

# CODEX ALIMENTARIUS COMMISSION



Food and Agriculture  
Organization of  
the United Nations



World Health  
Organization

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Agenda Item 7

CX/FO 11/22/9

## JOINT FAO/WHO FOOD STANDARDS PROGRAMME CODEX COMMITTEE ON FATS AND OILS

Twenty-second Session  
Penang, Malaysia, 21-25 February 2011

### PROPOSAL FOR NEW WORK ON A STANDARD FOR FISH OILS

( Submitted by Switzerland )

At the 21<sup>st</sup> session of the Codex Committee on Fats and Oils (CCFO), Kota Kinabalu, Malaysia 16 – 20 February 2009, the Delegation of Switzerland proposed to discuss the possible elaboration of a Codex Standard for Fish Oils<sup>1</sup> based on a Conference Room Document<sup>2</sup> that Switzerland had prepared for discussion under Agenda Item 9. However, an in-depth discussion of the Swiss proposal was not possible at the session due to its late submission. In view of the observations, the Committee agreed to consider the proposal at its next session, based on a revised project document prepared by Switzerland, taking into account the comments and views presented at the twenty-first session as well as the Guidelines on the Application of the *Criteria for the Establishment of Work Priorities* Applicable to Commodities.

Switzerland was requested to prepare a revised document for possible development of a Codex Standard for fish oils. It should be noted however, that besides fish oils, there are other oils of marine origin that are traded for the same purposes; for example squid and algal oils. Switzerland therefore proposes to develop an inclusive Codex Standard for Marine Oils, which could be easily updated as newer types of oils increase in importance in international trade. The proposed Codex Standard should cover marine oils for direct human consumption or further processing.

The purpose for proposing new work on a Codex Standard for marine oils is to establish common definitions, composition and quality factors for marine oils. Marine oils are an important source of specific fatty acids and are increasingly used in a wide variety of food applications. There are a number of distinct types of marine oils and consumer demand is driving growing international trade. The lack of a harmonised standard is leading to impediments to trade. A harmonised standard would facilitate international trade and enable fair and transparent practices.

In view of the importance and necessity of a Codex Standard for Marine Oils, both for consumer protection and in order to ensure fair practices in trade while guaranteeing transparency as well as consumer information, Switzerland would like to suggest that the proposed Standard be developed under the accelerated procedure. In which case, the work would be finalized by July 2013. However, should the Committee prefer to develop the Standard for Marine Oils under the Uniform procedure, work would be completed by July 2015.

**Annex: Project Document in view of the development of a Codex Standard for Marine Oils submitted by Switzerland.**

<sup>1</sup> ALINORM 09/32/17 para 113-116

<sup>2</sup> Conference Room Document CRD 6, Agenda Item 9

**PROJECT DOCUMENT IN VIEW OF THE DEVELOPMENT OF A CODEX STANDARD FOR MARINE OILS****SUBMITTED BY SWITZERLAND**

This project document has been developed according to the Codex Alimentarius Commission Procedural Manual 19<sup>th</sup> Edition, 2010 Section II, Procedures for the Elaboration of Codex Standards and related texts, *part 2. Critical review, proposals to undertake new work or to revise a standard (page 23)*.

**1. Purpose and Scope of the Standard**

**The Purpose** of proposing this new work is to establish an overarching standard containing quality and compositional factors for different marine oils (for example fish oils, algal oils).

Marine oils have a specific composition which makes them an important ingredient in an increasing variety of foods. Currently, there are multiple types of marine oils on the market. It is proposed to develop an inclusive Codex Standard, initially covering the marine oils which meet the Codex criteria for new work. It should be possible to easily update the proposed Standard to include other marine oils as newer types of oils increase in importance in international trade. The level of detail required in the standard, regarding composition and quality factors, necessary to meet the stated objectives will be determined during the deliberations of the Codex Committee on Fats and Oils.

The aims of Codex Standards are consumer protection from the point of view of health and food safety, ensuring fair practices in the food trade while taking into account the identified needs of developing countries. Establishing a Codex Standard for marine oils containing quality and compositional factors will ensure fair practices in trade in these commodities. Furthermore, in order to ensure consumer protection, it is important to establish quality and compositional factors for marine oils.

Currently, due to the lack of an international standard, marine oils are traded with differing levels of information which makes it difficult for authorities to judge whether a particular type of oil is acceptable. Furthermore, due to the lack of harmonized information and references, consumers are unable to make an informed choice.

