying at 102°C)	IV
Milkfat products	Antioxidants (phenolic)	IDF Standard 165:1993	Reversed phase gradient liquid chromatography	II
Milkfat products	Fatty acids, free (expressed as oleic acid)	IDF Standard 6B:1989 ISO 1740:1991 (confirmed 1996) AOAC 969.17	Titrimetry	I
Milkfat products	Milkfat	IDF Standard 24:1964	Gravimetry (calculation from solids-not-fat and water content)	IV
Milkfat products	Sampling	IDF Standard 50C:1995 ISO 707:1997 AOAC 968.12	General Instructions for obtaining a sample from a bulk	-
Milkfat products	Vegetable fat (sterols)	IDF Standard 54:1979 ISO 3594:1976 (confirmed 1996) AOAC 970.50A	Gas liquid chromatography	II
Milkfat products	Vegetable fat	IDF Standard 32:1965 ISO 3595:1976 (confirmed 1996) AOAC 955.34A	Phytosteryl acetate test	III
Milkfat products	Water	IDF Standard 23A:1988	Titrimetry (Karl Fischer)	II
Milkfat products (anhydrous milkfat)	Peroxide value	AOAC 965.33	Titrimetry	I
Processed cheese products	Citric acid	IDF Standard 34C:1992	Enzymic method	II

<i>Commodity Standard</i>	<i>Provision</i>	<i>Method</i>	<i>Principle</i>	<i>Type</i>
Processed cheese products	Citric acid	ISO 2963:1997 AOAC 976.15	Photometry	III
Processed cheese products	Milkfat	IDF Standard 5B:1986 ISO 1735:1987 AOAC 933.05	Gravimetry (Schmid- Bondzynski- Ratzlaff)	I
Processed cheese products	Phosphate, added (expressed as phosphorus)	IDF Standard 51B:1991	Calculation	IV
Processed cheese products	Phosphorus	IDF Standard 33C: 1987 ISO 2962:1984 (confirmed 1994) AOAC 990.24	Spectrophotometry (molybdate- ascorbic acid)	II
Processed cheese products	Salt	IDF Standard 88A:1979 ISO 5943:1988 (confirmed 1996) AOAC 983.14	Potentionmetry (determination of chloride, expressed as sodium chloride)	II
Sweetened condensed milk	Milkfat	IDF Standard 13C: 1987 ISO 1737:1985 AOAC 920.115F	Gravimetry (Röse-Gottlieb)	I
Sweetened condensed milks	Protein (in milk solids-not-fat)	AOAC 920.115G	Titrimetry, Kjeldahl digestion	I
Sweetened condensed milks	Sampling	IDF Standard 50C:1995 ISO 707:1997 AOAC 968.12	General Instructions for obtaining a sample from a bulk	-
Whey cheese	Dry matter	IDF Standard 58:1970 (confirmed 1993) ISO 2920:1974 (confirmed 1996)	Gravimetry (drying at 88±2°C)	IV
Whey cheese	Milkfat (in dry matter)	IDF Standard 59A:1986 ISO 1854:1987 AOAC 974.09	Gravimetry (Röse-Gottlieb)	I
Whey cheese	Sampling	IDF Standard 50C:1995 ISO 707:1997 AOAC 968.12	General Instructions for obtaining a sample from a bulk	-
Whey powders	Ash	IDF Standard 90:1979 (confirmed 1986) ISO 5545:1978	Furnace, 825°C	IV

<i>Commodity Standard</i>	<i>Provision</i>	<i>Method</i>	<i>Principle</i>	<i>Type</i>
Whey powders	Copper	AOAC 985.35	Atomic absorption spectrophotometry	II
Whey powders	Copper	IDF Standard 76A:1980 ISO 5738:1980 (confirmed 1995) AOAC 960.40 (Codex general method)	Photometry (diethyldiethiocarbamate)	III
Whey powders	Lead	AOAC 972.25 (Codex general method)	Atomic absorption spectrophotometry	II
Whey powders	Milkfat	IDF Standard 9C:1987 ISO 1736:1985 AOAC 932.06	Gravimetry (Röse-Gottlieb)	I
Whey powders	Moisture, "Free"	IDF Standard 58:1970 (confirmed 1993) ISO 2920:1974 (confirmed 1996)	Gravimetry (drying at 88±2°C)	IV
Whey powders	Protein (total N x 6.38)	IDF Standard 92:1979 (confirmed 1986) ISO 5549:1978 (confirmed 1978)	Titrimetry, Kjeldahl digestion	IV
Whey powders	Sampling	IDF Standard 113A:1990 ISO 5538:1987 (confirmed 1992)	Inspection by attributes	-
Whey powders	Sampling	IDF Standard 50C:1995 ISO 707:1997 AOAC 968.12	General Instructions for obtaining a sample from a bulk	-
Yoghurt products	<i>Lactobacillus bulgaricus</i> & <i>Streptococcus thermophilus</i>	IDF Standard 117A:1988	Colony count at 37°C	
Yoghurt products	<i>Lactobacillus bulgaricus</i> & <i>Streptococcus thermophilus</i>	IDF Standard 146:1991	Test for identification	
Yoghurt products	Solids, Total	IDF Standard 151:1991	Gravimetry (drying at 102°C)	I
Natural Mineral Waters				
Natural mineral waters	Arsenic	AOAC 986.15 (Codex general method)	Atomic absorption spectrophotometry	II
Natural mineral waters	Arsenic	ISO 6595:1982 (confirmed 1995)	Spectrophotometry	IV

<i>Commodity Standard</i>	<i>Provision</i>	<i>Method</i>	<i>Principle</i>	<i>Type</i>
Natural mineral waters	Barium	<i>Examination of Water Pollution Control</i> WHO Pergamon Press (1982) Vol. 2, pp. 65-66		IV
Natural mineral waters	Barium	<i>Examination of Water Pollution Control.</i> WHO Pergamon Press (1982) Vol. 2, pp. 67-68		IV
Natural mineral waters	Borate	ISO 9390:1990	Spectrophotometry	II
Natural mineral waters	Cadmium	ISO 8288:1986 (confirmed 1995)	Flame atomic absorption spectrophotometry	II
Natural mineral waters	Cadmium	AOAC 974.27	Atomic absorption spectrophotometry	III
Natural mineral waters	Cadmium	AOAC 986.15 (Codex general method)	Anodic stripping voltanmetry	III
Natural mineral waters	Calcium	ISO 6058:1984	Titrimetry	II
Natural mineral waters	Calcium	ISO 7980:1986 (confirmed 1995)	Atomic absorption spectrophotometry	III
Natural mineral waters	Chloride	<i>Examination of Water Pollution Control.</i> WHO Pergamon Press (1982) Vol. 2, pp. 205-208		II
Natural mineral waters	Chloride	AOAC 973.51	Titrimetry (Mercuric nitrate)	III
Natural mineral waters	Chloride	ISO 9297:1989 (confirmed 1994)	Titrimetry	III
Natural mineral waters	Chromium (VI)	<i>Examination of Water Pollution Control.</i> WHO Pergamon Pres (1982) Vol. 2, pp. 86- 87		IV
Natural mineral waters	Coliform organism, thermotolerant organism and presumptive <i>Escherichia coli</i>	ISO 9308-1:1990	Membrane filtration	I
Natural mineral waters	Copper	ISO 8288:1986 (confirmed 1995)	Flame atomic absorption spectrophotometry	II

<i>Commodity Standard</i>	<i>Provision</i>	<i>Method</i>	<i>Principle</i>	<i>Type</i>
Natural mineral waters	Copper	AOAC 960.40 (Codex general method)	Colorimetry	III
Natural mineral waters	Faecal Streptococci	ISO 7899-2:1984	Membrane filtration	I
Natural mineral waters	Fluoride	<i>Examination of Water Pollution Control.</i> WHO Pergamon Press (1982) Vol. 2, pp. 245-247		II
Natural mineral waters	Fluoride	<i>Examination of Water Pollution Control.</i> WHO Pergamon Press (1982) Vol.2, pp. 247-250		III
Natural mineral waters	Iron, dissolved	ISO 6332:1988 (confirmed 1995)	Spectrophotometry	II
Natural mineral waters	Lead	ISO 8288:1986 (confirmed 1995)	Flame atomic absorption spectrophotometry	II
Natural mineral waters	Lead	AOAC 974.27	Atomic absorption spectrophotometry	III
Natural mineral waters	Magnesium	ISO 6059:1984 (confirmed 1995)	Titrimetry	II
Natural mineral waters	Magnesium	ISO 7980:1986 (confirmed 1995)	Atomic absorption spectrophotometry	III
Natural mineral waters	Manganese	<i>Examination of Water Pollution Control.</i> WHO Pergamon Press (1982) Vol. 2, pp. 121-122		II
Natural mineral waters	Manganese	ISO 6333:1986 (confirmed 1995)	Spectrophotometry	III
Natural mineral waters	Mercury	ISO 5666-3:1984 (confirmed 1995)	Flameless atomic absorption spectrophotometry	II
Natural mineral waters	Mercury	AOAC 977.22	Flameless atomic absorption spectrophotometry	III
Natural mineral waters	Nitrates	ISO 7890-2:1986 (confirmed 1995)	Spectrophotometry	II
Natural mineral waters	Nitrates	<i>Examination of Water Pollution Control.</i> WHO Pergamon Press (1982) Vol.2, pp. 280-283		IV

<i>Commodity Standard</i>	<i>Provision</i>	<i>Method</i>	<i>Principle</i>	<i>Type</i>
Natural mineral waters	Nitrates	<i>Handbuch Lebensmittel Chemie</i> (1969)		IV
Natural mineral waters	Nitrites	ISO 6777:1984	Molecular absorption spectrophotometry	IV
Natural mineral waters	Phenols	ISO 6439:1990 (confirmed 1995)	Spectrophotometry	I
Natural mineral waters	Potassium	<i>Examination of Water Pollution Control.</i> WHO Pergamon Press (1982) Vol.2, pp. 142-145		II
Natural mineral waters	Selenium	AOAC 986.15	Atomic absorption spectrophotometry	II
Natural mineral waters	Selenium	<i>Examination of Water Pollution Control.</i> WHO Pergamon Press (1982) Vol.2, pp.320-322		III
Natural mineral waters	Sodium	<i>Examination of Water Pollution Control.</i> WHO Pergamon Press (1982) Vol.2 pp. 148-151		II
Natural mineral waters	Sodium	<i>Examination of Water Pollution Control.</i> WHO Pergamon Press (1982) Vol.2, pp. 151-152		III
Natural mineral waters	Spores of sulphite-reducing anaerobes (Clostridia)	ISO 6461-2:1986 (confirmed 1996)	Membrane filtration	I
Natural mineral waters	Sulphates	ISO 9280:1990 (confirmed 1995)	Gravimetry	III
Natural mineral waters	Sulphide	<i>Handb. Spurenanal.</i> 1974		IV
Natural mineral waters	Surface active agents	ISO 7875-1:1996	Spectrophotometry (methylene blue)	I
Processed Fruits and Vegetables				
Processed fruits and vegetables	Drained weight	AOAC 968.30	Sieving	I
Processed fruits and vegetables	Fill of containers	CAC/RM 46-1972	Weighing	I

<i>Commodity Standard</i>	<i>Provision</i>	<i>Method</i>	<i>Principle</i>	<i>Type</i>
Processed fruits and vegetables	Soluble solids	ISO 2173:1978 AOAC 932.14C	Refractometry	I
Canned green beans and wax beans	Tough strings	CAC/RM 39-1970	Stretching	I
Canned green peas	Calcium	AOAC 968.31	Complexometric titrimetry	II
Canned green peas	Proper fill (in lieu of drained weight)	CAC/RM 45-1972	Pouring and measuring	I
Canned green peas	Solids, alcohol insoluble	AOAC 938.10	Sieving	I
Canned green peas	Types of peas, distinguishing	CAC/RM 48-1972	Visual inspection	I
Canned mangoes	Syrup	AOAC 932.14C	Brix spindle method	I
Canned mature processed peas	Solids, total	AOAC 964.22	Gravimetry (vacuum oven)	I
Canned mushrooms	Washed drained weight	CAC/RM 44-1972	Sieving	I
Canned palmito	Mineral impurities	ISO 762:1982 (confirmed 1992)	Gravimetry	I
Canned strawberries	Calcium	AOAC 968.31	Complexometric titrimetry	II
Canned strawberries	Mineral impurities	AOAC 971.33	Gravimetry	I
Canned tomatoes	Calcium	AOAC 968.31	Complexometric titrimetry	II
Canned tomatoes	Drained weight	CAC/RM 37-1970 - Method II	Sieving	I
Canned tomatoes	Mould count	AOAC 965.41	Howard mould count	I
Citrus marmalade	Calcium	AOAC 968.31	Complexometric titrimetry	II
Dates	Identification of defects	Described in the Standard	Visual inspection	I
Dates	Moisture	AOAC 934.06	Gravimetry (vacuum oven)	I
Dried apricots	Identification of defects	Described in the Standard	Visual inspection (weighing)	I
Dried apricots	Moisture	AOAC 934.06	Gravimetry (vacuum oven)	I
Dried apricots	Sulphur dioxide	AOAC 963.20	Colorimetry	II
Grated desiccated coconut	Acidity, total (in extracted oil)	Described in the Standard	Titration of extracted oil	IV

