# CODEX ALIMENTARIUS COMMISSION







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Agenda Item 3

CX/MAS 17/38/3 March 2017

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

**Thirty-eighth Session** 

Budapest, Hungary, 8 – 12 May 2017

# ENDORSEMENT OF METHODS OF ANALYSIS AND SAMPLING PLANS FOR PROVISIONS IN CODEX STANDARDS

- 1. This document contains the methods of analysis and/or sampling (Appendix I, II, III, IV, V and VI) proposed by the following Committees:
  - Codex Committee on Processed Fruits and Vegetables (methods of analysis and sampling plans for quick frozen vegetables);
  - FAO/WHO Coordinating Committee for Asia (methods of analysis and sampling for laver products);
  - Codex Committee on Nutrition and Foods for Special Dietary Uses (methods of analysis for Infant Formula and Fomulas for Special Medical Purposes Intended for Infants);
  - FAO/WHO Coordinating Committee for Africa (methods of analysis for unrefined shea butter);
  - Codex Committee on Spices and Culinary Herbs (methods of analysis for cumin, thyme and black, white and green pepper); and
  - Codex Committee on Fats and Oils (methods of analysis for fish oils).

#### CODEX COMMITTEE ON PROCESSED FRUITS AND VEGETABLES (CCPFV28)1

**NOTE:** The Committee agreed to forward the proposed draft annexes for certain quick frozen vegetables (for inclusion in the *Standard for Quick Frozen Vegetables* (CODEX STAN 320-2015) to the Commission for adoption at Step5/8.

The Committee is invited to endorse the methods of analysis and sampling plan in Appendix I.

#### FAO/WHO COORDINATING COMMITTEE FOR ASIA (CCASIA20)2

**NOTE:** The Committee agreed to forward the proposed draft Standard for Laver products for adoption at Step 5/8 and the methods of analysis and sampling plans.

The Committee is invited to endorse the methods of analysis and sampling plans in Appendix II.

## CODEX COMMITTEE ON NUTRITION AND FOODS FOR SPECIAL DIETARY USES (CCNFSDU37)3

Methods of analysis for provisions in the Standard for Infant Formula and Formulas for Special Medical Purposes Intended for Infants (CODEX STAN 72-1981)

4. The Committee agreed to submit the method for determination of Vitamin C in infant formula for endorsement and inclusion in the *Recommended Methods of Analysis and Sampling* (CODEX STAN 234-1999) as this method reflected the most recent scientific methods of analysis for nutrients in infant formula and were fully validated for these products (Appendix V, Part I). CCMAS is requested to remove or reclassify methods that are not validated for infant formula in CODEX STAN 234-1999 that might be replaced by the aforementioned method.

<sup>&</sup>lt;sup>1</sup> REP17/PFV, para. 41 and Appendix IV (Part II).

<sup>&</sup>lt;sup>2</sup> REP17/ASIA, para. 95 and Appendix IV

<sup>&</sup>lt;sup>3</sup> REP17/NFSDU, paras 180-190, Appendix V, Part I)

5. The Committee is invited to endorse the method of analysis in Appendix III and remove or reclassify the corresponding methods in the CODEX STAN 234-1999.

#### FAO/WHO COORDINATING COMMITTEE FOR AFRICA (CCAFRICA22)4

#### Method of Analysis for shea butter

**NOTE:** The Committee agreed to forward the proposed draft Standard for Unrefined Shea Butter to the Commission for adoption at Step 5/8 and the methods of analysis for endorsement and inclusion in CODEX STAN 234-1999.

6. The Committee is invited to endorse the methods of analysis in Appendix IV.

#### **COMMITTEE ON SPICES AND CULINARY HERBS (CCSCH3)**

#### Methods of analysis for cumin<sup>5</sup> and thyme<sup>6</sup> and BWG pepper<sup>7</sup>

**NOTE:** The Committee agreed to forward the draft standards for cumin and thyme to the Commission for adoption at Step 8; and the proposed draft Standard for Black, White and Green (BWG) Pepper for adoption at Step 5/8; and the methods of analysis and sampling plans for endorsement and inclusion in CODEX STAN 234-1999.