The Codex Alimentarius Commission has developed Standards for almost all fats and oils commonly used in food. However, marine oils are increasingly important foodstuffs, for which up to now no specific Standard has been developed. Neither the *Codex Standard for Edible Fats and Oils*, nor the *Codex Standard for Named Animal Fats* adequately cover the specific nature of marine oils.

Due to their specific composition, marine oils are more sensitive to oxidation compared to other oils. Therefore, quality factors such as peroxide value (POV) or iron content laid down in existing Standards are not appropriate.

**The Scope** of the new work is an inclusive Codex Standard for Marine Oils. The proposed Codex Standard should cover fish oils and other marine oils that meet the Codex Criteria.

**2. Relevance and Timeliness:**

Beyond traditional use of cod liver oil, the consumption of oils produced by marine organisms known for their specific composition is a more recent phenomenon observed in many countries.

Initially fish oil was proposed to the consumer as a supplement (e.g. in soft gelatin capsules). Today, fish oil as well as other marine oils are added to foodstuffs and consumer awareness is increasing. However, there is a lack of knowledge amongst consumers and national authorities on appropriate quality and compositional factors for marine oils in general, or between different types of marine oil.

As trade in marine oils has increased rapidly over the past 10 years, and is now approximately 80,000 metric tons<sup>3</sup>, an international standard is required to enable fair practices in trade.

### 3. Main Aspects to be covered:

The proposed new work on a Standard for Marine Oils will be developed according to the structures of the existing Codex Standards for fats and oils and it will include the following sections:

- Scope,
- Description,
- Essential composition and quality factors,
- Food additives,
- Contaminants,
- Hygiene,
- Labelling,
- Methods of analysis and sampling,
- Tables with characteristic fatty acid composition of the described oils.
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### 4. Assessment of the Criteria for the Establishment of Work Priorities:

The proposed new work complies with the criteria for the establishment of work priorities applicable to commodities as laid down in the Procedural Manual of the Codex Alimentarius Commission, 19<sup>th</sup> edition, (2010) page 33.

- a) Volume of production and consumption in individual countries and volume and pattern of trade between countries.*

Marine oils for human consumption are a high value commodity. The international trade in processed marine oils suitable for human consumption is approximately 80,000 metric tons and 1 billion USD. Thus-far during the 21<sup>st</sup> century, the quantity of marine oils traded for human consumption has doubled every 4 years and growth in the demand as well as trade of this commodity is projected to continue<sup>3</sup>.

On a volume basis most oil is derived from members of the fish families *Clupeidae* and *Engraulidae*. However on a value basis there are four distinct types of oil that share a significant proportion of current trade; in addition to the above there are oils derived from algae (*Chromista* and *Protozoa*), oils that are traded as concentrates and oils traded on the basis of their specific origin (such as tuna oil and cod-liver oil). All of these oils have distinct composition characteristics.

The marine oil supply chain is international, major fisheries are located in regions distant from refiners and producers of end consumer products. Global shipments between sites of primary production and food manufacturers are commonplace. It is common for marine oil or products containing marine oil to cross several national borders before reaching the consumer.

- b) Diversification of national legislation and apparent resultant or potential impediments to international trade.*

As no internationally harmonised standard for marine oils exists, difficulties in and impediments to trade occur regularly.

Due to the lack of an international standard, marine oils are currently traded with various levels of detail provided concerning their source, composition and quality. As there are variations possible in the degree of processing, purity, addition of additives and molecular forms of the oil, it is difficult for national authorities to judge whether individual shipments are acceptable.

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<sup>3</sup> Market survey data, Global Organisation of EPA and DHA (GOED).

This new work will assist in providing an internationally harmonized approach for quality and compositional factors as well as the labelling and trade in marine oils.

*c) International or regional market potential.*

The majority of marine oils traded for human consumption are produced in specific geographical areas, whereas consumption in finished food products is global.

*d) Amenability of the commodity to standardization*

Marine oil is a commodity which is amenable to standardization by the CCFO.

*e) Coverage of the main consumer protection and trade issues by existing or proposed general standards.*

The development of a Codex Standard for Marine Oils containing essential composition and quality factors will enable a harmonization of marine oils and thereby contribute to consumer protection whilst ensuring fair practices in the trade of marine oils.

*f) Number of commodities which would need separate standards indicating whether raw, semi-processed or processed.*

There are multiple types of marine oils. The proposal is to develop an inclusive Codex Standard that covers fish oils and other marine oils that meet the Codex Criteria. As newer types of marine oils increase in international trade, it is the intention that these new types should be included in the Standard.

