CODEX ALIMENTARIUS COMMISSION

Food and Agriculture Organization of the United Nations

World Health Organization

Viale delle Terme di Caracalla, 00153 Rome, Italy - Tel: (+39) 06 57051 - E-mail: codex@fao.org - www.codexalimentarius.org

Agenda Item 5 **CX/FO 24/28/8 Add.1**

ORIGINAL LANGUAGE

JOINT FAO/WHO FOOD STANDARDS PROGRAMME

CODEX COMMITTEE ON FATS AND OIL

Twenty-eighth Session

Kuala Lumpur, Malaysia

19 - 23 February 2024

PROPOSED DRAFT REVISION TO THE STANDARD FOR OLIVE OILS AND OLIVE POMACE OILS (CXS 33-1981): REVISION OF SECTIONS 3, 8 AND APPENDIX

Comments in reply to CL 2023/61/OCS-FO

Comments of Australia, Brazil, Canada, Chile, China, Ecuador, European Union, Iran, Iraq, Jordan, Kenya, New Zealand, Peru, Russian Federation, Syrian Arab Republic, Thailand, Tunisia, Turkey, United Arab Emirates, USA and IOC

Background

1. This document compiles comments received through the Codex Online Commenting System (OCS) in response to CL 2023/61/OCS-FO issued in December 2023. Under the OCS, comments are compiled in the following order: general comments are listed first, followed by comments on specific sections.

Explanatory notes on the Annex

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

ANNEX I

GENERAL COMMENTS

COMMENT	MEMBER / OBSERVER
Australia supports the ongoing review of this standard. However, the current draft does not meet the committee's agreed purpose to 'accommodate greater variability of the oils coming from new and traditional producing countries'(Rep17/FO). Australia made a range of proposals to this effect, which were not incorporated into the draft standard by the electronic working group.	**Australia**
Canada appreciates the efforts of the EWG chaired by Spain and co-chaired by Argentina in progressing the work to address the remaining parameters that were left in square brackets following the discussions at the 27th session of the CCFO in 2021. Canada notes the importance of many of these issues to the standard. As a major importer of olive oil, Canada reiterates its overall support to ensure that the standard is inclusive of authentic olive oils from various regions and that the parameters and values selected do not discriminate against these oils. Like other Codex standards, Canada supports the goal to ensure that the Codex Standard for Olive Oils and Olive Pomace Oils (CXS 33-1981) be inclusive of the needs of all Codex Member Countries that produce and trade in this important product. Canada has reviewed the proposed draft revision developed by the EWG. Canada is providing the following comments on areas in square brackets first, and then on other areas of the draft. For reference, both the options in the Report of the 27th Session of CCFO (REP22 FO) and the Proposed draft revision to the Standard for Olive Oils and Olive Pomace Oils in the CL 2023/61/OCS-FO are included. The other comments are mostly editorial in nature and included to seek clarification on certain areas of the proposed draft revision where these appear not to be aligned with the conclusions in the Report of CCFO27 (REP22 FO) and the Report of CCFO26 (REP19 FO) where applicable.	**Canada**
Ecuador agradece el trabajo realizado, con relación al documento "ANTEPROYECTO DE REVISION DE LA NORMA PARA LOS ACEITES DE OLIVA Y ACEITES DE ORUJO DE OLIVA (CXS 33-1981) – REVISION DE LOS ARTÍCULOS 3, 8 Y APÉNDICE", Ecuador no presenta comentarios a los factores de composición, factores de calidad; esto en virtud de que la normativa vigente en el país no contempla los parámetros propuestos; actualmente Ecuador mantiene la Norma Técnica Ecuatoriana NTE INEN 29 Aceite de Oliva. Requisitos, para dichos productos. Incentivamos a continuar con el desarrollo de los documentos, y quedamos atentos a futuras solicitudes en el que contemos con mayor información.	**Ecuador**
The European Union (EU) thanks the chair and co-chair of the electronic Working Group (eWG) on the Revision of the Standard for Olive Oils and Pomace Olive Oils for the good progress on this subject and welcomes the proposed draft revision of the standard. Overall, the EU acknowledges significant progress in the revision of this standard since discussions started in 2017. While important progress was achieved since CCFO27 with regard to Section 8 of the standard, Methods of Analyses and Sampling, consensus has not yet been found in a few parameters. The EU would like to signal some editorial issues: - In point 3.2.1 GLC ranges of fatty acid composition, in front of the trans-fatty acids the less or equal sign is deleted. We believe that this is a mistake and the less or equal sign should be kept; - In point 3.2.4 Total 4α desmethylsterols content (mg/kg), the virgin olive oils are missing from the table; The CCFO27 report says: in paragraph 132 "CCFO27 agreed to retain the provision for total 4α-desmethylsterols content of the virgin olive oils in the main body under Section 3.2.4.". We believe this is a mistake and the virgin olive oils should be included in the same line with Refined olive oil and Olive oil composed of refined olive oil and virgin olive oils.	**European Union**