- 7. The methods of analysis for cumin and thyme were previously considered by CCMAS37 and proposals made for consideration by CCSCH.8
- 8. The Committee is invited to endorse the methods of analysis and sampling plans in Appendix V.

#### **COMMITTEE ON FATS AND OILS (CCFO25)**

#### Methods of analysis for fish oils

**NOTE:** The Committee agreed to forward the draft Standard for Fish Oils for adoption at Step 8 and the methods of analysis and sampling plans for inclusion in CODEX STAN 234. CCMAS36 already endorsed the sampling plan and several methods of analysis for fish oils except for the method for determination of phospholipids pending clarification from CCFO<sup>9</sup>. The reply from CCFO is provided in CX/MAS 17/38/2.

9. The Committee is invited to endorse the methods of analysis in Appendix VI.

<sup>&</sup>lt;sup>4</sup> REP17/AFRICA, para. 78 and Appendix III

 $<sup>^{\</sup>rm 5}$  REP17/SCH, paras 29 and 57 and Appendix II

<sup>&</sup>lt;sup>6</sup> REP17/SCH, paras 38 and 57 and Appendix III

<sup>&</sup>lt;sup>7</sup> REP17/SCH, para. 42 and Appendix IV

<sup>&</sup>lt;sup>8</sup> REP16/MAS, paras 26 - 28 and Appendix II

<sup>9</sup> REP15/MAS, paras 21- 26 and Appendix III

## APPENDIX I

# COMMITTEE ON PROCESSED FRUITS AND VEGETABLES (CCPFV28)

# Methods of analysis for quick frozen vegetables

Product	Provision	Method	Principle	Туре
Quick frozen fruits and vegetables	Thawing procedure	CAC/RM 32 AOAC 974.25	Thawing	I
Quick frozen fruits and vegetables: Vegetables	Cooking procedure	CAC/RM 33	Cooking	I
Quick frozen fruits and vegetables (non-glazed)	Net weight	CAC/RM 34 AOAC 963.26	Weighing	I
Quick frozen peas	Solids, alcohol insoluble	CAC/RM 35	Gravimetry	ı
Quick frozen green and wax beans	Tough strings	CAC/RM 39	Stretching	I
Quick frozen fruits and vegetables: Berries, Whole kernel corn and Corn- on-the- cob	Soluble solids, total	CAC/RM 43AOAC 974.25 then 932.14C	Refractometry	ı
Quick frozen fruits and vegetables: Berries, leek and carrot	Mineral impurities	CAC/RM 54 AOAC 974.25 then 971.33	Flotation and sedimentation	I
Quick frozen fruits and vegetables: Peaches and berries	Drained fruit/drained berries	Described in the Standard	Draining	ı
Quick frozen spinach	Dry matter, Sodium chloride- free	Described in the Standard	Weighing	I
Quick frozen French fried potatoes	Moisture	AOAC 984.25	Gravimetry (convection oven)	I
Quick frozen French fried potatoes	Free fatty acid	ISO 660:2009; or AOCS Cd 3d-63 (09)	Titrimetry	I

#### SAMPLING PLANS FOR QUICK FROZEN VEGETABLES

## **Sampling Plans**

The appropriate inspection level is selected as follows:

Inspection level I

**Normal Sampling** 

Inspection level II -Disputes, (Codex referee purposes sample size), enforcement or

need for better lot estimate

## **SAMPLING PLAN 1** (Inspection Level I, AQL = 6.5)

	NET WEIGHT IS EQUAL TO OR LESS THAN 1 KG (2.2 LB)				
Lot Size (N)	Sample Size (n)	Acceptance Number (c)			
4,800 or less	6	1			
4,801 - 24,000	13	2			
24,001 - 48,000	21	3			
48,001 - 84,000	29	4			
84,001 - 144,000	38	5			
144,001 - 240,000	48	6			
more than 240,000	60	7			
NET WEIGHT IS GREATER	R THAN 1 KG (2.2 LB) BUT NOT	MORE THAN 4.5 KG (10 LB)			
Lot Size (N)	Sample Size (n)	Acceptance Number (c)			
2,400 or less	6	1			
2,401 - 15,000	13	2			
15,001 - 24,000	21	3			
24,001 - 42,000	29	4			
42,001 - 72,000	38	5			
72,001 - 120,000	48	6			
more than 120,000	60	7			
NET	WEIGHT GREATER THAN 4.5 KG	(10 LB)			
Lot Size (N)	Sample Size (n)	Acceptance Number (c)			
600 or less	6	1			
601 - 2,000	13	2			
2,001 - 7,200	21	3			
7,201 - 15,000	29	4			
15,001 - 24,000	38	5			
24,001 - 42,000	48	6			
more than 42,000	60	7			