<i>Commodity Standard</i>	<i>Provision</i>	<i>Method</i>	<i>Principle</i>	<i>Type</i>
Grated desiccated coconut	Ash	AOAC 950.49	Gravimetry	I
Grated desiccated coconut	Extraneous vegetable matter	Described in the Standard	Counting extraneous material with the naked eye	IV
Grated desiccated coconut	Moisture	AOAC 925.40	Gravimetry (loss on drying)	I
Grated desiccated coconut	Oil content	AOAC 948.22	Gravimetry	I
Grated desiccated coconut	Sampling	Described in the Standard (According to Codex Sampling Instruction)	-	-
Jams (fruit preserves) and jellies	Calcium	AOAC 968.31	Complexometric titrimetry	II
Jams (fruit preserves) and jellies	Mineral impurities	AOAC 971.33	Gravimetry	I
Mango chutney	Ash insoluble in HCl	ISO 763:1982	Gravimetry	I
Pickled cucumbers	Acidity, total	AOAC 942.15	Titrimetry	I
Pickled cucumbers	Drained weight	AOAC 968.30	Gravimetry	I
Pickled cucumbers	Mineral impurities	AOAC 971.33	Gravimetry	I
Pickled cucumbers	Salt in brine	AOAC 971.27 (Codex general method)	Potentiometry	II
Pickled cucumbers	Volume fill by displacement	Described in the Standard	Displacement	I
Processed tomato concentrates	Mineral impurities	AOAC 971.33	Gravimetry	IV
Processed tomato concentrates	Natural tomato soluble solids	AOAC 970.59	Refractometry	I
Processed tomato concentrates	Sodium chloride	AOAC 971.27 (Codex general method)	Potentiometry	II
Raisins	Mineral impurities	CAC/RM 51-1974	Ashing	I
Raisins	Mineral oil	CAC/RM 52-1974	Extraction and separation on alumina	II
Raisins	Moisture	AOAC 972.20	Electrical conductance	I
Raisins	Sorbitol	AOAC 973.28	Gas chromatography	II
Raisins	Sulphur dioxide	AOAC 963.20	Colorimetry	II
Table olives	Acidity of brine	Described in the Standard	Titrimetry	IV

<i>Commodity Standard</i>	<i>Provision</i>	<i>Method</i>	<i>Principle</i>	<i>Type</i>
Table olives	pH of brine	Described in the Standard	Potentiometry	IV
Table olives	Salt in brine	AOAC 971.27 (Codex general method)	Potentiometry	II
Unshelled pistachio nuts	Identification of defects	Described in the Standard	Visual inspection	I
Unshelled pistachio nuts	Moisture	AOAC 925.40	Gravimetry (loss on drying)	I
Unshelled pistachio nuts	Size classification	Described in the Standard	Number per 500 g	I
Processed Meat and Poultry Products and Soups and Broths				
Processed meat and poultry products and soups and broths	Fat	ISO 1443-1973	Gravimetry	I
Processed meat and poultry products and soups and broths	Lead	AOAC 934.07	Colorimetry (dithizone)	II
Processed meat and poultry products and soups and broths	Nitrates	ISO 3091:1975 (confirmed 1996)	Colorimetry (cadmium reduction)	II
Processed meat and poultry products and soups and broths	Nitrites	ISO 2918:1975 (confirmed 1996)	Colorimetry	IV
Processed meat and poultry products and soups and broths	Tin	AOAC 985.16 (Codex general method)	Atomic absorption spectrophotometry	II
Processed meat and poultry products	Nitrogen/protein	ISO 937:1978 (confirmed 1995)	Titrimetry	II
Bouillons and consommés	Amino nitrogen	AIIBP Method No 2/7	Volumetry (modified Van Slyke)	II
Bouillons and consommés	Creatinine	AIIBP Method No 2/5	Colorimetry (Hadorn)	II
Bouillons and consommés	Lead	AOAC 934.07	Colorimetry (dithizone)	II
Bouillons and consommés	Nitrogen, total	AIIBP Method No 2/6	Titrimetry, Kjeldahl digestion	II
Bouillons and consommés	Sodium chloride	AOAC 971.27 (Codex general method)	Potentiometry	II
Bouillons and consommés	Tin	AOAC 985.16 (Codex general method)	Atomic absorption spectrophotometry	II
Canned corned beef	Lead	AOAC 972.25 (Codex general method)	Atomic absorption spectrophotometry	II

<i>Commodity Standard</i>	<i>Provision</i>	<i>Method</i>	<i>Principle</i>	<i>Type</i>
Canned corned beef	Nitrites, potassium and/or sodium salt	AOAC 973.31 (Codex general method)	Colorimetry	II
Canned corned beef	Nitrites, potassium and/or sodium salt	ISO 2918:1975 (confirmed 1996)	Colorimetry	IV
Canned corned beef	Tin (Products in tins and other containers)	AOAC 985.16 (Codex general method)	Atomic absorption spectrophotometry	II
Cooked cured chopped meat	Fat	ISO 1443-1973	Gravimetry (extraction)	I
Cooked cured chopped meat	Lead	AOAC 972.25 (Codex general method)	Atomic absorption spectrophotometry	II
Cooked cured chopped meat	Nitrites	AOAC 973.31 (Codex general method)	Colorimetry	II
Cooked cured chopped meat	Nitrites	ISO 2918:1975 (confirmed 1996)	Colorimetry	IV
Cooked cured chopped meat	Tin	AOAC 985.16 (Codex general method)	Atomic absorption spectrophotometry	II
Cooked cured ham	Fat	ISO 1443:1973	Gravimetry (extraction)	I
Cooked cured ham	Gelatin, added	Described in the Standard	Calculation	I
Cooked cured ham	Lead	AOAC 972.25 (Codex general method)	Atomic absorption spectrophotometry	II
Cooked cured ham	Nitrites	AOAC 973.31 (Codex general method)	Colorimetry	II
Cooked cured ham	Nitrites	ISO 2918:1975 (confirmed 1996)	Colorimetry	IV
Cooked cured ham	Protein (conversion factor 6.25)	ISO 937:1978 (confirmed 1995)	Titrimetry, Kjeldahl digestion	II
Cooked cured ham	Tin	AOAC 985.16 (Codex general method)	Atomic absorption spectrophotometry	II
Cooked cured pork shoulder	Fat	ISO 1443:1973	Gravimetry (extraction)	I
Cooked cured pork shoulder	Gelatin, added	Described in the Standard	Calculation	I
Cooked cured pork shoulder	Lead	AOAC 972.25 (Codex general method)	Atomic absorption spectrophotometry	II
Cooked cured pork shoulder	Nitrites	AOAC 973.31 (Codex general method)	Colorimetry	II
Cooked cured pork shoulder	Nitrites	ISO 2918:1975 (confirmed 1996)	Colorimetry	IV
Cooked cured pork shoulder	Protein	ISO 937:1978 (confirmed 1995)	Titrimetry, Kjeldahl digestion	II

<i>Commodity Standard</i>	<i>Provision</i>	<i>Method</i>	<i>Principle</i>	<i>Type</i>
Cooked cured pork shoulder	Tin	AOAC 985.16 (Codex general method)	Atomic absorption spectrophotometry	II
Luncheon meat	Fat	ISO 1443:1973	Gravimetry (extraction)	I
Luncheon meat	Lead	AOAC 972.25 (Codex general method)	Atomic absorption spectrophotometry	II
Luncheon meat	Nitrites, potassium and/or sodium salt	AOAC 973.31 (Codex general method)	Colorimetry	II
Luncheon meat	Nitrites, potassium and/or sodium salt	ISO 2918:1975 (confirmed 1996)	Colorimetry	IV
Luncheon meat	Tin	AOAC 985.16 (Codex general method)	Atomic absorption spectrophotometry	II
Quick Frozen Fruits and Vegetables				
Quick frozen fruits and vegetables	Net weight	CAC/RM 34-1970	Weighing	I
Quick frozen fruits and vegetables	Thawing procedure	CAC/RM 32-1970	Thawing	I
Quick frozen fruits and vegetables: Berries, leek and carrot	Mineral impurities	CAC/RM 54-1974	Flotation and sedimentation	I
Quick frozen fruits and vegetables: Berries, Whole kernel corn and Corn-on-the-cob	Soluble solids, total	CAC/RM 43-1971	Refractometry	I
Quick frozen fruits and vegetables: Peaches and berries	Drained fruit/drained berries	Described in the Standards	Draining	I
Quick frozen fruits and vegetables: Vegetables	Cooking procedure	CAC/RM 33-1970	Cooking	I
Quick frozen French fried potatoes	Moisture	AOAC 984.25	Gravimetry (convection oven)	I
Quick frozen green and wax beans	Tough strings	CAC/RM 39-1970	Stretching	I
Quick frozen peas	Solids, alcohol insoluble	CAC/RM 35-1970	Gravimetry	I
Quick frozen spinach	Dry matter, Salt-free	Described in the Standard	Weighing	I

<i>Commodity Standard</i>	<i>Provision</i>	<i>Method</i>	<i>Principle</i>	<i>Type</i>
Sugars and Honey				
Honey	Acidity	<i>J. Assoc. Public Analysts</i> (1992) 28 (4) 171-175 <i>MAFF Validated Method V19 for Acidity in Honey</i>	Titrimetry	I
Honey	Arsenic	AOAC 952.13 (Codex general method)	Colorimetry (diethyldithiocarbamate)	II
Honey	Copper	AOAC 971.20 (Codex general method)	Atomic absorption spectrophotometry	II
Honey	Diastase activity	AOAC 958.09	Photometry	II
Honey	Diastase activity	Described in the Standard (Other commercially available calibrated substrate preparations can also be used)	Photometry	III
Honey	Hydroxymethylfurfural	AOAC 980.23	Spectrophotometry	II
Honey	Hydroxymethylfurfural	Described in the Standard	Photometry (Winkler)	III
Honey	Hydroxymethylfurfural	Described in the Standard	HPLC	III
Honey	Lead	AOAC 972.25 (Codex general method)	Atomic absorption spectrophotometry	II
Honey	Mineral (ash)	<i>J. Assoc. Public Analysts</i> (1992) 28 (4) 177-181 <i>MAFF Validated Method V20 for Mineral (ash) in Honey</i>	Gravimetry (ignition at 600°C)	I
Honey	Moisture	AOAC 969.38B <i>J. Assoc. Public Analysts</i> (1992) 28 (4) 183-187 <i>MAFF Validated Method V21 for Moisture in Honey</i>	Refractometry	I
Honey	Reducing sugar, apparent	Described in the Standard	Titrimetry (Lane & Eynon)	I
Honey	Sample preparation	AOAC 920.180	-	-

<i>Commodity Standard</i>	<i>Provision</i>	<i>Method</i>	<i>Principle</i>	<i>Type</i>
Honey	Solids, water-insoluble	<i>J. Assoc. Public Analysts</i> (1992) 28 (4) 189-193 <i>MAFF Validated Method V22 for Water-Insoluble Solids in Honey</i>	Gravimetry	I
Honey	Sucrose, apparent	<i>FAO Manual of Quality Control, Food and Nutrition Monograph 14/3</i> (1979) 150	Walker inversion	I
Honey	Sugars added (corn and cane sugar products)	AOAC 978.17	Carbon isotope ratio mass spectrometry	I
Honey	Sugars added (high fructose syrup, corn syrup)	AOAC 979.22	Thin layer chromatography	II
Honey	Sugars added (sugar profile)	AOAC 977.20	Liquid chromatography	II
Sugars	Arsenic	AOAC 952.13 (Codex general method)	Colorimetry (diethyldithiocarbamate)	II
Sugars	Arsenic	ICUMSA GS 2/3-25 (1994)	Colorimetry (diethyldithiocarbamates)	IV
Sugars	Lead	AOAC 997.15	Atomic absorption spectrophotometry (graphite furnace)	II
Sugars (dextrose anhydrous and dextrose monohydrate)	D-Glucose	ISO 5377:1981	Titrimetry	I
Sugars (dextrose anhydrous and dextrose monohydrate)	Solids, total	ISO 1741:1980	Gravimetry (vacuum oven)	I
Sugars (dextrose anhydrous and dextrose monohydrate)	Sulphated ash	ISO 5809:1982	Single sulphonation	I
Sugars (dextrose anhydrous and dextrose monohydrate)	Sulphur dioxide	ISO 5379:1983	Acidimetry and nephelometry	IV
Sugars (fructose)	pH	ICUMSA GS 1/2/3/4/7/8-23 (1994)	Potentiometry	I
Sugars (fructose)	Conductivity ash	ICUMSA GS 2/3-17 (1994)	Conductimetry	I
Sugars (fructose)	D-Fructose	ISO 10504:1988	Liquid chromatography (refractive index detection)	II

<i>Commodity Standard</i>	<i>Provision</i>	<i>Method</i>	<i>Principle</i>	<i>Type</i>
Sugars (fructose)	D-Glucose	ISO 10504:1988	Liquid chromatography (refractive index detection)	II
Sugars (fructose)	Loss on drying	ISO 1742:1980	Gravimetry	I
Sugars (fructose)	Sulphur dioxide	ISO 5379:1983	Acidimetry and nephelometry	IV
Sugars (glucose syrup and dried glucose syrup)	Reducing sugar	ISO 5377:1981	Titrimetry	I
Sugars (glucose syrup and dried glucose syrup)	Solids, total	ISO 1742:1980	Gravimetry (vacuum oven)	I
Sugars (glucose syrup and dried glucose syrup)	Sulphated ash	ISO 5809:1982	Single sulphonation	I
Sugars (glucose syrup and dried glucose syrup)	Sulphur dioxide	ISO 5379:1983	Acidimetry and nephelometry	IV
Sugars (lactose)	Lactose, anhydrous	ICUMSA GS 4/3-3 (1994)	Titrimetry	II
Sugars (lactose)	Loss on drying	USP General Chapter 731	Gravimetry (Drying at 120°C for 16 h)	I
Sugars (lactose)	pH	ICUMSA GS 1/2/3/4/7/8-23 (1994)	Potentiometry	I
Sugars (lactose)	Sulphated ash	ISO 5809:1982	Single sulphonation	I
Sugars (plantation or mill white sugar)	Conductivity ash	ICUMSA GS 1/3/4/7/8-13 (1994)	Conductimetry	I
Sugars (plantation or mill white sugar)	Invert sugar	ICUMSA GS 1/3/7-3 (1994)	Titrimetry (Lane & Eynon)	I
Sugars (plantation or mill white sugar)	Loss on drying	ICUMSA GS 2/1/3-15 (1994)	Gravimetry	I
Sugars (plantation or mill white sugar)	Polarization	ICUMSA GS 1/2/3-1 (1994)	Polarimetry	II
Sugars (plantation or mill white sugar)	Sulphur dioxide	ICUMSA GS 2/3-35 (1998) NMKL 135 (1990) EN 1988-2 (1998)	Enzymatic method	II
Sugars (powdered dextrose)	Sulphated ash	ISO 5809:1982	Single sulphonation	I

