

codex alimentarius commission



FOOD AND AGRICULTURE
ORGANIZATION
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WORLD
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Agenda Item 5

CX/FO 03/5

JOINT FAO/WHO FOOD STANDARDS PROGRAMME

CODEX COMMITTEE ON FATS AND OILS

Eighteenth Session

London, United Kingdom, 3 – 7 February 2003

PROPOSED DRAFT AMENDMENTS TO THE STANDARD FOR NAMED VEGETABLE OILS (Super Palm Olein and Mid Oleic Acid Sunflower Oil, Inclusion of new data in Table 3 and Table 4 of the Standard)

COMMENTS AT STEP 3

The following comments have been received from Argentina, Brazil, Canada, Cuba, France, Germany, Mexico, and Spain in response to CL 2002/23-FO and CL 20002/47-FO.

Part I: GENERAL COMMENT

CANADA

It is Canada's opinion that before the Codex Committee on Fats and Oils considers (*revising the Codex Standard for Named Vegetable Oils*), the Committee should first consider how it will address nomenclature issues associated with traditional oils that have had their fatty-acid profile modified. With the potential number of "new" oils that could be developed with modified saturated, oleic or linolenic acid content, the Codex Committee on Fats and Oils could find itself in the position of constantly having to create a new definition for each modified oil.

Using sunflower oil as an example, the oleic acid content in the current standard is 14.0 - 39.4% and the "high oleic acid" content is 75 – 90.7%. It is Canada's opinion that expressions such as "high-oleic acid" sunflower oil', or "mid-oleic acid" sunflower oil would not provide meaningful information to consumers with respect to the altered nature of the oil. The altered oleic acid content could provide benefits with respect to its use as a deep-frying oil because of the high content of oleic acid and virtual absence of highly oxidizable polyunsaturated fatty acids. However, these modifications also impact on the nutritional value of the oil when used as a salad dressing due to their decreased essential fatty-acid content.

Canada notes that the Committee has not agreed on appropriate criteria for identifying a particular product being "high" or "medium" oleic acid oil. For example, by how much should the oleic acid content be increased in order to qualify being labelled as "high" oleic acid? Currently, the standard provides for a range of 75 - 90.7% oleic acid for sunflower oil but 70 - 83.7% for "high oleic" safflower oil.

For most consumers, a reference to "oleic acid" content would be meaningless. This is particularly important since most consumers purchase vegetable oils based on their name and intended use. Canada is concerned with the increasing prevalence of oils which have been modified in a manner impacting on the end use of the product, or which do not clearly inform the consumer that the product being purchased has in some way been modified from the traditional oil.

Therefore, Canada is of the view that this issue should be addressed by CCFO before any further decisions are taken with respect to inclusion in the Standard of modified oils bearing traditional names. Another matter which

the Committee should address, in addition to the process for naming "modified oils", is the process for revising the standard to include those oils. With the potential for a large number of oils with modified fatty acid profiles to be placed in trade, a process needs to be established to allow the standard to include those oils without requiring the CCFO to meet and constantly revise the Standard.

It is Canada's view that labelling a particular food as "high oleic" or "mid-oleic" constitutes a claim regarding the amount and type of fatty acid. Therefore these products would be subject to the provisions of the *Codex Guidelines on Nutrition Labelling*. Canada would suggest, therefore, that Section 7 of the *Standard for Named Vegetable Oils* be revised to reflect this requirement. Canada proposes the following text for consideration for inclusion under Section 7.1 Name of the Food.

"Where the name of the oil includes a specific reference to its fatty acid content, the product shall also be labelled in, accordance with the Codex Guidelines on Nutritional Labelling (CAC/GL 2 - 1985).

