## CODEX ALIMENTARIUS COMMISSION





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Agenda Item 7

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

36<sup>th</sup> Session Budapest, Hungary, 23 – 27 February 2015

#### **REVIEW AND UPDATE OF METHODS IN CODEX STAN 234-1999**

(Comments of SDOs)

The SDOs would like to thank Brazil for their extensive work on this project.

Representatives of the standardisation organisations; AACC INTERNATIONAL, AOAC INTERNATIONAL, AOCS, CEN, IDF, ISO and NMKL have reviewed and commented on CX/MAS 15/36/7 Annex 1 and Annex 2. The comments are given in the last column of the tables.

However, the SDOs think it is even more important to focus on the process of method endorsement, and the review and updating of Codex standards. The SDOs would recommend that:

- The commodity standards should not refer to specific methods, but give the reference to the Codex Stan 234. This will make it easier to review the methods, keep them up-to-date, and avoid inaccuracy between the commodity standards and the Codex Stan 234.
- The commodity committees should continue to forward specific methods for endorsement to CCMAS, but the methods should only be referred to in the Codex Stan 234.
- The commodity committees have to advise CCMAS of the limit values for the provisions, along with their method suggestions.
- For many provisions, method criteria will apply, and it will be easier to add newly appropriated suggested methods, fulfilling the criteria, to the Codex Stan 234. This could be done at the CCMAS.
- In Codex Stan 234, there are several methods that are not fit for purpose, newer methods should preferably replace old ones. (For example, methods for tin in some commodities and aflatoxins in general have not been updated.)

Brazil has provided the necessary first step in highlighting the importance of maintaining the accuracy and currency of the Codex standards. However, the SDOs feel that looking at past ALINORMs from active committees can be confusing, as subsequent decisions may not be reflected in these documents. This could result in incorrect information as to the current status of the commodity standards with respect to Codex STAN 234. Also CCMAS should focus on identifying the topics for further discussions, and not spend time on editorial inconsistencies which could lead to reopening discussions on agreed decisions.

Readability and ease-of-use of the paper from Brazil can be enhanced if the Codex Stan of interest are included for the different provisions.

It seems appropriate to first adopt a structured revision process for 234, including the role of commodity committees, IAM, and Codex secretariat. This process should result in work packages which can be handled during CCMAS endorsement sessions.

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

Commoditi	Source	Provision	Method	Principle	Туре	Year	Year	Year	Committee	Remarks	SDO replies
es						Approval	Last	Endorsement			
							revision	by CCMAS			
All foods	ALINORM	Lead,	NMKL 161	AAS after	III			2001	CCCF	The method AOAC	yes it is a typing
	01/23	cadmium,	AOAC	microwave						991.10 is not for food	error: it should be
		copper,	991.10	digestion						(Cholinesterase	AOAC 999.10
		iron and	999.10							Activity in Whole	
		zinc								Blood)	
										It is a typing error, it	
										should be AOAC	
										999.10.	
Bouillons	ALINORM	Tin	AOAC	Atomic	II			1995	CCSB	a) CODEX STAN 234	The AOAC
and	95/23		985.16	absorption						doesn't mention this	suggested method
Consomm										provision . The	is probably not
és										CODEX STAN 228	sensitive enough
										doesn't contain	as it is flame AAS.
										methods for tin	So we would
										neither the CODEX	rather suggest a
										STAN 117	criteria approach
											to find most
Consomm	95/23		985.16	absorption						provision . The CODEX STAN 228 doesn't contain methods for tin neither the CODEX	is proba sensitive as it is fl So we we rather s

									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	_	ı		1987	CCPFV	a) The CODEX STAN	delete the entry in
mangoes	87/23	capacity of	46						234 doesn't mention	this document
		containers							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	Stan 234	Wash	CAC/RM44	Sieving	ı			CCPFV	The report that	Canned
mushroo		drained							mention this	mushrooms
ms		weight							provision/method	standard (Codex

									was not found. The	STAN 55) was
									Codex standard for	deleted, so delete
									this commodity was	this line in 234
									not found.	
Cereals,	ALINORM	Sum of	EN 12955 :	HPLC with	III		2003	CCCF	BS EN 12955:1999 -	EN 12955:1999 was
shell fruit	03/23	aflatoxins	<del>1999-07</del>	post column					Superseded,	replaced by EN ISO
and		B1, B2,	ISO 16050	derivatizatio					Withdrawn	16050:2011. This
derived		G1 and G2		n and					Replaced By : BS EN	change is already
Products				immunoaffin					ISO 16050:2011	incorporated in
(including				ity column						Codex STAN 234 so
peanuts)				clean up						there is no
										problem.
Cocoa	ALINORM	Lead	AOAC	AAS	Ш		2001	СССРС	a) There are methods	We would rather
Butter (for	01/23		999.11						mentioned in the	suggest a criteria
all foods)			NMKL 139						CODEX STAN 86-	approach as there
									According to AOAC	are other relevant
									934.07 or IUPAC	methods.
									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	ALINORM	Lead	AOAC	Atomic	II		1995	ССМРРР	a)There are methods	AOAC 934.07 was
cured	95/23		972.25	absorption					mentioned in the	withdrawn. Codex
chopped									CODEX STAN 98	STAN 234 is
meat									AOAC 934.07.	already updated so
									see above	there is no
										problem.
										Delete this line in
										this table. See
										above regarding
										Criteria approach.
Cooked	ALINORM	Lead	AOAC	Atomic	II		1995	ССМРРР	a) The CODEX STAN	AOAC 934.07 was
cured ham	95/23		972.25	absorption					96 mentions a	withdrawn. Codex
									different method:	234 is updated so
									AOAC 934.07.	there is no
									1.37.000071	

										problem.
										Delete this line
Cooked	ALINORM	Nitrite	AOAC	Colorimetry	Ш		1995	ССМРРР	a)The CODEX STAN	Update CODEX
cured ham	95/23	Withte	973.31	Colormicary	"		1333	CCIVII I I	96 doesn't mention	STAN 96 is not
carea mani	33/23		373.31							
									this method, only ISO	updated?
									2918	
Cooked	ALINORM	Protein	ISO 937	Kjeldahl	II		1995	CCMPPP	a)There are methods	in ALINORM95/23,
cured ham	95/23			digestion					mentioned in the	it is written that
									CODEX STAN 96	there is an error
									b) The CODEX STAN	therefore ISO 1443
									96 doesn't mention	was replaced by
									this method, only ISO	ISO 937
									Recommendation	
									R 1443	Codex STAN 234 is
									c) The CODEX STAN	OK so there is no
									234 mentions the	problem
									provision Protein	
									(conversion factor	
									6.25)	
Cooked	ALINORM	Lead	AOAC	Atomic	II		1996	ССМРРР	a)The CODEX STAN	we would rather
cured pork	95/23		972.25	absorption					97 mentions a	suggest a criteria
shoulder									different method:	approach to find
									AOAC 934.07	most relevant
										methods.