<i>Commodity Standard</i>	<i>Provision</i>	<i>Method</i>	<i>Principle</i>	<i>Type</i>
Sugars (powdered sugar and powdered dextrose)	Sulphur dioxide	ICUMSA GS 2/3-35 (1998) NMKL 135 (1990) EN 1988-2 (1998)	Enzymatic method	II
Sugars (powdered sugar)	Colour	ICUMSA GS 2/3-9 (1994)	Photometry	I
Sugars (powdered sugar)	Conductivity ash	ICUMSA GS 2/3-17 (1994)	Conductimetry	I
Sugars (powdered sugar)	Invert sugar	ICUMSA GS 2/3-5 (1997) after filtration if necessary to remove any anticaking agents	Titrimetry	I
Sugars (powdered sugar)	Loss on drying	ICUMSA GS 2/1/3-15 (1994)	Gravimetry	I
Sugars (powdered sugar)	Polarization	ICUMSA GS 2/3-1 after filtration if necessary to remove any anticaking agents	Polarimetry	II
Sugars (raw cane sugar)	Sulphur dioxide	ICUMSA GS 2/3-35 (1998) NMKL 135 (1990) EN 1988-2 (1998)	Enzymatic method	II
Sugars (soft white sugar and soft brown sugar)	Conductivity ash	ICUMSA GS 1/3/4/7/8-13 (1994)	Conductimetry	I
Sugars (soft white sugar and soft brown sugar)	Invert sugar	ICUMSA GS 4/3-3 (1994) (applicable at levels >10% m/m)	Titrimetry (Lane & Eynon)	I
Sugars (soft white sugar and soft brown sugar)	Invert sugar	ICUMSA GS 1/3/7-3 (1994) (applicable at levels <10% m/m)	Titrimetry (Lane & Eynon)	I
Sugars (soft white sugar and soft brown sugar)	Loss on drying	ICUMSA GS 2/1/3-15 (1994)	Gravimetry	I
Sugars (soft white sugar and soft brown sugar)	Sucrose plus invert sugar	ICUMSA GS 4/3-7 (1994)	Titrimetry	I
Sugars (soft white sugar and soft brown sugar)	Sulphated ash	ICUMSA GS 1/3/4/7/8-11 (1994)	Gravimetry	I
Sugars (soft white sugar and soft brown sugar)	Sulphur dioxide	ICUMSA GS 2/3-35 (1998) NMKL 135 (1990) EN 1988-2 (1998)	Enzymatic method	II

<i>Commodity Standard</i>	<i>Provision</i>	<i>Method</i>	<i>Principle</i>	<i>Type</i>
Sugars (soft white sugar)	Colour	ICUMSA GS 2/3-9 (1994)	Photometry	I
Sugars (white sugar)	Conductivity ash	ICUMSA GS 2/3-17 (1994)	Conductimetry	I
Sugars (white sugar)	Invert sugar	ICUMSA GS 2/3-5 (1997)	Titrimetry	I
Sugars (white sugar)	Loss on drying	ICUMSA GS 2/1/3-15 (1994)	Gravimetry	I
Sugars (white sugar)	Polarization	ICUMSA GS 2/3-1 (1994)	Polarimetry	II
Sugars (white sugar)	Sulphur dioxide	ICUMSA GS 2/3-35 (1998) NMKL 135 (1990) EN 1988-2 (1998)	Enzymatic method	II
Miscellaneous Products				
Edible cassava flour	Fibre, crude	ISO 5498:1981 (B.5 separation)	Gravimetry	I
Edible cassava flour	Granularity	ISO 2591-1:1988	Sieving	I
Edible cassava flour	Moisture	ISO 712:1998	Gravimetry	I
Food grade salt	Arsenic	ESPA/CN-E/105-1996	Photometry	II
Food grade salt	Cadmium	ESPA/CN-E/107-1997	Atomic absorption spectrophotometry	II
Food grade salt	Calcium and magnesium	ISO 2482:1973	Complexometric titrimetry	II
Food grade salt	Copper	ESPA/CN-E/101-1994	Photometry	II
Food grade salt	Halogens	ISO 2481:1973	Mercurimetry	II
Food grade salt	Insoluble matter	ISO 2479:1972	Gravimetry	II
Food grade salt	Iodine	ESPA/CN-E/109-1994	Titrimetry using sodium thiosulphate	II
Food grade salt	Iodine	AOAC 925.56	Titrimetry using sodium thiosulphate	III
Food grade salt	Lead	ESPA/CN-E/108-1994	Atomic absorption spectrophotometry	II
Food grade salt	Loss on drying	ISO 2483:1973	Gravimetry (drying at 110°C)	I
Food grade salt	Mercury	ESPA/CN-E/106-1994	Cold vapour atomic absorption spectrophotometry	II

<i>Commodity Standard</i>	<i>Provision</i>	<i>Method</i>	<i>Principle</i>	<i>Type</i>
Food grade salt	Potassium	ESPA/CN-E/104-1994 (applicable to products containing ≥ 2 mg-K/kg)	Flame atomic absorption spectrophotometry	II
Food grade salt	Potassium	ESPA/CN-E/103-1994 (applicable to products containing ≥ 100 mg-K/kg)	Titrimetry	III
Food grade salt	Sodium chloride	Described in the Standard	Calculation	I
Food grade salt	Sulphate	ISO 2480:1972	Gravimetry	II
Gari	Ash	ISO 2171:1993	Gravimetry	I
Gari	Fibre, crude	ISO 5498:1981 (B.5 separation)	Gravimetry	I
Gari	Granularity	ISO 2591-1:1988	Sieving	I
Gari	Moisture	ICC Method No 109/1 (1986) ISO 712:1998	Gravimetry	I
Guideline level for acrylonitrile	Acrylonitrile	AOAC 985.13	Gas chromatography	II
Guideline levels for mercury in fish	Methyl mercury	AOAC 988.11	Atomic absorption spectrophotometry	II
Guideline levels for vinyl chloride monomer	Vinyl chloride monomer	ISO 6401:1985	Gas chromatography	II
Guideline levels for vinyl chloride monomer	Vinyl chloride monomer	Commission Directive 81/432/EEC O.J. No. L.167, p. 6, 24.6.81	Gas chromatography ("head-space")	III
Guidelines for nutrition labelling	Polyunsaturated fatty acids	AOCS Ce 1c-89	Gas liquid chromatography	IV
Guidelines for nutrition labelling	Saturated fatty acids	AOAC 996.06	Gas liquid chromatography	II
Guidelines for nutrition labelling	Saturated fatty acids	AOCS Ce 1c-89	Gas liquid chromatography	IV
Mayonnaise	Egg yolk	Described in the Standard	Extraction and ashing	I
Mayonnaise	Fat, total	Described in the Standard	Gravimetry	I
Vinegar	Acids, total (expressed as CH ₃ COOH)	AOAC 930.35J	Titrimetry	I

<i>Commodity Standard</i>	<i>Provision</i>	<i>Method</i>	<i>Principle</i>	<i>Type</i>
Vinegar	Alcohol, residual	AOAC 942.06	Pycnometry	I
Vinegar	Alcohol, residual	OIV Method A 2, 1990	Pycnometry	III
Vinegar	Arsenic	AOAC 952.13 (Codex general method)	Colorimetry (diethyldithiocarbamate)	II
Vinegar	Copper	AOAC 971.20 (Codex general method)	Atomic absorption spectrophotometry	II
Vinegar	Iron	IFJU Method No 15, 1964	Photometry	IV
Vinegar	Lead	AOAC 972.25 (Codex general method)	Atomic absorption spectrophotometry	II
Vinegar	Soluble solids	AOAC 930.35C	Gravimetry	I
Vinegar	Sulphur dioxide	AOAC 990.28 (Codex general method)	Optimized Monier-Williams method	II
Vinegar	Sulphur dioxide	OIV Method A 17, 1990	Titrimetry	III
Vinegar	Sulphur dioxide	AOAC 990.29 (Codex general method)	Flow injection analysis	III
Vinegar	Sulphur dioxide	AOAC 990.31 (Codex general method)	Ion exclusion chromatography	III
Vinegar	Zinc	AOAC 969.32 (Codex general method)	Atomic absorption spectrophotometry	II

RECOMMENDED METHODS OF ANALYSIS AND SAMPLING

CODEX STAN 234-1999

PART II

**METHODS OF ANALYSIS AND SAMPLING BY ALPHABETICAL ORDER OF
PROVISIONS**

<i>Provision</i>	<i>Commodity Standard</i>	<i>Method</i>	<i>Principle</i>	<i>Type</i>
Acidity	Fats and oils	IUPAC 2.201 ISO 660:1996	Titrimetry	I
Acidity	Honey	<i>J. Assoc. Public Analysts</i> (1992) 28 (4) 171-175 <i>MAFF Validated Method V19 for Acidity in Honey</i>	Titrimetry	I
Acidity of brine	Table olives	Described in the Standard	Titrimetry	IV
Acidity, titratable	Milk powders and cream powders	IDF Standard 86:1981	Titrimetry, titration to pH 8.4	I
Acidity, total	Pickled cucumbers	AOAC 942.15	Titrimetry	I
Acidity, total (in extracted oil)	Grated desiccated coconut	Described in the Standard	Titration of extracted oil	IV
Acids, free	Edible casein products	IDF Standard 91:1979 (confirmed 1986) ISO 5547:1978 (confirmed 1993)	Titrimetry (aqueous extract)	IV
Acids, total (expressed as CH ₃ COOH)	Vinegar	AOAC 930.35J	Titrimetry	I
Acrylonitrile	Guideline level for acrylonitrile	AOAC 985.13	Gas chromatography	II
Aflatoxins, total	Maize (corn)	AOAC 979.18	Holiday-Velasco mini column	II
Aflatoxins, total	Peanuts (intended for further processing)	AOAC 975.36	Romer minicolumn	III
Aflatoxins, total	Peanuts (intended for further processing)	AOAC 979.18	Holiday-Velasco minicolumn	III
Aflatoxins, total	Peanuts (raw)	AOAC 991.31	Immunoaffinity column (Aflatest)	II
Aflatoxins, total	Peanuts (raw)	AOAC 993.17	Thin layer chromatography	III
Alcohol, residual	Vinegar	AOAC 942.06	Pycnometry	I
Alcohol, residual	Vinegar	OIV Method A 2, 1990	Pycnometry	III
Amino nitrogen	Bouillons and consommés	AIIBP Method No 2/7	Volumetry (modified Van Slyke)	II
Antioxidants (phenolic)	Milkfat products	IDF Standard 165:1993	Reversed phase gradient liquid chromatography	II

<i>Provision</i>	<i>Commodity Standard</i>	<i>Method</i>	<i>Principle</i>	<i>Type</i>
Arsenic	Cocoa products and chocolate	AOAC 952.13 (Codex general method)	Colorimetry (diethyldithiocarbamate)	II
Arsenic	Fats and oils	AOAC 952.13 (Codex general method) IUPAC 3.136	Colorimetry (diethyldithiocarbamate)	II
Arsenic	Fats and oils	AOAC 942.17 (Codex general method)	Colorimetry (molybdenum blue)	III
Arsenic	Fats and oils	AOAC 985.16 (Codex general method)	Atomic absorption spectrophotometry	III
Arsenic	Food grade salt	ESPA/CN-E/105-1996	Photometry	II
Arsenic	Fruit juices	AOAC 952.13 (Codex General method)	Colorimetry (diethyldithiocarbamate)	II
Arsenic	Fruit juices	AOAC 942.17 (Codex General method)	Colorimetry (molybdenum blue)	III
Arsenic	Fruit juices	AOAC 986.15 (Codex General method)	Atomic absorption spectrophotometry	III
Arsenic	Honey	AOAC 952.13 (Codex general method)	Colorimetry (diethyldithiocarbamate)	II
Arsenic	Natural mineral waters	AOAC 986.15 (Codex general method)	Atomic absorption spectrophotometry	II
Arsenic	Natural mineral waters	ISO 6595:1982 (confirmed 1995)	Spectrophotometry	IV
Arsenic	Sugars	AOAC 952.13 (Codex general method)	Colorimetry (diethyldithiocarbamate)	II
Arsenic	Sugars	ICUMSA GS 2/3-25 (1994)	Colorimetry (diethyldithiocarbamates)	IV
Arsenic	Vinegar	AOAC 952.13 (Codex general method)	Colorimetry (diethyldithiocarbamate)	II
Ascorbic acid, L-	Fruit juices	AOAC 967.22	Microfluorometry	II
Ash	Degermed maize (corn) meal and maize (corn) grits	AOAC 923.03 ISO 2171:1993 ICC Method No 104/1 (1990)	Gravimetry	I
Ash	Gari	ISO 2171:1993	Gravimetry	I
Ash	Grated desiccated coconut	AOAC 950.49	Gravimetry	I
Ash	Pearl millet flour	AOAC 923.03	Gravimetry	I
Ash	Sorghum flour	AOAC 923.03 ISO 2171:1993 ICC Method No 104/1 (1990)	Gravimetry	I