Given the above, the EU supports the organisation of an in-session meeting on the Revision of the Standard for Olive Oils and Pomace Olive Oils, to take stock of the progress achieved so far and reach consensus on the remaining parameters.	
- There was no sound evidence to support the proposed value of 55% as the minimum value of C18:1. To include authentic oils with low C18:1, the value of 53% shall remain. - we support the use of two decimal places in the trans fatty acid limit. -The footnote "Virgin olive oil's authenticity is not compromised if one sterol, or their minimum content, does not fall within the ranges provided for, if all other sterols and parameters tested referred to in this standard fall within the stated ranges" should be maintained in the standard. - The increase in the value of the median of the most perceived defect for virgin olive oil from 2.5 to 3.5 with a footnote "includes the uncertainty predicted by the IOC method" shall not be supported.	**Jordan**
The Russian Federation does not have specific objections to the proposed draft revision to the Standard for Olive Oils	**Russian Federation**
Syria appreciates the opportunity to provide comments on the proposed draft of revision of the standard for olive oils and olive pomace oils (CXS 33-1981) and thanks the Chair and Co-chair for leading the EWG to progress this work. Syria generally agrees with the proposed revision of the draft, with the exception of those mentioned under specific comments. Although, Syria comments will focus in items still in square brackets, we have some concerns related to few clauses that has technical and editorial error that required to be noted as the following:	**Syrian Arab Republic**
Malgré les grands progrès réalisés au CCFO27 (sur la base des quatre années de travail du GT électronique du CCFO) sur de nombreuses questions, une harmonisation complète n'a pas été réalisée. Selon les conclusions du document CX/FO 24/28/8 préparé par le groupe de travail électronique présidé par l'Espagne et co-présidé par l'Argentine, un nouvel échange de vues serait peut-être utile pour parvenir à un consensus sur ces questions encore litigeuses.	**Tunisia**
The United States supports CCFO efforts to amend the Standard for Olive Oils and Olive Pomace Oils (CXS 33-1981) to safeguard the integrity of olive oils and to ensure fair practices in trade. It is also critical to ensure that olive oils from all regions are represented in the revised standard and revisions do not exclude authentic oils from certain regions that could have different compositional and/or quality characteristics. United States believes that changes to the standard should reflect variation in olive oils due to climatic, geographic, and varietal differences and that changes should be made to accommodate authentic oils from all Member countries. Specific comments to the revisions are noted below.	**USA**

SPECIFIC COMMENTS

3. ESSENTIAL COMPOSITION AND QUALITY FACTORS	
3.1 Designations and definitions	
Section 3.1 Designations and definitions – Footnotes related to various olive oil designations Proposed revision has the following links to footnotes: Ordinary virgin olive oil:…laid for this category 1 Refined olive oil:… laid for this category 2 Refined olive-pomace oil:… laid for this category 1 The associated footnote is missing footnote 1 and shows only footnote 2 as follows Footnote 2 - This product may only be sold direct to the consumer if permitted in the country of retail sale [RETAINED UNTILL CCFO30]	**Canada**

