CODEX ALIMENTARIUS COMMISSION E

Food and Agriculture Organization of the United Nations

World Health Organization

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Agenda Item 4.1 **CX/FO 19/26/4 Add.1**

JOINT FAO/WHO FOOD STANDARDS PROGRAMME

CODEX COMMITTEE ON FATS AND OILS

26th Session

Kuala Lumpur, Malaysia, 25 February - 1 March 2019

PROPOSED DRAFT REVISION TO THE STANDARD FOR OLIVE OILS AND OLIVE POMACE (CODEX STAN 33-1981)

Comments at Step 3 (Replies to CL 2018/76/OCS-FO)

Comments of Australia, Brazil, Canada, Ecuador, Egypt, European Union, Iraq, Peru, Syrian Arab Republic, Turkey, IOC and AOCS

Background

1. This document compiles comments received, in response to CL 2018/76/OCS-FO issued in November 2018 with a deadline of 15 January 2019. Annex I contains the comments received through Codex Online Commenting System (OCS), and Annex II are the comments received by email.

Explanatory notes on the appendix

2. The comments submitted are, hereby attached as **Annex I** and are presented in table format.

Annex I

Comments on the Proposed draft revision to the Standard for Olive Oils and Olive Pomace (CXS 33-1981)

Comment	Member/Observer
GENERAL COMMENTS	
As part of the electronic working group, Australia put forward information and evidence to members on pyropheophytin a (PPPs) and 1,2-diacyl-glycerols (DAGs) for inclusion in the Standard. Australia would appreciate consideration of this evidence by members and discussion of these parameters at the CCFO meeting.	**Australia**
Brazil thanks for the opportunity to present comments on the revision of Olive and Olive Pomace oils standard and congratulates Spain, Argentina and Canada for the excellent work developed in the EWG In general, Brazil supports the changes proposed for the revision of Olive and Olive Pomace oils. The main observation is that organoleptic parameters that do not have an official method of reference should not be moved to the body of the standard. Brazil also would like to suggest the Committee to discuss “lampante olive oil” and to consider the inclusion of this definition in the Standard clarifying if this product represent any health risk. According to the Standards Comparison Document, this expression is mentioned in some standards (USDA, South Africa Standard, EU and IOC Standard). Current Codex Standard does not mention this definition and the lack of information on the matter may lead to, at least, misinterpretation of the Codex Standard. Another important remark is that the Committee should consider defining the limit for linolenic acid because there is no reason to leave this parameter opened.	**Brazil**
Canada appreciates the efforts of the electronic working group (eWG) to develop the draft document for discussion at the CCFO26 plenary session. We appreciate the opportunity to provide comments on the proposed draft revision to the Standard for Olive Oils and Olive Pomace Oils (CODEX STAN 33-1981) in Annex I of the CX/FO 19/26/4 - Rev.1.	**Canada**
With reference to the Circular Letter No. CL 2018/76/OCS-CCFO, whereby CCFO invites Codex members and observers to present their comments at Step 3 regarding the "Proposed Draft Revision of the Standard for olive oils and olive pomace oils (CXS 33-1981): revision of sections 3, 8 and Appendix” we are pleased to advice the following: Ecuador wishes to convey our thanks to all the countries that worked and contributed to the Proposed Draft Revision of the Standard for olive oils and olive pomace oils; and recognises that the making of such a standard will generate a positive contribution to the guidelines, rules and recomendations agreed with the purpose of collaboration in the protection of consumer health and in the promotion of fair practices in the trade of olive oil; nevertheless, our country states that at the present moment it does not produce this type of oil, and therefore we could not contribute any data.	**Ecuador**
Egypt thanks the Working Group for its great efforts in reviewing this standard	**Egypt**
The European Union (EU) thanks the chair and co-chairs of the electronic Working Group (eWG) for the very good progress on this subject and welcomes the proposed draft revision to the standard. The EU is pleased that the comments it provided in the eWG were taken into account in the document.	**European Union** European Union Competence. European Union Vote.

Comment	Member/Observer
We are agree with proposed draft	**Iraq**
(i) General comments: Peru is grateful for the invitation for comments about the Proposed Draft revision of the Standard for olive oils and olive pomace oils (CXS 33-1981): revision of sections 3, 8 and the Appendix, and in this respect Peru is in agreement with the document with the exception of the several specific comments that follow below. (ii) Specific comments: these are as follows: • The document mentions the word "…organoleptic", the proper term is "... sensory". The Standard CAC/GL 31-1999 in its GUIDELINES FOR THE SENSORY EVALUATION OF FISH AND SHELLFISH IN THE LABORATORY, indicates: Sensory as related to the use of the sensory organs. • In Page 5, in the Table: Composition in fatty acids by gas chromatography (% of total fatty acids) Virgin olive oils [Olive Oil] [Olive oil composed of refined olive oil and virgin olive oil] Refined olive oil [Olive pomace oil] [Olive pomace oil composed of refined pomace oil and virgin olive oil] Refined olive pomace oil C18:3 ≤ 1,4 Peru proposes that due to the influence of latitude over the agricultural behaviour of the olive tree varieties produced in Peru and taking as reference the historic values from analyses carried out by domestic companies on the virgin olive oils, the value proposed for C18:3 should be ≤ 1,4. Regarding [Olive oil composed of refined olive and virgin olive oil] Refined olive oil and the [Olive pomace oil composed of refined olive pomace oil and virgin olive oil] Refined olive pomace oil, Peru does not process such products. Our country attaches data from test reports that supports the technical proposal, See annex A.1. • In the Table for Composition of desmetilesterols (% of total sterols) and in the note a): Campesterol ≤ 4,0 (a) ≤ 4,7 (a) When an authentic oil contains a naturally occurring level of campesterol >4.0% and ≤4.5% ≤ 4.7, it is considered virgin or extra virgin olive oil if the level of stigmasterol is ≤1,4%, the level of ∆7-stigmastenol is ≤0,3% and the level of stigmastadiens is ≤ 0.05 mg/kg. The other parameters shall comply with the limits laid down in the Standard. Peru states that due to the influence of latitude over the agricultural behaviour of the olive tree varieties produced in Peru and taking as reference the historic values from analyses carried out by domestic companies on the virgin olive oils, the value proposed for Campesterol is : ≤ 4,7 instead of ≤ 4,0 . Our country attaches data from test reports that support the technical proposal, see annex A.2. Annex (will be sent via normal mail as the system will not allow proper sight of the data) SUMMARY OF TEST REPORTS A.1 Composition of fatty acids C18:3, third party laboratory Report of Quantification Limit Result % total of FF. AA. Test Method C18:3 (□ 6) N° 3-8590/15 0.007 < 0.007 AOAC 996.06 c41 C18:3 (□ 3) N° 3-8590/15 0.007 1.070 AOAC 996.06 c41 C 18:3 1,0 R.CEE2568/91 X Y CE796/02 C18:3 (□ 6) N° 3-04247/14 0.007 < 0.007 AOAC 996.06 c41 C18:3 (□ 3) N° 3-04247/14 0.007 1,016 AOAC 996.06 c41 C18:3 (□ 6) N° 3-04119/14 0.007 < 0,007 AOAC 996.06 c41 C18:3 (□ 3) N° 3-04119/14 0.007 1.162 AOAC 996.06 c41 C18:3 (□ 6) N° 3-04236/15 0.007 < 0.007 AOAC 996.06 c41 C18:3 (□ 3) N° 3-04236/15 0.007 1.412 AOAC 996.06 c41 C18:3 (□ 6) N° 1-04967/17 0.007 < 0.007 AOAC 996.06 c41 C18:3 (□ 3) N° 1-04967/17 0.007 1,12 AOAC 996.06 c41 C18:3 (□ 6) N° 1-04968/17 0.007 < 0.007 AOAC 996.06 c41 C18:3 (□ 3) N° 1-04968/17 0.007 1,19 AOAC 996.06 c41 C 18:3 16F251 1.07± CEE 2568/91 Annex X and B Mod UE 2015/1833 annex IV C 18:3 40244 1.12 CEE 2568/91 Annex X method A C 18:3 30450 1.04 CEE 2568/91 Annex X method A C 18:3 40245 1.08 CEE 2568/91 Annex X method A A.2 Campesterol, third party laboratory Report No. Campesterol	**Peru**