<i>Provision</i>	<i>Commodity Standard</i>	<i>Method</i>	<i>Principle</i>	<i>Type</i>
Ash	Sorghum grains	AOAC 923.03 ISO 2171:1993 ICC Method No 104/1 (1990)	Gravimetry	I
Ash	Soy protein products	AOAC 923.03 ISO 2171:1993 (Method B)	Gravimetry	I
Ash	Special foods	AOAC 942.05	Gravimetry	I
Ash	Vegetable protein products	AOAC 923.03 ISO 2171:1993 (Method B)	Gravimetry, Direct	I
Ash	Wheat flour	AOAC 923.03 ISO 2171:1993 ICC Method No 104/1 (1990)	Gravimetry	I
Ash	Whey powders	IDF Standard 90:1979 (confirmed 1986) ISO 5545:1978	Furnace, 825°C	IV
Ash	Whole and decorticated pearl millet grains	AOAC 923.03	Gravimetry	I
Ash	Whole maize (corn) meal	AOAC 923.03 ISO 2171:1993 ICC Method No 104/1 (1990)	Gravimetry	I
Ash (including P ₂ O ₅)	Edible casein products	IDF Standard 90:1979 (confirmed 1986) ISO 5545:1978	Furnace, 825°C	IV
Ash (semolina)	Durum wheat semolina and durum wheat flour	AOAC 923.03 ISO 2171:1993	Gravimetry	I
Ash insoluble in HCl	Cocoa (cacao) nib, cocoa (cacao) mass, cocoa press cake and cocoa dust (cocoa fines), for use in the manufacturing of cocoa and chocolate products	AOAC 972.15	Gravimetry (at 600°C)	I
Ash insoluble in HCl	Mango chutney	ISO 763:1982	Gravimetry	I
Ash, total	Chocolate	AOAC 972.15	Gravimetry (at 600°C)	I

<i>Provision</i>	<i>Commodity Standard</i>	<i>Method</i>	<i>Principle</i>	<i>Type</i>
Ash, total	Cocoa (cacao) nib, cocoa (cacao) mass, cocoa press cake and cocoa dust (cocoa fines), for use in the manufacturing of cocoa and chocolate products	AOAC 972.15	Gravimetry (at 600°C)	I
Ash, total	Cocoa butter confectionery	AOAC 972.15	Gravimetry (at 600°C)	I
Ash, total (in cocoa mass and cocoa press cake)	Cocoa powders (cocoa) and dry cocoa-sugar mixtures	AOAC 972.15	Gravimetry (at 600°C)	I
Barium	Natural mineral waters	<i>Examination of Water Pollution Control</i> WHO Pergamon Press (1982) Vol. 2, pp. 65-66		IV
Barium	Natural mineral waters	<i>Examination of Water Pollution Control.</i> WHO Pergamon Press (1982) Vol. 2, pp. 67-68		IV
Baudouin test (modified Villavecchia or sesameseed oil test)	Fats and oils	AOCS Cb 2-40	Colour reaction	I
Borate	Natural mineral waters	ISO 9390:1990	Spectrophotometry	II
Cadmium	Food grade salt	ESPA/CN-E/107-1997	Atomic absorption spectrophotometry	II
Cadmium	Natural mineral waters	ISO 8288:1986 (confirmed 1995)	Flame atomic absorption spectrophotometry	II
Cadmium	Natural mineral waters	AOAC 974.27	Atomic absorption spectrophotometry	III
Cadmium	Natural mineral waters	AOAC 986.15 (Codex general method)	Anodic stripping voltammetry	III
Calcium	Canned green peas	AOAC 968.31	Complexometric titrimetry	II
Calcium	Canned strawberries	AOAC 968.31	Complexometric titrimetry	II
Calcium	Canned tomatoes	AOAC 968.31	Complexometric titrimetry	II
Calcium	Citrus marmalade	AOAC 968.31	Complexometric titrimetry	II
Calcium	Jams (fruit preserves) and jellies	AOAC 968.31	Complexometric titrimetry	II

<i>Provision</i>	<i>Commodity Standard</i>	<i>Method</i>	<i>Principle</i>	<i>Type</i>
Calcium	Natural mineral waters	ISO 6058:1984	Titrimetry	II
Calcium	Natural mineral waters	ISO 7980:1986 (confirmed 1995)	Atomic absorption spectrophotometry	III
Calcium	Special foods	AOAC 984.27	ICP emission spectrometry	III
Calcium and magnesium	Food grade salt	ISO 2482:1973	Complexometric titrimetry	II
Calories by calculation	Special foods	Method described in CAC/VOL IX-Ed.1, Part III	Calculation method	III
Carbohydrates	Special foods	Method described in CAC/VOL IX-Ed.1, Part III	Calculation	III
Carbon dioxide	Fruit juices	IFJU Method No 42, 1976	Titrimetry (back-titration after precipitation)	IV
Carotenoids, total	Fats and oils	BS 684 Section 2.20	Spectrophotometry	II
Centre in composite and filled chocolate	Composite and filled chocolate	Method described in ALINORM 83/23, p. 27	Gravimetry	III
Chloride	Natural mineral waters	<i>Examination of Water Pollution Control.</i> WHO Pergamon Press (1982) Vol. 2, pp. 205-208		II
Chloride	Natural mineral waters	AOAC 973.51	Titrimetry (Mercuric nitrate)	III
Chloride	Natural mineral waters	ISO 9297:1989 (confirmed 1994)	Titrimetry	III
Chloride	Special foods	AOAC 971.27 (Codex general method)	Potentiometry	II
Chromium (VI)	Natural mineral waters	<i>Examination of Water Pollution Control.</i> WHO Pergamon Pres (1982) Vol. 2, pp. 86-87		IV
Citric acid	Cheese	IDF Standard 34C:1992	Enzymic method	II
Citric acid	Cheese	ISO 2963:1997 AOAC 976.15	Photometry	III
Citric acid	Processed cheese products	IDF Standard 34C:1992	Enzymic method	II

<i>Provision</i>	<i>Commodity Standard</i>	<i>Method</i>	<i>Principle</i>	<i>Type</i>
Citric acid	Processed cheese products	ISO 2963:1997 AOAC 976.15	Photometry	III
Coating in composite and filled chocolate	Composite and filled chocolate	Method described in ALINORM 83/23, p. 27	Gravimetry	III
Cocoa butter	Cocoa butter confectionery	AOAC 963.15 IOCCC 14-1972	Gravimetry (Knorr tube extraction, Soxhlet extraction)	I
Cocoa butter	Cocoa powders (cocoa) and dry cocoa-sugar mixtures	IOCCC 14-1972 and 18-1973	Through total fat and total sterol content by GLC	I
Cocoa butter, percentage of	Chocolate	AOAC 963.15 IOCCC 14-1972	(Gravimetry (Soxhlet extraction))	I
Cocoa shell	Cocoa (cacao) nib, cocoa (cacao) mass, cocoa press cake and cocoa dust (cocoa fines), for use in the manufacturing of cocoa and chocolate products	AOAC 968.10 and 970.23	Spiral vessel count, Stone cell count	I
Cocoa solids, fat-free	Chocolate	AOAC 931.05	Oven evaporation and factor	I
Coliform organism, thermotolerant organism and presumptive <i>Escherichia coli</i>	Natural mineral waters	ISO 9308-1:1990	Membrane filtration	I
Colour	Pearl millet flour	<i>Modern Cereal Chemistry</i> , 6th Ed., D.W. Kent-Jones and A.J. Amos (Ed.), pp. 605-612, Food Trade Press Ltd, London, 1969.	Colorimetry using specific colour grader	IV
Colour	Sorghum flour	<i>Modern Cereal Chemistry</i> , 6th Ed., D.W. Kent-Jones and A.J. Amos (Ed.), pp. 605-612, Food Trade Press Ltd, London, 1969.	Colorimetry using specific colour grader	IV
Colour	Sugars (powdered sugar)	ICUMSA GS 2/3-9 (1994)	Photometry	I
Colour	Sugars (soft white sugar)	ICUMSA GS 2/3-9 (1994)	Photometry	I
Conductivity ash	Sugars (fructose)	ICUMSA GS 2/3-17 (1994)	Conductimetry	I
Conductivity ash	Sugars (plantation or mill white sugar)	ICUMSA GS 1/3/4/7/8-13 (1994)	Conductimetry	I

<i>Provision</i>	<i>Commodity Standard</i>	<i>Method</i>	<i>Principle</i>	<i>Type</i>
Conductivity ash	Sugars (powdered sugar)	ICUMSA GS 2/3-17 (1994)	Conductimetry	I
Conductivity ash	Sugars (soft white sugar and soft brown sugar)	ICUMSA GS 1/3/4/7/8-13 (1994)	Conductimetry	I
Conductivity ash	Sugars (white sugar)	ICUMSA GS 2/3-17 (1994)	Conductimetry	I
Cooking procedure	Quick frozen fruits and vegetables: Vegetables	CAC/RM 33-1970	Cooking	I
Copper	Chocolate	AOAC 960.40 (Codex general method)	Colorimetry (diethyldithiocarbamate)	II
Copper	Cocoa (cacao) nib, cocoa (cacao) mass, cocoa press cake and cocoa dust (cocoa fines), for use in the manufacturing of cocoa and chocolate products	AOAC 971.20 (Codex general method)	Atomic absorption spectrophotometry	II
Copper	Cocoa butter confectionery	AOAC 971.20 (Codex general method)	Atomic absorption spectrophotometry	II
Copper	Cocoa butters	AOAC 990.05 ISO 8294:1994 IUPAC 2.631 (Codex general method)	Atomic absorption spectrophotometry (direct graphite furnace)	II
Copper	Cocoa butters	AOAC 960.40 (Codex general method)	Colorimetry (diethyldithiocarbamate)	III
Copper	Cocoa powders (cocoa) and dry cocoa-sugar mixtures	AOAC 960.40 (Codex general method)	Colorimetry (diethyldithiocarbamate)	II
Copper	Edible casein products	AOAC 985.35	Atomic absorption spectrophotometry	II
Copper	Edible casein products	IDF Standard 76A:1980 ISO 5738:1980 (confirmed 1995) AOAC 960.40 (Codex general method)	Colorimetry (diethyldithiocarbamate)	III
Copper	Fats and oils	AOAC 990.05 ISO 8294:1994 IUPAC 2.631 (Codex general method)	Atomic absorption Spectrophotometry (direct graphite furnace)	II
Copper	Food grade salt	ESPA/CN-E/101-1994	Photometry	II

<i>Provision</i>	<i>Commodity Standard</i>	<i>Method</i>	<i>Principle</i>	<i>Type</i>
Copper	Fruit juices	AOAC 971.20 (Codex general method)	Atomic absorption spectrophotometry	II
Copper	Honey	AOAC 971.20 (Codex general method)	Atomic absorption spectrophotometry	II
Copper	Natural mineral waters	ISO 8288:1986 (confirmed 1995)	Flame atomic absorption spectrophotometry	II
Copper	Natural mineral waters	AOAC 960.40 (Codex general method)	Colorimetry	III
Copper	Vinegar	AOAC 971.20 (Codex general method)	Atomic absorption spectrophotometry	II
Copper	Whey powders	AOAC 985.35	Atomic absorption spectrophotometry	II
Copper	Whey powders	IDF Standard 76A:1980 ISO 5738:1980 (confirmed 1995) AOAC 960.40 (Codex general method)	Photometry (diethyldiethiocarbamate)	III
Creatinine	Bouillons and consommés	AIIBP Method No 2/5	Colorimetry (Hadorn)	II
Crismer value	Fats and oils	AOCS Cb 4-35	Turbidity	I
Defectives	Canned salmon	Described in the Standard	Classification	I
Denaturation of gluten	Wheat gluten	AACC Method 38-20	Pharinography	I
Density, apparent	Palm oil	ISO 6993:1995 with the appropriate conversion factor	Pycnometry	I
D-Fructose	Sugars (fructose)	ISO 10504:1988	Liquid chromatography (refractive index detection)	II
D-Glucose	Sugars (dextrose anhydrous and dextrose monohydrate)	ISO 5377:1981	Titrimetry	I
D-Glucose	Sugars (fructose)	ISO 10504:1988	Liquid chromatography (refractive index detection)	II
Diastase activity	Honey	AOAC 958.09	Photometry	II
Diastase activity	Honey	Described in the Standard (Other commercially available calibrated substrate preparations can also be used)	Photometry	III
Dietary fibre, total	Infant formula and follow-up formula	AOAC 991.43	Gravimetry (enzymatic digestion)	I

<i>Provision</i>	<i>Commodity Standard</i>	<i>Method</i>	<i>Principle</i>	<i>Type</i>
Dietary fibre, total	Special foods	AOAC 985.29	Gravimetry (enzymatic digestion)	I
Drained fruit/drained berries	Quick frozen fruits and vegetables: Peaches and berries	Described in the Standards	Draining	I
Drained weight	Canned crab meat	Described in the Standard	Weighing	I
Drained weight	Canned shrimps or prawns	Described in the Standard	Draining	I
Drained weight	Canned tomatoes	CAC/RM 37-1970 - Method II	Sieving	I
Drained weight	Pickled cucumbers	AOAC 968.30	Gravimetry	I
Drained weight	Processed fruits and vegetables	AOAC 968.30	Sieving	I
Dry matter	Whey cheese	IDF Standard 58:1970 (confirmed 1993) ISO 2920:1974 (confirmed 1996)	Gravimetry (drying at 88±2°C)	IV
Dry matter, Salt-free	Quick frozen spinach	Described in the Standard	Weighing	I
Egg yolk	Mayonnaise	Described in the Standard	Extraction and ashing	I
Essential oils	Fruit juices	AOAC 944.06; 942.08	Babcock method	I
Essential oils (Citrus fruit juices)	Fruit juices	IFJU Method No. 45A, 1972	Distillation and titration	I
Expression of results as m/m	Fruit juices	IFJU Method No 1, 1989 & IFJU General sheet, 1971	Pycnometry	I
Extraneous vegetable matter	Grated desiccated coconut	Described in the Standard	Counting extraneous material with the naked eye	IV
Faecal Streptococci	Natural mineral waters	ISO 7899-2:1984	Membrane filtration	I
Fat	Cooked cured chopped meat	ISO 1443-1973	Gravimetry (extraction)	I
Fat	Cooked cured ham	ISO 1443:1973	Gravimetry (extraction)	I
Fat	Cooked cured pork shoulder	ISO 1443:1973	Gravimetry (extraction)	I
Fat	Luncheon meat	ISO 1443:1973	Gravimetry (extraction)	I
Fat	Margarine	IUPAC 2.801	Gravimetry	I
Fat	Minarine	IUPAC 2.801	Gravimetry	I

