



Food and Agriculture
Organization of the
United Nations



World Health
Organization

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Agenda item 4.2

CX/CAC 24/47/4
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JOINT FAO/WHO FOOD STANDARDS PROGRAMME

CODEX ALIMENTARIUS COMMISSION

Forty-seventh Session

WORK OF THE CODEX COMMITTEE ON FATS AND OILS (CCFO)

1. The Commission is invited to adopt the standards and related texts submitted for final adoption as listed in **Part 1** of this document.
2. The comments received regarding standards and related texts from CCFO28 submitted for adoption are contained in CX/CAC 24/47/4 Add.1.
3. The Commission is also invited to endorse the recommendation of the 86th Session of the Executive Committee of the Codex Alimentarius Commission (CCEXEC86) regarding extension of deadline for the completion of work.
4. The Commission is furthermore invited to approve new work proposals from CCFO28 as listed in **Part 2** of this document and compiled in Annex I and Annex II. The Commission is invited to consider these proposals in the light of its *Codex Strategic Plan 2020-2025* and the *Codex Procedural Manual's Criteria for the establishment of work priorities* and *Criteria for the establishment of subsidiary bodies of the Codex Alimentarius Commission*.
5. The critical review of the work from CCFO28 was undertaken by CCEXEC86.

Part 1 – Standards and related texts submitted for final adoption

Standards and related texts	Reference	Job No.	Step
Revision to the <i>Standard for named vegetable oils</i> (CXS 210-1999): Inclusion of avocado oil	REP24/FO, paragraph 44, Appendix V	N12-2017	8
Amendment/revision of the <i>Standard for named vegetable oils</i> (CXS 210-1999): <ul style="list-style-type: none"> – Inclusion of camellia seed oil – Inclusion of sacha inchi oil – Inclusion of high oleic acid soya bean oil 	REP24/FO, paragraphs 51, 55 and 62, Appendix VI, Appendix VII, and Appendix VIII	N01-2022 N02-2022 N03-2022	5/8
Revision to the <i>Standard for olive oils and olive pomace oils</i> (CXS 33-1981): Revision of Sections 3, 8 and Appendix ¹	REP24/FO, paragraph 85(i), Appendix IX	N11-2022	5/8
Amendment/revision to the <i>Standard for fish oils</i> (CXS 329-2017) - Inclusion of Calanus oil	REP24/FO, paragraph 103(i), Appendix X	N04-2022	5/8
Amendments to the labelling provisions for non-retail containers in the six existing fats and oils standards (CXS 19-1981; CXS 33-1981; CXS 210-1999; CXS 211-1999; CXS 256-1999; and CXS 329-2017)	REP24/FO, paragraph 15(i), Appendix II	-	Adoption
Amendments/revisions to the <i>Code of practice for the storage and transport of edible fats and oils in bulk</i> (CXC 36-1987) and associated data needs	REP24/FO, paragraphs 33(vi) and 118, Appendix III (Parts A and B)	-	Adoption

Part 2 – Proposals to elaborate new standards and related texts

Text	Reference and project document
New work on the proposed revision to Codex standards on fats and oils to reduce trans-fatty acid intake	<ul style="list-style-type: none"> • REP24/FO, Appendix XI • Annex I of this document
New work on a standard for microbial omega-3 oils	<ul style="list-style-type: none"> • REP24/FO, Appendix XII • Annex II of this document

¹ CCFO requested an extension of the deadline for completion of the work to CCFO30, which was supported by CCEXEC86.

