

CODEX ALIMENTARIUS COMMISSION





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Agenda Item 7 CX/MAS 15/36/7

JOINT FAO/WHO FOOD STANDARDS PROGRAMME CODEX COMMITTEE ON METHODS OF ANALYSIS AND SAMPLING

Thirty-sixth Session Budapest, Hungary 23 - 27 February 2015

REVIEW AND UPDATE OF METHODS IN CODEX STAN 234-1999

Prepared by the Electronic Working Group led by Brazil

BACKGROUND:

- 1. At the 34thCCMAS Session, in 2013, updating the references of methods of analysis and related texts was discussed. The Committee agreed that a general single document or database with all the methods of analysis allows permanent and dynamic revision. The Committee agreed to establish an eWG to prepare a discussion paper with proposals: on establishing a format for a single source document (database) to capture all methods in the scope of CCMAS; the process for updating references to methods of analysis; and a plan to prioritize the (re)endorsement of current methods in the Recommended Methods of Analysis and Sampling (CODEX STAN 234-1999) and commodity standards.
- 2. At the 35t^hCCMAS Session, in 2014,the Committee agreed that the list to be compiled with all methods of analysis would be utilized for internal use of the Committee i.e. for updating the methods and that the mechanism for this process would first be tried before examining the necessity of having it recommended for inclusion in the Procedural Manual.
- 3. Regarding the information in the list, the Committee noted that the information on performance criteria of an analytical method would be required during endorsement by CCMAS, and agreed that such information would not be necessary at the time of identifying the analytical method that needed review, but agreed that this requirement would remain in the Table 1 (as presented in CRD 22), but that the concerns raised related to proprietary information should be taken into account when developing the single source document.
- 4. The Committee agreed to establish, an electronic working group, led by Brazil, open to all members and observers, and working in English only, with the following terms of reference:
 - a) compile a single workable list for all methods in CODEX STAN 234-1999 and commodity standards;
 - b) divide the list into workable packages based on the criteria developed by the Committee for prioritization of the methods of analysis;
 - c) conduct a validation exercise on one pilot work package of which the results would be considered by the Committee at its next session.
- 5. Brazil prepared the compiled list with comments from Argentina, Australia, South Korea, Mauritius, Jamaica, Japan, Republic of Cyprus, Slovak Republic, Switzerland, Uruguay, IDF and NMKL. A list of countries and NGOs that joined the EWG can be found in the Appendix III.

It is important highlight that the criteria for selecting methods of analysis was not discussed in this document.

METHOD OF CONSTRUCTION OF THE LIST

- 6. The eWG noticed that there are 3 ways to make reference to the methodologies, depending on how the methodologies are currently mentioned in the Codex documents: standardized methods published by international organizations; performance criteria required for provision determination and complete description of the method of analysis.
- 7. The eWG compiled, as a first step, all the standardized methods. The information of this compiled

list was suggested in the last session of the CCMAS (Annex I). This information was joined in a excel file.

8. The sources of information were the reports and ALINORMS of CCMAS and CODEX STAN 234. This work is very susceptible to mistakes and in several cases was difficult to have the traceability from CODEX STAN 234 to report, because the source of information was the Annex tables. The identified methods were compared with the ones in Codex commodity standards to search for inconsistencies, but the methods that are there only in commodity standards were not compiled yet. It will be the next step.

- 9. The third step will be the development of a list with the performance criteria and the methods that fit in this criteria and the last step will be the compilation of all methods with a full description in Codex commodity standards.
- 10. The Reports and ALINORMS were evaluated, comparing this information with that in the commodity standards, CODEX STAN 192, CODEX STAN 193, CODEX STAN 228, CODEX STAN 231, CODEX STAN 239 and CODEX STAN 234. The outcomes of this comparison are in the remarks column of Appendices I and II.
- 11. The dates of the methods are removed because it was agreed at the 34th Session due the necessity to use the most recent versions of analytical methods and older version of methods are generally not available, however the Committee agreed to include in the list three types of dates i.e. date of publication of the method, year of endorsement of the method by CCMAS; year of the latest version/revision.
- 12. A column of prioritization permits to divide the methods in workable packages. In the last CCMAS the Committee agreed with the following prioritization criteria: analytical methods directly linked with food safety, Type I and II methods (reference for disputes), methods with inaccurate information and number of years since endorsement (the oldest first).
- 13. It was highlighted that as Type II methods are chosen from a bulk of methods and only one is chosen as type II while others become type III for a specific provision, these methods (Type II and Type III) should be reviewed at the same time. The package 1 was subdivided, according with the year of the method endorsement. It was also suggested the Type I methods should be updated first because it is the only method to be used.
- 14. Based on these criteria and the outcomes of the comparison, the EWG makes the following proposal for prioritization:
 - i. Methods with inaccurate information that requires some action by CCMAS, such as methods not readily available, methods with wrong number, methods from IUPAC, methods that have been abandoned or replaced by others and RM methods. It was also considered inaccurate information when there are two different type II methods or when the CODEX STAN 234 and Commodity standards mention different methods for the same provision.
 - ii. Type I methods endorsed for over 10 years, related to food safety;
 - iii. Type II, III and IV methods endorsed for over 10 years, related to food safety;
 - iv. Type I methods endorsed for over 10 years, not related to food safety;
 - v. Type II, III and IV methods endorsed for over 10 years, not related to food safety;
 - vi. Type I methods endorsed for less than 10 years, related to food safety;
 - vii. Type II, III and IV methods endorsed for less than 10 years, related to food safety;
- viii. Type I methods endorsed for less 10 years, not related to food safety;
- ix. Type II, III and IV methods endorsed for less10 years, not related to food safety.
- 15. Several eWG participants raised the necessity to define the scope of the provisions "related to food safety". One member suggested "related to food safety" are any method measuring:
 - any physiologically relevant elements (e.g. iron, calcium, manganese), or substances (e.g., vitamins, fibers), mixtures (soluble fibers,..)
 - any characteristic of a food (pH, moisture, salt content, concentration of food preservatives) or microorganism (bacteria, moulds, parasites) that plays a role in its stability
 - any element, substances, mixtures or state of a food which have to be avoided or kept within some levels: such as lead, mercury, cadmium, mycotoxins, water activity, pH,..)"
- 16. However the SPS Agreement establishing the role of Codex Alimentarius on the food safety measures mentions those related to food additives, veterinary drug and pesticide residues, contaminants and guidelines of hygienic practice. Considering CCMAS term of reference, the methods of analysis related

to food additives and contaminants were considered "related to food safety" for this first screening. The CCMAS should consider if other provisions should be included as related to food safety.

- 17. This definition of "related to food safety" had no impact in the first package and after a Committee decision will be easy make a new classification if necessary.
- 18. Other issues discussed by the eWG was the number of the years for the endorsement revision. Most of the participants agreed with 10 years. However, a member of the group suggested that the period of 10 years could be reevaluated after the initial workload has been completed due the rate of technological change.
- 19. According with these prioritization criteria the methods were divided in 9 packages. The number of the methods per package is shown on Table I.
- 20. In order to allow the formation of workable packages the methods under prioritization 1 were divided according to number of years since endorsement.
- 21. There are 215 methods from CCNFSU that were not prioritised for the first and second packages, because of time restriction due the difficulty to find a commodity standard that shows the provisions and the related methods. It would be necessary to go to the CCNFSU reports. The CCNFSU methods with be dealt in the next round.