Based on the conclusions in REP22FO (paragraph 91 and 95) and the conclusion in the 26th session of CCFO (REP19 FO paragraph 35 – deleted footnote 2 and the superscripts in “Olive oil” and “Olive –pomace oil”) the following changes should be made: Footnote 2 should be shown as footnote 1, and should relate to the designations for “ordinary virgin olive oil”, “refined olive oil” and "refined olive-pomace oil" as is currently in CXS 33-1981. The note in square brackets should also be deleted as this does not relate to this footnote. The designations where footnote 1 should be added should be the same as in the current CXS 33-1981. The following changes to the superscripts should be made to the current proposed revision to align with the agreed upon changes in REP22 FO (para 95). It is noted here that the Committee agreed to retain the definition for OVOO and its associated footnote as well as related parameters in the standard until CCFO30, when final discussions would be held to decide whether to retain/remove the provision in the standard. The following changes are therefore suggested to product designation superscripts and footnote: Ordinary virgin olive oil ….category 1 [Retained until CCFO30] Refined olive oil: ….category 2 1 Refined olive-pomace oil:…category 1 2 1 This product may only be sold direct to the consumer if permitted in the country of retail sale [RETAINED UNTILL CCFO30]	
<u>Editorial</u> 3.1: There are two footnotes in the main text, but there is only one explanatory of footnote at the bottom of this page. Please add explanatory notes at the bottom of this page 3.1, Paragraph 6: It is recommended to add the following sentence at the end of the paragraph. In no case shall refined olive pomace oil be called “olive oil” 3.1, Paragraph 7: This symbol of “ 《》 ” is used incorrectly. In no case shall this blend be called “olive oil”.	**China**
<u>3.1 Designations and definitions:</u> Syria noted that footnote number related to the category of “ordinary olive oil” and “refined olive oil” should be identical to what is stated at the bottom of the page. It should be 1 instead of 2. For footnote2 “This product may only be sold direct to the consumer if permitted in the country of retail sale”: Syria emphasizes its view that it would be preferable to keep this footnote in the standard in order to maintain the advantage of olive oil compared with other types of refined vegetable oils mentioned in the codex standard CXS210-1999 by mixing refined olive oil with virgin olive oil to enhance its health and organoleptic properties. Regarding the note mentioned in point 3.1 "Note: Genuine virgin olive oil that does not meet one or more of the virgin olive oil's quality criteria of this standard is referred to as LAMPANTE OLIVE OIL. It is considered unfit for human consumption either as it stands or blended with other oils". Syria considers this note should not be remained in the document and that, given the significant impact it may have on international trade, because it will change the classification of large part of virgin olive oil production into lampante olive oil in the absence of one of the positive flavor and sensory tastes, or in the event of one sensory defect. Consequently we will lose a large part of virgin olive oil as food, despite the lack of scientific evidence or studies proving its harm if used in nutrition, while many countries in the world face a major food gap and food insecurity, especially in providing natural sources of dietary oil and fats.	**Syrian Arab Republic**

Ordinary virgin olive oil: Syria noted that footnote number related to the category of “ordinary olive oil” and “refined olive oil” should be identical to what is stated at the bottom of the page. It should be 1 instead of 2.	
Refined olive oil: Syria emphasizes its view that it would be preferable to keep this footnote in the standard in order to maintain the advantage of olive oil compared with other types of refined vegetable oils mentioned in the codex standard CXS210 by mixing refined olive oil with virgin olive oil to enhance its health and organoleptic properties.	
Olive-pomace oil composed of refined olive-pomace oil and virgin olive oils Note: Syria considers this note should not be remained in the document and that, given the significant impact it may have on international trade, because it will change the classification of large part of virgin olive oil production into lampante olive oil in the absence of one of the positive flavor and sensory tastes, or in the event of one sensory defect. Consequently we will lose a large part of virgin olive oil as food, despite the lack of scientific evidence or studies proving its harm if used in nutrition, while many countries in the world face a major food gap and food insecurity, especially in providing natural sources of dietary oil and fats.	
3.2 COMPOSITION FACTORS	
3.2.1 GLC ranges of fatty acid composition (expressed as percentages of total fatty acids):	
3.2.1 GLC ranges of fatty acid composition (expressed as percentages of total fatty acids): - United Arab Emirates agrees with the modification of the range of fatty acid C18:1 % in both (Extra virgin olive oil, Virgin olive oil, Refined olive oil and Refined olive-pomace oil (to be 55-85% instead of 53-85 %). - Regarding the following proposed statements: % of fatty acid C18:3 % in both (Extra virgin olive oil, Virgin olive oil, Refined olive oil and Refined olive-pomace oil) to be ≤ 1.0* *In cases where an edible virgin olive oil exhibits 1.0 < linolenic acid % ≤ 1.4, then this oil is authentic provided that apparent β-sitosterol/campesterol ≥ 24 and all other composition factors lie within the official limits. United Arab Emirates, indicates that, It is very rare that the % of Linolenic acid C18:3, (a polyunsaturated fatty acid. α-linolenic acid (ALA) which is called also as "Omega-3 fatty acid"), reaches more than 1 % (Normally) in all types of olive oil, and in case it will reach more than 1 %, it may primarily indicate the mixing of olive oil with some other low price vegetable oils. Therefore, UAE propose to accept the following statement: (Fatty acid C18:3 % in both (Extra virgin olive oil, Virgin olive oil, Refined olive oil and Refined olive-pomace oil) to be ≤ 1.0), and to delete the exceptional subsequent statement: (*In cases where an edible virgin olive oil exhibits 1.0 < linolenic acid % ≤ 1.4, then this oil is authentic provided that apparent β-sitosterol/ campesterol ≥ 24 and all other composition factors lie within the official limits). - United Arab Emirates agrees with the modification of Trans fatty acids (Σ(t-C18:1) to be ≤0.05, ≤0.20 and ≤0.40 in Extra virgin olive oil, Virgin olive oil, Refined olive oil and Refined olive-pomace oil respectively, instead of ≤0.1 , ≤0.20 and ≤0.40 respectively. - United Arab Emirates agrees with modification of Trans fatty acids Σ(t-C18:2) + Σ(t-C18:3) to be ≤0.05, instead of ≤0.1 in Extra virgin olive oil and Virgin olive oil, and to be without changes in ≤0.30 and ≤0.40 in Refined olive oil and Refined olive-pomace oil. - United Arab Emirates do not agree with the deletion of the statement: ([Virgin olive oil's authenticity is not compromised if one sterol, or their minimum content, does not fall within the ranges provided for if all other sterols and parameters tested referred to in this standard fall within the stated ranges.]	**United Arab Emirates**