PROJECT DOCUMENT**PROPOSED REVISIONS TO CODEX STANDARDS ON FATS AND OILS TO REDUCE TRANS-FATTY ACID INTAKE****(For approval)****1. Purpose and scope of the new work**

The objective of this proposal is to revise the following Codex Standards on fats and oils to include a prohibition on partially hydrogenated oils (PHO) and/or limits on industrially produced trans-fatty acid (iTFA):

- *Standard for Edible Fats and Oils Not Covered by Individual Standards* ([CXS 19-1981](#))
- *Standard for Fat Spreads and Blended Spreads* ([CXS 256-1999](#))
- *Standard for Named Animal Fats* ([CXS 211-1999](#))

2. Its relevance and timeliness

Virtual elimination of industrially produced trans-fatty acids (iTFA) from the food supply was one of the priority targets identified in the 13th General Programme of Work of the World Health Organization (WHO) for 2019-2023. Increased intake of TFA (>1% of total energy intake) is associated with increased risk of coronary heart disease events and mortality. Globally, more than 500,000 deaths in 2010 were attributed to increased intake of TFA.

Codex has committed to revising Codex standards and related texts, as necessary, to ensure that they are consistent with and reflect current scientific knowledge and other relevant information.

Of the six Codex standards for fats and oils, two have limits on TFA levels: *Standard for olive oils and olive pomace oils* ([CXS 33-1981](#)) and *Standard for fish oils* ([CXS 329-2017](#)). The four other standards – *Standard for Named Vegetable Oils* (CXS 210-1999), *Standard for Named Animal Fats* (CXS 211-1999), *Standard for Edible Fats and Oils Not Covered by Individual Standards* (CXS 19-1981), and *Standard for Fat Spreads and Blended Spreads* (CXS 256-1999) – do not identify specific fatty acid isomers in their compositional requirements nor do they identify limits for TFA levels.

3. Main aspects to be covered

Revise the following standards to:

a) include a prohibition on PHO and/or limits on industrially produced TFA:

- *Standard for Fat Spreads and Blended Spreads* (CXS 256-1999)
- *Standard for Edible Fats and Oils Not Covered by Individual Standards* (CXS 19-1981)
- *Standard for Named Animal Fats* (CXS 211-1999)

b) ensure that the scope of the above prohibition and/or limits, apply to fats and oil products used as ingredients in other food products, and consideration of enforcement option to focus on ingredient permission rather than in the consumer products given analytical challenges in differentiating between iTFA and ruminant TFA

c) introduce as necessary any definitions in the standards, such as a definition for Partially Hydrogenated Oils (PHOs)

d) provide flexibility to facilitate different approaches to implementation of the standards

The proposed list of standards does not include the *Standard for Named Vegetable Oils* (CXS 210-1999) where pure oils are described. Partial hydrogenation of such oils would move them outside the scope of the standard.

4. Assessment against the criteria for the establishment of new work priorities**General criteria:**

Clear composition requirements for oils and fats related to TFA can provide:

- industry with a clear and consistent direction for product formulation; and
- consumers with healthier products to reduce their risk of coronary heart disease.

Criteria applicable to general subjects:

(a) *Diversification of national legislation and apparent resulting or potential impediments to international trade*

Greater global harmonization related to the TFA content of fat products would help reduce barriers to trade and minimize potential negative health impacts.

(b) *Scope and establishment of priorities between the various sections of the work*

Not applicable.

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

In May 2018, WHO called for the global elimination of industrially produced TFA by 2023, highlighting as a priority target of the WHO's 13th General Programme of Work. The WHO REPLACE action framework was launched in 2018 and includes technical guidance and practical steps to help governments take relevant actions to eliminate industrially produced TFA from their national food supply. WHO also monitors countries' progress in implementing legislative and other measures to reduce and eliminate industrially produced TFA and has developed the [TFA Country Score Card](#) to track countries' performance on a continuous basis.

(d) *Amenability of the subject of the proposal to standardization*

Greater harmonization related to the TFA content of products would minimize potential negative health impacts and help reduce barriers to trade.

(e) *Consideration of the global magnitude of the problem*

Despite substantial progress, however, this leaves 5 billion people worldwide at risk from TFA's harmful health impacts. The report showed that the overwhelming majority of people living in low-income countries are not protected by such policies.