PACKAGE	DESCRIPTION	Nº of METHODS
1.	Methods with inaccurate information endorsed for over 10 years	105
	Methods with inaccurate information endorsed for less than10 years	62
2.	Type I methods endorsed for over 10 years, related to food safety	-
3.	Type II, III and IV methods endorsed for over 10 years, related to food safety	68
4.	Type I methods endorsed for over 10 years, not related to food safety	137
5.	Type II, III and IV methods endorsed for over 10 years, not related to food safety	52
6.	Type I methods endorsed for less than 10 years, related to food safety	-
7.	Type II, III and IV methods endorsed for less than10 years, related to food safety	35
8.	Type I methods endorsed for less 10 years, not related to food safety	199
9	Type II, III and IV methods endorsed for less10 years, not related to food safety	198

- 22. Each package may also be divided by the responsible Committee and commodity categories, depending on CCMAS decision regarding the process of revision.
- 23. The eWG has realized that there are several limits and parameters established by the Commodity Committees that don't have the related method of analysis. On the other hand there are methods endorsed that have no provision in any Codex Document.
- 24. A concern was raised regarding early revision of test methods (e.g. less than 10 years) and whether this would put developing countries at a disadvantage if the endorsed method is one which would not be realistically feasible for the country. However the eWG has not discussed any change in the criteria for selecting methods of analysis.

25. The first and second packages prioritized as number 1 (containing inaccurate information) are in Appendices I and II.

CONCLUSIONS AND RECOMMENDATIONS

- 26. After compiling the methods in a single list and prioritizing them it is possible to make the following conclusions:
- Almost 20% of the methods from the list were classified as containing inaccurate information that could mean the need to have a harmonized process to update the reference for methods of analysis;
- There are 30 entries in the Annexes I and II corresponding to RM methods or methods described in the Stan, despite the fact that the Codex Alimentarius Commission at its 22nd Session (June 1997) abolished the CAC/RM Numbering System;
- There was not a harmonized way to mention the methods in the report. In several cases was difficult to find which report approved or revoked the method.

After conducting this validation exercise the CCMAS should decide regarding to:

- The approach to be adopted for RM methods, such as compile all of them in an annex of CODEX STAN 234;
- The continuation of the revising work;
- The adoption of a harmonized process to update the reference to methods of analysis, including the role of the commodity committees, IAM and Codex Secretariat, and the format for a single source (document, database) to capture all methods in the scope of CCMAS, such as discussed in CX/MAS 14/35/6;
- The adoption of a harmonized report, including a list of non endorsed or revoked methods and the reason for it, which may facilitate the understanding of all the process.

ANNEX I - METHODS WITH INACCURATE INFORMATION ENDORSED FOR OVER 10 YEARS

Commodities	Source	Provision	Method	Principle	Type	Year	Year	Year	Committee	Remarks
						Approval	Last	Endorsement		
							revision	by CCMAS		
All foods	ALINORM	Lead,	NMKL 161	AAS after	III			2001	CCCF	The method AOAC
	01/23	cadmium,	AOAC	microwave						991.10 is not for food
		copper,	991.10	digestion						(Cholinesterase Activity
		iron and zinc								in Whole Blood)
										It is a typing error, it
										should be AOAC 999.10.
Bouillons and	ALINORM	Tin	AOAC 985.16	Atomic	П			1995	CCSB	a) CODEX STAN 234
Consommés	95/23			absorption						doesn't mention this
										provision . The CODEX
										STAN 228 doesn't
										contain methods for tin
										neither the CODEX
										STAN 117
Canned	ALINORM	Drained	CAC/RM 36	_	I			1987	CCPFV	a) The CODEX STAN 234
mangoes	87/23	weight								doesn't mention this
										provision for this
										commodity
										b) The principle is not
										mentioned in the
										ALINORM
										c) The CODEX STAN 159

									doesn't contain
									methods, but has this
									provision. d)The
									CAC/RM were revoked
Canned	ALINORM	Water	CAC/RM 46	_	I		1987	CCPFV	a) The CODEX STAN 234
mangoes	87/23	capacity of							doesn't mention this
		containers							provision for this
									commodity
									b) The principle is not
									mentioned in the
									ALINORM
									c) The CODEX STAN 159
									doesn't contain
									methods, but has this
									provision.
									d)The CAC/RM were
									revoked
Canned	Stan 234	Wash	CAC/RM44	Sieving	ĺ			CCPFV	The report that mention
mushrooms		drained							this provision/method
		weight							was not found. The
									Codex standard for this
									commodity was not
									found.
Cereals, shell	ALINORM	Sum of	EN 12955 :	HPLC with post	III		2003	CCCF	BS EN 12955:1999 -
fruit and	03/23	aflatoxins	1999-07	column					Superseded, Withdrawn
derived		B1, B2,	ISO 16050	derivatization and					Replaced By : BS EN ISO

Products		G1 and G2		immunoaffinity					16050:2011
(including				column clean up					
peanuts)									
Cocoa Butter	ALINORM	Lead	AOAC 999.11	AAS	П		2001	СССРС	a) There are methods
(for all foods)	01/23		NMKL 139						mentioned in the
									CODEX STAN 86-
									According to AOAC
									934.07 or IUPAC
									Method (Pure & Appl.
									Chem., 63).
									b) The IUPAC methods
									are obsolete
									c) There are methods
									for lead in Codex Stan
									228
									934.07
									(spectrophotometric
									method) would not
									have sufficient limit of
									determination.
									NMKL 139 and AOAC
									999.11 (AOAC has
									adopted the NMKL
									method) have better
									limit of detection
									/determination for lead

									and other metals.
Cooked cured	ALINORM	Lead	AOAC 972.25	Atomic	II		1995	ССМРРР	a)There are methods
chopped meat	95/23			absorption					mentioned in the
									CODEX STAN 98 AOAC
									934.07.
									see above
Cooked cured	ALINORM	Lead	AOAC 972.25	Atomic	II		1995	ССМРРР	a) The CODEX STAN 96
ham	95/23			absorption					mentions a different
									method: AOAC 934.07.
Cooked cured	ALINORM	Nitrite	AOAC 973.31	Colorimetry	=		1995	CCMPPP	a)The CODEX STAN 96
ham	95/23								doesn't mention this
									method, only ISO 2918
Cooked cured	ALINORM	Protein	ISO 937	Kjeldahl digestion	II		1995	CCMPPP	a)There are methods
ham	95/23								mentioned in the
									CODEX STAN 96
									b) The CODEX STAN 96
									doesn't mention this
									method, only ISO
									Recommendation
									R 1443
									c) The CODEX STAN 234
									mentions the provision
									Protein (conversion
									factor 6.25)