Comment	Member/Observer
% total of EE Test Method 4.6 % REG.CEE 2568/91 Annex V 16F251 4,0 % RCEE 2568/91 modified by UE No. 1348/2013 annex IV 40244 4.7 % CEE 2568/91 Annex V 30450 4.2 % CEE 2568/91 Annex V 40245 4.6 % CEE 2568/91 Annex V	
1- We affirm the importance of keeping third type of virgin olive oil with its footnote as the following: Ordinary virgin olive oil: virgin olive oil with a free acidity, expressed as oleic acid, of not more than 3.3 grams per 100 grams and whose other characteristics correspond to those laid down for this category 1. [1] This product may only be sold direct to the consumer if permitted in the country of retail sale 2- We suggest to modify Refined olive oil definition as the following: Refined olive oil: olive oil obtained from virgin olive oils by refining methods2 which do not lead to alterations in the initial glyceridic structure. It has a free acidity, expressed as oleic acid, of not more than 0.30 grams per 100 grams and its other characteristics [physicochemical and organoleptic] correspond to those laid down for this category1 [1] This product may only be sold direct to the consumer if permitted in the country of retail sale 2 These methods may aiming to the complete or partial removal of chemical compounds responsible for organoleptic descriptors, it is including soft conditions and milder treatments like any combination of heating, reduced pressure and/or filtering with bleaching earth. 3- We affirm the percentage of the following fatty acids: C17:0 = % (0.0 – 0.4) C17:1= %(0.0 – 0.6) 4- We suggest raising the percentage of the Arachidic fatty acid to: C20:0= %(0.0 – 0.6 0.8) 5- We affirm the importance of adding a footnote in in Desmethylsterol composition (% total sterols) table to referre the high percentage of Δ7-stigmastenol in virgin olive oil as following: Δ7-stigmastenol ≤ 0.5 (b) (b) If the value is >0,5 and ≤0,8%, it is considered virgin or extra virgin olive oil and the campesterol level must be ≤3,3, stigmasterol ≤1,4 and ΔECN42 ≤|0,1|. 6- We suggest correcting the Value of total sterols especially in Refined olive oil as following: VOO, ROO and OOC (≥ 1,000 mg/kg) Refined olive-pomace oil (ROPO) (≥ 1,800 mg/kg) (OPOC) (≥ 1,600 mg/kg) 7- We affirm the importance of adding all Values relating to ordinary olive oil especially waxs and stigmastadienes content as following:	**Syrian Arab Republic**

Comment	Member/Observer
Waxes content Extra Virgin olive oil and Virgin olive oils ≤150 mg/kg (d) Ordinary Virgin olive oils ≤250 mg/kg(*) (d) Sum of C42+C44+C46 (*) sum of C40+C42+C44+C46 stigmastadienes content Extra Virgin olive oil and Virgin olive oils ≤ 0.05 mg/kg Ordinary olive oil ≤0.10 8- We suggest correcting the formula of Absorbency the ultraviolet region (K) according to COI/T.20/doc No 19/REV.4 (absolute value instead of Quadrature)	
Please correct the spelling of or in this text:: Determination of relative density According toIUPAC 2.101, with the appropriate conversion factor ISO 6883 o AOCS Cc 10c-95	**AOCS - American Oil Chemists' Society**
SPECIFIC COMMENTS	
ESSENTIAL COMPOSITION AND QUALITY FACTORS	
3. ESSENTIAL COMPOSITION AND QUALITY FACTORS Canada notes that the current draft has the following proposed text changes related to the physicochemical and organoleptic characteristics of EVOO and VOO:	**Canada**
• The EU can accept the adaptation of the definition of "Extra Virgin Olive Oil" and "Virgin Olive Oil" by adding the terms "and organoleptic" to physicochemical characteristics and by adding another decimal place for the expression of the limit for free acidity for the Extra Virgin Olive Oil. • The EU can agree to remove the Ordinary Virgin Olive Oil from the CODEX STAN 33. • Regarding the definition of Refined Olive Oil: The EU supports the proposal to let the refined olive oil definition as it is now in CODEX STAN 33. The EU is of the opinion that there should not be any reference to organoleptic characteristics in the definition of this category; The EU could also accept the second definition in brackets: • [Refined olive oil: olive oil obtained from virgin olive oils by refining methods [(including methods aiming to the complete or partial removal of chemical compounds responsible for organoleptic descriptors)] which do not lead to alterations in the	**European Union**