Part II: COMMENT TO PALM SUPEROLEIN

ARGENTINA

ARGENTINIAN OBSERVATIONS ON THE CODEX DOCUMENT

“AMENDMENT TO THE NORM FOR SPECIFIC VEGETABLE OILS: REQUEST FOR OBSERVATIONS AND INFORMATION”

In reply to the request for comment on the document referenced above, we wish to inform you that the CAA (Argentinean Food Code) contains stipulations for palm oil but not for palm super olein oil, which would be a fractionation obtained by a fractionated crystallisation process from the palm *Elaeis guineensis*.

BRAZIL

CL 2002/23-FO - PROPOSED DRAFT AMENDMENT TO THE CODEX STANDARD FOR NAMED VEGETABLE OILS - INCLUSION OF PALM SUPEROLEIN – (At Step 3 of the Procedure)

- Regarding the product palm superolein, Brazil does not comment on the fatty acids composition, chemical and physical characteristics and identity characteristics due to the non-existence of production of the oil in our country.

- Brazil considers it important that other countries, which produce palm superolein, send more data in order to greater characterize the products.

Justification: Brazil has the potential to produce palm oil and observed that the Brazilian raw material characteristic is mostly non-saturated, supposing that the palm superolein which will be produced in the country will have the different characteristics than those shown on this CL.

Item 8 - Methods of Analysis and Sampling:

Brazil agrees with the inclusion of the official methodology of the American Oil Chemist's Society (AOCS).

Table 1 - Fatty Acid Composition of Vegetable Oils:

Considering that there aren't statistics and evidence of occurrence of coconut oil production obtained from the specie *Cocos nucifera* as well as high oleic acid safflower and sunflower oils in Brazil, it isn't possible to give an opinion on the new values presented for these oils.

Appendix - Other Quality and Composition Factors:

Item 2 - Composition Characteristics:

Brazil would like to question the reason for keeping the indexes 2.2 (“Reichert values”), 2.3 (“Polenske values”), 2.4 (“Halphen test”), 2.7 (“Crismar value”) and 2.9 (“Baudouin test”) as composition characteristics.

Justification: Actually it is noticed routine use of the gaseous chromatography for the determination of the fatty acid composition of fats and oils, is not used anymore for the indexes/tests indicated in the above items; the use of those indexes/tests involves the manipulation of toxic reagents; the other analyses will take longer.

Item 3 - Chemical and Physical Characteristics:

Table 2 - Chemical and Physical Characteristics of Crude Vegetable Oils:

- Brazil considers that the footnote of the Table, as presented in CL 2000/25-FO, should continue in the proposal: " *Iodine values shown in the Table were calculated from the fatty acid composition with the exception of those for palm oil, palm Kernel oil, palm olein, palm stearin (Wijs method)"; Brazil considers that the unit cg/g for Iodine Index must be kept in the proposal, for effect of uniformity.

Item 5 - Methods of Analysis and Sampling:

Brazil agrees with the inclusion of the official methodology of the American Oil Chemists’ Society (AOCS).

CUBA

We have no comments on Circulars CL 2002/22-FO and CL 2002/23-FO.

FRANCE

It should be noted that (the quantities, which are the subject of international trade, remain insignificant). This is not favourable to the production of a Codex standard.

MEXICO

We suggest that Mexico should accept Malaysia’s proposal in this matter.

The Malaysian proposal refers to the inclusion of superolein in the Codex Alimentarius list of oils, which is natural since Malaysia is the largest producer of palm oil in the world. The physico-chemical characteristics given for the oil seem to be correct; no cold test is mentioned that might give high enough values to compete with other vegetable oils such as soya and dewaxed sunflower oil or winterized cotton oil.

Part III: COMMENT TO MID OLEIC SUNFLOWER OIL

FRANCE

France would like to make a few comments on the amendment regarding the inclusion of sunflower oil with medium oleic acid content.

