



JOINT FAO/WHO FOOD STANDARDS PROGRAMME
CODEX COMMITTEE ON METHODS OF ANALYSIS AND SAMPLING
Thirty-sixth Session

Budapest, Hungary, 23 – 27 February 2015

ENDORSEMENT OF METHODS OF ANALYSIS PROVISIONS IN CODEX STANDARDS

1. This document contains the methods of analysis and sampling proposed by the Codex Committee on Fats and Oils (CCFO)¹.
2. The Committee is **invited to endorse** the proposed the methods of analysis and sampling in Appendix I.

¹ REP15/FO, Appendix III

APPENDIX I

PROPOSED DRAFT STANDARD FOR FISH OILS**8. Methods of Analysis and Sampling****8.1 SAMPLING**

ISO 5555: Animal and vegetable fats and oils -- Sampling

8.2 DETERMINATION OF FATTY ACID COMPOSITION

According to applicable ISO methods including: ISO 5508 and ISO 12966-2 (Animal and vegetable fats and oils -- Analysis by gas chromatography of methyl esters of fatty acids) or AOCS methods including: Ce 1b-89 (Fatty acid composition of Marine Oils by GLC), Ce 1i-07 (Determination of saturated cis-, monounsaturated, and cis-polyunsaturated fatty acids in Marine Other Oils containing long chain Polyunsaturated Fatty Acids (PUFAs) by Capillary GLC), Ce 2b-11 (Direct Methylation of Lipids in Foods by Alkali Hydrolysis), Ce 1a-13 (Determination of Fatty Acids in edible oils and fats by capillary GLC) and Ce 2-66 (Preparation of Methyl Esters of Fatty Acids)

8.3 DETERMINATION OF ARSENIC

According to AOAC 952.13 (Silver Diethyldithiocarbamate Method); AOAC 942.17 (Molybdenum Blue); or AOAC 986.15 (Spectroscopy/Atomic Absorption Spectroscopy).

8.4 DETERMINATION OF LEAD

According to AOAC 994.02 (Atomic Absorption Spectroscopy); or ISO 12193 (Animal and vegetable fats and oils -- Determination of lead by direct graphite furnace atomic absorption spectroscopy); or AOCS Ca 18c-91 (Determination of Lead by Direct Graphite Furnace Atomic Absorption Spectrophotometry).

8.5 DETERMINATION OF ACID VALUE

According to AOCS Ca 5a-40 (Free Fatty Acids), AOCS Cd 3d-63 (Acid Value); ISO 660 (Animal and vegetable fats and oils -- Determination of acid value and acidity); European Pharmacopoeia 2.5.1 (Acid value).

8.6 DETERMINATION OF PEROXIDE VALUE

According to AOCS CD 8b-90 (Peroxide Value Acetic Acid-Isooctane Method); ISO 3960 (Animal and vegetable fats and oils -- Determination of peroxide value -- Iodometric (visual) endpoint determination); European Pharmacopoeia 2.5.5 (Peroxide value).

8.7 DETERMINATION OF P-ANISIDINE VALUE

According to AOCS Cd 18-90

8.8 DETERMINATION OF VITAMIN A

According to PhEur 2.2.29 liquid chromatography, monograph Cod liver oil (type A).

8.9 DETERMINATION OF VITAMIN D

According to PhEur 2.2.29 liquid chromatography, monograph Cod liver oil (type A).

8.10 DETERMINATION OF PHOSPHOLIPIDS

According to AOCS Ca 12b-92 (Phosphorus by direct graphite furnace atomic absorption spectrometry); AOCS Ca 12a-02 (Colorimetric determination of phosphorus content in fats and oils); Ca 20-99 (Analysis for phosphorus in oil by inductively coupled plasma optical emission spectroscopy).