Comment	Member/Observer
initial glyceridic structure. It has a free acidity, expressed as oleic acid, of not more than 0.30 grams per 100 grams and its other characteristics correspond to those laid down for this category] • Regarding the definition of Refined Olive-Pomace Oil, the EU supports the proposal to let the definition Refined Olive-Pomace Oil as it is now in CODEX STAN 33. The EU is of the opinion that there should not be any reference to organoleptic characteristics in the definition of this category; • The EU supports the proposal to adopt the designation of “olive oil composed of refined olive oil and virgin olive oils” for the blend of refined olive oil and virgin olive oils. The EU is in favour of that proposal as it would bring more clarity on the nature of the product considered. Indeed, the EU believes that the current designation of "olive oil" being used as a generic term for all categories of olive oils, including for the blend of refined olive oil with virgin olive oils, is confusing for consumers and should be clarified. The EU considers that in the case of olive oil composed of refined olive oil and virgin olive oil, the definition should not refer to "organoleptic characteristics". The EU considers that usually this category when placed on the market is mainly composed of refined oil. • The EU does not support to adopt the designation of “olive pomace oil composed of refined olive pomace oil and virgin olive oils” for the blend of refined olive oil and virgin olive oils. Contrary to the above for olive oil, the EU is of the opinion that the designation "olive-pomace oil" currently used in CODEX STAN 33-1981 does not entail misinterpretations. A change in the designation of that category would therefore bring unnecessary complexity as regards the labelling of this product. The EU considers that in the case of olive pomace oil, the definition should not refer to "organoleptic characteristics". The EU considers that usually this category when placed on the market is mainly composed of refined olive-pomace oil. • For the sake of a greater harmonization, the EU can agree to swap the limit of Virgin Olive Oil’s main defect median from 2.5 to 3.5 and add for Extra Virgin Olive Oil and Virgin Olive Oil one decimal place for the expression of the median of the fruity attribute. - A maximum intensity of 3.5 for the median of the main defect is the limit already provided for in the IOC standard for virgin olive oil. • The EU can accept the new limits set for C14:0, C17:0, C17:1, C18:2, C20:1. • The EU cannot agree to set the palmitic acid range values between 7.0 % and 20.0 %. - Accepting this proposal would imply lowering the current lower limit value of 7.5% to 7.0% for most of the standards (only Australia and South Africa are at 7.0%). - The Chair indicates that lowering the lower limit of palmitic acid content would not involve a significant additional risk of fraud because other parameters can be used to detect it. However, the European Union would like to know more	

Comment	Member/Observer
about the justification of lowering such limit. In particular, the European Union would be interested in knowing the proportion of authentic olive oils containing less than 7.5% of palmitic acid, as well as in receiving more scientific evidences about the level of fraudulent blends that could be disregarded by lowering this limit and its effective detection by other parameters. • The EU cannot agree to set the lower limit of the oleic acid percentage at 53%. - High content of oleic acid is a major factor of identity of olive oil and confers to the product part of its healthy properties. Therefore, the European Union considers necessary to be very cautious on considering changes on oleic content limits. The European Union would like to receive more information on volumes of authentic olive oils produced with a problem in relation to the current lower limit in oleic acid of the CODEX STAN 33-1981. If it concerns small proportion of the production in some countries, alternative ways should be considered to solve the problem of such authentic olive oils by allowing its marketing in the domestic markets were they are produced. • The EU can agree with lowering the waxes' limit of edible virgin oils to 150 mg/kg, taking into account only the waxes with 42, 44, and 46 carbon atoms. • The EU can accept to fix the stigmastadienes' limit to 0.05 mg/kg. • The EU can accept to change the refined olive oil limit of K270 from 1.10 to 1.25. This is consistent with the current limits established in the IOC trade standard. The former limit of 1.10 was trade restrictive and the current limit of 1.25 was defined on the basis of scientific evidences. • The EU can accept to change the olive oil limit of K270 from 0.90 to 1.15. This is consistent with the current limits established in the IOC trade standard. The former limit was trade restrictive and the current limit of 1.15 was defined on the basis of scientific evidences. • The formulas for the calculation of ΔK are not correct, the squared (^2) should be deleted; It should read as follow: $\Delta\ 270 = 270 - (\ 266 + \ 274)/2$ $\Delta\ 268 = 268 - (\ 264 + \ 272)/2$ • The EU agrees to include in the standard fatty acid ethyl esters (EE) content as an Extra Virgin Olive Oil (EVOO) quality parameter with a limit of 35 mg/kg. However, the information that the parameter has to be applied only to extra virgin olive oil is missing and should be added to the standard. The proposed limit of 35 mg/kg is based on the results of previously conducted studies. A lower limit could lead to problems with certain quality EVOO where the presence of EE can be related to variety, period of harvest or seasonal reasons. • The EU can agree to change the title "Minimum value for total sterols" into "Value for total sterols". For the sake of preciseness, the EU invites however to consider another wording "Total sterol content".	

<table>
<tr><th>Comment</th><th>Member/Observer</th></tr>
<tr><td>

However, the limits in the table are not correct. The table for the total sterols content should read as follows:
<table>
<tr><td>Virgin olive oils</td><td rowspan="2">≥ 1,000 mg/kg</td></tr>
<tr><td>[Olive oil composed of refined olive oil and virgin olive oils]</td></tr>
<tr><td>Refined olive oil</td><td rowspan="2">≥ 1,600 mg/kg</td></tr>
<tr><td>[Olive-pomace oil composed of refined olive pomace oil and virgin olive oils]</td></tr>
<tr><td>Refined olive-pomace oil</td><td>≥ 1,800 mg/kg</td></tr>
</table>

The EU can agree to delete the term "maximum" from the titles related to the content of Erythrodiol and Uvaol and sigmastadienes.

</td><td></td></tr>
<tr><td colspan="2">Extra virgin olive oil: virgin olive oil with a free acidity, expressed as oleic acid, of not more than 0.8<u>0</u> grams per 100 grams and whose other physicochemical <u>and organoleptic</u> characteristics correspond to those laid down for this category.</td></tr>
<tr><td>Brazil agrees to include “physicochemical and organoleptic” in the definition of Extra virgin olive oil.