<i>Provision</i>	<i>Commodity Standard</i>	<i>Method</i>	<i>Principle</i>	<i>Type</i>
Fat	Processed meat and poultry products and soups and broths	ISO 1443-1973	Gravimetry	I
Fat	Soy protein products	CAC/RM 55-1976 - Method 1	Gravimetry (extraction)	I
Fat	Special foods	CAC/RM 55-1976	Gravimetry (extraction)	I
Fat	Vegetable protein products	CAC/RM 55-1976 - Method 1	Gravimetry (extraction)	I
Fat acidity	Wheat flour	AOAC 939.05	Titrimetry	I
Fat in foods not containing starch, meat or vegetable products	Special foods	CAC/RM 1-1973, B-2	Gravimetry	I
Fat, crude	Degermed maize (corn) meal and maize (corn) grits	AOAC 945.38F; 920.39C	Gravimetry (ether extraction)	I
Fat, crude	Pearl millet flour	AOAC 945.38F; 920.39C	Gravimetry (ether extraction)	I
Fat, crude	Sorghum flour	AOAC 945.38F; 920.39C	Gravimetry (ether extraction)	I
Fat, crude	Sorghum grains	AOAC 945.38F, 920.39C	Gravimetry (ether extraction)	I
Fat, crude	Whole and decorticated pearl millet grains	AOAC 945.38F; 920.39C	Gravimetry (ether extraction)	I
Fat, crude	Whole maize (corn) meal	AOAC 945.38F; 920.39C	Gravimetry (ether extraction)	I
Fat, total	Chocolate	AOAC 963.15	Gravimetry (Soxhlet extraction)	I
Fat, total	Mayonnaise	Described in the Standard	Gravimetry	I
Fatty acid composition	Fats and oils	IUPAC 2.301+2.302+2.304 ISO 5509:1978+5508:1990	Gas chromatography of methyl esters	II
Fatty acids, free	Cocoa butters	IUPAC 2.201	Titrimetry	II
Fatty acids, free (expressed as oleic acid)	Milkfat products	IDF Standard 6B:1989 ISO 1740:1991 (confirmed 1996) AOAC 969.17	Titrimetry	I
Fermentability, test of	Fruit juices	IFJU Method No 18, 1974	Microbiological method	I
Fibre, crude	Edible cassava flour	ISO 5498:1981 (B.5 separation)	Gravimetry	I

<i>Provision</i>	<i>Commodity Standard</i>	<i>Method</i>	<i>Principle</i>	<i>Type</i>
Fibre, crude	Gari	ISO 5498:1981 (B.5 separation)	Gravimetry	I
Fibre, crude	Pearl millet flour	ISO 5498:1981 (B.5 Separation)	Gravimetry	I
Fibre, crude	Sorghum flour	ICC Method No 113 (1972) ISO 6541:1981 (confirmed 1996)	Gravimetry	I
Fibre, crude	Soy protein products	ISO 5498:1981	Gravimetry	I
Fibre, crude	Vegetable protein products	AACC (1982) 32-17	Ceramic fiber filtration	I
Fibre, crude	Wheat gluten	AOAC 962.09	Ceramic fiber filtration	I
Fibre, crude	Whole and decorticated pearl millet grains	ISO 5498:1981 (B.5 Separation)	Gravimetry	I
Fill of containers	Fruit juices	CAC/RM 46-1972	Weighing	I
Fill of containers	Processed fruits and vegetables	CAC/RM 46-1972	Weighing	I
Fill of containers	Special foods	CAC/RM 46-1972	Weighing	I
Fluoride	Natural mineral waters	<i>Examination of Water Pollution Control.</i> WHO Pergamon Press (1982) Vol. 2, pp. 245-247		II
Fluoride	Natural mineral waters	<i>Examination of Water Pollution Control.</i> WHO Pergamon Press (1982) Vol.2, pp. 247-250		III
Folic acid	Special foods	AOAC 944.12	Microbioassay	II
Gelatin, added	Cooked cured ham	Described in the Standard	Calculation	I
Gelatin, added	Cooked cured pork shoulder	Described in the Standard	Calculation	I
Granularity	Edible cassava flour	ISO 2591-1:1988	Sieving	I
Granularity	Gari	ISO 2591-1:1988	Sieving	I
Halogens	Food grade salt	ISO 2481:1973	Mercurimetry	II
Halphen test	Fats and oils	AOCS Cb 1-25	Colorimetry	I

<i>Provision</i>	<i>Commodity Standard</i>	<i>Method</i>	<i>Principle</i>	<i>Type</i>
Histamine	Quick frozen fish sticks (fish fingers) and fish portions - Breaded or in batter	AOAC 977.13	Fluorimetry	II
Hydroxymethylfurfural	Honey	AOAC 980.23	Spectrophotometry	II
Hydroxymethylfurfural	Honey	Described in the Standard	Photometry (Winkler)	III
Hydroxymethylfurfural	Honey	Described in the Standard	HPLC	III
Identification of defects	Dates	Described in the Standard	Visual inspection	I
Identification of defects	Dried apricots	Described in the Standard	Visual inspection (weighing)	I
Identification of defects	Unshelled pistachio nuts	Described in the Standard	Visual inspection	I
Insoluble impurities	Fats and oils	IUPAC 2.604 ISO 663:1992	Gravimetry	I
Insoluble matter	Food grade salt	ISO 2479:1972	Gravimetry	II
Invert sugar	Sugars (plantation or mill white sugar)	ICUMSA GS 1/3/7-3 (1994)	Titrimetry (Lane & Eynon)	I
Invert sugar	Sugars (powdered sugar)	ICUMSA GS 2/3-5 (1997) after filtration if necessary to remove any anticaking agents	Titrimetry	I
Invert sugar	Sugars (soft white sugar and soft brown sugar)	ICUMSA GS 4/3-3 (1994) (applicable at levels >10% m/m)	Titrimetry (Lane & Eynon)	I
Invert sugar	Sugars (soft white sugar and soft brown sugar)	ICUMSA GS 1/3/7-3 (1994) (applicable at levels <10% m/m)	Titrimetry (Lane & Eynon)	I
Invert sugar	Sugars (white sugar)	ICUMSA GS 2/3-5 (1997)	Titrimetry	I
Iodine	Food grade salt	ESPA/CN-E/109-1994	Titrimetry using sodium thiosulphate	II
Iodine	Food grade salt	AOAC 925.56	Titrimetry using sodium thiosulphate	III
Iodine	Foods with low-sodium content (including salt substitutes)	AOAC 925.56	Titrimetry	II
Iodine (milk based formula)	Infant formula and follow-up formula	AOAC 992.24	Ion-selective potentiometry	II
Iodine value	Cocoa butters	IUPAC 2.205	Titrimetry	I

<i>Provision</i>	<i>Commodity Standard</i>	<i>Method</i>	<i>Principle</i>	<i>Type</i>
Iron	Cocoa butters	AOAC 990.05 ISO 8294:1994 IUPAC 2.631 (Codex general method)	Atomic absorption spectrophotometry (direct graphite furnace)	II
Iron	Cocoa butters	BS 684 Section 2.17:1976	Colorimetry	III
Iron	Fats and oils	AOAC 990.05 ISO 8294:1994 IUPAC 2.631 (Codex general method)	Atomic absorption spectrophotometry (direct graphite furnace)	II
Iron	Fruit juices	IFJU Method No 15, 1964	Photometry	II
Iron	Milk products	NMKL 139 (1991) (Codex general method)	Atomic absorption spectrophotometry	II
Iron	Milk products	IDF Standard 103A:1986 ISO 6732:1985 (confirmed 1995)	Photometry (bathophenanthroline)	IV
Iron	Vinegar	IFJU Method No 15, 1964	Photometry	IV
Iron, dissolved	Natural mineral waters	ISO 6332:1988 (confirmed 1995)	Spectrophotometry	II
<i>Lactobacillus bulgaricus & Streptococcus thermophilus</i>	Yoghurt products	IDF Standard 117A:1988	Colony count at 37°C	
<i>Lactobacillus bulgaricus & Streptococcus thermophilus</i>	Yoghurt products	IDF Standard 146:1991	Test for identification	
Lactose	Edible casein products	IDF Standard 106:1982 ISO 5548:1980 (confirmed 1996)	Photometry (phenol and H ₂ SO ₄)	IV
Lactose, anhydrous	Sugars (lactose)	ICUMSA GS 4/3-3 (1994)	Titrimetry	II
Lead	Bouillons and consommés	AOAC 934.07	Colorimetry (dithizone)	II
Lead	Butter	AOAC 972.25 (Codex general method)	Atomic absorption spectrophotometry	II
Lead	Canned corned beef	AOAC 972.25 (Codex general method)	Atomic absorption spectrophotometry	II
Lead	Chocolate	AOAC 986.15 (Codex general method)	Anodic stripping voltammetry	II

<i>Provision</i>	<i>Commodity Standard</i>	<i>Method</i>	<i>Principle</i>	<i>Type</i>
Lead	Cocoa (cacao) nib, cocoa (cacao) mass, cocoa press cake and cocoa dust (cocoa fines), for use in the manufacturing of cocoa and chocolate products	AOAC 972.25 (Codex general method)	Atomic absorption spectrophotometry	II
Lead	Cocoa butter confectionery	AOAC 972.25 (Codex general method)	Atomic absorption spectrophotometry	II
Lead	Cocoa butters	AOAC 934.07	Colorimetry (dithizone)	II
Lead	Cocoa butters	IUPAC Method (<i>Pure and Appl. Chem.</i> 63)	Atomic absorption Spectrophotometry, graphite furnace	III
Lead	Cocoa powders (cocoa) and dry cocoa-sugar mixtures	AOAC 986.15 (Codex general method)	Anodic stripping voltammetry	II
Lead	Cocoa powders (cocoa) and dry cocoa-sugar mixtures	AOAC 934.07	Colorimetry (dithizone)	III
Lead	Cooked cured chopped meat	AOAC 972.25 (Codex general method)	Atomic absorption spectrophotometry	II
Lead	Cooked cured ham	AOAC 972.25 (Codex general method)	Atomic absorption spectrophotometry	II
Lead	Cooked cured pork shoulder	AOAC 972.25 (Codex general method)	Atomic absorption spectrophotometry	II
Lead	Edible casein products	AOAC 972.25 (Codex general method)	Atomic absorption spectrophotometry	II
Lead	Edible casein products	AOAC 982.23 (Codex general method)	Anodic stripping voltammetry	III
Lead	Edible casein products	IDF Standard 133A:1992	Spectrophotometry (1,5-diphenylthiocarbazone)	III
Lead	Edible casein products	NMKL 139 (1991) (Codex general method)	Atomic absorption spectrophotometry	III
Lead	Fats and oils	AOAC 994.02 IUPAC 2.623 ISO 12193:1994 (Codex general method)	Atomic absorption spectrophotometry (direct graphite furnace)	II
Lead	Food grade salt	ESPA/CN-E/108-1994	Atomic absorption spectrophotometry	II
Lead	Fruit juices	AOAC 972.25 (Codex general method)	Atomic absorption spectrophotometry	II

<i>Provision</i>	<i>Commodity Standard</i>	<i>Method</i>	<i>Principle</i>	<i>Type</i>
Lead	Honey	AOAC 972.25 (Codex general method)	Atomic absorption spectrophotometry	II
Lead	Luncheon meat	AOAC 972.25 (Codex general method)	Atomic absorption spectrophotometry	II
Lead	Natural mineral waters	ISO 8288:1986 (confirmed 1995)	Flame atomic absorption spectrophotometry	II
Lead	Natural mineral waters	AOAC 974.27	Atomic absorption spectrophotometry	III
Lead	Processed meat and poultry products and soups and broths	AOAC 934.07	Colorimetry (dithizone)	II
Lead	Sugars	AOAC 997.15	Atomic absorption spectrophotometry (graphite furnace)	II
Lead	Vinegar	AOAC 972.25 (Codex general method)	Atomic absorption spectrophotometry	II
Lead	Whey powders	AOAC 972.25 (Codex general method)	Atomic absorption spectrophotometry	II
Linoleate (in the form of glycerides)	Special foods	AOAC 922.06; 969.33; 963.22	Acid hydrolysis, preparation of methyl esters and gas chromatography	II
Linoleate (in the form of glycerides)	Special foods	AOAC 922.06; 979.19	Acid hydrolysis and spectrophotometry	III
Loss on drying	Food grade salt	ISO 2483:1973	Gravimetry (drying at 110°C)	I
Loss on drying	Special foods	AOAC 934.01 AOAC 925.23	Gravimetry	I
Loss on drying	Sugars (fructose)	ISO 1742:1980	Gravimetry	I
Loss on drying	Sugars (lactose)	USP General Chapter 731	Gravimetry (Drying at 120°C for 16 h)	I
Loss on drying	Sugars (plantation or mill white sugar)	ICUMSA GS 2/1/3-15 (1994)	Gravimetry	I
Loss on drying	Sugars (powdered sugar)	ICUMSA GS 2/1/3-15 (1994)	Gravimetry	I
Loss on drying	Sugars (soft white sugar and soft brown sugar)	ICUMSA GS 2/1/3-15 (1994)	Gravimetry	I