- United Arab Emirates agrees with deletion of the limit (> 35) of 1,2 diglycerides (% total diglycerides) in Extra virgin olive oil. - United Arab Emirates agrees with deletion of the limit (> 17) of Pyropheophytin "a" (% total chlorophyll pigments) in Extra virgin olive oil.	
3.2.1 - Australia supports the adoption of 53% as the minimum value of oleic acid (C18:1), consistent with the Australian standard for olive oils and olive pomace oils AS5264. - Australia supports the adoption of 1.5% as the maximum value for linolenic acid (C18:3), consistent with the Australian standard for olive oils and olive pomace oils AS5264. - Australia does not support the use of the IOC decision tree for oils with values of linolenic acid from 1.0 to 1.4%. Australia does not support the use of decision trees for fatty acids or sterols. - The measures to expand the ranges for oleic and linolenic acid do not account for all the known deviations from the ranges in the standard for fatty acids. For example, oils with oleic acid levels of 55% or lower tend to have correspondingly higher levels of palmitic acid. This is also why it is important to discuss these items together as they are related. - CXS-210 has a footnote for fatty acids for all the other oils covered by Codex Alimentarius: "Samples falling within the appropriate ranges specified in Table …. 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." - Australia has consistently proposed the adoption of this footnote within CXS-33 for fatty acids. - Australia recognises that problems with deviations from the ranges for fatty acids and sterols within the standard are more likely for oils within the virgin category (extra virgin, virgin and ordinary) than the other categories of refined and pomace olive oil. Australia is therefore proposing that this footnote only apply to olive oils within the virgin category. **3.2.3 4α-Desmethylsterols composition (% total 4α-desmethylsterols)** - Australia does not support the deletion of the footnote on the general statement on sterols in virgin olive oil. Australia further proposes that CXS-33 adopt a maximum level of 4.8% for campesterol and a maximum level of 1.9% for sigmasterol. These changes will improve the effectiveness of CXS-33 with regard to authentication as an examination of the sterols levels for other oils within CXS-110, at the same time accommodating the widespread occurrence of oils with levels of campesterol above 4.0%. - Proposal to delete the parameter "apparent beta-sitosterol" and relace with the individual measurements of beta-sitosterol and the other sterols currently included in "apparent beta-sitosterol" - In CXS-33 and most other olive oil standards there is a parameter within the sterols table known as "apparent beta-sitosterol", this parameter is the sum of several sterols - beta-sitosterol + delta-5-avenasterol + delta-5-23-stigmastadienol + clerosterol + sitostanol + delta-5-24-stigmastadienol. This seems to be a historical parameter decided when measurement and separation of these compounds was difficult and expensive. - The measurement of sterols has improved and we propose that these sterols be separated and characterised for olive oil within the standard CXS-33. This would add to the detailed characterisation of olive oils and aid in determining their origin as well as their authenticity.	**Australia**