Cooked	ALINORM	Nitrite	AOAC	Colorimetry	П		1995	ССМРРР	a)The CODEX STAN	we would rather
cured pork	95/23		973.31						97 doesn't mention	suggest a criteria
shoulder									this method, only ISO	approach to find
									2918	most relevant
										methods.
										Codex STAN 97
										should be udpated
Cooked	ALINORM	Protein	ISO 937	Kjeldahl	II		1995	ССМРРР	a) The CODEX STAN	see above:
cured pork	95/23			digestion					97 doesn't mention	in ALINORM95/23,
shoulder									this method, only ISO	it is written that
									Recommendation	there is an error
									R 1443	therefore ISO 1443
										was replaced by
										ISO 937
										Codex STAN 234 is
										OK so there is no
										problem
Degermed	CODEX	Crude fat	AOAC	Gravimetry	I		1985	CCCPL	a) The Annex of	AACC 30-20.01
maize	STAN 234		945.38F;	(ether					CODEX STAN 155	(1999)
(corn)			920.39C	extraction)					mentions the	is equivalent to
meal and			/AACCI 30-						method AOAC	AOAC
maize			20.01						945.38F; 920.39C and	
(corn)									ISO 5986	Suggestions of
grits									(Withdrawn)	other standards:
										ISO 11085:2008

										ISO 6492:1999
Degermed	ALINORM	Protein	ICC 105/1	_	I		1985	CCCPL	CODEX STAN 155 and	Confirmed ICC
maize	85/23								CODEX STAN 234	105/2 is current
(corn)									mention the method	and is equivalent
meal and									ICC 105/I . The	to AACCI 46-12.01
maize									current version of	(1999)
(corn)									the method is ICC	
grits									105/2	
Durum	ALINORM	Protein	ICC 105/1	Titrimetry	I		1985	CCCPL	a)The CODEX STAN	ISO 1871 = Kjeldahl
wheat	85/23								178 mentions this	
semolina									method and also ISO	Suggestion of
and									1871	other standards:
durum									b) CODEX STAN 234	NMKL 6
wheat									mentions the	AACCI 46-12.01 is
flour									principle Titrimetry,	equivalent to ICC
									Kjeldahl digestion,	105/2
									type I	
									c) The current	
									version of the	
									method is ICC 105/2	
Fluid milk	ALINORM	Aflatoxin	AOAC	HPLC	Not	95	1997	ССММР	CODEX STAN 234	There is no
	97/23	M1	986.16		descri				describes only	commodity
		0.05 μg/kg			bed				methods for peanuts	standard on fluid
										milk.

										There is a ML as a
										contaminant.
										We suggest a full
										discussion on
										aflatoxins
Gari	ALINORM	Acidity	AOAC	_	I		1989	CCCPL	a) CODEX STAN 234	need to add a
	89/23		14.064						does not describe	provision in 234:
			AOAC						this provision	CCCPL to
			14.065						b) CODEX STAN 151	recommend
									mentions AOAC	methods
									14.064 – 14.065 (not	
									found)	
									- or -	
									ISO 7305 for total	
									acidity. The standard	
									was revised in 1998	
									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	to be discussed
			method						CODEX STAN 12 and	within WG
			V19, J A						in CODEX STAN 234	endorsement
			Public						b) Method MAFF was	(suggestion:
			Analyst						not readily available.	replace by AOAC

Honey   ALINORM   Mineral   J. Assoc.   Gravimetry   I   1997   CCS   a) This provision is not mentioned in the code   CODEX STAN 234   b) This method is not readily available   Method   V20 for Mineral (ash) in Honey   Honey   ALINORM   Sugars   AOAC   Carbon   I   2001   CCS   a) CODEX STAN 12   AOAC 978 is replaced by AOAC   Gravimetry   I   2001   CCS   a) CODEX STAN 234   b) CODEX STAN 234   b) CODEX STAN 234   b) CODEX STAN 234   code   code   CODEX STAN 234   code   code   CODEX STAN 234   code   c				1992,							962.19) (MAFF
Honey ALINORM Mineral J. Assoc. Gravimetry I 1997 CCS a) This provision is 7 not mentioned in the 4 cODEX STAN 234 available (ignition at 4 color of corn and 6 cane sugar P )  Honey ALINORM Sugars AOAC Carbon I isotope ratio detection of corn and cane sugar P . y  ALINORM SUGARS ALINORM CCS a) This provision is 7 not mentioned in the 4 code with a content of the 4 code with a				28(4) 171-							method available
Honey ALINORM Mineral J. Assoc. Gravimetry I (ignition at 4 4 5 600°C) (1992) (1.0% 28 (4.1) 17-181 MAFF Validated Methods Method V20 for Mineral (ash) in Honey ALINORM O1/23 added: 998.12. isotope ratio of corn and cane sugar y				175							http://www.apajo
Honey ALINORM Mineral J. Assoc. Gravimetry I (ignition at 4 4 5 600°C) 4 (ash) Public (ignition at 4 600°C) 4 (ash) Public (ignition at 4 6 600°C) 4 (ash) Fully Analysts (1992) 4 (ash) F											urnal.org.uk/html/
Honey ALINORM Mineral J. Assoc. Gravimetry I 1997 CCS a) This provision is not mentioned in the CODEX STAN 234 b) This method is not readily available with most methods. html)  Honey ALINORM Sugars AOAC Carbon I 2001 CCS a) CODEX STAN 12 does not mention added: 998.12. isotope ratio detection of corn and cane sugar y											maff_validated_m
Honey ALINORM Sugars AOAC Carbon I isotope ratio detection of corn and cane sugar y											ethods.html)
Honey ALINORM Sugars AOAC Carbon I 2001 CCS a) CODEX STAN 234 detection of corn and cane sugar y	Honey	ALINORM	Mineral	J. Assoc.	Gravimetry	I		1997	CCS	a) This provision is	?
Honey ALINORM Sugars AOAC Carbon I Honey ALINORM Sugars added: 998.12. isotope ratio detection of corn and cane sugar y		97/23 <sup>A</sup>	(ash)	Public	(ignition at					not mentioned in the	(MAFF method
Carbon   Code			<1.0%	Analysts	600°C)					CODEX STAN 234	available
Honey ALINORM Sugars AOAC Carbon I 2001 CCS a) CODEX STAN 12 does not mention CODEX STAN 234. 998.12 spectrometr of corn and cane sugar y				(1992)						b) This method is not	http://www.apajo
Honey ALINORM Sugars AOAC Carbon I 2001 CCS a) CODEX STAN 12 does not mention of corn and cane sugar y ethods.html)  181 MAFF Validated Method V20 for Mineral (ash) in Honey  2001 CCS a) CODEX STAN 12 does not mention CODEX STAN 234 mention AOAC  2001 CCS b) CODEX STAN 234 mention AOAC				<1.0% 28						readily available	urnal.org.uk/html/
Honey ALINORM Sugars AOAC Carbon I 2001 CCS a) CODEX STAN 12 does not mention CODEX STAN 234. b) CODEX STAN 234 mention AOAC				(4) 177-							maff_validated_m
Honey ALINORM Sugars AOAC Carbon I 2001 CCS a) CODEX STAN 12 does not mention cone sugar y AOAC Sp8.12. b) CODEX STAN 234. b) CODEX STAN 234 mention AOAC				181 MAFF							ethods.html)
Honey ALINORM Sugars AOAC Carbon I 2001 CCS a) CODEX STAN 12 does not mention CODEX STAN 234 mention AOAC				Validated							
Honey ALINORM Sugars AOAC Carbon I 2001 CCS a) CODEX STAN 12 AOAC 978 is replaced by AOAC detection of corn and cane sugar y				Method							
Honey ALINORM Sugars AOAC Carbon I 2001 CCS a) CODEX STAN 12 AOAC 978 is replaced by AOAC detection of corn and cane sugar y				V20 for							
Honey ALINORM Sugars AOAC Carbon I 2001 CCS a) CODEX STAN 12 AOAC 978 is replaced by AOAC detection of corn and cane sugar y				Mineral							
Honey ALINORM Sugars AOAC Carbon I 2001 CCS a) CODEX STAN 12 does not mention replaced by AOAC 998.12. does not mention CODEX STAN 234. b) CODEX STAN 234. b) CODEX STAN 234 mention AOAC				(ash) in							
01/23 added: 998.12. isotope ratio detection of corn and cane sugar y does not mention mass spectrometr y mention AOAC does not mention copies of corn and cane sugar y does not mention copies of c				Honey							
detection mass contained per part of corn and cane sugar y CODEX STAN 234. b) CODEX STAN 234 mention AOAC	Honey	ALINORM	Sugars	AOAC	Carbon	I		2001	CCS	a) CODEX STAN 12	AOAC 978 is
of corn and cane sugar y b) CODEX STAN 234 mention AOAC		01/23	added:	998.12.	isotope ratio					does not mention	replaced by AOAC
cane sugar y mention AOAC			detection		mass					CODEX STAN 234.	998.12
			of corn and		spectrometr					b) CODEX STAN 234	
products 978 17 for Sugars			cane sugar		у					mention AOAC	
products.			products.							978.17 for Sugars	
added: detection of										added: detection of	

									corn and cane sugar	
									products	
Honey	ALINORM	Sugars	AOAC	Thin layer	II		1999	CCS	a) CODEX STAN 12	AOAC 978 is
Honey	99/23	added:	979.22	chromatogra	"		1333	CCS	does not mention	replaced by AOAC
	33/23									
		detection	AOAC	phy					CODEX STAN 234.	998.12
		of high	998.12						b) CODEX STAN 234	Same thing for
		fructose							mentions AOAC	AOAC 991.41
		syrup,							978.17 for Sugars	
		corn syrup.							added: 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	Carbon	I		2001	CCS	The CODEX STAN 12	The correct
	01/23	added: for	998. <b>18</b>	isotope ratio					mentions the AOAC	method is AOAC
		sugar	998.12	mass					977.20 for sugar	998.12
		profile		spectrometr					profile and AOAC	
				у					991.41 internal	
									standard for SCIRA.	