## SAMPLING PLAN 2 (Inspection Level II, AQL = 6.5)

<b>N</b> ET WEIGH	NET WEIGHT IS EQUAL TO OR LESS THAN 1 KG (2.2 LB)			
Lot Size (N)	Sample Size (n)	Acceptance Number (c)		
4,800 or less	13	2		
4,801 - 24,000	21	3		
24,001 - 48,000	29	4		
48,001 - 84,000	38	5		
84,001 - 144,000	48	6		
144,001 - 240,000	60	7		
more than 240,000	72	8		
NET WEIGHT IS GREATER	THAN 1 KG (2.2 LB) BUT NOT I	MORE THAN 4.5 KG (10 LB)		
Lot Size (N)	Sample Size (n)	Acceptance Number (c)		
2,400 or less	13	2		
2,401 - 15,000	21	3		
15,001 - 24,000	29	4		
24,001 - 42,000	38	5		
42,001 - 72,000	48	6		
72,001 - 120,000	60	7		
more than 120,000	72	8		
NET W	EIGHT GREATER THAN 4.5 KG	(10 LB)		
Lot Size (N)	Sample Size (n)	Acceptance Number (c)		
600 or less	13	2		
601 - 2,000	21	3		
2,001 - 7,200	29	4		
7,201 - 15,000	38	5		
15,001 - 24,000	48	6		
24,001 - 42,000	60	7		
more than 42,000	72	8		

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## Appendix II

## FAO/WHO COORDINATING COMMITTEE FOR ASIA (CCASIA20)

## Methods of analysis for laver products

Provision	Method	Principle	Туре
Moisture content	AOAC 925.45	Gravimetry, drying at atmospheric pressure	IV
Acid value	AOCS Cd 3d-63	Titrimetry	1

## **Sampling Plans**

The Appropriate inspection level is selected as follows:

Inspection level I - Normal Sampling

Inspection level  ${\rm I\!I}$  - Disputes, (Codex referee purposes sample size) enforcement or need for better lot estimate

#### **SAMPLING PLAN 1**

(Inspection Level I, AQL = 6.5)

	(IIISpection Level I, AQL	= 0.3)		
NET WEIGHT IS EQUAL TO OR LESS THAN 1KG (2.2 LB)				
Lot Size (N)	Sample Size (n)	Acceptance Number (c)		
4,800 or less	6	1		
4,801 - 24,000	13	2		
24,001 - 48,000	21	3		
48,001 - 84,000	29	4		
84,001 - 144,000	38	5		
144,001 - 240,000	48	6		
more than 240,000	60	7		
NET WEIGHT IS GREATER	THAN 1KG (2.2 LB) BUT NOT	MORE THAN 4.5KG (10 LB)		
Lot Size (N)	Sample Size (n)	Acceptance Number (c)		
2,400 or less	6	1		
2,401 - 15,000	13	2		
15,001 - 24,000	21	3		
24,001 - 42,000	29	4		
42,001 - 72,000	38	5		
72,001 - 120,000	48	6		
more than 120,000	60	7		
NET WEIGHT GREATER TH	IAN 4.5KG (10 LB)			
Lot Size (N)	Sample Size (n)	Acceptance Number (c)		
600 or less	6	1		
601 - 2,000	13	2		
2,001 - 7,200	21	3		
7,201 - 15,000	29	4		
15,001 - 24,000	38	5		