5. Relevance to the codex strategic plan's² goals and objectives

The proposed work is consistent with the Commission's mandate to develop standards, guidelines and other international recommendations to protect consumer health and to ensure fair food trade practices. Amending the named fats and oils standards to comprehensively address TFA will contribute to the achievement of Strategic Goals 1, 2, 3, and 4.

- **Goal 1: Address current, emerging and critical issues in a timely manner.**

Virtual elimination of industrially produced TFA from the food supply is one of the priority targets identified in the 13th General Programme of Work of the WHO in 2019-2023.

- **Goal 2: Develop standards based on science and Codex risk-analysis principles.**

- Objective 2.1. Use scientific advice consistently, in line with Codex risk-analysis principles.

Implementing legislative or regulatory actions to limit or prohibit industrially produced TFA has been recognized as the most effective action to reduce TFA in the food supply.

- **Goal 3: Increase impact through the recognition and use of Codex standards.**

- Objective 3.2: Support initiatives to enable the understanding and implementation/application of Codex standards.

This work would enable better application of globally-aligned and scientifically-based TFA compositional requirements globally.

- **Goal 4: Facilitate the participation of all Codex Members through the standard setting process.**

- Objective 4.3: Reduce barriers to active participation by developing Countries.
 - Trans fat is a globally relevant issue, impacting both developed and developing countries.
 - Amending the CCFO standards to address the issue of TFA would enable all Codex Members and Observers to participate in the discussion.

² For more information, please see the [Codex Strategic Plan 2021-2025](#)

6. Relationship between this proposal and other existing codex documents

The proposal relates to the *Guidelines on Nutrition Labelling* (CXG 2-1985) which includes information on TFA declaration and the *General Standard for the Labelling of Prepackaged Foods* (CXS 1-1985) which refers to the term “hydrogenated” and “partially-hydrogenated” in item 4.2.3.1.

7. Identification of any requirement for and availability of expert scientific advice

No need for the expert scientific advice has been identified at this stage.

8. Identification of any need for technical input to the guideline from external bodies that can be planned

No need identified at this stage as the committee could consider using the values already established by the WHO.

9. Proposed timeline for completion of the new work

Subject to approval of the new work by the Codex Alimentarius Commission, it is expected that the CCFO will require 2 sessions to complete its work.

PROJECT DOCUMENT
PROPOSAL FOR NEW WORK ON A STANDARD FOR MICROBIAL OMEGA-3 OILS
(For approval)

1. The purposes and the scope of the standard

The purpose and scope of this new work is to establish an overarching standard providing a harmonised description containing quality and compositional factors for microbial omega-3 oils, potential food safety issues of the product and its production system for use as an ingredient in foods and food supplements where these are regulated as food.

2. Its relevance and timeliness

Microbial omega-3 oils have specific compositions, rich in eicosapentaenoic acid (EPA) and docosahexaenoic acid (DHA), which makes them an important ingredient in an increasing variety of foods and food supplements.

The consumption of oils produced by microbial omega-3 organisms, known for their specific compositions rich in EPA and DHA, is a more recent phenomenon observed in many countries. Microbial omega-3 oils are added to foodstuffs, and consumer awareness, as well as trade, is increasing.

Today, microbial omega-3 oils are presented to the consumer in fortified foods, foods for plant-based diets, several types of foods for special dietary uses — such as foods for special medical purposes, infant formula or follow-up formula products — and food supplements.

However, there is a lack of knowledge among consumers and national authorities on appropriate quality and compositional factors for microbial omega-3 oils in general, or between different types of microbial omega-3 oils. As trade in microbial omega-3 oils has increased rapidly, with volume at over 5,029 metric tons (according to data for the year 2021), an international standard is required to enable fair practices in trade.