									The method AOAC 998.18 was not	
									found	
Honey	ALINORM	Sugars	AOAC	Liquid	II		1999	CCS	a) The CODEX STAN	The correct
	99/23	added: for	977.20	chromatogra					12 does not mention	method is AOAC
		sugar	998.12	phy					CODEX STAN 234.	998.12
		profile							b) This method are	
									mentioned in the	
									CODEX STAN 12.	
									c) CODEX STAN 234	
									mentions methods	
									AOAC 998.18 as type	
									l;	
Kimchi	ALINORM	Drained	AOAC	Gravimetry	I		1999	CCPFV	a) The CODEX STAN	Codex 234 should
	99/23	weight	968.30						223 / 2001 , mention	include this
									"See Codex	commodity
									Alimentarius Volume	
									13".	Suggestion: NMKL
									B) CODEX STAN 234	55
									doesn't mention the	
									commodity	
Kimchi	ALINORM	Mineral	AOAC	Ashing	I		1999	CCPFV	a) a) The CODEX	Codex STAN 234
	99/23	impurities	971.33						STAN 223 / 2001 ,	should include this
									mention "See Codex	commodity
									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	AOAC	Potentiomet	II		1999	CCPFV	a) a) The CODEX	Codex 234 should
	99/23	(sodium	971.27	ry					STAN 223 / 2001 ,	include this
		chloride)		(Determinati					mention "See Codex	commodity
				on of					Alimentarius Volume	
				chloride,					13".	
				expressed					B) CODEX STAN 234	
				as sodium					doesn't mention the	
				chloride)					commodity	
									c) CODEX STAN 234	
									mentions method	
									AOAC 971.27 for	
									many products.	
Kimchi	ALINORM	Total	AOAC	Tritrimetry	ı		1999	CCPFV	a) a) The CODEX	Codex 234 should
	99/23	acidity (as	942.15						STAN 223 / 2001 ,	include this
		lactic acid)							mention "See Codex	commodity
									Alimentarius Volume	
									13".	
									B) CODEX STAN 234	
									doesn't mention the	

Luncheon meat	ALINORM 95/23	Lead	AOAC 972.25	Atomic absorption	II		1995	ССМРРР	commodity c) CODEX STAN 234 mentions method AOAC 942.15 for many products. a) CODEX STAN 89 mentions a different method: AOAC 934.07	AOAC 934.07 is deleted. We would rather suggest a criteria approach to find most relevant
										methods.
Mango	ALINORM	Total	AOAC	-	I		1991	CCPFV	a)There aren't	refer back to
Chutney	91/23	soluble	932.14(c)						methods in the	CCPFV
		solids							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	Titrimetry	I		CCFO	The reference report	listed in Codex
	STAN 234		15					was not found. There	STAN 256: AOAC
								is not reference for	990.27 or AOCS Ca
								this method on	5c-87(97)
								CODEX STAN 256	
Margarine	CODEX	Vitamin D	AOAC	Bioassay	II		CCFO	The method AOAC	Refer back to CCFO
	STAN 234		936.14					981.17 is mentioned	to update the
								on CODEX STAN 256	methods
								as Type II	(bioessay)
									(suggestion of new
									methods: EN
									12821,
									NMKL 167)
Margarine	CODEX	Vitamin E	IUPAC	TLC followed	II		CCFO	The reference report	IUPAC method
	STAN 234		2.411	by				was not found. The	does not exist any
				spectrophot				method ISO 9936 is	more.
				ometry or				mentioned in CODEX	Refer back to CCFO
				GLC				STAN 256	
									suggestion of new
									methods: EN
									12822, ISO 9936
									could replace the
									IUPAC method
Margarine	CODEX	Water	CAC/RM	Gravimetry	I		CCFO	The reference report	not needed,
	STAN 234		17-1969					was not found. There	remove from
			(described					is no reference value	Codex STAN 234

			in the						for water on CODEX	
			Standard)						STAN 256	
Milk	ALINORM	Aflatoxin	IDF STD.	Immunoaffin	П	95	1997	ССММР	CODEX STAN 193	We suggest a
	97/23	M1	171	ity column &					mentions the	general discussion
				LC					provision. CODEX	on aflatoxins
									STAN 234 mentions	
									only methods for	
									peanuts	
Milk &	ALINORM	Aflatoxin	IDF Std.	TLC/LC	Not	95	1997	ССММР	CODEX STAN 193	We suggest a
dried milk	97/23	M1	111 A		descri				mentions the	general discussion
A-5 (milk					bed				provision. CODEX	on aflatoxins
powder)									STAN 234 mentions	
									only methods for	
									peanuts	
Minarine	CODEX	Fat	IUPAC	Gravimetry	I			CCFO	The reference report	listed in Codex
	STAN 234		2.801						was not found	STAN 256: ISO
										17189   IDF 194
Minarine	CODEX	Milkfat	CAC/RM	Titrimetry	I			CCFO	The reference report	listed in Codex
	STAN 234		15						was not found. The	STAN 256: AOAC
			(described						CODEX STAN 256	990.27 or AOCS Ca
			in the						does not describe	5c-87(97)
			Standard)						this method.	
Minarine	CODEX	Sodium	AOAC	Potentiomet	II			CCFO	CODEX STAN 256	listed in Codex
	STAN 234	chloride	971.27	ry					mentions for	STAN 256: ISO

			(Codex					determination of salt	1738   IDF 12
			general					content the following	
			method)					methods: IDF 12B:	Suggestion to add
								1988, ISO CD 1738	also NMKL 178
								or AOAC 960.29.	
Minarine	CODEX	Vitamin A	AOAC	Spectrophot	II		CCFO	CODEX STAN 256	Suggestion to add
	STAN 234		960.45	ometry				mentions for	EN 12823-1
								determination of	
								vitamin A content:	
								AOAC 985.30; AOAC	
								992.04; or JAOAC	
								1980, 63, 4.	
Minarine	CODEX	Vitamin D	AOAC	Bioassay	II		CCFO	CODEX STAN 256	Suggestion to add
	STAN 234		936.14					mentions for	EN 12821
								determination of	NMKL 167
								vitamin D content	
								According to AOAC	
								981.17	
Minarine	CODEX	Vitamin E	IUPAC	TLC followed	II		CCFO	The reference report	Suggestion to add
	STAN 234		2.411	by				was not found. The	EN 12822
				spectrophot				CODEX STAN 256	
				ometry or				mentions for vitamin	
				GLC				E content ISO 9936:	
Minarine	CODEX	Water	CAC/RM	Gravimetry	I		CCFO	The reference report	not needed,
	STAN 234		17					was not found. There	remove from
								is no reference value	Codex STAN 234

								for water on CODEX STAN 256	
Natural Mineral Waters	CODEX STAN 234	Spores of sulphite-reducing anaerobis	ISO 6461-2	Membrane filtration	I		CCNMW	Out of CCMAS scope	If it is deleted from 234, where will it be mentioned?
Olive Oils and Olive Pomace Oils	CODEX STAN 234	(Clostridia)  Halogenat ed solvents, traces	COI/T.20/ Doc. no. 8	Gas chromatogra phy	II		CCFO	This method was not found	no provision in the comodity standard. delete the line in Codex STAN 234
Pearl millet flour	CODEX STAN 234	Colour	Modern Cereal Chemistry, 6th Ed., D.W. Kent Jones & A.J. Amos, pp 605- 612, Food Trade Press Ltd., London, 1969.	Colorimetry using specific colour grader	IV		CCCPL	The article is not readily available	?