						1000	0014000	\T 00055\(00000000000000000000000000000000
Cooked cured	ALINORM	Lead	AOAC 972.25	Atomic	Ш	1996	ССМРРР	a)The CODEX STAN 97
pork shoulder	95/23			absorption				mentions a different
								method: AOAC 934.07
Cooked cured	ALINORM	Nitrite	AOAC 973.31	Colorimetry	П	1995	ССМРРР	a)The CODEX STAN 97
pork shoulder	95/23							doesn't mention this
								method, only ISO 2918
Cooked cured	ALINORM	Protein	ISO 937	Kjeldahl digestion	II	1995	ССМРРР	a) The CODEX STAN 97
pork shoulder	95/23							doesn't mention this
								method, only ISO
								Recommendation
								R 1443
Degermed	CODEX	Crude fat	AOAC	Gravimetry (ether	I	1985	CCCPL	a) The Annex of CODEX
maize (corn)	STAN 234		945.38F;	extraction)				STAN 155 mentions the
meal and			920.39C					method AOAC 945.38F;
maize (corn)								920.39C and ISO 5986
grits								(Withdrawn)
Degermed	ALINORM	Protein	ICC 105/1	_	I	1985	CCCPL	CODEX STAN 155 and
maize (corn)	85/23							CODEX STAN 234
meal and								mention the method
maize (corn)								ICC 105/I . The current
grits								version of the method is
								ICC 105/2
Durum wheat	ALINORM	Protein	ICC 105/1	Titrimetry	I	1985	CCCPL	a)The CODEX STAN 178
semolina and	85/23							mentions this method
durum wheat								and also ISO 1871
flour								b) CODEX STAN 234

									mentions the principle
									Titrimetry, Kjeldahl
									digestion, type I
									c) The current version of
									the method is ICC 105/2
Fluid milk	ALINORM	Aflatoxin M1	AOAC 986.16	HPLC	Not	95	1997	ССММР	CODEX STAN 234
	97/23	0.05 μg/kg			describ				describes only methods
					ed				for peanuts
Gari	ALINORM	Acidity	AOAC 14.064	_	I		1989	CCCPL	a) CODEX STAN 234
	89/23		AOAC 14.065						does not describe this
									provision
									b) CODEX STAN 151
									mentions AOAC 14.064
									- 14.065 (not found)
									- or -
									ISO/DP 7305 for total
									acidity. The standard
									was revised in 1995
									c) The principle is not
									mentioned in the
									ALINORM neither in
									CODEX STAN 151
Honey	ALINORM	Acidity	MAFF	Titrimetry	I		2001	CCS	This methods is
	01/23		Validated						mentioned in the
			method						CODEX STAN 12 and in
			V19, J A						CODEX STAN 234

			Public Analyst						b) Method MAFF was
			1992,						not readily available.
			28(4) 171-175						
Honey	ALINORM	Mineral	J. Assoc.	Gravimetry	I		1997	CCS	a) This provision is not
	97/23 ^A	(ash) <1.0%	Public	(ignition at 600°C)					mentioned in the
			Analysts						CODEX STAN 234
			(1992) <1.0%						b) This method is not
			28 (4) 177-						readily available
			181 MAFF						
			Validated						
			Method V20						
			for Mineral						
			(ash) in						
			Honey						
Honey	ALINORM	Sugars	AOAC 998.12.	Carbon isotope	I		2001	CCS	a) CODEX STAN 12 does
	01/23	added:		ratio mass					not mention CODEX
		detection		spectrometry					STAN 234.
		of corn and							b) CODEX STAN 234
		cane sugar							mention AOAC 978.17
		products.							for Sugars added:
									detection of corn and
									cane sugar products
Honey	ALINORM	Sugars	AOAC 979.22	Thin layer	II		1999	CCS	a) CODEX STAN 12 does
	99/23	added:		chromatography					not mention CODEX
		detection							STAN 234.
		of high							b) CODEX STAN 234

		fructose							mentions AOAC 978.17
		syrup,							for Sugars added:
		corn syrup.							detection of corn and
									cane sugar products
									c) CODEX STAN 12
									mentions AOAC 991.41
									internal standard for
									SCIRA (stable carbon
									isotope ratio analysis).
									for authenticity
Honey	ALINORM	Sugars	AOAC 998.18	Carbon isotope	I		2001	CCS	The CODEX STAN 12
	01/23	added: for		ratio mass					mentions the AOAC
		sugar		spectrometry					977.20 for sugar profile
		profile							and AOAC 991.41
									internal standard for
									SCIRA. The method
									AOAC 998.18 was not
									found
Honey	ALINORM	Sugars	AOAC 977.20	Liquid	II		1999	CCS	a) The CODEX STAN 12
	99/23	added: for		chromatography					does not mention
		sugar							CODEX STAN 234.
		profile							b) This method are
									mentioned in the
									CODEX STAN 12.
									c) CODEX STAN 234
									mentions methods

									AOAC 998.18 as type I;
Kimchi	ALINORM	Drained	AOAC 968.30	Gravimetry	I		1999	CCPFV	a) The CODEX STAN 223
	99/23	weight							/ 2001 , mention "See
									Codex Alimentarius
									Volume 13".
									B) CODEX STAN 234
									doesn't mention the
									commodity
Kimchi	ALINORM	Mineral	AOAC 971.33	Ashing	I		1999	CCPFV	a) a) The CODEX STAN
	99/23	impurities							223 / 2001 , mention
									"See Codex
									Alimentarius Volume
									13".
									B) CODEX STAN 234
									doesn't mention the
									commodity
									c) CODEX STAN 234
									mentions method AOAC
									971.33 for many
									products.
Kimchi	ALINORM	Salt (sodium	AOAC 971.27	Potentiometry	II		1999	CCPFV	a) a) The CODEX STAN
	99/23	chloride)		(Determination of					223 / 2001 , mention
				chloride,					"See Codex
				expressed					Alimentarius Volume

				as sodium					13".
				chloride)					B) CODEX STAN 234
									doesn't mention the
									commodity
									c) CODEX STAN 234
									mentions method AOAC
									971.27 for many
									products.
Kimchi	ALINORM	Total acidity	AOAC 942.15	Tritrimetry	ı		1999	CCPFV	a) a) The CODEX STAN
	99/23	(as lactic							223 / 2001 , mention
		acid)							"See Codex
									Alimentarius Volume
									13".
									B) CODEX STAN 234
									doesn't mention the
									commodity
									c) CODEX STAN 234
									mentions method AOAC
									942.15 for many
									products.
Luncheon	ALINORM	Lead	AOAC 972.25	Atomic	II		1995	ССМРРР	a) CODEX STAN 89
meat	95/23			absorption					mentions a different
									method: AOAC 934.07
Mango	ALINORM	Total soluble	AOAC	_	ļ		1991	CCPFV	a)There aren't methods
Chutney	91/23	solids	932.14(c)						in the CODEX STAN 160,
									just the expression "To

								be completed".
								b) In the CODEX STAN
								234 is not mentioned
								this provision to this
								commodity
								c) There is provision
								CODEX STAN 160
Margarine	CODEX	Milkfat	CAC/RM 15	Titrimetry	I		CCFO	The reference report
	STAN 234							was not found. There is
								not reference for this
								method on CODEX STAN
								256
Margarine	CODEX	Vitamin D	AOAC 936.14	Bioassay	II		CCFO	The method AOAC
	STAN 234							981.17 is mentioned on
								CODEX STAN 256 as
								Type II
Margarine	CODEX	Vitamin E	IUPAC 2.411	TLC followed by	II		CCFO	The reference report
	STAN 234			spectrophotomet				was not found. The
				ry or GLC				method ISO 9936 is
								mentioned in CODEX
								STAN 256
Margarine	CODEX	Water	CAC/RM 17-	Gravimetry	I		CCFO	The reference report
	STAN 234		1969					was not found. There is
			(described in					no reference value for
			the Standard)					water on CODEX STAN
								256

