



**JOINT FAO/WHO FOOD STANDARDS PROGRAMME
CODEX COMMITTEE ON FATS AND OILS
Twenty-Seventh Session
Virtual, 18 - 26 October 2021
Comments from Mexico**

**PROPOSED DRAFT AMENDMENT/REVISION TO THE STANDARD FOR NAMED VEGETABLE OILS
(CXS 210-1999): Inclusion of Avocado oil**

(Step 3)

Proposed changes to relevant sections are indicated in **bold** and underline

PART I

2. DESCRIPTION

2.1 Product definitions

Avocado oil is derived from the mesocarp of the avocado fruit (*Persea americana*) ~~which and is can be extracted~~ by processing the whole fruit or ~~just~~ the mesocarp **only**.

Note: Extra virgin and Virgin oils are derived using the mesocarp only.

3. ESSENTIAL COMPOSITION AND QUALITY FACTORS

3.1 GLC ranges of fatty acid composition (expressed as percentages)

Samples falling within the appropriate ranges specified in Table 1 are in compliance with this Standard. Supplementary criteria, for example national geographical and/or climatic variations, may be considered, as necessary, to confirm that a sample is in compliance with the Standard.

Table 1: Fatty acid composition of avocado oil as determined by gas liquid chromatography from authentic samples (expressed as percentage of total fatty acids)

Note: The values in this table apply to extra virgin, virgin, crude and refined oils.

Fatty acid	<u>Avocado Oil</u>
<u>C6:0</u>	=
<u>C8:0</u>	=
<u>C10:0</u>	=
<u>C12:0</u>	=
<u>C14:0</u>	ND - 0.3
<u>C16:0</u>	11.0 - 26.0
<u>C16:1</u>	4.0 - 172.050
<u>C17:0</u>	ND - 0.3
<u>C17:1</u>	ND - 0.12
<u>C18:0</u>	0.1 - 1.3
<u>C18:1</u>	4253.0 - 70.0

<u>C18:2</u>	<u>7.8 - 19.0</u>
<u>C18:3</u>	<u>0.5ND - 2.1</u>
<u>C20:0</u>	<u>ND - 0.3</u>
<u>C20:1</u>	<u>ND - 0.3</u>
<u>C20:2</u>	<u>:</u>
<u>C22:0</u>	<u>ND - 0.5</u>
<u>C22:1</u>	<u>:</u>
<u>C22:2</u>	<u>:</u>
<u>C24:0</u>	<u>ND - 0.2</u>
<u>C24:1</u>	<u>ND - 0.2</u>

PART II**APPENDIX****OTHER QUALITY AND COMPOSITION FACTORS****3. CHEMICAL AND PHYSICAL CHARACTERISTICS**

Chemical and Physical Characteristics are given in Table 2.

Table 2: Chemical and physical characteristics of crude avocado oil

Note: The values in this table apply to extra virgin, virgin and refined oils

<u>Parameter</u>	<u>Avocado Oil</u>
<u>Relative density (x°C/water at 20°C)</u>	<u>0.910 - 0.920</u>
<u>Apparent density (g/ml)</u>	<u>0.908 - 0.915</u>
<u>Refractive Index (ND 40°C)</u>	<u>1.460 - 1.470</u>
<u>Saponification Value (mg KOH/g oil)</u>	<u>170 - 198</u>
<u>Iodine Value</u>	<u>80 - 90</u>
<u>Unsaponifiable matter (g/Kg)</u>	<u>19.0 max</u>

4. IDENTITY CHARACTERISTICS

Levels of desmethylsterols in vegetable oils as a percentage of total sterols are given in Table 3.

Table 3. Levels of desmethylsterols in crude avocado oil from authentic samples as a percentage of total sterols.

Note: The values in this table apply to extra virgin, virgin, crude and refined oils.

	<u>Avocado Oil</u>
<u>Cholesterol</u>	<u>ND - 0.5</u>
<u>Brassicasterol</u>	<u>ND - 0.2</u>
<u>Campesterol</u>	<u>4.0 - 8.3</u>
<u>Stigmasterol</u>	<u>ND - 2.0</u>
<u>Beta-sitosterol</u>	<u>79.0 - 93.4</u>
<u>Clerosterol</u>	<u>1.0 - 2.0</u>
<u>Delta-5-avenasterol</u>	<u>2.0 - 8.0</u>
<u>Delta-7-stigmastenol</u>	<u>ND - 1.0</u>

<u>Delta-7-avenasterol</u>	<u>ND - 1.0</u>
<u>Others</u>	<u>0.0 - 2.0</u>
<u>Total sterols (mg/kg)</u>	<u>3500 - 6500</u>