Pearl	ALINORM	Crude Fat	AOAC	Gravimetry	l		1991	CCCPL	a) CODEX STAN 170	See above
millet	91/23		945.38F	(ether					mention these	
flour			AOAC	extraction)					methods and ISO	
			920.39C						5986 (withdrawn)	
									b)In CODEX STAN 234	
									mention the method	
									Gravimetry (ether	
									extraction)	
Pickled	ALINORM	Benzoic	NMKL 103	Gas	III		2007	CCPFV	a) CODEX STAN 234	NMKL 103 was
Fruits and	07/30/23	acid	or AOAC	Chromatogr					doesn't mention this	withdrawn
Vegetable			983.16	aphy					commodity. The	because of
S									Codex Stan 260	chloroform.
									mentions these	Suggestion: NMKL
									methods.	recommand to use
									b) The method	NMKL 124 (HPLC)
									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	Polarizatio	ICUMSA	Polarimetry	ı			CCS	a) CODEX STAN 212	Now: GS3-1
sugar	STAN 234	n	GS 2/1/3-						mentions to see	
(Icing			15						relevant Codex texts	
sugar)									on methods of	
									analysis and sampling	
									b) The ICUMSA GS	
									2/1/3-15 method	
									was not found	
Powdered	ALINORM	Starch	TBD	Gravimetry	_		1995	CCS	a) The type isn't	type I
sugar	95/23		Proposed						mentioned in the	
(Icing			AOAC						ALINORM 95.This is	
sugar)			925.50						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	Weighing	I		2003	CCPFV	a) The standard was	The ISO standard is
fruits and	03/23	containers	46						not found.	90-1:1997
									B) The method is	
vegetables									b) The method is	

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 CODEX Sodium AOAC Potentiomet II CCFFP a) There are methods in CODEX STAN 234 Chloride 971.21 ry  Blocks of (Codex general general method) Fish fillet, minced fish flesh and minced fish flesh and minced fish flesh and minced Fish flesh STAN 234 CODEX Cooking CAC/RM cooking I CCFFV Frozen STAN 234 Procedure 33-1970 Femous STAN 234 Procedure									CODEX STAN 260	NMKL 178 and ISO
A6-1972 (reference to "metal containers" deleted and refer to ISO 90.1:1999 for determination of water capacity in metal containers)  Quick CODEX Sodium AOAC Potentiomet II or CCFFP a) There are methods in CODEX STAN 234 Chloride 971.21 ry methods of (Codex General Groven) method in CODEX STAN 165 b) the method AOAC STAN 165 b) the method AOAC general method in CODEX STAN 165 b) the method AOAC groven method in CODEX STAN 165 h) the method AOAC groven method in									c) CODEX STAN 234	8106
to "metal containers" deleted and refer to ISO 90.1:1999 for determination of water capacity in metal containers)  Quick CODEX Sodium AOAC Potentiomet II ry (Codex General Ge									mentions CAC/RM	
deleted and refer to ISO 90.1:1999 for determination of water capacity in metal containers)  Quick CODEX Sodium AOAC Potentiomet II CCFFP a) There are methods in CODEX STAN 234 Chloride 971.21 ry methods in CODEX STAN 165 b) the method AOAC general method)  Gish fillet, minced fish flesh and mixtures of fillets and mixtures and minced fish flesh STAN 234 CODEX STAN 234 CODEX STAN 234 Procedure 33-1970 Temove  Quick CODEX COOKING CAC/RM cooking I CCCPFV Temove Temove  Trozen STAN 234 Procedure 33-1970 Temove STAN 234 Procedure 33-1970 Temove T									46-1972 (reference	
Code									to "metal containers"	
Quick CODEX Sodium AOAC Potentiomet III CCFFP a) There are methods in CODEX STAN 234 Chloride 971.21 ry STAN 234 c									deleted and refer to	
Quick CODEX Sodium AOAC Potentiomet II CCFFP a) There are methods in CODEX STAN 234 Chloride 971.21 ry methods in CODEX STAN 165 b) the method AOAC general method) Fish filesh and mixtures of fillets and minced fish flesh Quick CODEX Cooking Frozen STAN 234 Procedure 33-1970 Brussels									ISO 90.1:1999 for	
Quick CODEX Sodium AOAC Potentiomet II CCFFP a) There are methods in CODEX STAN 234 Chloride 971.21 ry method in CODEX STAN 165 b) the method AOAC general method) 971.21 is for Hg.  fish filet, minced fish flesh and mixtures of fillets and minced fish flesh STAN 234 CODEX STAN 234 Procedure 33-1970 method is an independent of the control of the cont									determination of	
Quick CODEX Sodium AOAC Potentiomet II CCFFP a) There are methods in CODEX STAN 234 Chloride 971.21 ry methods in CODEX STAN 165 b) the method AOAC general method)  fish fillet, minced fish flesh and mixtures of fillets and minced fish flesh STAN 204 CODEX STAN 204 COOKING TOOKING TOOK									water capacity in	
frozen STAN 234 Chloride 971.21 ry methods in CODEX STAN 165 b) the method AOAC 971.21 is for Hg. fish fillet, and mixtures of fillets and minced fish flesh and mixtures of fillets and minced fish flesh STAN 234 Procedure 33-1970 Brussels									metal containers)	
blocks of fish fillet, general method)  fish fillet, minced method)  fish flesh and mixtures of fillets and minced fish flesh  Quick CODEX Cooking CAC/RM cooking I CCPFV remove  Frozen STAN 234 Procedure 33-1970  Brussels	Quick	CODEX	Sodium	AOAC	Potentiomet	II		CCFFP	a) There are	
fish fillet, minced fish flesh and mixtures of fillets and minced fish flesh STAN 234 Procedure 33-1970 general method)  general method)  general method)  b) the method AOAC 971.21 is for Hg.  CCPFV remove  remove	frozen	STAN 234	Chloride	971.21	ry				methods in CODEX	
minced fish flesh and mixtures of fillets and minced fish flesh STAN 234 Procedure 33-1970 method) method)	blocks of			(Codex					STAN 165	
fish flesh and mixtures of fillets and minced fish flesh  Quick CODEX Cooking CAC/RM cooking I CCPFV remove  Frozen STAN 234 Procedure 33-1970	fish fillet,			general					b) the method AOAC	
and mixtures of fillets and minced fish flesh  Quick CODEX Cooking CAC/RM cooking I CCCPFV remove  Frozen STAN 234 Procedure 33-1970	minced			method)					971.21 is for Hg.	
mixtures of fillets and minced fish flesh  Quick CODEX Cooking CAC/RM Frozen STAN 234 Procedure STAN 234	fish flesh									
of fillets and minced fish flesh  Quick CODEX Cooking CAC/RM cooking I  Frozen STAN 234 Procedure 33-1970  Brussels	and									
and minced fish flesh  Quick CODEX Cooking CAC/RM cooking I CCPFV remove  Frozen STAN 234 Procedure 33-1970  Brussels	mixtures									
minced fish flesh  Quick CODEX Cooking CAC/RM cooking I  Frozen STAN 234 Procedure 33-1970  Brussels	of fillets									
fish flesh  Quick CODEX Cooking CAC/RM cooking I  Frozen STAN 234 Procedure 33-1970  Brussels	and									
Quick     CODEX     Cooking     CAC/RM     cooking     I       Frozen     STAN 234     Procedure     33-1970     33-1970	minced									
Frozen STAN 234 Procedure 33-1970 Brussels	fish flesh									
Brussels	Quick	CODEX	Cooking	CAC/RM	cooking	I		CCPFV		remove
	Frozen	STAN 234	Procedure	33-1970						
Sprouts	Brussels									
	Sprouts									