Milk	ALINORM	Aflatoxin M1	IDF STD. 171	Immunoaffinity	II	95	1997	ССММР	CODEX STAN 193
	97/23			column & LC					mentions the provision.
									CODEX STAN 234
									mentions only methods
									for peanuts
Milk & dried	ALINORM	Aflatoxin M1	IDF Std. 111 A	TLC/LC	Not	95	1997	ССММР	CODEX STAN 193
milk A-5 (milk	97/23				describ				mentions the provision.
powder)					ed				CODEX STAN 234
									mentions only methods
									for peanuts
Minarine	CODEX	Fat	IUPAC 2.801	Gravimetry	I			CCFO	The reference report
	STAN 234								was not found
Minarine	CODEX	Milkfat	CAC/RM 15	Titrimetry	I			CCFO	The reference report
	STAN 234		(described in						was not found. The
			the Standard)						CODEX STAN 256 does
									not describe this
									method.
Minarine	CODEX	Sodium	AOAC 971.27	Potentiometry	II			CCFO	CODEX STAN 256
	STAN 234	chloride	(Codex						mentions for
			general						determination of salt
			method)						content the following
									methods: IDF 12B: 1988,
									ISO CD 1738 or AOAC
									960.29.

Minarine	CODEX	Vitamin A	AOAC 960.45	Spectrophotomet	П		CCFO	CODEX STAN 256
	STAN 234			ry				mentions for
								determination of
								vitamin A content:
								AOAC 985.30; AOAC
								992.04; or JAOAC 1980,
								63, 4.
Minarine	CODEX	Vitamin D	AOAC 936.14	Bioassay	II		CCFO	CODEX STAN 256
	STAN 234							mentions for
								determination of
								vitamin D content
								According to AOAC
								981.17
Minarine	CODEX	Vitamin E	IUPAC 2.411	TLC followed by	II		CCFO	The reference report
	STAN 234			spectrophotomet				was not found. The
				ry or GLC				CODEX STAN 256
								mentions for vitamin E
								content ISO 9936:
Minarine	CODEX	Water	CAC/RM 17	Gravimetry	I		CCFO	The reference report
	STAN 234							was not found. There is
								no reference value for
								water on CODEX STAN
								256
Natural	CODEX	Spores of	ISO 6461-2	Membrane	I		CCNMW	Out of CCMAS scope
Mineral	STAN 234	sulphite-		filtration				
Waters		reducing						

		anaerobis							
		(Clostridia)							
Olive Oile and	CODEY	Halasanatad	COL/T 20/Dag	Con				0050	This mostly advises next
Olive Oils and	CODEX	Halogenated	COI/T.20/Doc.	Gas	II			CCFO	This method was not
Olive Pomace	STAN 234	solvents,	no. 8	chromatography					found
Oils		traces							
Pearl millet	CODEX	Colour	Modern	Colorimetry using	IV			CCCPL	The article is not readily
flour	STAN 234		Cereal	specific colour					available
			Chemistry,	grader					
			6th Ed., D.W.						
			Kent Jones &						
			A.J. Amos, pp						
			605- 612,						
			Food Trade						
			Press Ltd.,						
			London,						
			1969.						
Pearl millet	ALINORM	Crude Fat	AOAC	Gravimetry (ether	1		1991	CCCPL	a) CODEX STAN 170
flour	91/23		945.38F	extraction)					mention these methods
			AOAC						and ISO 5986
			920.39C						(withdrawn)
									b)In CODEX STAN 234
									mention the method
									Gravimetry (ether
									extraction)

Pickled Fruits	ALINORM	Benzoic acid	NMKL 103 or	Gas	III		2007	CCPFV	a) CODEX STAN 234
and	07/30/23		AOAC	Chromatography					doesn't mention this
Vegetables			983.16						commodity. The Codex
									Stan 260 mentions
									these methods.
									b) The method NMKL-
									AOAC Method Number
									983.16 is for Fish/Fish
									Homogenate
									c) NMKL 103 is "Benzoic
									acid and sorbic acid in
									foods".
									The method is tested on
									apple juice, almond
									paste, and fish
									homogenate [at 0.5–2
									g/kg levels], NMKL 103
									is withdrawn in 2014
									due to the use of
									chloroform.
Powdered	CODEX	Polarization	ICUMSA GS	Polarimetry	I			CCS	a) CODEX STAN 212
sugar (Icing	STAN 234		2/1/3-15						mentions to see
sugar)									relevant Codex texts on
									methods of analysis and
									sampling
									b) The ICUMSA GS

									2/1/3-15 method was
									not found
		G: 1					1005		\
Powdered	ALINORM	Starch	TBD Proposed	Gravimetry	_		1995	CCS	a) The type isn't
sugar (Icing	95/23		AOAC 925.50						mentioned in the
sugar)									ALINORM 95.This is not
									mentioned in CODEX
									STAN 234 and in the
									CODEX STAN 212. The
									CODEX STAN 212
									contains provision for
									starch.
Processed	ALINORM	Fill of	CAC/RM 46	Weighing	I		2003	CCPFV	a) The standard was not
fruits and	03/23	containers							found.
vegetables									B) The method is
									described in the CODEX
									STAN 260
									c) CODEX STAN 234
									mentions CAC/RM 46-
									1972 (reference to
									"metal containers"
									deleted and refer to ISO
									90.1:1999 for
									determination of water
									capacity in metal
									containers)

Quick frozen	CODEX	Sodium	AOAC 971.21	Potentiometry	II		CCFFP	a) There are methods in
blocks of fish	STAN 234	Chloride	(Codex					CODEX STAN 165
fillet, minced			general					b) the method AOAC
fish flesh and			method)					971.21 is for Hg.
mixtures of								
fillets and								
minced fish								
flesh								
Quick Frozen	CODEX	Cooking	CAC/RM 33-	cooking	I		CCPFV	
Brussels	STAN 234	Procedure	1970					
Sprouts								
Quick frozen	CODEX	Mineral	CAC/RM 54	Flotation and	I		CCPFV	
fruits and	STAN 234	impurities		sedimentation				
vegetables:								
Berries, leek								
and carrot								
Quick frozen	CODEX	Net weight	CAC/RM 34-	Weighing	I		CCPFV	The reference report
fruits and	STAN 234		1970					was not found
vegetables								
Quick frozen	CODEX	Thawing	CAC/RM 32-	Thawing	I		CCPFV	The reference report
fruits and	STAN	procedure	1970					was not found
vegetables	234							
Quick frozen	CODEX	Soluble	CAC/RM 43	Refractometry	I		CCPFV	The reference report
fruits and	STAN 234	solids, total						was not found
vegetables:								
Berries, Whole								
	1				<u> </u>			

kernel corn								
and Corn-on-								
the-cob								
Quick frozen	CODEX	Drained	Described in	Draining	ı		CCPFV	The reference report
fruits and	STAN 234	fruit/drained	the Stan					was not found. The
vegetables:		berries						standard for this
Peaches and								commodity was not
berries								found. The specific
								Codex commodities
								don't describe the
								method
Quick frozen	CODEX	Cooking	CAC/RM 33-	Cooking	ı		CCPFV	The reference report
fruits and	STAN 234	procedure	1970					was not found
vegetables:								
Vegetables								
Quick Frozen	CODEX	Tough	CAC/RM 39	Stretching	I		CCPFV	a) CODEX STAN 113
Green Beans	STAN 234	Strings						mentions :See relevant
and Quick								Codex texts on methods
Frozen Wax								of analysis and
Beans								sampling.
Quick frozen	CODEX	Solids,	CAC/RM 35	Gravimetry	II		CCPFV	The reference report
peas	STAN 234	alcohol						was not found
		insoluble						
Quick Frozen	CODEX	Dry matter,	Described in	Weighing	ı		CCPFV	CODEX STAN 77 doesn't
Spinach	STAN 234	Salt-free	the Standard					describe the method
L								

