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ARAB INDUSTRIAL DEVELOPMENT, STANDARDIZATION AND MINING ORGANIZATION
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45th Meeting of the Codex Contact Points in the Arab Region

PREPARATION FOR THE 29th SESSION OF THE CODEX ALIMENTARIUS COMMITTEE OF FATS AND OILS (CCFO29)

Presented by (Yemen – Syria)

Agenda Item 9.3

Discussion paper - revision to the Standard for named vegetable oils

(CXS 210-1999)to adjust stearic acid content for high oleic acid sunflower seed oil

Purpose and scope of the standard

The purpose of this proposal is to revise the fatty acid (stearic acid C18:0) specification of high oleic sunflower edible oil in the Standard for named vegetable oils (CXS 210-1999) to facilitate its commercialization conditions.

Its relevance and timeliness

- ✓ High oleic sunflower oil is one of the most suitable oils for the formulation

of frying oils according to the latest recommendations of the World Health Organization.

- ✓ Low saturation and high heat resistance due to its oleic fatty acid content are unique

features of this oil, which is mainly cultivated in Eastern Europe, and its demand is increasing day by day due to its higher quality.

The main aspects to be covered

An amendment of the stearic acid content of high oleic sunflower oil, in CXS 210-1999, such that the acceptable range is amended from the current 2.9-6.2% to 2.1-6.2%.

4- An assessment against Section 2: Criteria for the establishment of work priorities

This proposal is consistent with the following criteria applicable to commodities:

4.1 General criterion:

Consumer protection from the point-of-view of health, food safety, ensuring fair practices in the food trade, and taking into account the identified needs of developing countries

The consumption of high oleic sunflower oil is increasing due to its low saturation and high heat resistance as a healthy oil, and its trade facilitation is considered due to the healthiness of the food basket. The revision will provide specifications for authenticity, hence contributing to consumer protection and the prevention of fraudulent practices.

4.2 Criteria applicable to commodities

follow **4.2.1 Volume of production and consumption in individual countries and volume and pattern of trade between Countries**

Recent fatty acid profile analyses from imported high oleic sunflower oil shipments over the past several years revealed the following:

- ❖ Over 38% of samples fall below the Codex-specified 2.9% minimum for stearic acid (highlighted in red in Table 1).
- ❖ Exactly 38% of shipments tested at the threshold value of 2.9% (highlighted in yellow in Table 1).
- ❖ Due to analytical variability and method uncertainty, some shipments may effectively be below the standard once retested at the destination.

- Only 23% of imported shipments met or exceeded the current 2.9% requirement

Table 1 - Fatty acid composition profile of imported high oleic sunflower oil shipments (2022-2025)

FAS	CODEX	2021	2022				2023					2024		
		1	2	3	4	5	6	7	8	9	10	11	12	13
C16:0	2.6-5	4.3	3.7	4	3.9	3.9	4.6	4.2	4.2	4.3	4	3.9	3.5	3.1
C18:0	2.9-6.2	2.6	2.9	3	2.9	2.4	2.4	3.5	2.5	3	2.3	2.9	2.9	2.9
C18:1	75-90.7	86.7	85.5	84.7	83.1	87	84.6	86.2	86.2	83.5	87.8	84	83.3	85.4
C18:2	2.1-17	4.5	5.6	6.2	8.5	4.8	5.9	5.1	5.1	6.9	4	7.2	9.5	7.5
C18:3	max0.3	0.1	0.1	0.1	0.1	<0.05	0.3	0.1	0.1	0.2	0.1	0.1	<0.1	<0.1
C20:0	0.2-0.5	0.3	0.2	0.3	0.7	0.3	0.3	0.2	0.2	0.3	0.2	0.3	0.3	0.3

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

There is significant variation in the fatty acid profile requirements for high oleic sunflower oil across different national legislations.

For example, the European Union and certain South American countries apply broader compositional tolerances than Codex, while other jurisdictions align strictly with Codex specifications.

This lack of harmonization has resulted in **rejected consignments**, **additional costs for exporters and importers**, and disruptions in the trade of otherwise compliant high oleic sunflower oil.

Revising the Codex specification would reduce these **discrepancies, facilitate harmonization, and eliminate unnecessary barriers to international trade**

4.2.3 International or regional market potential

High oleic sunflower oil is experiencing increasing global demand due to its nutritional profile, oxidative stability, and suitability for frying and processed food applications.

The oil is widely traded across Europe, Asia, the Middle East, and Latin America. In particular, developing countries with limited domestic oilseed production rely heavily on imports of high oleic sunflower oil to meet consumer demand for healthier frying oils.

Adjusting Codex specifications to reflect real-world production will ensure that global supply chains remain stable and responsive to growing international market demand.