24,001 - 42,000	48	6
more than 42,000	60	7

# SAMPLING PLAN 2 (Inspection Level II, AQL = 6.5)

NET WEIGHT IS EQUAL TO OR LESS THAN 1KG (2.2 LB)				
Lot Size (N)	Sample Size (n)	Acceptance Number (c)		
4,800 or less	13	2		
4,801 - 24,000	21	3		
24,001 - 48,000	29	4		
48,001 - 84,000	38	5		
84,001 - 144,000	48	6		
144,001 - 240,000	60	7		
more than 240,000	72	8		
NET WEIGHT IS GREATER THAN 1K	G (2.2 LB) BUT NOT MORE T	HAN 4.5KG (10 LB)		
Lot Size (N)	Sample Size (n)	Acceptance Number (c)		
2,400 or less	13	2		
2,401 - 15,000	21	3		
15,001 - 24,000	29	4		
24,001 - 42,000	38	5		
42,001 - 72,000	48	6		
72,001 - 120,000	60	7		
more than 120,000	72	8		
NET WEIGHT GREATER THAN 4.5KG	G (10 LB)			
Lot Size (N)	Sample Size (n)	Acceptance Number (c)		
600 or less	13	2		
601 - 2,000	21	3		
2,001 - 7,200	29	4		
7,201 - 15,000	38	5		
15,001 - 24,000	48	6		
24,001 - 42,000	60	7		
more than 42,000	72	8		

Appendix III

## COMMITTEE ON NUTRITION AND FOODS FOR SPECIAL DIETARY USES (CCNFSDU38)

## Methods of analysis for infant formula

Provision	Method	Principle	Type
Vitamin C	AOAC 2012.22   ISO/DIS 20635	HPLC	II
Chromium, selenium, molybdenum	AOAC 2011.19   ISO 20649   IDF 235	ICP-MS	10

**Appendix IV** 

## FAO/WHO COORDINATING COMMITTEE FOR AFRICA (CCAFRICA22)

## Methods of analysis for unrefined shea butter

Provision	Method
	AOAC 920.116
Moisture content	IUPAC 2.60
	ISO 662:1998
Froe fatty asid content; said value and asidity	ISO 660:1996
Free fatty acid content: acid value and acidity	IUPAC 2.201
Relative density	IUPAC 2.101
Cononification value	ISO 3657:1998 (revised 1992)
Saponification value	IUPAC 2.202
ladina valva	AOAC 925.56
lodine value	ISO 3961:1999
	AOCS cd. 8b – 90
Peroxide value	IUPAC 2501
	ISO 3960: 2005
Unsaponifiable matter	ISO 3596-1: 1996
Onsaponinable matter	IUPAC 2.401
Insoluble impurities content	ISO 663: 2000
Insoluble impunites content	IUPAC 2604
Melting point	ISO 6321:2002
	ISO 12193:1994
Lead	AOAC 972.25
Leau	AOAC 994.02
	IUPAC 2632
Arsenic	AOAC 952.13
Alseliid	IUPAC 3136
	ISO 8294: 1994
Iron	AOAC 990.05
	IUPAC 2631

 $<sup>^{10}</sup>$  Submitted to CCMAS to reconsider the classification of the method as Type II (see CX/MAS 17/38/2)

# Appendix V

# **COMMITTEE ON SPICES AND CULINARY HERBS (CCSCH3)**

# Methods of analysis and sampling plans for cumin

Provision	Method	Principle	Туре
Moisture	ISO 760:1978/ISO 939:1980 AOAC 2001.12	Titration Distillation	To be determined
Total ash	ISO 928:1997	Gravimetry	I
Acid-insoluble ash	ISO 930:1997	Gravimetry	I
Volatile oils	ISO 6571:2008	Distillation / Volumetric	I
Extraneous vegetative matter material	ISO 927:2009	Visual examination / Gravimetry	I
Foreign matter	ISO 927:2009	Visual examination / Gravimetry	I
Insect damage	Method V-8 Spices, Condiments, Flavors and Crude Drugs (Macroanalytical Procedure Manual, FDA Technical Bulletin Number 5) http://www.fda.gov/Food/FoodScienceRese arch/LaboratoryMethods/ucm084394.htm#v	Visual examination	IV
Mammalian excreta	Macroanalytical procedure manual USFDA technical bulletin V.39 B (for whole) and AOAC 993.27 (for ground)	Visual examination (for whole) Enzymatic Detection method (For ground)	IV III
Mould damage	Method V-8 Spices, Condiments, Flavors and Crude Drugs (Macroanalytical Procedure Manual, FDA Technical Bulletin Number 5) http://www.fda.gov/Food/Food/ScienceRese arch/LaboratoryMethods/ucm084394.htm#v	Visual examination	IV