Quick Frozen	ALINORM	mineral	ISO R 763	_	_		1978	CCPFV	a) CODEX STAN 234
Spinach	78/25	impurities							doesn't mention this
									commodity.
									b) The CAC/RM were
									revoked , but the
									CAC/RM 46-1972 is
									described in CODEX
									STAN 234.
									c) The principle and
									type aren't mentioned
									in the ALINORM
Raisins	CODEX	Mineral	CAC/RM 51-	Ashing	I			CCPFV	The reference report
	STAN 234	impurities	1974						was not found
Raisins	CODEX	Mineral oil	CAC/RM 52-	Extraction and	II			CCPFV	The reference report
	STAN 234		1974	separation on					was not found
				alumina					
Sorghum flour	CODEX	Colour	Modern	Colorimetry using	IV			CCCPL	a) CODEX STAN 173
	STAN 234		Cereal	specific colour					mentions the same
			Chemistry,	grader					method The article is
			6th Ed., D.W.						not readily available
			Kent-Jones						
			and A.J. Amos						
			(Ed.), pp. 605-						
			612, Food						
			Trade Press						

			Ltd, London,						
			1969.						
	41110004	0 1 5 :	100 5000				1007	20001	\ 0005\\ 654\\ 450
Sorghum flour	ALINORM	Crude Fat	ISO 5986,	-	I		1987	CCCPL	a) CODEX STAN 173
	87/23		Animal						there are methods:
			Feeding Stuffs						AOAC 945.38F, 920.39C
									and ISO 5986
									b)The Stan 234 does
									not mention ISO 5986
									(withdrawn).
Sorghum flour	CODEX	Protein	ICC Method	Titrimetry,	I			CCCPL	a) CODEX STAN 173
	STAN 234		No 105/1	Kjeldahl digestion					mention ICC 105/1 and
									ISO 1871
									b) the correct version is
									ICC 105/2
Sorghum	CODEX	Fat Crude	AOAC	Gravimetry	I			CCCPL	a) CODEX STAN 172
grains	STAN 234		945.38F,						mentions methods
			920.39C						AOAC 945.38F and
									920.39C and ISO
									5986:1983 – animal
									feedingstuff
Sorghum	CODEX	Protein	ICC Method	Titrimetry,	I			CCCPL	a) CODEX STAN 172
grains	STAN 234		No 105/1	Kjeldahl digestion					there are the methods:
									ICC Method No 105/1 e
									ISO 1871

									b) the correct version is
									ICC 105/2
Sugars	ALINORM	pH 4.5-7.0	ICUMSA GS	Potentiometry	I		1997	CCS	CODEX STAN 212, item
(fructose and	97/23A		1/2/3/4/7/8-						6. METHODS OF
lactose)			23						ANALYSIS AND
									SAMPLING mentions
									See relevant Codex
									texts on methods of
									analysis and sampling.
									B) The correct method
									is ICUMSA GS
									1/2/3/4/7/8/9-23
Sugars	ALINORM	Conductivity	ICUMSA GS	Conductimetry	I		2001	CCS	a) The methods are not
(fructose)	01/23	ash	2/3-17						mentioned in the
									CODEX STAN 212.
									CODEX STAN 212
									mentions "see CODEX
									STAN 234".
									b) The correct method is
									ICUMSA GS 2/3/9-17
Sugars	ALINORM	Invert sugar	ICUMSA GS 2-	Titrimetry	I		2001	CCS	a) The methods are not
(plantation or	01/23		6						mentioned in the
mill white									CODEX STAN 212.
sugar)									b) The CODEX STAN 212
									mentions "see CODEX

									STAN 234".
									These methods are
									different from CODEX
									STAN 234 that mention
									ICUMSA GS 1/3/7-3
									approved in the
									ALINORM 1997
Sugars	ALINORM	Conductivity	ICUMSA GS	Conductimetry	I		1997	CCS	a) CODEX STAN 212,
(powdered	97/23A	ash	2/3-17						item 6. METHODS OF
sugar)									ANALYSIS AND
									SAMPLING mentions
									See relevant Codex
									texts on methods of
									analysis and sampling.
									b) The correct method is
									ICUMSA GS 2/3/9-17
Sugars	ALINORM	Invert sugar	ICUMSA GS	Titrimetry	I		1997	CCS	a) CODEX STAN 212,
(powdered	97/23A		2/3-5 : after						item 6. METHODS OF
sugar)			filtration if						ANALYSIS AND
			necessary to						SAMPLING mentions
			remove any						See relevant Codex
			anticaking						texts on methods of
			agents						analysis and sampling.
									B) The ICUMSA GS 2/3-5
									method was not found

Sugars (soft	ALINORM	Sulphated	ICUMSA GS	Gravimetry	I		1997	CCS	a) CODEX STAN 212,
brown sugar)	97/23A	ash	1/3/4/7/8-11						item 6. METHODS OF
									ANALYSIS AND
									SAMPLING mentions:
									See relevant Codex
									texts on methods of
									analysis and sampling.
									B) The ICUMSA GS
									1/3/4/7/8-11 method
									was not found.
Sugars (soft	ALINORM	Loss on	ICUMSA GS	Gravimetry	I		1997	CCS	A) CODEX STAN 212,
white sugar,	97/23A	drying	2/1/3-15						item 6. METHODS OF
soft brown									ANALYSIS AND
sugar, white									SAMPLING mentions
sugar,									See relevant Codex
plantation or									texts on methods of
mill white									analysis and sampling.
sugar and									B) The correct method
powdered									is ICUMSA Method GS
sugar)									2/1/3/9-15
Sugars (white	ALINORM	Conductivity	ICUMSA GS	Conductimetry	ı		1997	CCS	a) CODEX STAN 212,
sugar)	97/23A	ash	2/3-17						item 6. METHODS OF
									ANALYSIS AND
									SAMPLING mentions
									See relevant Codex
									texts on methods of

									analysis and sampling.
									b) The correct method is
									ICUMSA GS 2/3/9-17
Sugars (white	ALINORM	Invert sugar	ICUMSA GS	Titrimetry	I		1997	CCS	a) CODEX STAN 212,
sugar)	97/23A		2/3-5						item 6. METHODS OF
									ANALYSIS AND
									SAMPLING mentions
									See relevant Codex
									texts on methods of
									analysis and sampling.
									B) The correct method
									is ICUMSA GS 2/3/9-5
Vegetable	CODEX	Fat	CAC/RM 55-	Gravimetry	I			CCVP	a) CODEX STAN 174
protein	STAN 234		1976 -	(extraction)					was approved in 1989
products			Method 1						and doesn't mention
			Gravimetry						methods
			(extraction)						
Wheat flour	CODEX	Fat acidity	AOAC 939.05	Titrimetry	ĺ			CCCPL	a) CODEX STAN 152
	STAN 234								mentions methods: ISO
									7305 and AOAC 939.05
Wheat flour	CODEX	Moisture	ISO 712 ICC	Gravimetry	ı			CCCPL	a) CODEX STAN 152 is
	STAN 234		Method No						not mentioned these
			110/1						methods
Wheat flour	CODEX	Protein	ICC Method	Titrimetry,	I			CCCPL	a) CODEX STAN 152
	STAN 234		No 105/1	Kjeldahl digestion					mentions the same
									method:ICC Method No

