

# CODEX ALIMENTARIUS COMMISSION



Food and Agriculture  
Organization of the  
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World Health  
Organization

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Agenda Item 6

CRD10

## JOINT FAO/WHO FOOD STANDARDS PROGRAMME

### CODEX COMMITTEE ON FATS AND OILS

25<sup>th</sup> Session

Kuala Lumpur, Malaysia, 27 February - 3 March 2017

#### COMMENTS ON PROPOSED DRAFT REVISION OF THE *STANDARD FOR NAMED VEGETABLE OILS* (CODEX STAN 210-1999): ADDITION OF PALM OIL WITH HIGH OLEIC ACID (OXG)

(Comments of Brazil, Egypt, European Union, India and Philippines)

#### BRAZIL

##### INTRODUCTION

At the 38<sup>th</sup> Session of Codex Alimentarius Commission (CAC), the addition of Palm Oil with High Oleic Acid (OxG) to the Standard for Named Vegetable Oils (CODEX STAN 210-1999) was approved as a new work and at the 24<sup>th</sup> Session the Codex Committee on Fats and Oils (CCFO) agreed to establish an electronic Working Group (eWG), led by Colombia and co-chaired by Ecuador, to prepare a proposed draft revision of the *Standard for Named Vegetable Oils*.

On CL 2016/44-FO, Codex members and observers were invited to submit comments, at Step 3, on the proposed draft revision of the Standard for Named Vegetable Oils (CODEX STAN 210-1999), adding the provisions to palm oil with high oleic acid (OxG), prepared by the mentioned EWG.

There is production of hybrid palm OxG (*Elaeis oleifera* x *Elaeis guineensis*) in Brazil. Unfortunately, Brazil was not able to send data during the eWG or the CL 2016/44-FO.

The aim of this CRD is to present Brazilian data and propose some changes in the draft standard for palm oil with high oleic acid (OxG), at step 3, based on the analytical results of hybrid palm OxG oil produced in Brazil.

##### BRAZIL PROPOSAL

Thirty-eight samples of hybrid palm OxG oil produced in 2016 in the North region of Brazil (Pará state) were analyzed. The tests of the fatty acid profiles were carried out using the AOCS Official Method Ce 1a-13. The results obtained are shown in Table 1, and the following differences were observed in the hybrid palm OxG oil produced in Brazil.

**Table 1.** Comparison among fatty acids composition established in the Draft of CL 2016/44-FO and the fatty acids composition for palm oil with high oleic acid (OxG) produced in Brazil.

Draft of CL 2016/44-FO		Analytical results	
		Minimum	Maximum
C6:0 (caproic acid)	ND	ND	ND
C8:0 (caprylic acid)	ND	ND	ND
C10:0 (capric acid)	ND	ND	ND
C12:0 (lauric acid)	ND – 0.4	0.06	0.20
C14:0 (myristic acid)	ND – 0.7	0.29	0.63
C16:0 (palmitic acid)	25.0 – 34.0	24.87	28.83
C16:1 (palmitoleic acid)	ND – 0.8	0.16	0.30
C17:0 (heptadecanoic acid)	ND	<b>0.08</b>	<b>0.20</b>
C17:1 (heptadecenóico acid)	ND	ND	ND
C18:0 (stearic acid)	2.0 – 3.8	3.01	<b>4.46</b>
C18:1 (oleic acid)	48.0 – 58.0	51.65	56.79

C18:2 (linoleic acid)	10.0 – 14.0	11.07	12.69
C18:3 (linolenic acid)	ND – 0.6	0.40	0.47
C20:0 (arachidic acid)	ND – 0.4	0.31	0.37
C20:1 (eicosenoic acid)	ND	<b>0.15</b>	<b>0.18</b>
C22:0 (behenic acid)	ND	<b>0.06</b>	<b>0.49</b>
C22:1 (erucic acid)	ND	ND	ND
C22:2 (eicosadienóico acid)	ND	ND	ND
C24:0 (lignoceric acid)	ND	ND	<b>0.13</b>
C24:1 (nervoic acid)	ND	ND	ND

Based on these analytical results and considering that the limits in the table 1 of Codex Stan 210-1999 are expressed with only one decimal place, we propose the following changes in the draft revision presented in CL 2016/44-FO, as shown in Table 2.