*g) Work already undertaken by other international organizations in this field and/or suggested by the relevant international intergovernmental body(ies).*

There is no existing international standard for the food use of marine oils. This lack of standardization has led to the development of a voluntary industry standard<sup>4</sup>, which is however not recognized by authorities. A Codex Standard covering all necessary quality and compositional factors is therefore required.

## **5. Relevance to the Codex Strategic Objectives:**

The outcome of the proposed new work is relevant to the overarching

Goal 1: Promoting Sound Regulatory Frameworks, as well as

Goal 1.2: Review and develop Codex Standards and related texts for food quality.

The results of this new work will contribute to the development of sound food control and regulatory infrastructures and they will consequently promote the quality and suitability of marine oils for human consumption.

## **6. Information on the Relation between the Proposal and other Existing Codex Documents:**

Codex has developed standards for almost all fats and oils used in food, including:

- Standard for Milk Fat Products (*CODEX STAN A -2-19 73, Rev. 1-1999, Amended 2006*)
- Standard for Edible Fats and Oils not covered by Individual Standards [*CODEX STAN 19- 1981 (Rev. 2-1999)*]
- Standard for Olive Oils and Olive Pomace Oils [*CODEX STAN 33-1981 (Rev.2-2003)*]
- Standard for Named Vegetable Oils [*CODEX STAN 210 (Amended 2003, 2005)*]
- Standard for Named Animal Fats (*CODEX STAN 211-1999*),

The *Standard for Edible Fats and Oils not covered by Individual Standards* and the *Standard for Named Animal Fats* do not adequately cover marine oils. Due to their specific composition, marine oils are more sensitive to oxidation compared to other oils. Therefore, quality factors such as peroxide value (POV) or iron content laid down in existing Standards are not appropriate.

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<sup>4</sup> GOED Voluntary Monograph, <http://www.goedomega3.com/portals/0/public/GOEDMonograph.pdf>

**7. Identification of any Requirement for and Availability of Expert Scientific Advice:**

None identified at present.

**8. Identification of any Need for Technical Input to the Standard from External Bodies so that this can be planned for:**

Input on analytical methods may be sought from recognised international organisations.

**9. Proposed Time-line for Completion of the New Work, including the Start Date. The proposed Date for Adoption at Step 5, and the proposed Date for Adoption by the Commission; the Time Frame for developing a Standard should not normally exceed five Years:**

The Committee should consider whether the proposed New Work should either be undertaken according to the Uniform Procedure or the Accelerated Procedure. As the Codex Committee on Fats and Oils only meets every two years Switzerland proposes that the Codex Standard on Marine Oils be developed according to the Accelerated Procedure. Switzerland has indicated the two work plan options below.

Work plan for the development of a Codex Standard for Marine Oils.

<b>Timetable</b>	<b>Meeting</b>	<b>Progress</b>
February 2011	22 <sup>nd</sup> session of the Codex Committee on Fats and Oils, Malaysia	Agree on purpose and scope and request approval for new work from the Codex Alimentarius Commission at its 34 <sup>th</sup> session.
July 2011	34 <sup>th</sup> session of the Codex Alimentarius Commission.	Approval of new work
August 2011 to October 2012	Intersession – Electronic Working Group	Development of a Proposed Draft Standard and circulation for comments by the Codex secretariat at Step 3 in view of the 23 <sup>rd</sup> session of the CCFO (2013).
February 2013	23 <sup>rd</sup> session of the Codex Committee on Fats and Oils	Discussion of the Proposed Draft Standard for Marine Oils at step 4 and eventually, proposal to forward the Draft Standard to CAC for adoption at step 5 or 5/8 in line with the agreed procedure for the development of the standard.
July 2013	36 <sup>th</sup> session of the Codex Alimentarius Commission	a) <b>Final Adoption</b> of the Draft Standard for Marine Oils <b>at step 5/8</b> (Accelerated Procedure) b) Adoption of the Draft Standard for Marine Oils at step 5 (Uniform Procedure)
August 2013 to October 2014	Intersession – Electronic Working Group	Circulation for comments and revision in the light of the comments received
February 2015	24 <sup>th</sup> Session of the Codex Committee Fats and Oils	Consideration of the Draft Standard for Marine Oils at step 7 and submission to the CAC for adoption at step 8.
July 2015	38 <sup>th</sup> session of the Codex Alimentarius Commission	<b>Final Adoption</b> of the Draft Standard for Marine Oils at step 8.