									105/I
									b) the correct version is
									ICC 105/2
Whole and	ALINORM	Crude fat	AOAC	Gravimetry (ether	1		1991	CCCPL	a) The CODEX STAN 169
Decorticated	91/23		945.38F	extraction)					mentions these
Pearl Millet			AOAC						methods and the ISO
Grain			920.39C						5986 (withdrawn)
Bouillons and	CODEX	Amino	AIIBP Method	Volumetry	Ш			CCSB	a) CODEX STAN 117 was
Consommés	STAN 234	nitrogen	No 2/7	(modified Van					approved in 2001
				Slyke)					b) Methods AIIBP was
									not found.
Bouillons and	CODEX	Creatinine	AIIBP Method	HPLC	Ш			CCSB	a) CODEX STAN 117 was
Consommés	STAN 234		No 2/5						approved in 2001
									b) Methods AIIBP was
									not found.
Bouillons and	ALINORM	Sodium	AIIBP Method	Volhard titrimetry	Ш		1995	CCSB	a)There are methods
Consommés	95/23	chloride	No 2/4						mentioned in the Codex
									STAN 117- Method 2/4
									of the AIIBP Official
									Collection of Methods
									of Analysis, Revision
									1998; AOAC Method
									971.27 (Codex general
									method) based on
									potentiometric
									determination);

					c) CODEX STAN 234
					mentions a different
					principle:
					Potentiometric titration
					(chloride expressed as
					sodium chloride).
					d) The method was not
					found

APPENDIX II – METHODS WITH INACCURATE INFORMATION ENDORSED FOR LESS THAN 10 YEARS

Commodities	Source	Provision	Method	Principle	Туре	Year	Year	Year	Committee	Remarks
						Approval	Last	Endorsement		
							revision	by CCMAS		
Blend of	REP14/MAS	Milk protein in	ISO 8968-	Titrimetry (Kjeldahl	IV		2014	2014	ССММР	a) There aren't methods in
sweetened		MSNF	1/IDF 20-				(IDF/ISO)			the CODEX STAN 252 , just
condensed			1/AOAC							the expression see "CODEX
skimmed			991.20							STAN 234"
milk and										b) It was not clear whether
vegetable fat										AOAC 991.20, listed as
										equivalent to the method in
										the Standard, is still
										equivalent to the newly
										proposed methods (REPORT
										2014 , par. 27) c) The CODEX
										STAN 234 is not updated
										regarding to modification of
										ISO / IDF on 06/09/2014
										d) It's necessary to
										harmonize in all protein
										determination to milk
										products by kjeldahl the
										mention of total N x 6,38 in
										the provision file
										e) Its necessary to verify the

									equivalence of methods
Cannad	DED42/NAAC	Fill of	CAC/DAAAC	Mainhinn			2012	CCDEV	a) Thousans are not reathered.
Canned	REP13/MAS		CAC/RM 46-	Weighing	'		2013	CCPFV	a) There are not methods
Apple		containers	1972 (for						mentioned in the CODEX
Sauce			glass						STAN 17, just the expression
			containers))						see relevant CODEX Texts on
			and						Methods of Analysis
			ISO 90-1.1						b) The CAC/RM were
			(for metal						revoked , but the CAC/RM 46
			containers)						is described in CODEX STAN
									234.
Canned	ALINORM	Proper fill (in	CAC/RM 45	Pouring and	ı		2009	CCPFV	a) CODEX STAN 234 mentions
Green Peas	09/32/23	lieu of drained		measuring					CAC/RM 45
		weight)							b) CODEX STAN 297 describes
									CAC/RM 45
Canned	ALINORM	Types of peas	CAC/RM 48	Visual inspection	I		2009	CCPFV	a) CODEX STAN 234 mentions
Green peas	09/32/23								CAC/RM 48
									b) CODEX STAN 297 describes
									CAC/RM 48.
Canned	ALINORM	Tough strings	CAC/RM 39	Stretching	ı		2009	CCPFV	a) CODEX STAN 234 mentions
Green	09/32/23								CAC/RM 39
beans									b) CODEX STAN 297 describes
									CAC/RM 39. c) The
									commodity on Stan 234 is
									canned green beans and wax

									beans
Certain	ALINORM	Fill of	CAC/RM 46	Weighing	I		2007	CCPFV	a) There are methods
Canned	07/30/23	containers	(Codex						mentioned in Codex STAN
Citrus Fruits			General						254: CAC/RM 46-(for glass
			Method for						containers) (Codex general
			processed						method for processed fruit
			fruits and						and vegetables) and ISO 90.1
			vegetables)						(for metal containers) (Codex
									general method for processed
									fruit and vegetables)
									b) The ISO 90.1 is not
									mentioned in ALINORM 2007
									c) The provision is not
									mentioned on CODEX STAN
									234 for this commodity
Cheese,	REP14/MAS	Milk protein	ISO 8968-	Titrimetry (Kjeldahl	I	2014	2014	ССММР	a) It was not clear whether
unripened			1/IDF 20-			(IDF/ISO)			AOAC 991.20, listed as
including			1/AOAC						equivalent to the method in
fresh cheese			991.20 and						the Standard, is still
			991.23						equivalent to the newly
									proposed methods (REPORT
									2014 , par. 27)
									b) The CODEX STAN 234 is not
									updated regarding to

									modification of ISO / IDF (on
									06/09/2014).
									c) It's necessary to
									harmonize in all protein
									determination to milk
									products by kjeldahl the
									mention of total N x 6,38 in
									the provision file
									d) CODEX STAN 234 mention
									ISO 8968-1/2IDF 20-1/2
Cocoa Butter	ALINORM	Free fatty acids	ISO660; or	Titrimetry	I		2007	СССРС	a) The CODEX STAN 86
	07/30/23		AOCS Cd 3d-						mentions the following
			63 (03)						methods: IUPAC (1987)
									2.201.
									b) The CODEX STAN 234
									mentions these methods
Cocoa Butter	ALINORM	Unsaponifiable	ISO 3596 or	Titrimetry after	I		2007	CCCPC	a)The CODEX STAN 86
	07/30/23	matter	ISO 18609 or	extraction with					mentions IUPAC (1987)
			AOCS Ca 6b-	diethyl ether I					2.401.
			53 (01)						b) The CODEX STAN 234
									mentions these methods
Cream and	REP14/MAS	Milk protein	ISO 8968-	Titrimetry (Kjeldahl	I	2014	2014	ССММР	a) There isn't provision for
Prepared			1/IDF 20-			(IDF/ISO)			Milk Protein on CODEX STAN
Creams			1/AOAC						275. e) CODEX STAN 234
			991.20						mentions ISO 8968-1/2 and
									IDF 20-1/2