Justification: Parameters for these characteristics are already defined in the standard.</td><td>Brazil</td></tr>
<tr><td>Comment: bold and underline <u>physicochemical</u></td><td>Canada</td></tr>
<tr><td>Egypt agrees with add this text</td><td>Egypt</td></tr>
<tr><td>Extra Virgin Olive Oil: Olive oil with free acidity, expressed in oleic acid, with no more than 0,8<u>0</u> grams per 100 grams and whose other remaining physicochemical and <u>~~and organolepticsensory~~</u> characteristics correspond to those laid down for this category

The Standard CAC/GL 31-1999 in its GUIDELINES FOR THE SENSORY EVALUATION OF FISH AND SHELLFISH IN THE LABORATORY, provides the definition: Sensory is related to the use of the sensory organs.</td><td>Peru</td></tr>
<tr><td>Turkey supports editorial change and also addition of "organoleptic".</td><td>Turkey</td></tr>
<tr><td colspan="2">Virgin olive oil: virgin olive oil with a free acidity, expressed as oleic acid, of not more than 2.0 grams per 100 grams and whose other characteristics physicochemical <u>and organoleptic</u> correspond to those laid down for this category</td></tr>
<tr><td>Brazil agrees to include “physicochemical and organoleptic” in the definition of Virgin olive oil.

Justification: Parameters for these characteristics are already defined in the standard.</td><td>Brazil</td></tr>
<tr><td>Canada agrees with the above text which reflects the outcome of the eWG discussions as noted on page 3 of the eWG R9 Summary Report posted on the Codex Online Forum. We note that this is a compromise solution to the various definitions being proposed while other possibilities are being studied.</td><td>Canada</td></tr>
</table>

Comment	Member/Observer
bold and underline **physicochemical**	**Canada**
Egypt agrees with add this text	**Egypt**
Virgin Olive Oil: Virgin Olive Oil with free acidity, expresed in oleic acid, with no more than 2,0 grams per 100 grams and whose other remaining physicochemical **and ~~organoleptic~~ sensory** characteristics correspond to those laid down for this category The Standard CAC/GL 31-1999 in its GUIDELINES FOR THE SENSORY EVALUATION OF FISH AND SHELLFISH IN THE LABORATORY, provides the definition: Sensory is related to the use of the sensory organs.	**Peru**
Turkey supports addition of "organoleptic".	**Turkey**
~~***[Ordinary virgin olive oil***: virgin olive oil with a free acidity, expressed as oleic acid, of not more than 3.3 grams per 100 grams and whose other characteristics correspond to those laid down for this category1].~~	
Brazil does not agree to remove the definition of Ordinary virgin olive oil from the standard. Justification: “Ordinary virgin olive oil” is already part of Codex Standard, therefore, there is already a consensus that this product does not represent any food safety problem. In this sense, Brazil believes that “ordinary virgin olive oil” should remain in the standard combined with the footnote that indicate that this product may only be sold directly to the consumer if permitted in the country of retail sale. By doing so, the “ordinary virgin olive oil” will continue to be clearly defined and labelled, avoiding unnecessary actions to prohibit or determining the recall of a product that does not represent any health risk	**Brazil** .
Canada also supports removing the category of Ordinary Virgin Olive Oil (see proposal P2 on page 13-14 of the eWG R7 Global Summary Report), if this is a category that is not used and cannot be differentiated on the basis of chemical or sensory parameters. However, while most countries agree with this proposal, further discussion may be needed to address concerns of countries that could be impacted.	**Canada**
Egypt agrees with delete this text.	**Egypt**
Refined olive oil: olive oil obtained from virgin olive oils by refining methods which do not lead to alterations in the initial glyceridic structure. It has a free acidity, expressed as oleic acid, of not more than 0.30 grams per 100 grams and its other characteristics correspond to those laid down for this category[1]	
Brazil agrees to maintain Refined olive oil definition as it is and to remove the footnote that this product may only be sold direct to consumer if permitted in the country of retail sale. Justification: There is no need to detail the process of refining of olive oil because it can be restrictive to new technologies. Refined olive oil is adequate for human consumption. If there is not any food safety problem related to this type of oil and it is only a choice of consumers it is better to keep this classification in the standard, especially because there is a remarkable trade on it.	**Brazil**
Turkey supports this definition. Because other defitions include some parameters that are not measurable and open to comment.	**Turkey**
FOONOTE 1 This product may only be sold direct to the consumer if permitted in the country of retail sale. *[Pending to remove this note by the CCFO plenary]*	
~~**1**This product may only be sold direct to the consumer if permitted in the country of retail sale. *[Pending to remove this note by the CCFO plenary]*~~	**Canada**

Comment	Member/Observer
Canada understands that this item will be brought to the plenary, and would like to reiterate support for its removal. Canada agrees with the comments of the chair that this footnote is a trade restriction that should not be in an international standard such as Codex (see comments on P3-3 on page 40-41 of the eWG R7 Global Summary Report).	
Refined Olive Oil: Olive oil obtained from virgin olive oils using refining techniques that do no alter the initial glyceridic structure. It has a free acidity, expresed as oleic acid, of not more than 0,30 grams per 100 grams and whose other remaining [Physicochemical *and* ~~*organoleptic*~~*sensory*] characteristics correspond to those laid down for this category.[1] The Standard CAC/GL 31-1999 in its GUIDELINES FOR THE SENSORY EVALUATION OF FISH AND SHELLFISH IN THE LABORATORY, provides the definition: Sensory is related to the use of the sensory organs.	**Peru**
[**Refined olive oil:** olive oil obtained from virgin olive oils by refining methods [*(including methods aiming to the complete or partial removal of chemical compounds responsible for organoleptic descriptors)]* which do not lead to alterations in the initial glyceridic structure. It has a free acidity, expressed as oleic acid, of not more than 0.30 grams per 100 grams and its other characteristics correspond to those laid down for this category]	
In this regard, Canada would like to reiterate the need to develop methods for detection of refined oils using these types of technologies. Adulteration of EVOO and VOO with these types of soft deodorized refined olive oils is more difficult to detect. Note that Canada has added in square brackets the reference to "physicochemical and organoleptic" characteristics, as this has been also identified as an item that needs further discussion during plenary (see page 39 of the eWG R7 Global Summary Report).	**Canada**
Added text in bold [**Refined olive oil:** olive oil obtained from virgin olive oils by refining methods ~~[[(*including methods aiming to the complete or partial removal of chemical compounds responsible for organoleptic descriptors*)]~~**(*including methods aiming to the complete or partial removal of chemical compounds responsible for organoleptic descriptors*)] [such as soft deodorization]** which do not lead to alterations in the initial glyceridic structure. It has a free acidity, expressed as oleic acid, of not more than 0.30 grams per 100 grams and its other ~~characteristics correspond to th~~**[physiochemical][and organleptic]**characteristics correspond to those laid down for this category] Canada supports the second option, which is more outcome-based, and would therefore have the potential to include new technologies that could be developed in the future. In addition, we propose to include as an example, soft deodorization, to indicate clearly what types of treatment would be covered. Canada agrees with some member's comment during the eWG discussions that a "reference to a soft deodorization in the definition of "refined oil" would help identify this practice as something reserved for this oil category, so it cannot be applied in oils intended to be marketed as virgin oils. This would constitute fraud, which may not be detected by physicochemical analysis."	**Canada**
*[**Olive Oil** obtained from virgin olive oils using refining methods, [inclusive of soft conditions and hydraulic treatments] [including any combination of heating, reduced pressure and/or filtration with bleaching earths], that do not produce alterations in the initial glyceridic structure. It has a free acidity expressed as oleic acid, of not more than 0,30 grams per 100 grams and whose other remaining physicochemical [and ~~organoleptic]~~ sensory] characteristics correspond with those laid down for this category in this standard].*	**Peru**