Quick	CODEX	Mineral	CAC/RM	Flotation	I		CCPFV		remove
frozen	STAN 234	impurities	54	and					
fruits and				sedimentati					
vegetables				on					
: Berries,									
leek and									
carrot									
Quick	CODEX	Net weight	CAC/RM	Weighing	I		CCPFV	The reference report	new methods to be
frozen	STAN 234		34-1970					was not found	found
fruits and									
vegetables									
Quick	CODEX	Thawing	CAC/RM	Thawing	ı		CCPFV	The reference report	new methods to be
frozen	STAN 234	procedure	32-1970					was not found	found
fruits and									
vegetables									
Quick	CODEX	Soluble	CAC/RM	Refractomet	I		CCPFV	The reference report	new methods to be
frozen	STAN 234	solids,	43	ry				was not found	found
fruits and		total							
vegetables									
: Berries,									
Whole									
kernel									
corn and									
Corn-on-									
the-cob									

Quick	CODEX	Drained	Described	Draining	I		CCPFV	The reference report	new methods to be
frozen	STAN 234	fruit/drain	in the Stan					was not found. The	found
fruits and		ed berries						standard for this	
vegetables								commodity was not	
: Peaches								found. The specific	
and								Codex commodities	
berries								don't describe the	
								method	
Quick	CODEX	Cooking	CAC/RM	Cooking	I		CCPFV	The reference report	new methods to be
frozen	STAN 234	procedure	33-1970					was not found	found
fruits and									
vegetables									
:									
Vegetable									
S									
Quick	CODEX	Tough	CAC/RM	Stretching	I		CCPFV	a) CODEX STAN 113	new methods to be
Frozen	STAN 234	Strings	39					mentions :See	found
Green								relevant Codex texts	
Beans and								on methods of	
Quick								analysis and	
Frozen								sampling.	
Wax									
Beans									
Quick	CODEX	Solids,	CAC/RM	Gravimetry	II		CCPFV	The reference report	new methods to be
frozen	STAN 234	alcohol	35					was not found	found
peas		insoluble							

Quick	CODEX	Dry	Described	Weighing	I			CCPFV	CODEX STAN 77	
Frozen	STAN 234	matter,	in the						doesn't describe the	
Spinach		Salt-free	Standard						method	
Quick	ALINORM	mineral	ISO <del>-R</del> 763	_	-		1978	CCPFV	a) CODEX STAN 234	
Frozen	78/25	impurities							doesn't mention this	
Spinach									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	Ashing	1			CCPFV	The reference report	new methods to be
	STAN 234	impurities	51-1974						was not found	found
Raisins	CODEX	Mineral oil	CAC/RM	Extraction	II			CCPFV	The reference report	new methods to be
	STAN 234		52-1974	and					was not found	found
				separation						
				on alumina						
Sorghum	CODEX	Colour	Modern	Colorimetry	IV			CCCPL	a) CODEX STAN 173	?
flour	STAN 234		Cereal	using					mentions the same	
			Chemistry,	specific					method The article is	
			6th Ed.,	colour					not readily available	

			D.W. Kent-	grader						
			Jones and							
			A.J. Amos							
			(Ed.), pp.							
			605-612,							
			Food							
			Trade							
			Press Ltd,							
			London,							
			1969.							
Sorghum	ALINORM	Crude Fat	ISO 5986,	_	I		1987	CCCPL	a) CODEX STAN 173	See above
flour	87/23		Animal						there are methods:	
			Feeding						AOAC 945.38F,	
			Stuffs						920.39C and ISO	
									5986	
									b)The Stan 234 does	
									not mention ISO	
									5986 (withdrawn).	
Sorghum	CODEX	Protein	ICC	Titrimetry,	I			CCCPL	a) CODEX STAN 173	ISO 1871 = Kjeldahl
flour	STAN 234		Method	Kjeldahl					mention ICC 105/1	
			No 105/1	digestion					and ISO 1871	Suggestion of
									b) the correct version	other standards:
									is ICC 105/2	NMKL 6
										AACCI 46-12.01 is
										equivalent to ICC

										105/2
Sorghum	CODEX	Fat Crude	AOAC	Gravimetry	I			CCCPL	a) CODEX STAN 172	See above
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	Titrimetry,	I			CCCPL	a) CODEX STAN 172	ISO 1871 = Kjeldahl
grains	STAN 234		Method	Kjeldahl					there are the	
			No 105/1	digestion					methods: ICC	Suggestion of
									Method No 105/1 e	other standards:
									ISO 1871	NMKL 6
									b) the correct version	AACCI 46-12.01 is
									is ICC 105/2	equivalent to ICC
										105/2
Sugars	ALINORM	pH 4.5-7.0	ICUMSA	Potentiomet	I		1997	CCS	CODEX STAN 212,	Now:
(fructose	97/23A		GS	ry					item 6. METHODS OF	GS1/2/3/4/7/8/9-
and			1/2/3/4/7/						ANALYSIS AND	23
lactose)			8-23						SAMPLING mentions	
									See relevant Codex	
									texts on methods of	
									analysis and	
									sampling.	
									B) The correct	

1				1		ı			T	
									method is ICUMSA	
									GS 1/2/3/4/7/8/9-23	
Sugars	ALINORM	Conductivit	ICUMSA	Conductimet			2001	CCS	a) The methods are	Now: GS2/3/9-17
(fructose)	01/23	y ash	GS 2/3-17	ry					not mentioned in the	
(	5 = 7 = 5	,	55 2,5 2.	.,					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	ICUMSA	Titrimetry			2001	CCS	a) The methods are	Now: GS1/3/7-3
(plantatio	01/23	sugar	GS 2-6	remicery	·		2001	003	not mentioned in the	
n or mill	01,10	5484.	00 = 0						CODEX STAN 212.	
white									b) The CODEX STAN	
sugar)									212 mentions "see	
Jugury									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	Conductivit	ICUMSA	Conductimet			1997	CCS	a) CODEX STAN 212,	Now: GS2/3/9-17
					ı		133/	CCS		140W. GG2/3/8-17
(powdere	97/23A	y ash	GS 2/3-17	ry					item 6. METHODS OF	

d 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	ICUMSA	Titrimetry	I		1997	CCS	a) CODEX STAN 212,	Now: GS 2/3/9-5
(powdere	97/23A	sugar	GS 2/3-5 :						item 6. METHODS OF	
d sugar)			after						ANALYSIS AND	
			filtration if						SAMPLING mentions	
			necessary						See relevant Codex	
			to remove						texts on methods of	
			any						analysis and	
			anticaking						sampling.	
			agents						B) The ICUMSA GS	
									2/3-5 method was	
									not found	
Sugars	ALINORM	Sulphated	ICUMSA	Gravimetry	I		1997	CCS	a) CODEX STAN 212,	Now: GS3/4/7/8-
(soft	97/23A	ash	GS						item 6. METHODS OF	11
brown			1/3/4/7/8-						ANALYSIS AND	
sugar)			11						SAMPLING mentions:	
									See relevant Codex	
									texts on methods of	
			]			l			1	