									b) It was not clear whether
									AOAC 991.20, listed as
									equivalent to the method in
									the Standard, is still
									equivalent to the newly
									proposed methods (REPORT
									2014 , par. 27) c) The
									information is outdated on
									CODEX STAN 234 regarding
									to ISO/IDF methods
									(09/06/2014).
									d) It's necessary to
									harmonize in all protein
									determination to milk
									products by kjeldahl the
									mention of total N x 6,38 in
									the provision file.
Edible casein	REP14/MAS	Milk protein	ISO 8968-	Titrimetry	I	2014	2014	ССММР	a)There aren't methods in the
products		(total N x 6.38	1 IDF 20-1	(Kjeldahl)		(IDF/ISO)			CODEX STAN 290, just the
		in dry matter)							expression see "CODEX STAN
									234"
									b) The information is
									outdated on CODEX STAN 234
									regarding to ISO/IDF
									methods (on 09/06/2014).
									c) It's necessary to harmonize

									in all protein determination to milk products by kjeldahl
									the mention of total N x 6,38
									in the provision file
									d) CODEX STAN 234 mention
									IDF 91 and ISO 5549
Evaporated	REP14/MAS	Milk protein in	ISO 8968-1/	Titrimetry	I	2014	2014	ССММР	a) There aren't methods in
milks		MSNF	IDF 20-1/	(Kjeldahl)		(IDF/ISO)			the CODEX STAN 281 b) It
			AOAC						was not clear whether AOAC
			991.20						991.20, listed as equivalent to
			/AOAC						the method in the Standard,
			945.48H						is still equivalent to the newly
									proposed methods (REPORT
									2014 , par. 27) c) The CODEX
									STAN 234 is not updated
									regarding to modification of
									ISO / IDF (on 06/09/2014).
									d) It's necessary to
									harmonize in all protein
									determination to milk
									products by kjeldahl
Fats and oils	REP	Soap content	BS 684	Gravimetry	I		2011	CCFO	a)The method in the CODEX
	11/MAS		Section						STAN 19
			2.5/AOCS Cc						is BS 684 Section 2.5
			17-95						

Fats and oils	REP	Peroxide value	AOCS Cd 8b-	Titrimetry using	I		2012	CCFO	a) The methods in the CODEX
not covered	12/MAS		90 (11)/ISO	iso-octane					STAN 19 are IUPAC 2.501 (as
by individual			3961						amended), AOCS Cd 8b - 90
standards									(97) or ISO 3961: 1998.
									b) C
									c) CODEX STAN 234 mention
									the methods AOCS Cd 8b-90
									(11) ISO 3960
Fermented	REP14/MAS	Milk Protein	ISO 8968-	Titrimetry	I	2014	2014	ССММР	a) There aren't methods in
milks			1 IDF 20-	(Kjeldahl)		(IDF/ISO)			the CODEX STAN 243
			1/AOAC						b) It was not clear whether
			991.20						AOAC 991.20, listed as
									equivalent to the method in
									the Standard, is still
									equivalent to the newly
									proposed methods (REPORT
									2014 , par. 27)
									c) The CODEX STAN 234 is
									not updated regarding to
									modification of ISO / IDF (on
									06/09/2014).
									d) It's necessary to
									harmonize in all protein
									determination to milk
									products by kjeldahl the
									mention of total N x 6,38 in

									the provision file
Fish sauce	Codex Stan 234	sodium chloride	AOAC 976.18,	potentiometry	II		2012	CCFFP	a) CODEX STAN 302 mentions the methods FAO 1981, Technical Paper 219 AOAC
Jams and jellies	ALINORM 09/32/23	fill of containers	CAC/RM 46	Weighing	I		2009	CCPFV	 937.13 or 976.18 or 976.19. a) CODEX STAN 234 mentions and describes CAC/RM 46; b) CODEX STAN 296 mentions and describes CAC/RM 46 for glass containers and mentions
Jams and	ALINORM	Soluble solids	ISO 2173	Refractometry	I		2009	CCPFV	ISO90.1 to metal containers a) The methods mentioned
jellies	09/32/23		AOAC 932.14C						on CODEX STAN 296 are AOAC 932.14C ISO 2173 (Codex General Method
									for processed fruits and vegetables) b) The Codex Stan 234 mentions AOAC 932.12
Milk powders and cream	REP14/MAS	Milk Protein	ISO 8968- 1/IDF 20- 1/AOAC	Titrimetry (Kjeldahl)	I	2014 (IDF/ISO)	2014	ССММР	a) There aren't methods in the CODEX STAN 207, just the expression see "CODEX

powders			991.21						STAN 234"
									b) It was not clear whether
									AOAC 991.20, listed as
									equivalent to the method in
									the Standard, is still
									equivalent to the newly
									proposed methods (REPORT
									2014 , par. 27)
									c) The CODEX STAN 234 is
									not updated regarding to
									modification of ISO / IDF (on
									06/09/2014).
									d) It's necessary to
									harmonize in all protein
									determination to milk
									products by kjeldahl the
									mention of total N x 6,38 in
									the provision file e) The
									name of the provision on 234
									and CODEX STAN 207 is Milk
									Protein (in MSNF)
Named	REP	Acidity	ISO	Titrimetry	I		2011	CCFO	a)The CODEX STAN 211
Animal Fats	11/MAS		660/AOCS						mentions IUPAC 2.201 and
			Cd 3d-63						ISO 660

Named	REP	Copper and	AOAC	Atomic absorption	II		2011	CCFO	a)The CODEX STAN 211
Animal Fats	11/MAS	Iron	990.05/ISO	Spectrophotometry					mentions IUPAC 2631, AOAC
			8294/ AOCS	(direct graphite					990.05/ISO 8294
			Ca 18b-91	furnace)					
Named	REP	GLC ranges of	ISO 5508/ISO	Gas	II		2011	CCFO	a)The methods in the CODEX
Animal Fats	11/MAS	fatty	12966-2/	chromatography of					STAN 211 are IUPAC 2.301,
		acid	AOCS Ce 2-	methyl esters					2.302 and 2.304 or ISO 5508:
		composition	66/Ce 1e-						1995/ 5509: 1999.
			91/Ce 1f-96						b) The method AOCS Ce1e 91
									is not available
Named	REP	Relative	ISO/AOCS	Pycnometry	I		2011	CCFO	a)CODEX STAN 234 mentions
Animal Fats	11/MAS	density	method for						type II and doesn't mention
			apparent						the method.
			density to be						b) CODEX STAN 211 mentions
			inserted						the IUPAC 2.101, with the
									appropriate conversion
									factor.
Named	ALINORM	Saponification	ISO 3657 or	Titrimetry	I		2007	CCFO	a CODEX STAN 211 mention
Animal Fats	07/30/23	value	AOCS Cd 3-						IUPAC 2.202 or ISO 3657:
			25						1988.
Named	REP	lodine value	ISO	Wijs-Titrimetry	I		2012	CCFO	a) There are methods in the
Animal Fats	12/MAS	(IV)	3961/AOAC						CODEX STAN 211 IUPAC
			993.20/AOCS						2.205/1, ISO 3961: 1996,
			Cd 1d-92						AOAC 993.20, or AOCS Cd 1d-
									1992 (97).