4.2.4 Amenability of the commodity to standardization

High oleic sunflower oil is already covered under the Codex Standard for Named Vegetable Oils (CXS 210-1999). The oil is routinely traded in bulk shipments and subjected to internationally recognized testing methods for fatty acid composition.

Therefore, the commodity is highly amenable to standardization.

The only adjustment required is to :
revise the lower bound of the stearic acid range, in order to bring the specification into alignment with the natural compositional variability observed in modern high oleic sunflower cultivars.

This revision will:

- ensure continued access to high-quality, high oleic sunflower oil,
- maintain the functional requirements of frying oil formulations, and
- reflect the fatty acid profile of the oils currently available in the global market

4.2.5 Coverage of the main consumer protection and trade issues by existing or proposed general standards

Existing Codex standards and methods of analysis adequately cover authenticity, safety, and quality issues for high oleic sunflower oil.

The proposed revision does **not introduce any new risks or analytical requirements.**
Rather, it improves consumer protection and trade facilitation by ensuring that authentic oils are not excluded from the market due to outdated compositional limits. The revision thus strengthens Codex's role in safeguarding fair trade and consumer confidence in oil authenticity.

4.2.6 Number of commodities which would need separate standards indicating whether raw, semiprocessed or processed

No new commodities require separate standards. The only commodity under consideration in this project document is high oleic sunflower oil, which remains within the framework of the existing Standard for Named Vegetable Oils (CXS 210-1999).

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

No other international organizations have established different compositional standards for high oleic sunflower oil.

However, data from international trade associations and oilseed research institutes indicate a clear trend towards lower stearic acid levels in newly developed cultivars.

The International Sunflower Association (ISA) and regional oilseed boards have published reports supporting this variability.

This proposal complements those findings and aligns Codex specifications with the realities already acknowledged in scientific and trade circles.

5. Relevance to the Codex strategic objectives

This proposal is directly relevant to the Codex strategic objectives, particularly:

- **Protecting consumers' health**: The proposed revision does not compromise food safety or authenticity.

Stearic acid variability is a natural characteristic of high oleic sunflower cultivars and has no negative implications for nutritional quality or consumer protection.

- **Ensuring fair practices in the food trade**: Current specifications exclude a significant proportion of legitimately produced high oleic sunflower oils, mainly from Russia and other regions, creating unnecessary trade barriers. Revising the lower limit will facilitate global trade and harmonize Codex standards with market realities.
- **Facilitating the participation of developing countries**: developing countries depend heavily on imports of high oleic sunflower oil. This revision will reduce trade disruptions and ensure sustainable access to healthier edible oils

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

This revision concerns the Standard for named vegetable oils (CXS 210-1999). It does not require revision
of other Codex standards but will harmonize provisions across sunflower oils:

- ✓ Mid-oleic sunflower oil is already defined with a stearic acid range of 2.1–5.0%.
- ✓ Standard sunflower oil is defined with a range of 2.7–6.5%.
- ✓ Aligning the high oleic sunflower oil specification to 2.1–6.2% better reflects the continuum of sunflower

oil cultivars and maintains consistency across Codex standards for vegetable oils

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

No additional expert advice is required from JECFA, JMPR, or other FAO/WHO scientific bodies, since the revision does not concern food safety, toxicology, or nutrition risks.

The proposal is solely a compositional adjustment reflecting natural **agronomic variability in sunflower cultivars.**

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

No technical input from external bodies is required, as the change only concerns the numeric range of fatty acid composition already covered by Codex methods of analysis. The revision is straightforward and does not necessitate new testing methods or validation. **However, adjusting stearic fatty acid profile need to make amendments of physical and chemical chrematistics of high oleic sunflower oil**

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 two sessions to complete its work.

Indicative considerations for regional coordination

Given the reliance of many countries on imported edible oils, coordinated regional discussion ahead of CCFO29 may assist in assessing the broader relevance of the proposal, identifying any additional analytical data, and aligning positions on whether to support the initiation of new work or request further evidence.

- Support forwarding the project document to the Codex Alimentarius Commission (CAC49) for approval as new work, provided that the revision remains limited in scope to the proposed adjustment of the lower bound of stearic acid content;
- Encourage the collection and consideration of additional analytical data from a broader range of producing and importing countries, to confirm the global representativeness of the observed compositional variability;
- Emphasize that any revision should not compromise product identity, authenticity, or consumer confidence, and should maintain consistency across sunflower oil categories within CXS 210-1999; and Request that the work be undertaken in a manner that ensures transparency, inclusiveness, and alignment with existing Codex analytical methods, without introducing new testing requirements or trade barriers.


thank you
danke
謝謝
ngiyabonga
рахмат
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Баярлалаа
спасибо
faafetai lava
vinaka
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tapadh leat
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