<i>Provision</i>	<i>Commodity Standard</i>	<i>Method</i>	<i>Principle</i>	<i>Type</i>
Loss on drying	Sugars (white sugar)	ICUMSA GS 2/1/3-15 (1994)	Gravimetry	I
Loss on drying (milk based)	Special foods	AOAC 925.23 IDF Standard 21B:1987 ISO 6731:1989	Gravimetry	I
Magnesium	Natural mineral waters	ISO 6059:1984 (confirmed 1995)	Titrimetry	II
Magnesium	Natural mineral waters	ISO 7980:1986 (confirmed 1995)	Atomic absorption spectrophotometry	III
Manganese	Natural mineral waters	<i>Examination of Water Pollution Control.</i> WHO Pergamon Press (1982) Vol. 2, pp. 121-122		II
Manganese	Natural mineral waters	ISO 6333:1986 (confirmed 1995)	Spectrophotometry	III
Matter volatile at 105°C	Fats and oils	IUPAC 2.601 ISO 662:1996	Gravimetry (open-drying)	I
Melting behaviour (i) Slip point (ii) Clear melting point	Cocoa butters	IOCCC 4-1961	Melting point measurement	I
Mercury	Fish and fishery products	AOAC 977.15	Flameless atomic absorption spectrophotometry	III
Mercury	Food grade salt	ESPA/CN-E/106-1994	Cold vapour atomic absorption spectrophotometry	II
Mercury	Natural mineral waters	ISO 5666-3:1984 (confirmed 1995)	Flameless atomic absorption spectrophotometry	II
Mercury	Natural mineral waters	AOAC 977.22	Flameless atomic absorption spectrophotometry	III
Methyl mercury	Guideline levels for mercury in fish	AOAC 988.11	Atomic absorption spectrophotometry	II
Milk protein	Cocoa butter confectionery	IOCCC 17-1973 AOAC 939.02	Titrimetry, Kjeldahl digestion; after extraction of milk proteins	II

<i>Provision</i>	<i>Commodity Standard</i>	<i>Method</i>	<i>Principle</i>	<i>Type</i>
Milk solids-not-fat	Butter	IDF Standard 80:1977 ISO 3727:1977 AOAC 920.116	Gravimetry	I
Milkfat	Butter	IDF Standard 80:1977 ISO 3727:1977 AOAC 920.116	Gravimetry	I
Milkfat	Cheese	IDF Standard 5B: 1986 ISO 1735:1987 AOAC 933.05	Gravimetry (Schmid-Bondzynski-Ratslaff)	I
Milkfat	Cocoa butter confectionery	IOCCC 5-1960 AOAC 945.34; 925.41B; 920.80	Titrimetry/Distillation	I
Milkfat	Cream	IDF Standard 16C:1987 ISO 2450:1985 AOAC 920.111A	Gravimetry (Röse-Gottlieb)	I
Milkfat	Edible casein products	IDF Standard 127A:1988 ISO 5543:1986 (confirmed 1996)	Gravimetry (Schmid-Bondzynski-Ratslaff)	I
Milkfat	Evaporated milks	IDF Standard 13C: 1987 ISO 1737:1985 AOAC 945.48G	Gravimetry (Röse-Gottlieb)	I
Milkfat	Margarine	CAC/RM 15-1969	Titrimetry	I
Milkfat	Milk powders and cream powders	IDF Standard 9C: 1987 ISO 1736:1985 AOAC 932.06	Gravimetry (Röse-Gottlieb)	I
Milkfat	Milk products (products not completely soluble in ammonia)	IDF Standard 126A:1988 ISO 8262-3:1987	Gravimetry (Weibull-Berntrop)	I
Milkfat	Milkfat products	IDF Standard 24:1964	Gravimetry (calculation from solids-not-fat and water content)	IV
Milkfat	Minarine	CAC/RM 15-1969	Titrimetry	I

<i>Provision</i>	<i>Commodity Standard</i>	<i>Method</i>	<i>Principle</i>	<i>Type</i>
Milkfat	Processed cheese products	IDF Standard 5B:1986 ISO 1735:1987 AOAC 933.05	Gravimetry (Schmid- Bondzynski- Ratzlaff)	I
Milkfat	Sweetened condensed milk	IDF Standard 13C: 1987 ISO 1737:1985 AOAC 920.115F	Gravimetry (Röse-Gottlieb)	I
Milkfat	Whey powders	IDF Standard 9C:1987 ISO 1736:1985 AOAC 932.06	Gravimetry (Röse-Gottlieb)	I
Milkfat (in dry matter)	Whey cheese	IDF Standard 59A:1986 ISO 1854:1987 AOAC 974.09	Gravimetry (Röse-Gottlieb)	I
Milkfat in dry matter	Cheeses in brine	IDF Standard 5B:1986 ISO 1735:1987 AOAC 933.05	Gravimetry (Schmid-Bondzynski- Ratslaff)	I
Mineral (ash)	Honey	<i>J. Assoc. Public Analysts</i> (1992) 28 (4) 177-181 <i>MAFF Validated Method V20 for Mineral (ash) in Honey</i>	Gravimetry (ignition at 600°C)	I
Mineral impurities	Canned palmito	ISO 762:1982 (confirmed 1992)	Gravimetry	I
Mineral impurities	Canned strawberries	AOAC 971.33	Gravimetry	I
Mineral impurities	Jams (fruit preserves) and jellies	AOAC 971.33	Gravimetry	I
Mineral impurities	Pickled cucumbers	AOAC 971.33	Gravimetry	I
Mineral impurities	Processed tomato concentrates	AOAC 971.33	Gravimetry	IV
Mineral impurities	Quick frozen fruits and vegetables: Berries, leek and carrot	CAC/RM 54-1974	Flotation and sedimentation	I
Mineral impurities	Raisins	CAC/RM 51-1974	Ashing	I
Mineral impurities insoluble in HCl	Fruit juices	AOAC 941.12C	Gooch filtration	I

<i>Provision</i>	<i>Commodity Standard</i>	<i>Method</i>	<i>Principle</i>	<i>Type</i>
Mineral oil	Raisins	CAC/RM 52-1974	Extraction and separation on alumina	II
Moisture	Certain pulses	ISO 665:1977 (confirmed 1995)	Gravimetry	I
Moisture	Cocoa butter confectionery	IOCCC 26-1988 AOAC 977.10	Karl Fischer	II
Moisture	Dates	AOAC 934.06	Gravimetry (vacuum oven)	I
Moisture	Degermed maize (corn) meal and maize (corn) grits	ISO 712:1998 ICC Method No 110/1 (1986)	Gravimetry	I
Moisture	Dried apricots	AOAC 934.06	Gravimetry (vacuum oven)	I
Moisture	Durum wheat semolina and durum wheat flour	ISO 712:1998 ICC Method 110/1 (1986)	Gravimetry	I
Moisture	Edible casein products	IDF Standard 78C:1990 ISO 5550:1978	Gravimetry (drying at 102°C)	I
Moisture	Edible cassava flour	ISO 712:1998	Gravimetry	I
Moisture	Gari	ICC Method No 109/1 (1986) ISO 712:1998	Gravimetry	I
Moisture	Grated desiccated coconut	AOAC 925.40	Gravimetry (loss on drying)	I
Moisture	Honey	AOAC 969.38B <i>J. Assoc. Public Analysts</i> (1992) 28 (4) 183-187 <i>MAFF Validated Method V21 for Moisture in Honey</i>	Refractometry	I
Moisture	Maize (corn)	ISO 6540:1980 (confirmed 1994)	Gravimetry	I
Moisture	Pearl millet flour	ISO 712:1998 ICC Method No 110/1 (1986)	Gravimetry	I
Moisture	Quick frozen French fried potatoes	AOAC 984.25	Gravimetry (convection oven)	I
Moisture	Raisins	AOAC 972.20	Electrical conductance	I

<i>Provision</i>	<i>Commodity Standard</i>	<i>Method</i>	<i>Principle</i>	<i>Type</i>
Moisture	Sorghum flour	ISO 712:1998 ICC Method No 110/1 (1986)	Gravimetry	I
Moisture	Sorghum grains	ISO 6540:1980 (confirmed 1994)	Gravimetry	I
Moisture	Soy protein products	AOAC 925.09	Gravimetry (vacuum oven)	I
Moisture	Unshelled pistachio nuts	AOAC 925.40	Gravimetry (loss on drying)	I
Moisture	Vegetable protein products	AOAC 925.09	Gravimetry (vacuum oven)	I
Moisture	Wheat flour	ISO 712:1998 ICC Method No 110/1 (1986)	Gravimetry	I
Moisture	Whole and decorticated pearl millet grains	ISO 712:1998 ICC Method No 110/1 (1986)	Gravimetry	I
Moisture	Whole maize (corn) meal	ISO 712:1998 ICC Method No 110/1 (1986)	Gravimetry	I
Moisture / Loss on drying	Chocolate	AOAC 931.04 IOCCC 1-1952	Gravimetry	I
Moisture / Loss on drying	Cocoa powders (cocoa) and dry cocoa-sugar mixtures	AOAC 931.04 IOCCC 1-1952	Gravimetry	I
Moisture, "Free"	Whey powders	IDF Standard 58:1970 (confirmed 1993) ISO 2920:1974 (confirmed 1996)	Gravimetry (drying at 88±2°C)	IV
Mould count	Canned tomatoes	AOAC 965.41	Howard mould count	I
Natamycin	Cheese (and cheese rind)	IDF Standard 140A:1992 ISO 9223:1991 (confirmed 1996)	Molecular absorption spectrophotometry & HPLC after extraction	II
Natural tomato soluble solids	Processed tomato concentrates	AOAC 970.59	Refractometry	I
Net content of frozen fish blocks covered by glaze	Quick frozen blocks of fish fillet, minced fish flesh and mixtures of fillets and minced fish flesh	Described in the Standard	Gravimetry	I
Net weight	Canned crab meat	Described in the Standard	Weighing	I

<i>Provision</i>	<i>Commodity Standard</i>	<i>Method</i>	<i>Principle</i>	<i>Type</i>
Net weight	Canned finfish (mackerel and jack mackerel)	Described in the Standard	Weighing	I
Net weight	Canned salmon	Described in the Standard	Weighing	I
Net weight	Canned sardines and sardine-type products	Described in the Standard	Weighing	I
Net weight	Canned shrimps or prawns	Described in the Standard	Weighing	I
Net weight	Canned tuna and bonito	Described in the Standard	Weighing	I
Net weight	Quick frozen fish sticks (fish fingers) and fish portions - Breaded or in batter	Described in the Standard	Weighing	I
Net weight	Quick frozen fruits and vegetables	CAC/RM 34-1970	Weighing	I
Net weight of products covered by glaze	Quick frozen fish fillets	Described in the Standard	Water spraying and sieving	I
Nicotinamide for foods not based on milk	Special foods	AOAC 961.14	Colorimetry	II
Nicotinamide for milk-based foods	Special foods	AOAC 944.13	Microbioassay	II
Nitrates	Natural mineral waters	ISO 7890-2:1986 (confirmed 1995)	Spectrophotometry	II
Nitrates	Natural mineral waters	<i>Examination of Water Pollution Control</i> . WHO Pergamon Press (1982) Vol.2, pp. 280-283		IV
Nitrates	Natural mineral waters	<i>Handbuch Lebensmittel Chemie</i> (1969)		IV
Nitrates	Processed meat and poultry products and soups and broths	ISO 3091:1975 (confirmed 1996)	Colorimetry (cadmium reduction)	II
Nitrites	Cooked cured chopped meat	AOAC 973.31 (Codex general method)	Colorimetry	II
Nitrites	Cooked cured chopped meat	ISO 2918:1975 (confirmed 1996)	Colorimetry	IV
Nitrites	Cooked cured ham	AOAC 973.31 (Codex general method)	Colorimetry	II
Nitrites	Cooked cured ham	ISO 2918:1975 (confirmed 1996)	Colorimetry	IV

<i>Provision</i>	<i>Commodity Standard</i>	<i>Method</i>	<i>Principle</i>	<i>Type</i>
Nitrites	Cooked cured pork shoulder	AOAC 973.31 (Codex general method)	Colorimetry	II
Nitrites	Cooked cured pork shoulder	ISO 2918:1975 (confirmed 1996)	Colorimetry	IV
Nitrites	Natural mineral waters	ISO 6777:1984	Molecular absorption spectrophotometry	IV
Nitrites	Processed meat and poultry products and soups and broths	ISO 2918:1975 (confirmed 1996)	Colorimetry	IV
Nitrites, potassium and/or sodium salt	Canned corned beef	AOAC 973.31 (Codex general method)	Colorimetry	II
Nitrites, potassium and/or sodium salt	Canned corned beef	ISO 2918:1975 (confirmed 1996)	Colorimetry	IV
Nitrites, potassium and/or sodium salt	Luncheon meat	AOAC 973.31 (Codex general method)	Colorimetry	II
Nitrites, potassium and/or sodium salt	Luncheon meat	ISO 2918:1975 (confirmed 1996)	Colorimetry	IV
Nitrogen, total	Bouillons and consommés	AIIBP Method No 2/6	Titrimetry, Kjeldahl digestion	II
Nitrogen/protein	Processed meat and poultry products	ISO 937:1978 (confirmed 1995)	Titrimetry	II
Oil content	Grated desiccated coconut	AOAC 948.22	Gravimetry	I
Pantothenic acid	Infant formula and follow-up formula	AOAC 992.07	Microbioassay	II
Pantothenic acid	Infant formula and follow-up formula	<i>The Analyst</i> 89 (1964)(1) 3-6, 232 US Dept Agr., <i>Agr. Handbook</i> 97 (1965)	Microbioassay	IV
Pantothenic acid/enriched foods	Special foods	AOAC 945.74	Microbioassay	II
Pantothenic acid/non-enriched foods	Special foods	<i>The Analyst</i> 89 (1964):1, 3-6, <i>ibid.</i> 232 US Dept Agr., <i>Agr. Handbook</i> 97 (1965)	Microbioassay	IV
Parasites	Quick frozen blocks of fish fillet, minced fish flesh and mixtures of fillets and minced fish flesh	Described in the Standard	Visual examination	I
Particle size (granularity)	Degermed maize (corn) meal and maize (corn) grits	AOAC 965.22	Sieving	I
Particle size (granularity)	Sorghum flour	AOAC 965.22	Sieving	I
Particle size (granularity)	Wheat flour	AOAC 965.22	Sieving	I