									•	
									analysis and	
									sampling.	
									B) The ICUMSA GS	
									1/3/4/7/8-11 method	
									was not found.	
Sugars	ALINORM	Loss on	ICUMSA	Gravimetry	I		1997	CCS	A) CODEX STAN 212,	Now: GS2/1/3/9-
(soft white	97/23A	drying	GS 2/1/3-						item 6. METHODS OF	15
sugar, soft			15						ANALYSIS AND	
brown									SAMPLING mentions	
sugar,									See relevant Codex	
white									texts on methods of	
sugar,									analysis and	
plantation									sampling.	
or mill									B) The correct	
white									method is ICUMSA	
sugar and									Method GS 2/1/3/9-	
powdered									15	
sugar)										
Sugars	ALINORM	Conductivit	ICUMSA	Conductimet	I		1997	CCS	a) CODEX STAN 212,	Now: GS2/3/9-17
(white	97/23A	y ash	GS 2/3-17	ry					item 6. METHODS OF	
sugar)									ANALYSIS AND	
									SAMPLING mentions	
									See relevant Codex	
									texts on methods of	
									analysis and	
					i e			1		

									b) The correct	
									method is ICUMSA	
									GS 2/3/9-17	
Sugars	ALINORM	Invert	ICUMSA	Titrimetry	I		1997	CCS	a) CODEX STAN 212,	Now: GS2/3/9-5
(white	97/23A	sugar	GS 2/3-5	,					item 6. METHODS OF	
sugar)	, -	0-	,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,						ANALYSIS AND	
2.887									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	Gravimetry	I			CCVP	a) CODEX STAN 174	?
protein	STAN 234		55-1976 -	(extraction)					was approved in	
products			Method 1						1989 and doesn't	
			Gravimetry						mention methods	
			(extraction							
			)							
Wheat	CODEX	Fat acidity	AOAC	Titrimetry	I			CCCPL	a) CODEX STAN 152	ISO 7305 validated
flour	STAN 234		939.05						mentions methods:	for wheat flour
									ISO 7305 and AOAC	
									939.05	AACC 02-01.02 is
										identical to AOAC
										939.05
										JJ9.0J

Wheat	CODEX	Moisture	ISO 712	Gravimetry	I			CCCPL	a) CODEX STAN 152	delete in 234?
flour	STAN 234		ICC						is not mentioned	
			Method						these methods	
			No 110/1							
Wheat	CODEX	Protein	ICC	Titrimetry,	I			CCCPL	a) CODEX STAN 152	ISO 1871 = Kjeldahl
flour	STAN 234		Method	Kjeldahl					mentions the same	
			No 105/1	digestion					method:ICC Method	Suggestion of
									No 105/I	other standards:
									b) the correct version	NMKL 6
									is ICC 105/2	AACCI 46-12.01 is
										equivalent to ICC
										105/2
Whole	ALINORM	Crude fat	AOAC	Gravimetry	I		1991	CCCPL	a) The CODEX STAN	See above
and	91/23		945.38F	(ether					169 mentions these	
Decorticat			AOAC	extraction)					methods and the ISO	
ed Pearl			920.39C						5986 (withdrawn)	
Millet										
Grain										
Bouillons	CODEX	Amino	AIIBP	Volumetry	II			CCSB	a) CODEX STAN 117	?
and	STAN 234	nitrogen	Method	(modified					was approved in	
Consomm			No 2/7	Van Slyke)					2001	
és									b) Methods AIIBP	
									was not found.	
Bouillons	CODEX	Creatinine	AIIBP	HPLC	II			CCSB	a) CODEX STAN 117	?
and	STAN 234		Method						was approved in	
Consomm			No 2/5						2001	

és									b) Methods AIIBP	
									was not found.	
										_
Bouillons	ALINORM	Sodium	AIIBP	Volhard	II		1995	CCSB	a)There are methods	?
and	95/23	chloride	Method	titrimetry					mentioned in the	
Consomm			No 2/4						Codex STAN 117-	
és									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	Sourc	Provision	Method	Principle	Туре	Year	Year Last	Year	Committe	Remarks	
	е					Approv	revision	Endorsemen	е		
						al		t by CCMAS			
Blend of	REP14	Milk	ISO	Titrimetry	IV		2014 (IDF/ISO)	2014	ССММР	a) There aren't methods	a) it is the
sweetened	/MAS	protein	8968-	(Kjeldahl						in the CODEX STAN 252 ,	harmonized way to
condensed		in MSNF	1/IDF 20-							just the expression see	refer to Codex
skimmed			1/AOAC							"CODEX STAN 234"	STAN 234 in a
milk and			991.20							b) It was not clear	Commodity
vegetable fat										whether AOAC 991.20,	standard
										listed as equivalent to	b) AOAC 991.20 is
										the method in the	not equivalent. So
										Standard, is still	to be removed
										equivalent to the newly	from Codex STAN
										proposed methods (	234
										REPORT 2014, par. 27)	
										c) The CODEX STAN 234	
										is not updated regarding	
										to modification of ISO /	
										IDF on 06/09/2014	C) Meanwhile
										d) It's necessary to	Codex STAN 234
										harmonize in all protein	was updated
										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	
										e) see point b
										5, 555 pamer
Canned	REP13	Fill of	CAC/RM	Weighing	1		2013	CCPFV	a) There are not	see above
Apple	/MAS	containe	46-1972	Weighing	'		2013	CCITY	methods mentioned in	See above
Sauce	TIVIAS	rs	(for glass						the CODEX STAN 17, just	
Sauce		13								
			container						the expression see	
			s))						relevant CODEX Texts on	
			and						Methods of Analysis	
			ISO 90-						b) The CAC/RM were	
			1.1 (for						revoked , but the	
			metal						CAC/RM 46 is described	
			container						in CODEX STAN 234.	
			s)							
Canned	ALINO	Proper	CAC/RM	Pouring and	1		2009	CCPFV	a) CODEX STAN 234	Refer to CCPFV to
Green Peas	RM	fill (in	45	measuring					mentions CAC/RM 45	propose new methods
	09/32	lieu of							b) CODEX STAN 297	
	/23	drained							describes CAC/RM 45	We suggest for

		weight)								instance NMKL 55
Canned	ALINO	Types of	CAC/RM	Visual	I		2009	CCPFV	a) CODEX STAN 234	Refer to CCPFV to
Green peas	RM	peas	48	inspection					mentions CAC/RM 48	propose new methods
	09/32								b) CODEX STAN 297	
	/23								describes CAC/RM 48.	
Canned	ALINO	Tough	CAC/RM	Stretching	ı		2009	CCPFV	a) CODEX STAN 234	refer to CCPFV
Green	RM	strings	39						mentions CAC/RM 39	
beans	09/32								b) CODEX STAN 297	
	/23								describes CAC/RM 39. c)	
									The commodity on Stan	
									234 is canned green	
									beans and wax beans	
Certain	ALINO	Fill of	CAC/RM	Weighing	I		2007	CCPFV	a) There are methods	see above
Canned	RM	containe	46						mentioned in Codex	
Citrus Fruits	07/30	rs	(Codex						STAN 254: CAC/RM 46-	
	/23		General						(for glass containers)	
			Method						(Codex general method	
			for						for processed fruit and	
			processe						vegetables) and ISO 90.1	
			d fruits						(for metal containers)	
			and						(Codex general method	
			vegetabl						for processed fruit and	
			es)						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	Milk	ISO	Titrimetry	I	2014 (IDF/ISO)	2014	ССММР	a) It was not clear	see above
unripened	/MAS	protein	8968-	(Kjeldahl					whether AOAC 991.20,	
including			1/IDF 20-						listed as equivalent to	
fresh cheese			1/AOAC						the method in the	
			991.20						Standard, is still	
			and						equivalent to the newly	
			991.23						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	ALINO	Free	ISO660;	Titrimetry	I		2007	СССРС	a) The CODEX STAN 86	IUPAC standard
	RM	fatty	or AOCS						mentions the following	was removed so
	07/30	acids	Cd 3d-63						methods: IUPAC (1987)	update CODEX
	/23		(03)						2.201.	STAN 86
									b) The CODEX STAN 234	
									mentions these methods	
Cocoa Butter	ALINO	Unsaponi	ISO 3596	Titrimetry	I		2007	CCCPC	a)The CODEX STAN 86	IUPAC standard
	RM	fiable	or ISO	after					mentions IUPAC (1987)	was removed so
	07/30	matter	18609 or	extraction					2.401.	update CODEX
	/23		AOCS Ca	with diethyl					b) The CODEX STAN 234	STAN 86
			6b-53	ether I					mentions these	
			(01)						methods	
Cream and	REP14	Milk	ISO	Titrimetry	I	2014 (IDF/ISO)	2014	ССММР	a) There isn't provision	a) the relevant
Prepared	/MAS	protein	8968-	(Kjeldahl					for Milk Protein on	Codex standard is
Creams			1/IDF 20-						CODEX STAN 275. e)	Codex STAN 288;
			1/AOAC						CODEX STAN 234	The provision is
			991.20						mentions ISO 8968-1/2	under section 3.2
									and IDF 20-1/2	permitted
									b) It was not clear	ingredients
									whether AOAC 991.20,	
									listed as equivalent to	see above for the
									the method in the	other comments
									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	Milk	ISO	Titrimetry	I	2014 (IDF/ISO)	2014	ССММР	a)There aren't methods	see above
products	/MAS	protein	8968-	(Kjeldahl)					in the CODEX STAN 290,	
		(total N x	1 IDF 20-						just the expression see	
		6.38 in	1						"CODEX STAN 234"	
		dry							b) The information is	
		matter)							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	