Examples of internationally traded microbial omega-3 oils currently on the market include those from the genera *Schizochytrium*, *Nannochloropsis* and *Cryptocodinium*, among others:

- Oil from *Schizochytrium* is composed of triglycerides rich in DHA, or rich in DHA and EPA, as the major polyunsaturated fatty acid components.¹ It has a light yellow to orange appearance. It is obtained from fermentation of *Schizochytrium* sp., followed by solvent extraction, aqueous extraction methods or enzymatic hydrolysis methods, and further refining using traditional technologies applied for vegetable or animal based fats and oils.
- Oil from *Nannochloropsis* has a dark green appearance and is obtained from the fermentation of *Nannochloropsis culata*, followed by extraction methods and is composed of a mixture of glycolipids, phospholipids and triglycerides, with >24% of fatty acids being EPA.²
- Oil from *Cryptocodinium cohnii* is composed of triglycerides with a high level of DHA by weight, with DHA constituting almost all the polyunsaturated fatty acid fraction. The color of the oil is light yellow to orange. The oil is obtained by fermentation of *C. cohnii*, and may be refined using winterization, bleaching, and deodorization.

Microbial omega-3 oils from other single-cell microalgae species have been developed in the past or are under current development or are currently traded. Examples are oils from *Euglena* and *Cryptocodinium cohnii*, which is used for infant nutrition. Some microbial omega-3 oils that have been traded in the past are oils from *Ulkenia*.

Currently, due to the lack of an international standard, microbial omega-3 oils are traded with differing levels of information. This makes it difficult for authorities to judge whether a particular type of oil is acceptable, and consumers are unable to make an informed choice.

In this regard, it is therefore proposed to develop an inclusive Codex Standard that can be easily updated to include other microbial omega-3 oils as newer types of oils increase in importance in international trade.

¹ US Pharmacopeia - Food Chemical Codex (FCC). USP-FCC Schizochytrium Oil. https://online.foodchemicalscodex.org/uspfcc/document/6_GUID-DE13986B-B98E-413F-B133-8516D1F776E7_50101_en-US?source=TOC.

² Australian Government. Department of Health and Aged Care. Therapeutic Goods Administration. EPA-rich *Nannochloropsis oculata* oil. <https://www.tga.gov.au/resources/resource/compositional-guidelines/epa-rich-nannochloropsis-oculata-oil>.

Establishing a Codex Standard for microbial omega-3 oils containing quality and compositional factors will ensure fair practices in trade in these commodities as well as ensure consumers' health protection, in line with Codex Alimentarius purpose and goals.

The Codex Alimentarius Commission has developed Standards for almost all fats and oils commonly used in food. However, microbial omega-3 oils are increasingly important foodstuffs, for which up to now no specific Codex Standard has been developed, which means that no quality standards for these types of oils are applicable globally. Neither the *Codex Standard for Edible Fats and Oils not Covered by Individual Standards* (CXS 19-1981) nor the *Standard for Named Animal Fats* (CXS 211-1999) nor the *Standard for Fish Oils* (CXS 329-2017) adequately cover the specific nature of microbial omega-3 oils.

3. The main aspects to be covered.

The proposed new work to establish a Standard for microbial omega-3 oils includes the following sections, following the format for Codex Commodity Standards provided by the Codex Procedural Manual (Twenty-eighth edition, 2023) and the structures of existing Codex Standards for fats and oils:

- Scope
- Description
- Essential composition and quality factors
- Food additives
- Contaminants
- Hygiene
- Labelling
- Methods of analysis and sampling
- Tables with characteristic lipids/fatty acid composition of the described oils.

Further detail on the main aspects to be covered and addressed by the proposed new work are indicated in the Annex to this project document.

4. An assessment against the criteria for the establishment of work priorities General criterion

The Codex Alimentarius Commission has a mandate of protecting consumers' health and ensuring fair practices in food trade. The proposed new Standard for microbial omega-3 oils, containing quality and compositional factors, will meet this criterion by promoting consumer protection from the point of view of health, food safety and ensuring fair practices in the food trade, assuring product authenticity and traceability, taking into account the identified needs of developing countries.