Comment	Member/Observer
The Standard CAC/GL 31-1999 in its GUIDELINES FOR THE SENSORY EVALUATION OF FISH AND SHELLFISH IN THE LABORATORY, provides the definition: Sensory is related to the use of the sensory organs	
~~[Olive oil]~~ [Olive oil composed of refined olive oil and virgin olive oils]: oil consisting of a blend of refined olive oil and virgin olive oils suitable for human consumption. It has a free acidity, expressed as oleic acid, of not more than 1 gram per 100 grams and its other characteristics [*physicochemical and organoleptic characteristics]* correspond to those laid down for this category.[1]	
Brazil supports the substitution of Olive oil by Olive oil composed of refined olive oil and virgin olive oil, but Brazil does not support the inclusion of "organoleptic characteristics" in the description of this type of oil Justification: There is no need to define organoleptic parameters for this type of oil and there is no reference parameters to this oil in the standard.	**Brazil**
~~[Olive oil]~~ [~~Olive~~ Olive oil composed of refined olive oil and virgin olive ~~oils]~~oils: oil consisting of a blend of refined olive oil and virgin olive oils suitable for human consumption. It has a free acidity, expressed as oleic acid, of not more than 1 gram per 100 grams and its other characteristics [*physicochemical and organoleptic characteristics]* correspond to those laid down for this category.[2] Canada notes that during the discussions on proposals P38 and P39 (on page 154-155 of the eWG R7 Global Summary Report), members of the eWG agreed to change the definitions for these types of oil in order to make them more clear to consumers and to harmonize the definitions among the various standards. Therefore Canada proposes to reflect these discussions in the draft report, i.e. to remove the brackets from the designations, apply a strikethrough to the original designations, and put in Bold and underlined, the new designations. This change should be carried throughout all the rest of the draft revisions to the standard where they appear.	**Canada** remove square brackets
~~[Olive Oil]~~ [Olive Oil composed of refined olive oil and Virgin Olive Oil]: Oil composed from a mixture of refined olive oils and virgin olive oils fit for human consumption. It has a free acidity, expressed as oleic acid, of not more than 1 gram per 100 grams and whose other remaining [*physicochemical and ~~organoleptic~~sensory*] characteristics correspond to those laid down for this category.[2] The Standard CAC/GL 31-1999 in its GUIDELINES FOR THE SENSORY EVALUATION OF FISH AND SHELLFISH IN THE LABORATORY, provides the definition: Sensory is related to the use of the sensory organs.	**Peru**
Turkey supports the change on name.	**Turkey**
~~[Olive oil]~~ [Olive oil composed of refined olive oil and virgin olive oils]: oil consisting of a blend of refined olive oil and virgin olive oils suitable for human consumption. It has a free acidity, expressed as oleic acid, of not more than 1 gram per 100 grams and its other characteristics [*physicochemical ~~and organoleptic~~ characteristics]* correspond to those laid down for this category.[2]	**Turkey**

[26][1]The country of retail sale may require a more specific designation.

Comment	Member/Observer
Refined *olive-pomace oil*: oil obtained from crude olive-pomace oil by refining methods which do not lead to alterations in the initial glyceridic structure. It has a free acidity, expressed as oleic acid, of not more than 0.3 grams per 100 grams and its other characteristics *[physicochemical and organoleptic]* correspond to those laid down for this category[1].	
Brazil does not agree to include “organoleptic characteristics” in the definition of Refined olive-pomace oil. Justification: There is no need to define organoleptic parameters for this type of oil and there is no reference parameters to this oil in the standard.	**Brazil**
Olive Pomace Oil*:* Oil obtained from crude olive pomace oil using refining methods that do not lead to alterations in the initial glyceridic structure. It has a free acidity, expressed as oleic acid, of not more than 0,30 grams per 100 grams and whose other remaining [*physicochemical and ~~organoleptic~~sensory*] characteristics correspond to those laid down for this category[1] The Standard CAC/GL 31-1999 in its GUIDELINES FOR THE SENSORY EVALUATION OF FISH AND SHELLFISH IN THE LABORATORY, provides the definition: Sensory is related to the use of the sensory organs.	**Peru**
Refined *olive-pomace oil*: oil obtained from crude olive-pomace oil by refining methods which do not lead to alterations in the initial glyceridic structure. It has a free acidity, expressed as oleic acid, of not more than 0.3 grams per 100 grams and its other characteristics ~~*[physicochemical and organoleptic]*~~*[physicochemical]* correspond to those laid down for this category[1].	**Turkey**
~~***Olive-pomace oil]***~~ ***[Olive-pomace oil composed of refined olive pomace oil and virgin olive oils]***: oil consisting of a blend of refined olive-pomace oil and virgin olive oils. It has a free acidity, expressed as oleic acid, of not more than 1 gram per 100 grams and its other characteristics *[physicochemical and organoleptic*] correspond to those laid down for this category.[2]	
Brazil supports the substitution of Olive-pomace oil by Olive-pomace oil composed of refined olive oil and virgin olive oil, but Brazil does not support the inclusion of “organoleptic characteristics” in the description of this type of oil. Justification: There is no need to define organoleptic parameters for this type of oil and there are not any reference parameters to this oil in the standard.	**Brazil**
[~~***Olive-pomace oil]***~~ ~~***[Olive-pomace***~~ ***Olive-pomace oil composed of refined olive pomace oil and virgin olive*** ~~***oils]***~~***oils***: oil consisting of a blend of refined olive-pomace oil and virgin olive oils. It has a free acidity, expressed as oleic acid, of not more than 1 gram per 100 grams and its other characteristics *[physicochemical and organoleptic*] correspond to those laid down for this category.[2]	**Canada** remove square brackets
Egypt agrees with the new text Egypt agrees with the new difinations text	**Egypt**
~~***[Olive Pomace Oil]***~~ ***[Olive Pomace Oil composed from a mixture of refined olive pomace oil and virgin olive oil]:*** Oil made from a mixture of refined olive pomace oil and virgin olive oil fit for human consumption. It has a free acidity, expresed as oleic acid, of not more than 1 gram per 100 grams and whose other remaining [*physicochemical and ~~organoleptic~~sensory*] characteristics correspond to those laid down for this category.[2]	**Peru**