#### **SAMPLING PLAN**

## **Sampling Plans**

The appropriate inspection level is selected as follows:

Inspection level I - Normal Sampling

Inspection level II - Disputes, (Codex referee purposes sample size), enforcement or need for better lot estimate

## **SAMPLING PLAN 1**

(Inspection Level I, AQL = 6.5)

NET WEIGH	IT IS EQUAL TO OR LESS THAN '	1 KG (2.2 LB)
Lot Size (N)	Sample Size (n)	Acceptance Number (c)
4,800 or less	6	1
4,801 - 24,000	13	2
24,001 - 48,000	21	3
48,001 - 84,000	29	4
84,001 - 144,000	38	5
144,001 - 240,000	48	6
more than 240,000	60	7
NET WEIGHT IS GREATER	THAN 1 KG (2.2 LB) BUT NOT	MORE THAN 4.5 KG (10 LB)
Lot Size (N)	Sample Size (n)	Acceptance Number (c)
2,400 or less	6	1
2,401 - 15,000	13	2
15,001 - 24,000	21	3
24,001 - 42,000	29	4
42,001 - 72,000	38	5
72,001 - 120,000	48	6
more than 120,000	60	7
NET V	VEIGHT GREATER THAN 4.5 KG	(10 LB)
Lot Size (N)	Sample Size (n)	Acceptance Number (c)
600 or less	6	1
601 - 2,000	13	2
2,001 - 7,200	21	3
7,201 - 15,000	29	4
15,001 - 24,000	38	5
24,001 - 42,000	48	6
more than 42,000	60	7

## SAMPLING PLAN 2 (Inspection Level II, AQL = 2.5)

NET WEIGHT IS EQUAL TO OR LESS THAN 1 KG (2.2 LB)				
Lot Size (N)	Sample Size (n)	Acceptance Number (c)		
4,800 or less	13	2		
4,801 - 24,000	21	3		
24,001 - 48,000	29	4		
48,001 - 84,000	38	5		
84,001 - 144,000	48	6		
144,001 - 240,000	60	7		
more than 240,000	72	8		
NET WEIGHT IS GREATER TH	AN 1 KG (2.2 LB) BUT NOT	MORE THAN 4.5 KG (10 LB)		
Lot Size (N)	Sample Size (n)	Acceptance Number (c)		
2,400 or less	13	2		
2,401 - 15,000	21	3		
15,001 - 24,000	29	4		
24,001 - 42,000	38	5		
42,001 - 72,000	48	6		
72,001 - 120,000	60	7		
more than 120,000	72	8		
NET WEI	GHT GREATER THAN 4.5 KG	(10 LB)		
Lot Size (N)	Sample Size (n)	Acceptance Number (c)		
600 or less	13	2		
601 - 2,000	21	3		
2,001 - 7,200	29	4		
7,201 - 15,000	38	5		
15,001 - 24,000	48	6		
24,001 - 42,000	60	7		
more than 42,000	72	8		

# Methods of analysis and sampling plans for thyme

Provision	Method	Principle	Туре
Moisture	ISO 760:1978/ISO 938:1980 AOAC 2001.12	Titration Distillation	To be determined
Total ash	ISO 928:1997	Gravimetry	1
Acid-insoluble ash	ISO 930:1997	Gravimetry	I
Volatile oils	ISO 6571:2008	Distillation / Volumetric	1
Extraneous vegetable material	ISO 927:2009	Visual examination / Gravimetry	I
Foreign matter	ISO 927:2009	Visual examination / Gravimetry	I
Mammalian	Macroanalytical procedure manual USFDA technical bulletin V.39 B (for	Visual examination (for whole)	IV
excreta	whole) and AOAC 993.27 (for ground)	Enzymatic Detection method (for ground)	III
	Method V-8 Spices, Condiments, Flavors and Crude Drugs (Macroanalytical Procedure Manual, FDA Technical Bulletin Number 5) http://www.fda.gov/Food/FoodScience Research/LaboratoryMethods/ucm084 394.htm#v-32	Visual examination	IV
Mould damage	Method V-8 Spices, Condiments, Flavors and Crude Drugs (Macroanalytical Procedure Manual, FDA Technical Bulletin Number 5) http://www.fda.gov/Food/FoodScience Research/LaboratoryMethods/ucm084 394.htm#v-32		IV