Criteria applicable to commodities

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

Microbial omega-3 oils for human consumption are a high value commodity. The international trade in processed microbial omega-3 oils suitable for human consumption reached over 5,029 metric tons and 264.6 million USD in 2021. Both the production and global trade of microbial omega-3 oil is increasing, as growth in the demand as well as trade of this commodity is projected to continue.³

Microbial omega-3 strain selection and growth condition are optimized to produce a certain type of omega-3 (high EPA, high DHA, etc.), and can be grown by fermentation in tanks, or grown in open ponds (raceway ponds) or photobioreactors.

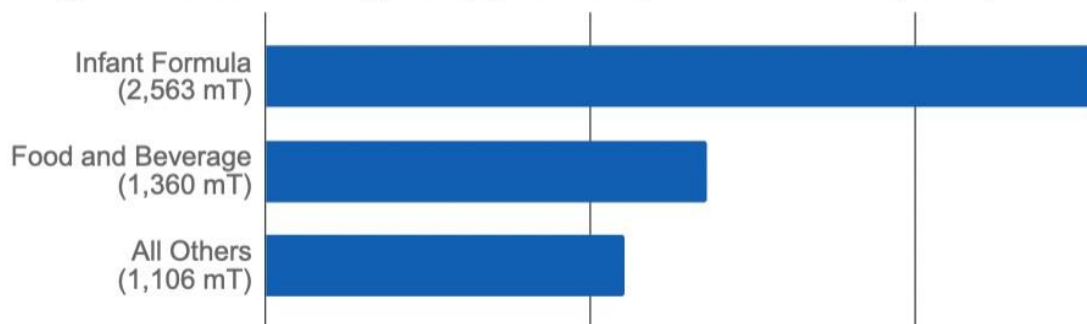
Microbial omega-3 oils are used mainly for segments where the ingredient characteristics justify it: fortified infant formula and foods, usually for a high content of DHA, and specialized food supplements, in particular for consumers wishing to consume omega-3 oils of a non-fish origin.

The figure below shows that the largest microbial omega-3 oil volume is used by two applications, infant formula and food and beverage:⁴

³ Market survey data, Global Organization for EPA and DHA Omega-3s (GOED).

⁴ Market survey data, GOED

Largest microbial omega-3 applications, in metric tons (2021)



Traditionally, microbial omega-3 oils have been used in food supplements tailored to specific groups of users (like vegetarian/vegan consumers, or people concerned about fish allergies) and have been high in DHA. As shown above, infant formula is now the largest application followed by food and beverage. In recent years, the production volume of high-EPA microbial omega-3 oils has increased, and it is likely that the resulting innovation will attract new consumer segments. In this regard, advances in production methods and declining prices are starting to make these oils attractive to a larger audience.

All geographic markets grew in volume, but the fastest increases (as a percentage of the demand) were observed in the developing markets, driven by increased penetration into infant formula.

a) Microbial omega-3 oils trade growth

Microbial omega-3 oils trade volumes, and projected continued growth in global production, demand and trade of microbial omega-3 oils, are described as follows:

In 2021, by Application:

Infant formula, the largest application, uses 51.0% of microbial omega-3 oil volume, growing at an annual rate of 2.8%, particularly in Asian countries.

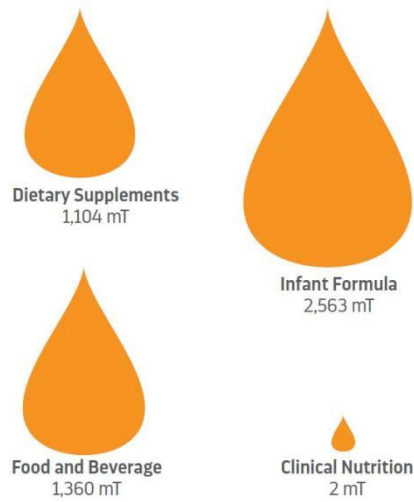
The next application, food and beverage, commands 27.0% of the volume of microbial omega-3 oils, and grew at a healthy 9.6%, driven by rapid growth in the large European market. An increased focus on prevention has resulted in the demand for healthy (including fortified) foods. The US market and the demand in the Asia-Pacific region also grew at a rapid pace.