Comment	Member/Observer
The Standard CAC/GL 31-1999 in its GUIDELINES FOR THE SENSORY EVALUATION OF FISH AND SHELLFISH IN THE LABORATORY, provides the definition: Sensory is related to the use of the sensory organs.	
[~~***Olive-pomace oil***~~***] [Olive-pomace oil composed of refined olive pomace oil and virgin olive oils]***: oil consisting of a blend of refined olive-pomace oil and virgin olive oils. It has a free acidity, expressed as oleic acid, of not more than 1 gram per 100 grams and its other characteristics ~~*[physicochemical and organoleptic*~~*[physicochemical*] correspond to those laid down for this category.[2]	**Turkey**
Turkey supports the change on name. [~~***Olive-pomace oil***~~***] [Olive-pomace oil composed of refined olive pomace oil and virgin olive oils]***: oil consisting of a blend of refined olive-pomace oil and virgin olive oils. It has a free acidity, expressed as oleic acid, of not more than 1 gram per 100 grams and its other characteristics *[physicochemical and organoleptic*] correspond to those laid down for this category.[2]	**Turkey**
3.1 Organoleptic characteristics (odour and taste) of virgin olive oils	
Consensus was not reached on this change. Australia did not agree to change the value of the median of the defect for virgin olive oil from ≤2.5 to ≤3.5. The value should remain at ≤2.5.	**Australia**
Brazil agrees to remove organoleptic characteristics of Ordinary virgin olive oil and to enlarge the median of defects for Virgin olive oil to ≤ 3,5.	**Brazil**
Canada believes this issue requires more discussion, and suggests putting the original value and the new, proposed value in square brackets, i.e. [< 2.5] [<3.5]. Regarding increasing the limit for the median of defects for VOO from < 2.5 to < 3.5 , Canada notes the arguments provided by the chair and responses from various countries on this issue (see eWG discussion document D3 and summary of comments to proposal P11 on page 70 of the eWG R7 Global Summary Report). Canada maintains that the change is not necessary. In our opinion, at a Median of Defects of 3.5, defects are universally detectable and unpleasant, and so this parameter should be no higher than 2.5. The current draft shows the median of fruity attributes for EVOO and VOO as "> 0.0" which indicates greater than or equal to 0.0. This appears to be a serious typo, as we do not recall any discussion to change the median of fruity to include "equal to 0.0"; nor a record of this change in the summary report. We note that fruity attribute is one of the main organoleptic characteristics of EVOO and VOO, and allowing "equal to 0.0" would indicate that these oils may not have this attribute, which we strongly disagree with.	**Canada**
The Table and the values inside are accepted.	**Turkey**
~~[* or when the median of the defect is less than or equal to 2.5 and the median of the fruity attribute is equal to 0.]~~	
Egypt agrees with delet this text	**Egypt**
Fatty acid composition as determined by gas chromatography (% total fatty acids)	

Comment	Member/Observer
Brazil supports the proposed changes in the ranges of fatty acids that are pointed in the table. Besides that, Brazil would like to suggest the Committee to define a limit for linolenic acid for olive oil.	**Brazil**
Further, Canada agrees with the Chair's comments and explanation in the eWG discussion document D4 and on page 124 of R7 Global Summary Report, in relation to lowering the limit for palmitic acid C16:0 from 7.5 to 7.0: "if a national standard has a specific value it is reasonable to consider that there is a previous study that has forced the country to lower the limit. In this case, (lowering the limit of palmitic acid by 0.5 %) has no known risk of fraud". The same argument holds true for lowering the limit for oleic acid C18:1 from 55.0 to 53.0, linoleic acid C18:2 from 3.5 to 2.5, and for most of the changes that had consensus. These changes will help ensure that the standard is inclusive of authentic oils from all countries (proposal P29 –P31, pages 129-135 of the eWG R7 Global Summary Report). Canada agrees with the comments from a member country with regards to setting the limits for fatty acids: "Ranges within each fatty acid should represent the true range of the fatty acid composition across olive oils around the world. No olive oil standard should discriminate and not accept demonstrated natural variations based on genetics and/or environmental conditions. Recent changes in fatty acid composition of many seed oils following genetic improvement programs deemed the fatty acid profile a rather obsolete analytical method to determine adulterations. Imposing overly prescriptive limits would exclude genuine olive oils in order to detect adulterations which are more easily determined by other analytical techniques". Canada notes the eWG discussions in document D4 and the comments related to proposals P25 to in the eWG R7 Global Summary Report (page 119 and onwards). Canada agrees with the draft proposals as these reflect the outcomes of the discussion, on areas to be changed.	**Canada**
Egypt agrees withe Fatty acid composition % for all fatty acid except C14:0% and Egypt suggest to keep the previous percent for C14:0 (0.0-0.5).	**Egypt**
The Table and the values inside are accepted.	**Turkey**
Content of 2-glyceryl monopalmitate (%)	
Brazil agrees with the proposed parameters, although we consider that this type of fraud is not so usual, and the method used is very laborious.	**Brazil**
Canada agrees with the proposed changes in the tables for the above parameters. We note however that while most of the changes could be considered minor, these might be of concern if any of the values are used in decision trees or when looking at a suite of results rather than an isolated individual result.	**Canada**
The Table and the values inside are accepted.	**Turkey**
Sterol and triterpene dialcohol composition	
Brazil agrees with the proposed changes in the desmethylsterol composition table.	**Brazil**
Desmethylsterol composition (% total sterols)	
Canada is reviewing this item and would provide comments after this review.	**Canada**