1										
						 			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	
										d) Codex STAN 234
										is now correct
Evaporated	REP14	Milk	ISO	Titrimetry	I	2014 (IDF/ISO)	2014	ССММР	a) There aren't methods	see above
milks	/MAS	protein	8968-1/	(Kjeldahl)					in the CODEX STAN 281	
		in MSNF	IDF 20-1/						b) It was not clear	
			AOAC						whether AOAC 991.20,	
			991.20						listed as equivalent to	
			/AOAC						the method in the	
			945.48H						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	
	1	1	1	1		l	1	1	1	1

Fats and oils	REP 11/M AS	Soap content	#S-684 Section 2.5EN ISO 10539/A OCS Cc 17-95	Gravimetry	I		2011	CCFO	harmonize in all protein determination to milk products by kjeldahl a)The method in the CODEX STAN 19 is BS 684 Section 2.5	BS 684 replaced by EN ISO 10539. AOACS and ISO 10539 are equivalent
Fats and oils	REP	Peroxide	AOCS Cd	Titrimetry	I		2012	CCFO	a) The methods in the	ISO 3960
not covered	12/M	value	8b-90	using iso-					CODEX STAN 19 are	(peroxide) instead
by individual	AS		(11)/ISO	octane					IUPAC 2.501 (as	of 3961 (iodine)
standards			<del>3961</del>						amended), AOCS Cd 8b -	update STAND 19
			3960						90 (97) or ISO 3961:	
									1998.	Suggestion to add
									b) C	also NMKL 158
									c) CODEX STAN 234	
									mention the methods	
									AOCS Cd 8b-90 (11) ISO	
									3960	
Fermented	REP14	Milk	ISO	Titrimetry	I	2014 (IDF/ISO)	2014	ССММР	a) There aren't methods	see above
milks	/MAS	Protein	8968-	(Kjeldahl)					in the CODEX STAN 243	
			1 IDF 20-						b) It was not clear	
			1/AOAC						whether AOAC 991.20,	
			991.20						listed as equivalent to	

									the method in the	
									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	sodium	AOAC	potentiomet	П		2012	CCFFP	a) CODEX STAN 302	refer to CCFFP
	Stan	chloride	976.18,	ry					mentions the methods	
	234								FAO 1981, Technical	
									Paper 219 AOAC 937.13	
									or 976.18 or 976.19.	
Jams and	ALINO	fill of	CAC/RM	Weighing	I		2009	CCPFV	a) CODEX STAN 234	see above
jellies	RM	containe	46						mentions and describes	
	09/32	rs							CAC/RM 46;	
	/23								b) CODEX STAN 296	
									mentions and describes	
									CAC/RM 46 for glass	
	<u> </u>									

									containers and mentions	
									ISO90.1 to metal	
									containers.	
Jams and	ALINO	Soluble	ISO 2173	Refractomet	ı		2009	CCPFV	a) The methods	ISO 2173: OK in
jellies	RM	solids	AOAC	ry					mentioned on CODEX	Codex STAN 234
jees	09/32	33	932.14C	.,					STAN 296 are AOAC	
	/23		332.140						932.14C	for AOAC 932.12 or
	/23								ISO 2173	.14: refer to CCPFV
										.14: refer to CCPFV
									(Codex General Method	
									for processed fruits and	
									vegetables)	
									b) The Codex Stan 234	
									mentions AOAC 932.12	
Milk	REP14	Milk	ISO	Titrimetry	ı	2014 (IDF/ISO)	2014	ССММР	a) There aren't methods	a to d) same as
powders and	/MAS	Protein	8968-	(Kjeldahl)					in the CODEX STAN 207,	above
cream			1/IDF 20-						just the expression see	
powders			1/AOAC						"CODEX STAN 234"	
			991.21						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	
									C) THE CODEX STAIN 234	

	1				1	T				
									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	e) Codex STAN 234
									provision on 234 and	is correct
									CODEX STAN 207 is Milk	
									Protein ( in MSNF)	
Named	REP	Acidity	ISO	Titrimetry	I		2011	CCFO	a)The CODEX STAN 211	delete IUPAC
Animal Fats	11/M		660/AOC						mentions IUPAC 2.201	and update 211
	AS		S Cd 3d-						and ISO 660	
			63							
Named	REP	Copper	AOAC	Atomic	П		2011	CCFO	a)The CODEX STAN 211	delete IUPAC
Animal Fats	11/M	and Iron	990.05/IS	absorption					mentions IUPAC 2631,	and update 211
	AS		O 8294/	Spectrophot					AOAC 990.05/ISO 8294	
			AOCS Ca	ometry						
			18b-91	(direct						
				graphite						
				furnace)						
L										

Named	REP	GLC	ISO	Gas	П		2011	CCFO	a)The methods in the	delete IUPAC
Animal Fats	11/M	ranges of	5508/ISO	chromatogra					CODEX STAN 211 are	and update 211
	AS	fatty	12966-2/	phy of					IUPAC 2.301, 2.302 and	
		acid	AOCS Ce	methyl					2.304 or ISO 5508: 1995/	
		composit	2-66/ <del>Ce</del>	esters					5509: 1999.	
		ion	<del>1e-91/Ce</del>						b) The method AOCS	
			<del>1f-96</del>						Ce1e 91 is not available	
			Ce 1e-							
			13/Ce1g-							
			07							
Named	REP	Relative	ISO/AOC	Pycnometry	I		2011	CCFO	a)CODEX STAN 234	CCFO adopted
Animal Fats	11/M	density	S						mentions type II and	ISO 6883 and
	AS		method						doesn't mention the	AOAC Cc-10c95
			for						method.	
			apparent						b) CODEX STAN 211	Suggest also
			density						mentions the IUPAC	ISO 18301
			to be						2.101, with the	
			inserted						appropriate conversion	
									factor.	
Named	ALINO	Saponific	ISO 3657	Titrimetry	I		2007	CCFO	a CODEX STAN 211	update stan 211
Animal Fats	RM	ation	or AOCS						mention IUPAC 2.202 or	
	07/30	value	Cd 3-25						ISO 3657: 1988.	
	/23									
Named	REP	lodine	ISO	Wijs-	I		2012	CCFO	a) There are methods in	Suggestion: also
Animal Fats	12/M	value (IV)	3961/AO	Titrimetry					the CODEX STAN 211	equivalent to
	AS		AC						IUPAC 2.205/1, ISO	NMKL 39