Microbial omega-3 oils have traditionally represented a small fraction of the oil volumes used in food supplements, but they are gaining momentum. In 2021, these oils comprised less than 1.6% of the volume (and 9.4% of the value) of omega-3 ingredients used in this sector. The major obstacle to larger representation has been their higher cost, but advances in production methods — and therefore more manufacturers coming onstream with algal/protist capacity — and economies of scale have resulted in more competitive pricing. Additionally, consumer interest in plant-based ingredients and a growing variety of strains and compositions have helped microalgae achieve a global growth rate of 10.3%.

The following figures provide further detail of microbial omega-3 growth in trade volumes by application:⁵

⁵ Market survey data, GOED

Algae Oil Market by Application (in Metric Tons)



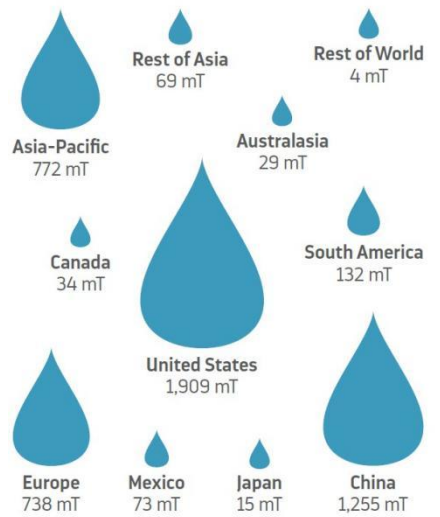
Algae Oil Market Volume by Growth (in Metric Tons) vs. Percent Growth (Change from 2020 to 2021)

	Change in VOLUME (mT)	Change in VOLUME (%)
Clinical Nutrition	< 1 mT	5.9%
Dietary Supplements	103 mT	10.3%
Food and Beverage	120 mT	9.6%
Infant Formula	70 mT	2.8%

In 2021, by region.

The following figures provide further detail of microbial omega-3 growth in trade volumes by region.⁶

Algae Oil Market by Region (in Metric Tons)



Algae Oil Market Volume by Growth (in Metric Tons) and Percent Growth (Change from 2020 to 2021)

	Change in VOLUME (mT)	Change in VOLUME (%)
Australasia	< 1 mT	2.1%
Canada	1 mT	4.0%
China	42 mT	3.4%
Europe	82 mT	12.5%
Japan	< 0.1 mT	< 0.1%
Mexico	6 mT	8.5%
Rest of World	< 1 mT	2.6%
Asia-Pacific	50 mT	6.9%
Rest of Asia	4 mT	6.8%
South America	9 mT	7.0%
United States	99 mT	5.4%

⁶ Market survey data, GOED

2021, by Region and Application

The following tables provide further detail of microbial omega-3 growth in trade volumes, in metric tons, mT, and value in millions of US dollars, by region and application:⁷