**Table 2** Brazil's proposal of fatty acid composition for palm oil with high oleic acid (OxG).

Fatty acid	Palm oil high oleic acid
C6:0 (caproic acid)	ND
C8:0 (caprylic acid)	ND
C10:0 (capric acid)	ND
C12:0 (lauric acid)	ND – 0.4
C14:0 (myristic acid)	ND – 0.7
C16:0 (palmitic acid)	25.0– 34.0
C16:1 (palmitoleic acid)	ND – 0.8
C17:0 (heptadecanoic acid)	ND – <b>0.2</b>
C17:1 (heptadecenóico acid)	ND
C18:0 (stearic acid)	2.0 – <del>3.8</del> <b>4.5</b>
C18:1 (oleic acid)	48.0 – 58.0
C18:2 (linoleic acid)	10.0 – 14.0
C18:3 (linolenic acid)	ND – 0.6
C20:0 (arachidic acid)	ND – 0.4
C20:1 (eicosenoic acid)	ND – <b>0.2</b>
C22:0 (behenic acid)	ND – <b>0.5</b>
C22:1 (erucic acid)	ND
C22:2 (eicosadienóico acid)	ND
C24:0 (lignoceric acid)	ND
C24:1 (nervoic acid)	ND – <b>0.2</b>
C6:0 (caproic acid)	ND

ND - non detectable, defined as  $\leq 0.05\%$

## CONCLUSION

In line with strategic goal 1 of the Commission Strategic Plan 2014-2019, regarding the responsibility on the establishment of international food standards in response to needs identified by Members, and considering the data presented, the Delegation of Brazil proposes to make the following changes in the minority fatty acid ranges listed below:

- 1) Establish maximum limit of C17:0 as 0.2;
- 2) Increase the maximum limit of C18:0 from 3,8 to 4.5;
- 3) Establish maximum limit of C20:1 as 0.2;
- 4) Establish maximum limit of C22:0 as 0.5;
- 5) Establish maximum limit of C24:1 as 0.2.

## EGYPT

Egypt would like to thank Colombia and Ecuador respectively of the EWG, for their work on the proposed addition of Palm Oil with High Oleic Acid (OxG) in the Standard for Named Vegetable Oils (CODEX STAN 210-1999).

Egypt suggests reviewing the oleic acid content of this oil or set it under type mid oleic acid.

Egypt disagrees with the proposal that the Tocopherol and Tocotrienol levels must be presented with whole numbers (zero decimal) instead of ND ( $\leq 0.05$ ).

## EUROPEAN UNION

The European Union and its Member States (EUMS) would like to thank Colombia and Ecuador for leading the work on the addition of palm oil with high oleic acid in the *Standard for Named Vegetable Oils* (CODEX STAN 210-1999).

The EUMS support the proposed draft revision of the standard as presented in Appendix I of document CX/FO 17/25/6. However, the new category of palm oil containing 48-58 % of oleic acid would seem to fall within mid oleic acid range. Therefore, it would be more appropriate to call the new category "Palm Oil – Mid Oleic Acid" instead of "Palm Oil – High Oleic Acid".

## INDIA

**General Comment:**

India supports the Agenda as it presents another option for healthy oil.

**Specific Comment:**

Appendix I

Section 2. Description

2.1 Product Definitions

India would like to amend the definition as under:

Palm oil-high oleic acid (high oleic acid palm oil) is derived **directly** from the fleshy mesocarp of hybrid palm fruit OxG (*Elaeis oleifera* x *Elaeis guineensis*).

**Rationale:**

To avoid adulteration with other possible methods while deriving palm oil.

## PHILIPPINES

The Philippines supports the Proposed Draft revision to the Standard for Named Vegetable Oils for the Addition of Palm Oil with High Oleic Acid (OxG) made by the eWg who worked between October 21, 2015-June 15, 2016.

However, the new text added on the range of C18:1 (oleic acid) was found to be overlapping with the super olein of palm oil which is 43.2-49.2 (Source: Palm Oil Uses, 6th edition, MPOB, 2009).