			993.20/A						3961: 1996, AOAC	
			OCS Cd						993.20, or AOCS Cd 1d-	
			1d-92						1992 (97).	
Named	REP	Peroxide	AOCS Cd	Titrimetry	ı		2012	CCFO	a) There are methods in	update STAND 211
Animal Fats	12/M	value	8b-	using iso-					the CODEX STAN 211	
	AS		90/ISO	octane					IUPAC 2.501 (as	Suggestion: also
			3960						amended), AOCS Cd 8b-	equivalent to
									90 (97) or ISO 3960:	NMKL 158
									1998.	
Named	REP	Unsaponi	ISO	Titrimetry	I		2012	CCFO	a) There are methods in	OK for ISO 3596
Animal Fats	12/M	fiable	3596/	after					the CODEX STAN 211:	OK for ISO 18609
	AS	matter	ISO	extraction					IUPAC 2.401 (part 1-5) or	udpate 211
			18609/	with diethyl					ISO 3596-1: 1988 and	
			AOCS Ca	ether					Amendment 1 1997, and	
			6b-53						ISO 3596-2: 1988 and	
									Amendment 1 1999.	
Named	REP	GLC	ISO	Gas	Ш		2012	CCFO	a) There are methods in	Ok for ISO 5508
Vegetable	12/M	ranges of	5508, ISO	chromatogra					the CODEX STAN 210-ISO	Ok for ISO 12966-2
Oils	AS	fatty acid	12966-2,	phy of					5508: 1990 and5509:	update stan 211 to
		composit	AOCS Ce	methyl					2000; or AOCS Ce 2-66	reflect 234
		ion	2-66,	esters					(97), Ce 1e-91 (01) or Ce	
			AOCS Ce						1f-96 (02).	replace AOCS Ce 1-
			<del>1-62</del>							62 by AOCS Ce 1a-
			AOCS Ce							13
			1a-13							
			and							

			AOCS Ce							
			1h-05							
Named	REP	Relative	IUPAC	Pycnometry	- 1		2011	CCFO	a) CODEX STAN 234 and	see above
Vegetable	11/M	density	2.101	1 yellollica y	•		2011	00.0	CODEX STAN 210	
Oils	AS	density	2.101						mention IUPAC method	
		- 115								
Natural	CODE	Coliform	ISO	Membrane	I			CCNMW	Out of CCMAS scope	If it is deleted from
Mineral	Х	organism	9308-1	filtration						234, where will it
Waters	STAN	,								be mentioned?
	234	thermot								
		olerant								
		organism								
		and								
		presump								
		etive								
		Escherich								
		ia Coli								
Netwel	CODE		ICO	Manahana	1			CCNINAVA	Out of CCNAAC access	If it is deleted from
Natural	CODE	Faecal	ISO	Membrane	ı			CCNMW	Out of CCMAS scope	
Mineral	Х	Streptoc	7899-2	filtration						234, where will it
Waters	STAN	occi								be mentioned?
	234									
Olive Oils	REP	Relative	IUPAC	Pycnometry	1		2011	CCFO	a) CODEX STAN 033 and	see above
and Olive	11/M	density	2.101,						CODEX STAN 234	
Pomace Oils	AS		with the						mentions the IUPAC	
			appropri						method.	
			ate						B) CODEX STAN 234	

			conversi						mentions "Error.	
			on factor						Bookmarking not	
			See						defined"	
			commen							
			t above							
Pickled Fruits	ALINO	Fill of	CAC/RM	Weighing	I		2007	CCPFV	a) CODEX STAN 234	see above
and	RM	containe	46						doesn't mention this	
Vegetables	07/30	rs	(Codex						commodity	
	/23		General						B) There are a full	
			Method						description of methods	
			for						on CODEX STAN 260	
			processe						c) The CAC/RM were	
			d fruits						revoked , but the	
			and						CAC/RM 46 is described	
			vegetabl						in the CODEX STAN 234.	
			es)							
Preserved	ALINO	Fill of	CAC/RM	Weighing	I		2007	CCPFV	a) There are methods	see above
Tomatoes	RM	containe	46 -						mentioned in the	
	07/30	rs	Codex						CODEX STAN 13:	
	/23		General						CAC/RM 46 (for glass	
			Method						containers)	
			for						(Codex general method	
			processe						for processed fruit and	
			d fruits						vegetables) and ISO 90.1	
			and						(for metal containers)	
			vegetabl						(Codex general method	

Processed	CODE	sodium	es)	Potentiomet	II			CCPFV	for processed fruit and vegetables) b)The provision "is not mentioned in the Codex Stan 234 a) The CODEX STAN 57	NMKL 178 is
Tomato Concentrate	X STAN 234	chloride	971.27	ry					mentions for Sodium Chloride ISO 3634 expressed as sodium chloride (Codex General Method),	equivalent to AOAC 971.27
									Potentiometry, type: III.	
Processed Tomato Concentrate	ALINO RM 07/30 /23	Fill of containe rs	CAC/RM 46 (Codex General Method for processe d fruits and vegetabl es)	Weighing	1		2007	CCPFV	a) CODEX STAN 57 mentions CAC/RM 46- 1972 (for glass containers) (Codex general method for processed fruit and vegetables) and ISO 90.1:1999 for metal containers) (Codex general method for processed fruit and vegetables) b) The provision is not mentioned in the Codex	see above

									Stan 234	
Processed	ALINO	Lactic	EN 2631	Enzymatic	II		2007	CCPFV	The CODEX STAN 57 and	please correct EN
Tomato	RM	Acid	EN	determinati					CODEX STAN 234	12631 instead of
Concentrate	07/30		12631	on					mention this method.	EN 2631 (typing
	/23								The method was not	error)
									found	
Reduced fat	REP14	Milk	ISO	Titrimetry	IV	2014 (IDF/ISO)	2014	ССММР	a) There aren't methods	see above
blend of	/MAS	protein	8968-	(Kjeldahl)					in the CODEX STAN 250	
Evaporated		in	1/IDF 20-						b) It was not clear	
skimmed		MSNF1	1/AOAC						whether AOAC 991.20,	
milk and			991.20						listed as equivalent to	
vegetable fat									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 (06/09/2014).	
Reduced fat	REP14	Milk	ISO	Titrimetry	IV	2014 (IDF/ISO)	2014	ССММР	a) There aren't	see above
blend of	/MAS	protein	8968-	(Kjeldahl					methods in the CODEX	
skimmed		in	1/IDF 20-						STAN 251	
milk powder		MSNF1	1/AOAC						b) It was not clear	

and			991.20						whether AOAC 991.20,	
vegetable fat									listed as equivalent to	
in powdered									the method in the	
form									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)	
Reduced fat	REP14	Milk	ISO	Titrimetry	IV	2014 (IDF/ISO)	2014	ССММР	a) There aren't methods	see above
blend of	/MAS	protein	8968-	(Kjeldahl					in the CODEX STAN 252"	
sweetened		in MSNF <sup>1</sup>	1/IDF 20-						b) It was not clear	
condensed			1/AOAC						whether AOAC 991.20,	
skimmed			991.20						listed as equivalent to	
milk and									the method in the	
vegetable fat									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)	

Sweetened	REP14	Milk	ISO	Titrimetry	I	2014 (IDF/ISO)	2014	ССММР	a) There aren't methods	see above
condensed	/MAS	protein	8968-1	(Kjeldahl)					in the CODEX STAN 282	
milk		in MSNF <sup>1</sup>	IDF 20-						b) It was not clear	
			1/ AOAC						whether AOAC 991.20,	
			991.20						listed as equivalent to	
			/AOAC						the method in the	
			945.48H						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	Fill of	CAC/RM	Weighing	I		2013	CCPFV	a) There are methods	see above
	/MAS	containe	46 (for						mentioned in the CODEX	
		rs	glass						STAN 66	
			container						b) There are a full	
			s)						description of the	
			and						method on CODEX/STAN	
			ISO 90-						66	
			1.1 (for						c) The CAC/RM were	
			metal						revoked , but the	
			container						CAC/RM 46 is described	
			s)						in CODEX STAN 234	

Table olives	REP13	Tin	NMKL	ICP-MS	III		2013	CCPFV	a) There isn't mention of	we would rather
	/MAS		191   EN						these methods in CODEX	suggest a criteria
			15765						STAN 234 .The CODEX	approach to find
									STAN 66 mentions	also other relevant
									AOAC 980.19 as Type II	methods.

<sup>&</sup>lt;sup>1</sup> 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