Volumes in mT

	Infant Formula			Food and Beverages			Dietary Supplements			Clinical Nutrition		
	2020	2021	Change	2020	2021	Change	2020	2021	Change	2020	2021	Change
Australasia	10	10	1.0%	12	13	3.2%	1	1	2.2%	-	-	-
Canada	8	8	-1.3%	16	17	5.7%	8	9	6.2%	-	-	-
China	1,025	1,059	3.3%	162	168	4.1%	25	26	4.0%	-	-	-
Europe	114	115	1.1%	255	301	17.9%	115	137	19.9%	-	-	-
Japan	-	-	-	13	13	0.8%	2	2	2.0%	-	-	-
Mexico	4	4	4.9%	63	69	8.7%	-	-	-	-	-	-
Rest of the World	-	-	-	3	4	3.2%	< 1	< 1	2.9%	-	-	-
Asia-Pacific	394	414	5.3%	201	218	8.9%	89	97	8.8%	-	-	-
Rest of Asia	20	20	4.1%	43	47	8.1%	2	2	2.2%	-	-	-
South America	41	42	2.2%	80	88	9.4%	2	2	3.1%	-	-	-
USA	878	890	1.4%	392	423	8.0%	90	98	9.6%	2	2	5.9%

Volumes in metric tons (mT)

⁷ Market survey data, GOED

Volumes of trade in millions of US dollars

	Infant Formula			Food and Beverages			Dietary Supplements			Clinical Nutrition		
	2020	2021	Change	2020	2021	Change	2020	2021	Change	2020	2021	Change
Australasia	\$0.4	\$0.4	-2.0%	\$0.7	\$0.7	0.2%	\$0.1	< 0.1	-0.8%	-	-	-
Canada	\$0.3	\$0.3	-4.2%	\$0.9	\$1.0	2.6%	\$0.6	\$0.6	3.1%	-	-	-
China	\$44.8	\$45.0	0.3%	\$9.6	\$9.7	1.1%	\$1.8	\$1.8	0.9%	-	-	-
Europe	\$5.0	\$4.9	-1.8%	\$15.2	\$17.3	14.4%	\$8.3	\$9.6	16.4%	-	-	-
Japan	-	-	-	\$0.7	\$0.7	-2.1%	\$0.1	\$0.1	-1.0%	-	-	-
Mexico	\$0.2	\$0.2	1.8%	\$3.8	\$4.0	5.5%	-	-	-	-	-	-
Rest of the World	-	-	-	\$0.2	\$0.2	0.2%	< 0.1	< 0.1	< 0.1%	-	-	-
Asia-Pacific	\$17.2	\$17.6	2.2%	\$11.9	\$12.6	5.7%	\$6.4	\$6.8	5.7%	-	-	-
Rest of Asia	\$0.9	\$0.9	1.1%	\$2.6	\$2.7	5.0%	\$0.2	\$0.2	-0.8%	-	-	-
South America	\$1.8	\$1.8	-0.8%	\$4.8	\$5.1	6.3%	\$0.1	\$0.1	0.1%	-	-	-
USA	\$38.4	\$37.8	-1.5%	\$23.3	\$24.4	4.9%	\$6.5	\$6.9	6.4%	\$0.1	\$0.1	2.8%

Volumes in millions of US dollars (MM US\$)

Forecast

These are the volumes by region and by application for 2021, followed by the growth rate from 2020-2021 and then the average annual growth rate expected to be seen to 2024.⁸

Forecast by region:

	2021 volume (Tons)	2020-21 (Percentage change)	To 2024 (average)
Australasia	29	2.1%	2.1%
Canada	34	4.0%	4.3%
China	1,255	3.4%	3.4%
Europe	738	12.5%	9.6%
Japan	15	<0.1%	0.7%
Mexico	73	8.5%	8.5%
Rest of the World	4	2.6%	2.6%
Asia-Pacific	772	6.9%	7.0%
Rest of Asia	69	6.8%	6.8%
South America	132	7.0%	7.2%
USA	1,909	5.4%	5.6%

Forecast by application:

	2021 volume (Tons)	2020-21 (Percentage change)	To 2024 (average)
Infant Formula	2,563	2.8%	2.9%
Food and Beverage	1,360	9.6%	8.0%
Dietary Supplements	1104	10.3%	10.1%
Clinical nutrition	2	5.9%	5.9%

b) Diversification of national legislations and apparent resultant or potential impediments to international trade

As no internationally harmonised standard for microbial omega-3 oils exists, difficulties in and impediments to trade occur. Microbial omega-3 oils are currently traded with various levels of detail concerning their source, composition and quality. As there are variations possible in the degree of processing, chemical forms of the oil, fatty acid profile requirements, quality requirements and addition of additives, it is difficult for national authorities to judge whether individual shipments are acceptable.