Named	REP	Peroxide value	AOCS Cd 8b-	Titrimetry using	I		2012	CCFO	a) There are methods in the
Animal Fats	12/MAS		90/ISO 3960	iso-octane					CODEX STAN 211 IUPAC 2.501
									(as amended), AOCS Cd 8b-90
									(97) or ISO 3960: 1998.
Named	REP	Unsaponifiable	ISO 3596/	Titrimetry after	I		2012	CCFO	a) There are methods in the
Animal Fats	12/MAS	matter	ISO 18609/	extraction					CODEX STAN 211: IUPAC
			AOCS Ca 6b-	with diethyl ether					2.401 (part 1-5) or ISO 3596-
			53						1: 1988 and Amendment 1
									1997, and ISO 3596-2: 1988
									and Amendment 1 1999.
Named	REP	GLC ranges of	ISO 5508,	Gas	II		2012	CCFO	a) There are methods in the
Vegetable	12/MAS	fatty acid	ISO 12966-2,	chromatography of					CODEX STAN 210-ISO 5508:
Oils		composition	AOCS Ce 2-	methyl esters					1990 and 5509: 2000; or
			66,						AOCS Ce 2-66 (97), Ce 1e-91
			AOCS Ce 1-						(01) or Ce 1f-96 (02).
			62 and AOCS						
			Ce 1h-05						
Named	REP	Relative	IUPAC 2.101	Pycnometry	I		2011	CCFO	a) CODEX STAN 234 and
Vegetable	11/MAS	density							CODEX STAN 210 mention
Oils									IUPAC method
Natural	CODEX	Coliform	ISO 9308-1	Membrane	I			CCNMW	Out of CCMAS scope
Mineral	STAN 234	organism,		filtration					
Waters		thermotolerant							
		organism and							
		presumpetive							
		Escherichia Coli							

Natural	CODEX	Faecal	ISO 7899-2	Membrane	I			CCNMW	Out of CCMAS scope
Mineral	STAN 234	Streptococci		filtration					
Waters									
Olive Oils	REP	Relative	IUPAC 2.101,	Pycnometry	I		2011	CCFO	a) CODEX STAN 033 and
and Olive	11/MAS	density	with the						CODEX STAN 234 mentions
Pomace Oils			appropriate						the IUPAC method.
			conversion						B) CODEX STAN 234 mentions
			factor See						"Error. Bookmarking not
			comment						defined"
			above						
Pickled Fruits	ALINORM	Fill of	CAC/RM 46	Weighing	1		2007	CCPFV	a) CODEX STAN 234 doesn't
and	07/30/23	containers	(Codex						mention this commodity
Vegetables			General						B) There are a full description
			Method for						of methods on CODEX STAN
			processed						260
			fruits and						c) The CAC/RM were
			vegetables)						revoked , but the CAC/RM 46
									is described in the CODEX
									STAN 234.
Preserved	ALINORM	Fill of	CAC/RM 46 -	Weighing	I		2007	CCPFV	a) There are methods
Tomatoes	07/30/23	containers	Codex						mentioned in the CODEX
			General						STAN 13: CAC/RM 46 (for
			Method for						glass containers)
			processed						(Codex general method for
			fruits and						processed fruit and
			vegetables)						vegetables) and ISO 90.1 (for

									metal containers)
									(Codex general method for
									processed fruit and
									vegetables)
									b)The provision "is not
									mentioned in the Codex Stan
									234
Processed	CODEX	sodium	AOAC 971.27	Potentiometry	П			CCPFV	a) The CODEX STAN 57
Tomato	STAN 234	chloride							mentions for Sodium Chloride
Concentrate									ISO 3634 expressed as sodium
									chloride (Codex General
									Method),
									Potentiometry, type: III.
Processed	ALINORM	Fill of	CAC/RM 46	Weighing	I		2007	CCPFV	a) CODEX STAN 57 mentions
Tomato	07/30/23	containers	(Codex						CAC/RM 46-1972 (for glass
Concentrate			General						containers) (Codex general
			Method for						method for processed fruit
			processed						and vegetables) and ISO
			fruits and						90.1:1999 for metal
			vegetables)						containers) (Codex general
									method for processed fruit
									and vegetables)
									b)The provision is not
									mentioned in the Codex Stan
									234
		I.			l	I			I .

Processed	ALINORM	Lactic Acid	EN 2631	Enzymatic	Ш		2007	CCPFV	The CODEX STAN 57 and
Tomato	07/30/23			determination					CODEX STAN 234 mention
Concentrate									this method. The method was
									not found.
Reduced fat	REP14/MAS	Milk protein in	ISO 8968-	Titrimetry	IV	2014	2014	ССММР	a) There aren't methods in
blend of		MSNF1	1/IDF 20-	(Kjeldahl)		(IDF/ISO)			the CODEX STAN 250
Evaporated			1/AOAC						b) It was not clear whether
skimmed			991.20						AOAC 991.20, listed as
milk and									equivalent to the method in
vegetable fat									the Standard, is still
									equivalent to the newly
									proposed methods (REPORT
									2014 , par. 27)
									c) The CODEX STAN 234 is not
									updated regarding to
									modification of ISO / IDF
									(06/09/2014).
Reduced fat	REP14/MAS	Milk protein in	ISO 8968-	Titrimetry (Kjeldahl	IV	2014	2014	ССММР	a) There aren't methods in
blend of		MSNF1	1/IDF 20-			(IDF/ISO)			the CODEX STAN 251
skimmed			1/AOAC						b) It was not clear whether
milk powder			991.20						AOAC 991.20, listed as
and									equivalent to the method in
vegetable fat									the Standard, is still
in powdered									equivalent to the newly
form									proposed methods (REPORT
									2014 , par. 27)

									c) The CODEX STAN 234 is not
									updated regarding to
									modification of ISO/IDF (on
									06/09/2014)
Reduced fat	REP14/MAS	Milk protein in	ISO 8968-	Titrimetry (Kjeldahl	IV	2014	2014	ССММР	a) There aren't methods in
blend of		$MSNF^1$	1/IDF 20-			(IDF/ISO)			the CODEX STAN 252"
sweetened			1/AOAC						b) It was not clear whether
condensed			991.20						AOAC 991.20, listed as
skimmed									equivalent to the method in
milk and									the Standard, is still
vegetable fat									equivalent to the newly
									proposed methods(REPORT
									2014 , par. 27)
									c) The CODEX STAN 234 is not
									updated regarding to
									modification of ISO/IDF (on
									06/09/2014)
Sweetened	REP14/MAS	Milk protein in	ISO 8968-1	Titrimetry	ı	2014	2014	ССММР	a) There aren't methods in
condensed		MSNF ¹	IDF 20-1/	(Kjeldahl)		(IDF/ISO)			the CODEX STAN 282
milk			AOAC 991.20						b) It was not clear whether
			/AOAC						AOAC 991.20, listed as
			945.48H						equivalent to the method in
									the Standard, is still
									equivalent to the newly
									proposed methods (REPORT

									2014, par. 27) c) The CODEX STAN 234 is not updated regarding to modification of ISO / IDF (on 06/09/2014).
Table olives	REP13/MAS	Fill of containers	CAC/RM 46 (for glass containers) and ISO 90-1.1 (for metal containers)	Weighing	ı		2013	CCPFV	a) There are methods mentioned in the CODEX STAN 66 b) There are a full description of the method on CODEX/STAN 66 c) The CAC/RM were revoked , but the CAC/RM 46 is described in CODEX STAN 234
Table olives	REP13/MAS	Tin	NMKL 191 EN 15765	ICP-MS	III		2013	CCPFV	a) There isn't mention of these methods in CODEX STAN 234 .The CODEX STAN 66 mentions AOAC 980.19 as Type II

¹ It's necessary to harmonize in all protein determination to milk products by kjeldahl the mention of total N x 6,38 in the provision file

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