<i>Provision</i>	<i>Commodity Standard</i>	<i>Method</i>	<i>Principle</i>	<i>Type</i>
Particle size (granularity)	Whole maize (corn) meal	AOAC 965.22	Sieving	I
Peroxide value	Fats and oils	IUPAC 2.501 (as amended) AOCS Cd 8b-90	Titrimetry using <i>iso</i> -octane	I
Peroxide value	Milkfat products (anhydrous milkfat)	AOAC 965.33	Titrimetry	I
pH	Edible casein products	IDF Standard 115A:1989 ISO 5546:1979 (confirmed 1996)	Electrometry	IV
pH	Sugars (fructose)	ICUMSA GS 1/2/3/4/7/8-23 (1994)	Potentiometry	I
pH	Sugars (lactose)	ICUMSA GS 1/2/3/4/7/8-23 (1994)	Potentiometry	I
pH of brine	Table olives	Described in the Standard	Potentiometry	IV
Phenols	Natural mineral waters	ISO 6439:1990 (confirmed 1995)	Spectrophotometry	I
Phosphate, added (expressed as phosphorus)	Processed cheese products	IDF Standard 51B:1991	Calculation	IV
Phosphorous	Special foods	AOAC 986.24	Colorimetry (molybdovanadate)	II
Phosphorus	Processed cheese products	IDF Standard 33C: 1987 ISO 2962:1984 (confirmed 1994) AOAC 990.24	Spectrophotometry (molybdate-ascorbic acid)	II
Polarization	Sugars (plantation or mill white sugar)	ICUMSA GS 1/2/3-1 (1994)	Polarimetry	II
Polarization	Sugars (powdered sugar)	ICUMSA GS 2/3-1 after filtration if necessary to remove any anticaking agents	Polarimetry	II
Polarization	Sugars (white sugar)	ICUMSA GS 2/3-1 (1994)	Polarimetry	II
Polyunsaturated fatty acids	Guidelines for nutrition labelling	AOCS Ce 1c-89	Gas liquid chromatography	IV
Potassium	Food grade salt	ESPA/CN-E/104-1994 (applicable to products containing ≥ 2 mg-K/kg)	Flame atomic absorption spectrophotometry	II
Potassium	Food grade salt	ESPA/CN-E/103-1994 (applicable to products containing ≥ 100 mg-K/kg)	Titrimetry	III

<i>Provision</i>	<i>Commodity Standard</i>	<i>Method</i>	<i>Principle</i>	<i>Type</i>
Potassium	Natural mineral waters	<i>Examination of Water Pollution Control</i> . WHO Pergamon Press (1982) Vol.2, pp. 142-145		II
Proper fill (in lieu of drained weight)	Canned green peas	CAC/RM 45-1972	Pouring and measuring	I
Proportion of fish fillet and minced fish	Quick frozen blocks of fish fillet, minced fish flesh and mixtures of fillets and minced fish flesh	AOAC 988.09	Physical separation	I
Proportion of fish fillet and minced fish	Quick frozen fish sticks (fish fingers) and fish portions - Breaded or in batter	AOAC 988.09	Gravimetry	I
Proportion of fish fillet and minced fish (for certain fish species with soft flesh, such as hakes from the Southern Hemisphere)	Quick frozen fish sticks (fish fingers) and fish portions - Breaded or in batter	Described in the Standard	Gravimetry	IV
Protein	Cooked cured pork shoulder	ISO 937:1978 (confirmed 1995)	Titrimetry, Kjeldahl digestion	II
Protein	Degermed maize (corn) meal and maize (corn) grits	ICC Method No 105/1 (1986)	Titrimetry, Kjeldahl digestion	I
Protein	Pearl millet flour	AOAC 920.87	Titrimetry, Kjeldahl digestion	I
Protein	Sorghum flour	ICC Method No 105/1 (1986)	Titrimetry, Kjeldahl digestion	I
Protein	Sorghum grains	ICC Method No 105/1 (1986)	Titrimetry, Kjeldahl digestion	I
Protein	Soy protein products	AOAC 955.04D (using factor 6.25)	Titrimetry, Kjeldahl digestion	II
Protein	Vegetable protein products	AOAC 955.04D (using factor 6.25)	Titrimetry, Kjeldahl digestion	II
Protein	Wheat flour	ICC Method No 105/1 (1986)	Titrimetry, Kjeldahl digestion	I
Protein	Wheat gluten	AOAC 976.05 (using factor 6.25)	Titrimetry, Kjeldahl digestion	II
Protein	Whole and decorticated pearl millet grains	AOAC 920.87	Titrimetry, Kjeldahl digestion	I
Protein	Whole maize (corn) meal	ICC Method No 105/1 (1986)	Titrimetry, Kjeldahl digestion	I
Protein (conversion factor 6.25)	Cooked cured ham	ISO 937:1978 (confirmed 1995)	Titrimetry, Kjeldahl digestion	II

<i>Provision</i>	<i>Commodity Standard</i>	<i>Method</i>	<i>Principle</i>	<i>Type</i>
Protein (in milk solids-not-fat)	Evaporated milks	AOAC 945.48H	Titrimetry, Kjeldahl digestion	I
Protein (in milk solids-not-fat)	Milk powders and cream powders	IDF Standard 20B:1993 AOAC 991.20-23	Titrimetry, Kjeldahl digestion	I
Protein (in milk solids-not-fat)	Sweetened condensed milks	AOAC 920.115G	Titrimetry, Kjeldahl digestion	I
Protein (N x 5.7)	Durum wheat semolina and durum wheat flour	ICC Method No 105/1	Titrimetry, Kjeldahl digestion	I
Protein (total N x 6.38 in dry matter)	Edible casein products	IDF Standard 92:1979 (confirmed 1986) ISO 5549:1978 (confirmed 1993)	Titrimetry, Kjeldahl digestion	IV
Protein (total N x 6.38)	Whey powders	IDF Standard 92:1979 (confirmed 1986) ISO 5549:1978 (confirmed 1978)	Titrimetry, Kjeldahl digestion	IV
Protein efficiency ratio (PER)	Special foods	AOAC 960.48	Rat bioassay	I
Protein, crude	Special foods	Method described in CAC/VOL IX-Ed. 1, Part III	Titrimetry, Kjeldahl digestion	I
Reducing sugar	Sugars (glucose syrup and dried glucose syrup)	ISO 5377:1981	Titrimetry	I
Reducing sugar, apparent	Honey	Described in the Standard	Titrimetry (Lane & Eynon)	I
Refractive index	Cocoa butters	IUPAC 2.102	Refractometry	II
Refractive index	Fats and oils	IUPAC 2.102 ISO 6320:1995	Refractometry	II
Reichert & Polenske values	Fats and oils	IUPAC 2.204	Titrimetry	I
Relative density	Fats and oils	IUPAC 2.101	Pycnometry	II
Riboflavin	Special foods	AOAC 970.65	Fluorometry	II
Salt	Butter	IDF Standard 12B: 1988 ISO 1738:1997 AOAC 960.29	Titrimetry (Mohr: determination of chloride, expressed as sodium chloride)	II

<i>Provision</i>	<i>Commodity Standard</i>	<i>Method</i>	<i>Principle</i>	<i>Type</i>
Salt	Butter	IDF Standard 179:1997 AOAC 971.27 (Codex general method)	Potentiometry (determination of chloride, expressed as sodium chloride)	III
Salt	Processed cheese products	IDF Standard 88A:1979 ISO 5943:1988 (confirmed 1996) AOAC 983.14	Potentiometry (determination of chloride, expressed as sodium chloride)	II
Salt in brine	Pickled cucumbers	AOAC 971.27 (Codex general method)	Potentiometry	II
Salt in brine	Table olives	AOAC 971.27 (Codex general method)	Potentiometry	II
Salt, added	Fruit juices	AOAC 971.27 (Codex general method)	Potentiometry	II
Salt, added	Fruit juices	IFJU Method No 37, 1968	Electrochemical titrimetry	III
Sample preparation	Honey	AOAC 920.180	-	-
Sampling	Butter	IDF Standard 50C:1995 ISO 707:1997 AOAC 968.12	General Instructions for obtaining a sample from a bulk	-
Sampling	Cheese	IDF Standard 50C:1995 ISO 707:1997 AOAC 968.12	General Instructions for obtaining a sample from a bulk	-
Sampling	Cheeses in brine	IDF Standard 50C:1995 ISO 707:1997 AOAC 968.12 A representative piece of cheese is placed on a cloth or on a sheet of non-absorbent paper for 5 to 10 min. A slice of 2-3 cm is cut off and sent to the laboratory in a sealed insulated box for analysis.	General Instructions for obtaining a sample from a bulk	-
Sampling	Durum wheat semolina and durum wheat flour	Described in the Standard (According to Codex Sampling Instructions)	-	-

<i>Provision</i>	<i>Commodity Standard</i>	<i>Method</i>	<i>Principle</i>	<i>Type</i>
Sampling	Edible casein products	IDF Standard 50C:1995 ISO 707:1997 AOAC 968.12	General Instructions for obtaining a sample from a bulk	-
Sampling	Evaporated milks	IDF Standard 50C:1995 ISO 707:1997 AOAC 968.12	General Instructions for obtaining a sample from a bulk	-
Sampling	Fruit juices	IFJU Method No 1, 1989	-	-
Sampling	Grated desiccated coconut	Described in the Standard (According to Codex Sampling Instruction)	-	-
Sampling	Milk powders and cream powders	IDF Standard 50C:1995 ISO 707:1997 AOAC 968.12	General Instructions for obtaining a sample from a bulk	-
Sampling	Milk products	IDF Standard 50C:1995 ISO 707:1997 AOAC 968.12	General Instructions for obtaining a sample from a bulk	-
Sampling	Milk products	IDF Standard 113A:1990 ISO 5538:1987 (confirmed 1992)	Inspection by attributes	-
Sampling	Milk products	IDF Standard 136A:1992 ISO 8197:1988 (confirmed 1993)	Inspection by variables	-
Sampling	Milkfat products	IDF Standard 50C:1995 ISO 707:1997 AOAC 968.12	General Instructions for obtaining a sample from a bulk	-
Sampling	Sweetened condensed milks	IDF Standard 50C:1995 ISO 707:1997 AOAC 968.12	General Instructions for obtaining a sample from a bulk	-
Sampling	Wheat gluten	ISO 2170:1980	-	-
Sampling	Whey cheese	IDF Standard 50C:1995 ISO 707:1997 AOAC 968.12	General Instructions for obtaining a sample from a bulk	-

<i>Provision</i>	<i>Commodity Standard</i>	<i>Method</i>	<i>Principle</i>	<i>Type</i>
Sampling	Whey powders	IDF Standard 113A:1990 ISO 5538:1987 (confirmed 1992)	Inspection by attributes	-
Sampling	Whey powders	IDF Standard 50C:1995 ISO 707:1997 AOAC 968.12	General Instructions for obtaining a sample from a bulk	-
Sampling of milk from bulk tanks	Milk products	AOAC 970.26	Instructions for obtaining a sample	-
Saponification value	Cocoa butters	IUPAC 2.202	Titrimetry	II
Saponification value	Fats and oils	IUPAC 2.202 ISO 3657:1988 (confirmed 1992)	Titrimetry	I
Saturated fatty acids	Guidelines for nutrition labelling	AOAC 996.06	Gas liquid chromatography	II
Saturated fatty acids	Guidelines for nutrition labelling	AOCS Ce 1c-89	Gas liquid chromatography	IV
Scorched particles	Milk powders and cream powders	IDF Standard 107A:1995 ISO 5739:1983	Visual comparison with standard disks, after filtration	IV
Sediment (scorched particles)	Edible casein products	IDF Standard 107A:1995 ISO 5739:1983	Visual comparison with standard disks, after filtration	IV
Selenium	Natural mineral waters	AOAC 986.15	Atomic absorption spectrophotometry	II
Selenium	Natural mineral waters	<i>Examination of Water Pollution Control.</i> WHO Pergamon Press (1982) Vol.2, pp.320-322		III
Sesameseed oil test	Olive oil	AOCS Cb 2-40	Colorimetry	I
Silica (colloidal, calcium silicate)	Foods with low-sodium content (including salt substitutes)	AOAC 950.85N	Gravimetry	IV
Size classification	Unshelled pistachio nuts	Described in the Standard	Number per 500 g	I
Size, determination of	Canned shrimps or prawns	Described in the Standard	Number per 100 g	I
Slip point	Fats and oils	ISO 6321:1991	Open ended capillary tube	I
Slip point	Palm oil	AOCS 3-25 (1992)	Open ended capillary tube (for 60°C)	I