Currently, pharmacopeial monographs, guidelines, standards and regulations exist for microbial omega-3 oils in Australia, China, the European Union, the USA, Brazil and Chile, providing orientation or authorising the use of microbial omega-3 oils with different levels of information in a variety of food applications.

This new work will assist in providing an internationally harmonized approach for quality and compositional factors as well as the labelling and trade in microbial omega-3 oils, embracing future innovation.

c) International or regional market potential

Today, both the production of microbial omega-3 oils, as well as the consumption of finished omega-3 rich food products containing such oils already occurs globally.

d) Amenability of the commodity to standardisation

Microbial omega-3 oils are approved for sale in different parts of the world, so therefore are a commodity amenable to standardization by the Codex Committee on Fats and Oils, CCFO.

⁸ Market survey data, GOED

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

The Codex Alimentarius Commission has developed Standards for almost all fats and oils commonly used in food. However, microbial omega-3 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 not Covered by Individual Standards* (CXS 19-1981) nor the *Standard for Named Animal Fats* (CXS 211-1999) nor the *Standard for Fish Oils* (CXS 329-2017) adequately cover the specific nature of microbial omega-3 oils.

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

There are several types of microbial omega-3 oils. The proposal is to develop an inclusive Codex Standard that can be easily updated to include other microbial omega-3 oils as newer types of oils increase in importance in international trade. Therefore, the work will cover a commodity that encompasses the various relevant microbial omega-3 oils.

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 work already undertaken on an international standard for the food use of microbial omega-3 oils. In addition, so far no similar work by other international organizations has been discovered. A Codex Standard covering all necessary quality and compositional factors is therefore required.

5. Relevance to the Codex strategic objectives

The proposed new work to establish a Standard for microbial omega-3 oils containing quality and compositional factors will ensure fair practices in trade in these commodities as well as ensure consumers' health protection, in line with Codex Alimentarius purpose and goals.

The objective, as described above, is in line with the Codex Strategic Plan 2020-2025, adopted by the 42nd Session of the Codex Alimentarius Commission. In this regard, the new work proposal will contribute particularly to Goals 1, 2 and 3:

Goal 1: *“Address current, emerging and critical issues in a timely manner.”*

Goal 2: *“Develop standards based on science and Codex risk-analysis principles.”*

Goal 3: *“Increase impact through the recognition and use of Codex Standards.”*

6. Information on the relation between the proposal and other existing Codex documents as well as other ongoing work

The Codex Alimentarius Commission has developed Standards for almost all fats and oils commonly used in food. However, microbial omega-3 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 not Covered by Individual Standards* (CXS 19-1981) nor the *Standard for Named Animal Fats* (CXS 211-1999) nor the *Standard for Fish Oils* (CXS 329-2017) adequately cover the specific nature of microbial omega-3 oils.

The proposed new work to establish a Standard for microbial omega-3 oils will take into account the provisions of relevant general subject standards, such as: the *General Principles of Food Hygiene* (CXC 1-1969), the *General Standard for the Labelling of Pre-packaged Foods* (CXS 1-1985), the *General Standard for Contaminants and Toxins in Food and Feed* (CXS 193-1995) and the *General Standard for Food Additives* (CXS 192-1995).

7. Identification of any requirement for and availability of expert scientific advice

The need for expert advice may be identified during the course of the work.

8. Identification of any need for technical input to the standard from external bodies so that this can be planned for

No technical input other than that which is to be found in the CCFO is required at this time.

9. The proposed timeline for completion of the new work

The work will be completed in two sessions of the Committee.