- Firstly, (the composition ranges in terms of fatty acids) between the various varieties proposed for CODEX (traditional sunflower oil, sunflower oil with medium oleic acid content and sunflower oil with high oleic acid content) (do not allow clear characterisation from one variety to another).
- Secondly, it seems premature to define a variety with medium oleic acid content while clearly (the composition range of this variety is still very wide and does not appear to be stabilised).
- Finally, relating to the range of fatty acids which appears to be very wide (for example 43.1 to 78.1 for C18: 1), the range proposed for sterols is paradoxically somewhat narrow.

This is why the American proposal could be readjusted at a later stage towards stabilised varieties offering a narrower range for oleic acid (type 45 to 65), thus avoiding the confusion caused by allowing the intervals between different varieties of sunflower to overlap.

It should also be noted:

- That (the quantities which are the subject of international trade) (American statistics report exports in the region of 20,000 tonnes) (remain insignificant). This is not favourable to the production of a Codex standard,
- That the interval proposed for the saponification index does not reflect the variability suggested by the fatty acids composition intervals,
- That the interval proposed for the iodine index (calculated from the fatty acids composition) comprises the intervals previously used for sunflower oils and sunflower oils with high oleic acid content, which does not seem to reflect the variability of the proposed fatty acids composition.
- That the interval proposed for the refraction index comprises that used for sunflower oil with high oleic acid content.

To clarify these various points, it would be desirable for the number of batches checked (representative nature) corresponding to the different values proposed (particularly for fatty acids, sterols and the indices mentioned above) to be specified to the Committee. This additional information moreover was part of the information to be supplied, which was agreed by the ad hoc working party set up at the 1999 session (and which met again at the 2001 session) for the introduction of a new oil in this standard.

SPAIN

We make the following comments with regard to the preliminary draft standard for sunflower oil with medium oleic acid content:

- 1.- In the fatty acid content and with regard to oleic acid (point 3.1. of Appendix 2), a range of 43.1 to 71.8 is specified that in some cases could overlap with that corresponding to sunflower oils with high oleic acid content.
- 2.- With regard to the percentage composition in sterols (point 4.1.), the ranges of values indicated for campesterol, stigmasterol, delta-7-stigmastenol and delta-7-avenasterol, we consider them to be very restrictive and with a too narrow margin.
- 3.- The delta -7-stigmastenol and delta-7-avenasterol contents are lower than the contents in other varieties of oils from *Helianthus annuus L* seeds, in percentage terms

Part IV: INCLUSION OF NEW DATA

FRANCE

France has no new values to propose.

It would be desirable for the delegations who supply values to also specify the number of different batches checked in order to ensure that they are representative of production.

PartV: COMMENT TO THE STANDARDS OF OTHER VEGETABLE OILS (OUT OF STEP PROCEDURE)

GERMANY

Fatty acid composition of Sesameseed oil as determined by GLC from 16 authentic samples from Nigeria (5), Sudan (5), India (5), and Uganda (1)

New proposed values in bold type

| Fatty acid | Alinorm 01/17 Appendix II Table 1 | Proposal Germany 2001 |
|-------------------|--|----------------------------------|
| 6:0 | NN | |
| 8:0 | NN | |
| 10:0 | NN | |
| 12:0 | NN | |
| 14:0 | NN - 0,1 | |
| 16:0 | 7,9 – 12,0 | |
| 16:1 | 0,1 - 0,2 | |
| 17:0 | NN - 0,2 | |
| 17:1 | NN - 0,1 | |
| 18:0 | 4,8 - 6,1 | 4,8 - 6,7 |
| 18:1 | 35,9 - 42,3 | 35,9 – 43,0 |
| 18:2 | 41,5 - 47,9 | 39,1 - 47,9 |
| 18:3 | 0,3 - 0,4 | 0,3 - 0,5 |
| 20:0 | 0,3 – 0,6 | 0,3 – 0,7 |
| 20:1 | NN - 0,3 | |
| 20:2 | NN | |
| 22:0 | NN - 0,3 | NN – 1,1 |
| 22:1 | NN | |
| 22:2 | NN | |
| 24:0 | NN - 0,3 | |
| 24:1 | NN | |