Comment	Member/Observer
[a] When an authentic oil contains naturally a level of campesterol >4,0% and ~~≤4,5%~~≤ 4,7, ~~it is considered virgin olive oil or extra virgin olive oil if the level of stigmasterol is ≤1,4%, the level of D~~7-~~estigmastenol is ≤0,3%~~ it is considered virgin or extra virgin olive oil if the level of stigmasterol is ≤1,4%, the level of D7-stigmastenol is ≤0,3% ~~and the level of stigmastadiens is ≤ 0,05 mg/kg~~. The remaining parameters will comply with and meet the limits laid down by the Standard. Peru states that due to the influence of latitude over the agricultural behaviour of the olive tree varieties produced in Peru and taking as reference the historic values from analyses carried out by domestic companies on the virgin olive oils, the value proposed for Campesterol is : ≤ 4,7 instead of ≤ 4,0 . Our country is attaching (vía mail) data from test reports that support the technical proposal, see annex A.2.	**Peru**
The Table and the values inside are accepted.	**Turkey**
~~Minimum~~ Value for total sterols	
Brazil agrees with the proposed changes in the total sterols values table.	**Brazil**
Canada agrees with the proposed changes in the tables for the above parameters. We note however that while most of the changes could be considered minor, these might be of concern if any of the values are used in decision trees or when looking at a suíte of results rather than an isolated individual result.	**Canada**
~~Maximum~~Erythrodiol and uvaol content (% total sterols)	
Brazil agrees with the proposed changes in the erythrodiol and uvaol content table.	**Brazil**
Canada agrees with the proposed changes in the tables for the above parameters. We note however that while most of the changes could be considered minor, these might be of concern if any of the values are used in decision trees or when looking at a suíte of results rather than an isolated individual result.	**Canada**
Waxes content	
Brazil agrees with the proposed changes in the content and definition of waxes.	**Brazil**
Canada agrees with the proposed changes in the tables for the above parameters. We note however that while most of the changes could be considered minor, these might be of concern if any of the values are used in decision trees or when looking at a suíte of results rather than an isolated individual result.	**Canada**
ΔECN42 - Maximum difference between the actual and theoretical ECN 42 triglyceride content	
Brazil agrees with the proposed changes in the statements for the ΔECN42 content table.	**Brazil**
Canada agrees with the proposed changes in the tables for the above parameters. We note however that while most of the changes could be considered minor, these might be of concern if any of the values are used in decision trees or when looking at a suíte of results rather than an isolated individual result.	**Canada**
~~Maximum~~ stigmastadienes content	

Comment	Member/Observer
Brazil agrees with the proposed changes in the content of stigmastadienes.	**Brazil**
Canada agrees with the proposed changes in the tables for the above parameters. We note however that while most of the changes could be considered minor, these might be of concern if any of the values are used in decision trees or when looking at a suíte of results rather than an isolated individual result.	**Canada**
Peroxide value (milliequivalents of active oxygen/kg oil)	
Brazil agrees with the proposed changes in the statements for peroxide value.	**Brazil**
Canada agrees with the proposed changes in the tables for the above parameters. We note however that while most of the changes could be considered minor, these might be of concern if any of the values are used in decision trees or when looking at a suíte of results rather than an isolated individual result.	**Canada**
Absorbency in~~ultra-violet K270~~the ultraviolet region ($K_{1cm}^{\%}$)	
Brazil agrees with the proposed changes in the values for absorbency in the ultraviolet region.	**Brazil**
Others	
Consensus was not reached on the inclusion of fatty acid ethyl esters as a parameter. Australia did not support the inclusion of FAEE in the Standard. FAEE can be influenced by variety and is not a consistent quality parameter, this line should be removed from the standard.	**Australia**
Brazil agrees with the inclusion of limit for fatty acid ethyl esters.	**Brazil**
Canada strongly recommends that before adding new parameters to the standard (e.g. FAEE, 1,2 DAG, PPP), a thorough review of the data supporting their suitability and usefulness should be conducted. The tests should demonstrate these without discriminating against regional/ varietal/ environmental variations that cause particular oils from some countries to fail other chemical tests. The standard comparison table also shows two countries and one regional standard have 1,2 Diacylglycerols (1,2 DAG) and Pyropheophytin a (PPP) in their national standards – Australia, South Africa and California. Some eWG members have provided strong rationale in support of adding these parameters in the body or in the Appendix of the standard (see P7, page 55-56 of R7). This test not only provides an indication of the quality of the oil but also as a marker for oil adulteration with soft deodorized oils. The eWG is encouraged to take these comments into consideration and explore the possibility of future addition to the standard based on a review of robust scientific data and information. Fatty Acid Ethyl Esters (FAEE) is a new parameter in the EU and IOC standards to indicate quality of the oil, based on studies conducted by the IOC. The proposal for P5, is to include this in the Codex standards in order to harmonize with the EU and IOC standards. Although supported by most members, Canada is of the opinion that this issue needs further review and more data could be obtained from member countries to support its inclusion in the standard. Canada supports the use of robust scientific data when adding new parameters to the standard. Canada would also like the committee to explore various methods that could indicate not only the quality of the oil but also the addition of deodorized oils.	**Canada**