#### **SAMPLING PLAN**

## **Sampling Plans**

The appropriate inspection level is selected as follows:

Inspection level I - Normal Sampling

Inspection level II - Disputes, (Codex referee purposes sample size), enforcement or need for better lot estimate

Table 4: SAMPLING PLAN 1 (Inspection Level I, AQL = 6.5)

NET WEIGH	IT IS EQUAL TO OR LESS THAN	1 KG (2.2 LB)
Lot Size (N)	Sample Size (n)	Acceptance Number (c)
4,800 or less	6	1
4,801 - 24,000	13	2
24,001 - 48,000	21	3
48,001 - 84,000	29	4
84,001 - 144,000	38	5
144,001 - 240,000	48	6
more than 240,000	60	7
NET WEIGHT IS GREATER	R THAN 1 KG (2.2 LB) BUT NOT I	MORE THAN 4.5 KG (10 LB)
Lot Size (N)	Sample Size (n)	Acceptance Number (c
2,400 or less	6	1
2,401 - 15,000	13	2
15,001 - 24,000	21	3
24,001 - 42,000	29	4
42,001 - 72,000	38	5
72,001 - 120,000	48	6
more than 120,000	60	7
NET V	VEIGHT GREATER THAN 4.5 KG	(10 LB)
Lot Size (N)	Sample Size (n)	Acceptance Number (c)
600 or less	6	1
601 - 2,000	13	2
2,001 - 7,200	21	3
7,201 - 15,000	29	4
15,001 - 24,000	38	5
24,001 - 42,000	48	6
more than 42,000	60	7

Table 5: SAMPLING PLAN 2 (Inspection Level II, AQL = 2.5)

NET WEIGHT IS EQUAL TO OR LESS THAN 1 KG (2.2 LB)			
Lot Size (N)	Sample Size (n)	Acceptance Number (c)	
4,800 or less	13	2	
4,801 - 24,000	21	3	
24,001 - 48,000	29	4	
48,001 - 84,000	38	5	
84,001 - 144,000	48	6	
144,001 - 240,000	60	7	
more than 240,000	72	8	
NET WEIGHT IS GREATER TH	AN 1 KG (2.2 LB) BUT NOT I	MORE THAN 4.5 KG (10 LB)	
Lot Size (N)	Sample Size (n)	Acceptance Number (c)	
2,400 or less	13	2	
2,401 - 15,000	21	3	
15,001 - 24,000	29	4	
24,001 - 42,000	38	5	
42,001 - 72,000	48	6	
72,001 - 120,000	60	7	
more than 120,000	72	8	
NET WEI	GHT GREATER THAN 4.5 KG	(10 LB)	
Lot Size (N)	Sample Size (n)	Acceptance Number (c)	
600 or less	13	2	
601 - 2,000	21	3	
2,001 - 7,200	29	4	
7,201 - 15,000	38	5	
15,001 - 24,000	48	6	
24,001 - 42,000	60	7	
more than 42,000	72	8	

# Methods of analysis and sampling plans for black, white and green pepper

Provision	Method	Principle	Туре
Bulk density	ISO 959-1:1998 ISO 959-2:1998	Separation by density	IV
Light berries	ISO 959-1:1998	Flotation	IV
Extraneous vegetable matter and foreign matter	ISO 927:2009	Visual examination	IV
Black berries	Physical separation and weighing ISO 959-2:1998	Visual examination	IV
Broken berries	Physical separation and weighing ISO 959-2:1998	Visual examination	IV
Mouldy berries	Macroanalytical procedure manual USFDA technical bulletin V.39 B	Visual examination	IV
Insect defiled berries	Macroanalytical procedure manual USFDA technical bulletin V.39 B	Visual examination	IV
Pinheads or broken berries	Physical separation and weighing ISO959-1:1998	Visual examination	IV
Mammalian and/ or other excreta	i) Macroanalytical procedure manual USFDA technical bulletin V.39 B (For Pepper Whole)	Visual examination(For whole pepper)  Enzymatic Detection	IV III
	ii) AOAC 993.27 (for ground pepper)	method (For ground pepper)	
Moisture content	AOAC 986.21 ISO 939:1980	Distillation	I
Total ash	AOAC 941.12 ISO 928:1997	Gravimetry	I
Non-volatile ether extract	AOAC 940.29 ISO 1108	Soxhlet extraction	I
Volatile oils	AOAC 962.17 ISO 6571:2008	Distillation	I
Piperine content	AOAC 987.07 ISO 5564	Spectrophotometry	I
Acid- Insoluble ash	AOAC 941.12 ISO930:1997	Gravimetry	I
Crude Fiber	AOAC 920.169 ISO 5498	Gravimetry	I