<i>Provision</i>	<i>Commodity Standard</i>	<i>Method</i>	<i>Principle</i>	<i>Type</i>
Soap content	Fats and oils	BS 684 Section 2.5	Gravimetry	I
Sodium	Natural mineral waters	<i>Examination of Water Pollution Control.</i> WHO Pergamon Press (1982) Vol.2 pp. 148-151		II
Sodium	Natural mineral waters	<i>Examination of Water Pollution Control.</i> WHO Pergamon Press (1982) Vol.2, pp. 151-152		III
Sodium and potassium	Special foods	ISO 8070:1987 (confirmed 1992) IDF Standard 119A:1987	Flame emission spectrophotometry	II
Sodium and potassium	Special foods	AOAC 984.27	ICP emission spectrometry	III
Sodium chloride	Bouillons and consommés	AOAC 971.27 (Codex general method)	Potentiometry	II
Sodium chloride	Food grade salt	Described in the Standard	Calculation	I
Sodium chloride	Margarine	AOAC 971.27 (Codex general method)	Potentiometry	II
Sodium chloride	Minarine	AOAC 971.27 (Codex general method)	Potentiometry	II
Sodium chloride	Processed tomato concentrates	AOAC 971.27 (Codex general method)	Potentiometry	II
Sodium chloride	Quick frozen blocks of fish fillet, minced fish flesh and mixtures of fillets and minced fish flesh	AOAC 971.21 (Codex general method)	Potentiometry	II
Sodium chloride	Quick frozen fish sticks (fish fingers) and fish portions - Breaded or in batter	AOAC 971.27 (Codex general method)	Potentiometry	II
Solids	Cream	IDF Standard 21B:1987 ISO 6731:1989 AOAC 920.107	Gravimetry (drying at 102°C)	I
Solids	Evaporated milks	IDF Standard 21B:1987 ISO 6731:1989 AOAC 925.23A	Gravimetry (drying at 102°C)	I
Solids, alcohol insoluble	Canned green peas	AOAC 938.10	Sieving	I
Solids, alcohol insoluble	Quick frozen peas	CAC/RM 35-1970	Gravimetry	I

<i>Provision</i>	<i>Commodity Standard</i>	<i>Method</i>	<i>Principle</i>	<i>Type</i>
Solids, total	Canned mature processed peas	AOAC 964.22	Gravimetry (vacuum oven)	I
Solids, total	Sugars (dextrose anhydrous and dextrose monohydrate)	ISO 1741:1980	Gravimetry (vacuum oven)	I
Solids, total	Sugars (glucose syrup and dried glucose syrup)	ISO 1742:1980	Gravimetry (vacuum oven)	I
Solids, Total	Yoghurt products	IDF Standard 151:1991	Gravimetry (drying at 102°C)	I
Solids, water-insoluble	Honey	<i>J. Assoc. Public Analysts</i> (1992) 28 (4) 189-193 <i>MAFF Validated Method V22 for Water-Insoluble Solids in Honey</i>	Gravimetry	I
Solubility	Milk powders and cream powders	IDF Standard 129A:1988 ISO 8156:1987	Centrifugation	I
Soluble solids	Fruit juices	IFJU Method No 8B, 1968	Refractometry	I
Soluble solids	Processed fruits and vegetables	ISO 2173:1978 AOAC 932.14C	Refractometry	I
Soluble solids	Vinegar	AOAC 930.35C	Gravimetry	I
Soluble solids, total	Quick frozen fruits and vegetables: Berries, Whole kernel corn and Corn-on-the-cob	CAC/RM 43-1971	Refractometry	I
Sorbitol	Raisins	AOAC 973.28	Gas chromatography	II
Spores of sulphite-reducing anaerobes (Clostridia)	Natural mineral waters	ISO 6461-2:1986 (confirmed 1996)	Membrane filtration	I
Sterol composition	Fats and oils	ISO 6799:1991 IUPAC 2.403	Gas chromatography	II
Sucrose plus invert sugar	Sugars (soft white sugar and soft brown sugar)	ICUMSA GS 4/3-7 (1994)	Titrimetry	I
Sucrose, apparent	Honey	<i>FAO Manual of Quality Control, Food and Nutrition Monograph</i> 14/3 (1979) 150	Walker inversion	I

<i>Provision</i>	<i>Commodity Standard</i>	<i>Method</i>	<i>Principle</i>	<i>Type</i>
Sugars	Cocoa butter confectionery	AOAC 980.13	Liquid chromatography	II
Sugars	Cocoa powders (cocoa) and dry cocoa-sugar mixtures	AOAC 980.13	Liquid chromatography	II
Sugars	Fruit juices	IFJU Method No 4, 1985	Titrimetry	I
Sugars added (corn and cane sugar products)	Honey	AOAC 978.17	Carbon isotope ratio mass spectrometry	I
Sugars added (high fructose syrup, corn syrup)	Honey	AOAC 979.22	Thin layer chromatography	II
Sugars added (sugar profile)	Honey	AOAC 977.20	Liquid chromatography	II
Sulphate	Food grade salt	ISO 2480:1972	Gravimetry	II
Sulphated ash	Sugars (dextrose anhydrous and dextrose monohydrate)	ISO 5809:1982	Single sulphonation	I
Sulphated ash	Sugars (glucose syrup and dried glucose syrup)	ISO 5809:1982	Single sulphonation	I
Sulphated ash	Sugars (lactose)	ISO 5809:1982	Single sulphonation	I
Sulphated ash	Sugars (powdered dextrose)	ISO 5809:1982	Single sulphonation	I
Sulphated ash	Sugars (soft white sugar and soft brown sugar)	ICUMSA GS 1/3/4/7/8-11 (1994)	Gravimetry	I
Sulphates	Natural mineral waters	ISO 9280:1990 (confirmed 1995)	Gravimetry	III
Sulphide	Natural mineral waters	<i>Handb. Spurenanal.</i> 1974		IV
Sulphur dioxide	Dried apricots	AOAC 963.20	Colorimetry	II
Sulphur dioxide	Fruit juices	IFJU Method No 7, 1968	Titrimetry after distillation	II
Sulphur dioxide	Raisins	AOAC 963.20	Colorimetry	II
Sulphur dioxide	Sugars (dextrose anhydrous and dextrose monohydrate)	ISO 5379:1983	Acidimetry and nephelometry	IV
Sulphur dioxide	Sugars (fructose)	ISO 5379:1983	Acidimetry and nephelometry	IV

<i>Provision</i>	<i>Commodity Standard</i>	<i>Method</i>	<i>Principle</i>	<i>Type</i>
Sulphur dioxide	Sugars (glucose syrup and dried glucose syrup)	ISO 5379:1983	Acidimetry and nephelometry	IV
Sulphur dioxide	Sugars (plantation or mill white sugar)	ICUMSA GS 2/3-35 (1998) NMKL 135 (1990) EN 1988-2 (1998)	Enzymatic method	II
Sulphur dioxide	Sugars (powdered sugar and powdered dextrose)	ICUMSA GS 2/3-35 (1998) NMKL 135 (1990) EN 1988-2 (1998)	Enzymatic method	II
Sulphur dioxide	Sugars (raw cane sugar)	ICUMSA GS 2/3-35 (1998) NMKL 135 (1990) EN 1988-2 (1998)	Enzymatic method	II
Sulphur dioxide	Sugars (soft white sugar and soft brown sugar)	ICUMSA GS 2/3-35 (1998) NMKL 135 (1990) EN 1988-2 (1998)	Enzymatic method	II
Sulphur dioxide	Sugars (white sugar)	ICUMSA GS 2/3-35 (1998) NMKL 135 (1990) EN 1988-2 (1998)	Enzymatic method	II
Sulphur dioxide	Vinegar	AOAC 990.28 (Codex general method)	Optimized Monier-Williams method	II
Sulphur dioxide	Vinegar	OIV Method A 17, 1990	Titrimetry	III
Sulphur dioxide	Vinegar	AOAC 990.29 (Codex general method)	Flow injection analysis	III
Sulphur dioxide	Vinegar	AOAC 990.31 (Codex general method)	Ion exclusion chromatography	III
Surface active agents	Natural mineral waters	ISO 7875-1:1996	Spectrophotometry (methylene blue)	I
Syrup	Canned mangoes	AOAC 932.14C	Brix spindle method	I
Tannins	Sorghum flour	ISO 9648:1988 (confirmed 1994)	Spectrophotometry	I
Tannins	Sorghum grains	ISO 9648:1988 (confirmed 1994)	Spectrophotometry	I
Thawing and cooking procedures	Fish and fishery products: Frozen fish and fishery products	Described in the Standards	Thawing and heating	I
Thawing procedure	Quick frozen fruits and vegetables	CAC/RM 32-1970	Thawing	I

<i>Provision</i>	<i>Commodity Standard</i>	<i>Method</i>	<i>Principle</i>	<i>Type</i>
Thiamine	Special foods	AOAC 942.23	Fluorometry	II
Tin	Bouillons and consommés	AOAC 985.16 (Codex general method)	Atomic absorption spectrophotometry	II
Tin	Cooked cured chopped meat	AOAC 985.16 (Codex general method)	Atomic absorption spectrophotometry	II
Tin	Cooked cured ham	AOAC 985.16 (Codex general method)	Atomic absorption spectrophotometry	II
Tin	Cooked cured pork shoulder	AOAC 985.16 (Codex general method)	Atomic absorption spectrophotometry	II
Tin	Fruit juices	AOAC 980.19 (Codex general method)	Atomic absorption spectrophotometry	II
Tin	Luncheon meat	AOAC 985.16 (Codex general method)	Atomic absorption spectrophotometry	II
Tin	Processed meat and poultry products and soups and broths	AOAC 985.16 (Codex general method)	Atomic absorption spectrophotometry	II
Tin (Products in tins and other containers)	Canned corned beef	AOAC 985.16 (Codex general method)	Atomic absorption spectrophotometry	II
Titrateable acids, total	Fruit juices	IFJU Method No 3, 1968	Titrimetry	I
Titre	Fats and oils	IUPAC 2.121 ISO 935:1988	Thermometry	I
Tocopherol composition	Fats and oils	IUPAC 2.432	HPLC	II
Tough strings	Canned green beans and wax beans	CAC/RM 39-1970	Stretching	I
Tough strings	Quick frozen green and wax beans	CAC/RM 39-1970	Stretching	I
Types of peas, distinguishing	Canned green peas	CAC/RM 48-1972	Visual inspection	I
Unsaponifiable matter	Cocoa butters	IUPAC 2.401	Gravimetry	I
Unsaponifiable matter	Fats and oils	IUPAC 2.401 (part 1-5) ISO 3596-1:1996	Titrimetry after extraction with diethyl ether	I
Vegetable fat	Butter	IDF Standard 54:1970 ISO 3594:1976 (confirmed 1996) AOAC 970.50A	Gas liquid chromatography	II

<i>Provision</i>	<i>Commodity Standard</i>	<i>Method</i>	<i>Principle</i>	<i>Type</i>
Vegetable fat	Butter	IDF Standard 32:1965 ISO 3595:1976 (confirmed 1996) AOAC 955.34A	Phytosteryl acetate test	III
Vegetable fat	Milkfat products	IDF Standard 32:1965 ISO 3595:1976 (confirmed 1996) AOAC 955.34A	Phytosteryl acetate test	III
Vegetable fat (sterols)	Milkfat products	IDF Standard 54:1979 ISO 3594:1976 (confirmed 1996) AOAC 970.50A	Gas liquid chromatography	II
Vinyl chloride monomer	Guideline levels for vinyl chloride monomer	ISO 6401:1985	Gas chromatography	II
Vinyl chloride monomer	Guideline levels for vinyl chloride monomer	Commission Directive 81/432/EEC O.J. No. L.167, p. 6, 24.6.81	Gas chromatography ("head-space")	III
Viscosity, apparent	Fruit juices	AOAC 967.16	Capillary viscometry	I
Vitamin A	Infant formula and follow-up formula	AOAC 974.29	Colorimetry	IV
Vitamin A	Margarine	AOAC 960.45	Spectrophotometry	II
Vitamin A	Minarine	AOAC 960.45	Spectrophotometry	II
Vitamin A	Special foods	AOAC 974.29	Colorimetry	IV
Vitamin A (retinol isomers)	Infant formula and follow-up formula	AOAC 992.04	Liquid chromatography	II
Vitamin A (retinol)	Infant formula and follow-up formula	AOAC 992.06	Liquid chromatography	II
Vitamin A in foods in which carotenes have been added as a source of vitamin A	Special foods	AOAC 941.15	Spectrophotometry	III
Vitamin B ₁₂	Special foods	AOAC 952.20	Microbioassay	II
Vitamin B ₆	Special foods	AOAC 961.15	Microbioassay	II
Vitamin C	Special foods	AOAC 967.22	Microfluorometry	II
Vitamin C	Special foods	AOAC 967.21	Colorimetry (dichloroindophenol)	III

<i>Provision</i>	<i>Commodity Standard</i>	<i>Method</i>	<i>Principle</i>	<i>Type</i>
Vitamin D	Margarine	AOAC 936.14	Bioassay	II
Vitamin D	Minarine	AOAC 936.14	Bioassay	II
Vitamin D	Special foods	AOAC 936.14	Rat bioassay	IV
Vitamin D (D ₃ , milk based infant formula)	Special foods	AOAC 992.26	Liquid chromatography	II
Vitamin E	Margarine	IUPAC 2.411	TLC followed by spectrophotometry or GLC	II
Vitamin E	Minarine	IUPAC 2.411	TLC followed by spectrophotometry or GLC	II
Vitamin E	Special foods	AOAC 971.30	Colorimetry	IV
Vitamin E (milk based infant formula)	Special foods	AOAC 992.03	Liquid chromatography	II
Vitamin K ₁	Infant formula and follow-up formula	AOAC 992.27	Liquid chromatography	II
Volatile acids	Fruit juices	IFJU Method No 5, 1985	Titrimetry after distillation	I
Volume fill by displacement	Pickled cucumbers	Described in the Standard	Displacement	I
Washed drained weight	Canned mushrooms	CAC/RM 44-1972	Sieving	I
Water	Butter	IDF Standard 80:1977 ISO 3727:1977 AOAC 920.116	Gravimetry	I
Water	Margarine	CAC/RM 17-1969	Gravimetry	I
Water	Milk powders and cream powders	IDF Standard 26A:1993	Gravimetry (drying at 102°C)	IV
Water	Milkfat products	IDF Standard 23A:1988	Titrimetry (Karl Fischer)	II
Water	Minarine	CAC/RM 17-1969	Gravimetry	I
Zinc	Fruit juices	AOAC 969.32 (Codex general method)	Atomic absorption spectrophotometry	II
Zinc	Fruit juices	AOAC 986.15 (Codex general method)	Atomic absorption spectrophotometry	III
Zinc	Vinegar	AOAC 969.32 (Codex general method)	Atomic absorption spectrophotometry	II