Comment	Member/Observer
8. METHODS OF ANALYSIS AND SAMPLING	
~~**Fatty acid ethyl esters - FAEE**~~ Consensus was not reached on the inclusion of this method of analysis and sampling. Australia did not support the inclusion of FAEE in the Standard. The method is not reliable, limits are still debatable and can be influenced by variety.	**Australia**
~~**According toCOI/T.20/Doc. N° 28**~~ As per previous comment.	**Australia**
Brazil agrees with the proposed changes in the methods section.	**Brazil**
Canada is still reviewing this item and would provide comments after its review.	**Canada**
The EU agrees with the updates regarding this section.	**European Union**
OTHER QUALITY AND COMPOSITION FACTORS	
QUALITY CHARACTERISTICS Brazil does not agree to move the table of organoleptic characteristics to the main body of the standard. Brazil also suggests excluding the phrase “virgin olive oils: see Section 3 of the Standard”. Justification: there is no official method for sensory evaluation of Refined olive oil, Refined olive-pomace oil and Olive-pomace oil composed of refined olive pomace oil and virgin olive oils, thus there is no reason to move it to the body of the standard. Moreover, it is not necessary to mention about Section 3 for organoleptic characteristics of Virgin olive oils in the appendix because it is already there.	**Brazil**
In this regard, Canada is of the opinion that all edible oils should be fit for human consumption and as such should not exhibit any indication of rancidity. Organoleptic considerations or some other tests to demonstrate this should be required. The location of different parameters, i.e. whether this is in the body or in the appendix of the standard, is only important if the appendix is somehow considered to be optional or informative only. Canada agrees that more discussion is needed to reach a consensus on the organoleptic characteristics of the other classification of olive oils (e.g. refined olive oil, refined olive pomace oil, and blends of these oils with virgin olive oils) and whether the table containing these parameters should be moved from the appendix to the body of the standard.	**Canada**
IT WILL BE DISCUSSED IF THIS TABLE IS MOVED TO SECTION 3 OF THE MAIN BODY OF THE STANDARD Appendix I • The EU does not support the moving of the organoleptic characteristics of refined olive oil, olive oil composed of refined olive oil and virgin olive oils, refined olive-pomace oil and olive pomace oil from the Appendix to the main body of the Standard, as it would then be considered as essential quality factors of the standard, which is not the case for those categories.	**European Union**

Comment	Member/Observer
In addition, moving the organoleptic characteristics from the Appendix to the main body of the Standard would require extra research to define attributes, to calibrate an organoleptic method for those categories (to be used for classification and control purposes) and to establish relevant limits. • The EU supports the removal from the Appendix of the reference to organoleptic characteristics for refined olive oil and refined olive-pomace oil, and then, the term “acceptable”. If the term "acceptable" should be maintained in the Appendix, the EU can agree to define the term "acceptable" as "with no rancidity symptoms". • In respect of «Olive oil composed of refined olive oil and virgin olive oils» and «Olive-pomace oil», the EU does not support to define the term "Good" as “Fruity with no rancidity symptoms.” Referring in the definition of Good to "no rancidity symptoms" is not appropriate to olive oil and olive-pomace oil because those categories can be obtained by blending refined olive oil and refined olive-pomace oil with virgin olive oils and therefore, might have slight defects, including rancidity. • The EU agrees to remove appearance criteria and would support to remove the colour criteria as well. □ The EU is of the opinion that the subjective indications related to colour and appearance of olive oil categories other than virgin olive oils, as expressed in the standard, are impossible to assess from a control point of view and is therefore in favour to removing those indications from the Appendix of the Standard.	
2. ~~COMPOSITION CHARACTERISTICS~~ CHEMICAL AND PHYSICAL CHARACTERISTICS Brazil agrees to remove these parameters from the appendix.	**Brazil**
~~3. CHEMICAL AND PHYSICAL CHARACTERISTICS~~ Brazil agrees with the changes in the statements of the refractive index, saponification value, iodine value and unsaponifiable matter.	**Brazil**
4. METHODS OF ANALYSIS AND SAMPLING Brazil agrees with the proposed changes in the methods section.	**Brazil**

Annex II

Comments of the International Olive Council (IOC)

1. General remarks:

The International Olive Council (IOC) thanks the chair and co-chairs of the electronic Working Group (eWG) for the excellent work on this subject and welcomes the proposed draft revision to the standard.

Despite the IOC status of observer in the Codex meeting, we would like to highlight that the IOC is the reference intergovernmental organisation in charge of the management of the UN international agreement on olive oil and table olives. Our standard is based on scientific studies and evidences obtained by the work of experts from all IOC member and non-member countries.

The IOC welcomes the changes proposed by the experts of the eWG.

The IOC Executive Secretariat has revised the document CX/FO 19/26/4 Rev.1 (November 2018), by also asking feedback to its member countries. We found a number of discrepancies between this version and the latest version of the IOC trade standard (COI/T.15/NC No 3/Rev. 12, June 2018) but only a few formal amendments are included with no substantial change.

The IOC is available to carry out additional studies that will be needed or appropriate.

2. Comments on the document CX/FO 19/26/4 Rev.1:

Section 3

[Olive oil] [Olive oil composed of refined olive oil and virgin olive oils]

[*Olive*-pomace *oil] [Olive-pomace oil composed of refined olive pomace oil and virgin olive oils]*

Free acidity should be expressed in both cases using two decimal digits.

This is suggested to standardise with the definition of other categories and with the IOC regulation.

Section 3.1

Table on fatty acid composition

All values needs to be expressed using two decimals. Please note that some decimals are mistakenly indicated using commas instead of dots.

This is suggested to standardise with the definition of other categories and with the IOC regulation.

Table on 2-glyceryl monopalmitate

The values for virgin olive oil, olive oil composed of refined olive oil and virgin olive oils, and refined olive oil should be indicated with two decimal digits (they should all read “14.00”).

This is suggested to standardise with the definition of other categories and with the IOC regulation.

Notes b and c of table on desmethylsterol composition

Δ-5.23 and Δ-5.24 should read as Δ-5,23 and Δ-5,24 (i.e. using commas)

Table on total sterols

Please use the term “total sterol content” instead of “total sterols”.

Please use a value of 1000 mg/kg for [olive oil composed of refined olive oil and virgin olive oils] and refined olive oil. Please split the last two items in the table: the first one (olive-pomace oil composed...) should have a value of 1600 mg/kg. The second one only should have 1800 mg/kg.

Table on ΔECN42

Please use two decimal digits for the three values in the table.

This is suggested to standardise with the international and IOC regulation.

Table on Absorbency in the ultraviolet region

Absorbency should read “absorbancy”.

The first column should indicate “270 nm or 268 nm” instead of 270nm/268nm.

The formulae reported in note (5) are incorrect: the square number should be removed to both formulae.

Others

For fatty acid ethyl esters, a note is required indicating that this limit only applies to Extra virgin olive oil.

This is needed because this parameter is used as a quality indicator based on studies carried out in the context of IOC expert groups.

Other quality and composition factors – 1. Quality characteristics. Table on insoluble impurities

The value for virgin olive oils should be expressed using two decimals (“0.10”).

This is suggested for consistency reason with the IOC regulation.