#### **SAMPLING PLANS**

## Sampling Plans

The appropriate inspection level is selected as follows:

Inspection level I - Normal Sampling

Inspection level II - Disputes, (Codex referee purposes sample size), enforcement or need for better lot estimate

## Sampling Plan 1

(Inspection Level I, AQL = 6.5)

	HT IS EQUAL TO OR LESS THAN	1 KG (2.2 LB)
Lot Size (N)	Sample Size (n)	Acceptance Number (c)
4,800 or less	6	1
4,801 - 24,000	13	2
24,001 - 48,000	21	3
48,001 - 84,000	29	4
84,001 - 144,000	38	5
144,001 - 240,000	48	6
more than 240,000	60	7
NET WEIGHT IS GREATER	R THAN 1 KG (2.2 LB) BUT NOT	MORE THAN 4.5 KG (10 LB)
Lot Size (N)	Sample Size (n)	Acceptance Number (c)
2,400 or less	6	1
2,401 - 15,000	13	2
15,001 - 24,000	21	3
24,001 - 42,000	29	4
42,001 - 72,000	38	5
72,001 - 120,000	48	6
more than 120,000	60	7
NET	VEIGHT GREATER THAN 4.5 KG	(10 LB)
Lot Size (N)	Sample Size (n)	Acceptance Number (c)
600 or less	6	1
601 - 2,000	13	2
2,001 - 7,200	21	3
7,201 - 15,000	29	4
15,001 - 24,000	38	5
24,001 - 42,000	48	6
more than 42,000	60	7

# Sampling Plan 2

(Inspection Level II, AQL = 2.5)

	NET WEIGHT IS EQUAL TO OR LESS THAN 1 KG (2.2 LB)			
Lot Size (N)	Sample Size (n)	Acceptance Number (c)		
4,800 or less	13	2		
4,801 - 24,000	21	3		
24,001 - 48,000	29	4		
48,001 - 84,000	38	5		
84,001 - 144,000	48	6		
144,001 - 240,000	60	7		
more than 240,000	72	8		
NET WEIGHT IS GREATER TH	AN 1 KG (2.2 LB) BUT NOT	MORE THAN 4.5 KG (10 LB)		
Lot Size (N)	Sample Size (n)	Acceptance Number (c)		
2,400 or less	13	2		
2,401 - 15,000	21	3		
15,001 - 24,000	29	4		
24,001 - 42,000	38	5		
42,001 - 72,000	48	6		
72,001 - 120,000	60	7		
more than 120,000	72	8		
NET WEI	GHT GREATER THAN 4.5 KG	(10 LB)		
Lot Size (N)	Sample Size (n)	Acceptance Number (c)		
600 or less	13	2		
601 - 2,000	21	3		
2,001 - 7,200	29	4		
7,201 - 15,000	38	5		
15,001 - 24,000	48	6		
24,001 - 42,000	60	7		
more than 42,000	72	8		

# Appendix VI

# **COMMITTEE ON FATS AND OILS (CCFO25)**

# Method of analysis for fish oils

Provisions	Method	
P-Anisidine value	European Pharmacopeia 2.5.36	
Phospholipids	USP-FCC10 1S (Krill oil): Content of total phospholipids by qualitative and quantitative NMR Analysis	
Triglycerides	USP 38 (Omega-3 Acid Triglycerides): Content of oligomers and partial glyceride; European Pharmacopoeia 01/2008/1352 (Omega3 acid triglycerides): Oligomers and partial glycerides; AOCS Cd 11d-96 (Mono- and diglycerides determination by HPLC-ELSD)	