Brazilian Position 1) **C18:1:** Brazil agrees to maintain the lower limit of C18:1 (oleic acid) in 55% because there was no scientific evidence to support the proposed decrease of the minimum limit from 55.0% to 53.0%. 2) **C 18:3:** Brazil agrees with the proposal to maintain the limit of C18:3 as ≤ 1.0% and with the use of decisional trees for olive oils that present 1.0 < C18:3 ≤ 1.4. 3) **Footnote for C 18:3:** Brazil agrees with the proposal of footnote to asegurar a autenticidade do azeite oliva. 4) **Uncertainty in the quantification of trans fatty acids:** Brazil agrees with the proposal to express the ranges for trans fatty acids with two decimals. Observar que é importante manter a faixa e não deixar um valor sozinho. Alertar para o valor de Σ(t-C18:2) + Σ(t-C18:3) que consta como 0.4 e no padrão atual é 0.35 (padrão atual e padrão atual do COI). **3.2.3 4α-Desmethylsterols composition (% total 4α-desmethylsterols)** Brazil agrees to eliminate the footnote for sterols because total sterols and individual sterols are important for assessing the authenticity of olive oil. **3.3 QUALITY FACTORS** **3.3.1 Organoleptic characteristics of virgin olive oils** Brazil agrees to the increase of the median of perceived defects to 3.5.	**Brazil**
Section 3.2.1 GLC ranges of fatty acid composition – Minimum value of Oleic Acid **C18:1:** [53.0] [55.0] – 85.0%. The draft revision proposes 55.0 – 85.0% Canada maintains its support for a minimum value of 53% for oleic acid (C18:1). This value does not discriminate against authentic olive oils from non-traditional growing regions outside the Mediterranean area, which may have varying climatic and varietal conditions. For example, Canada notes that 53% is the lower limit for oleic acid in the Australian Standard for olive oils and olive pomace oils AS5264 2011, as well as the South African standard for olive oils and olive pomace oils, SANS 1377. Canada notes that during the EWG discussions, the Chair of the EWG emphasized that, "one of the objectives of this work is to try to harmonize CXS-33 with the international standards, as well as with the national standards of Codex members. The harmonization is a very important issue to avoid any possible commercial barrier between CODEX members and to guarantee the quality and the genuinity of olive oil." Canada is in agreement with this objective and thus believes that ranges in the Codex standard should reflect real-world values from determinations of commercial products. The minimum value of 53% of oleic acid (C18:1) would be inclusive of particular olive varieties grown in non-traditional olive-growing regions of the world such as Australia and South Africa. Furthermore, this and other variations in the fatty acid limits could have been dealt with a proposed statement before the table: "Samples falling within the appropriate ranges specified below 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." This statement would have harmonized and aligned the CXS 33 standard with the CXS 210 standard. **2. Section 3.2.1 GLC ranges of fatty acid composition –** Linolenic acid value C18:3 ≤ 1.0* and to use decisional trees for olive oils with 1.0 < Ln ≤ 1.4%. CCFO27 agreed to the proposed value of < 1.0% with a link to the footnote (para 107, REP22 FO). There were some notable reservations in paragraph 108. If this is to be reopened, Canada does not agree with Ln ≤ 1.0% and/or using the decision tree. Canada would prefer the Ln value to be higher (~1.5 %) accompanied by a	**Canada**

statement such as those used in CXS 210, “Samples falling within the appropriate ranges specified below 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.” 3. Section 3.2.1 GLC ranges of fatty acid composition – Footnote associated with values of C18:3 - To use the IOC proposed decision tree for olive oils with 1.0 < Ln ≤ 1.4%: * In cases where an edible virgin olive oil exhibits 1.0 < linolenic acid % ≤ 1.4, then this oil is authentic provided that apparent β-sitosterol/campesterol ≥ 24 and all other composition factors lie within the official limits. Canada maintains the view that decision trees in a Codex standard could promote discrimination against authentic olive oils with off limit values. Statements such as those used in CXS 210 should provide a better approach to the consideration of olive oil authenticity than the use of decision trees. This decision tree introduces an extra level of complexity by comparing linolenic acid levels with the ratio of two sterols. The interrelationship of fatty acid and sterol metabolism in the maturing olive is complicated by attempting to include a ratio of a major and a minor component when the major component (apparent beta-sitosterol) is already the sum of major and minor components. As there are many unknowns in how this ratio is affected by various factors, Canada maintains that it would be better to address this using a similar statement in CXS 210. 4. Section 3.2.1 GLC ranges of fatty acid composition – Uncertainty measurements for trans fatty acids: CCFO27 (para 111 REP22 FO) agreed to place in square brackets the values for trans-fatty acids expressed to one and two decimal places. The proposed revision: To maintain two decimal places in trans fatty acids values Canada believes that the determination of trans fatty acid content is too variable in this expectation of accuracy and thus it should be expressed to one decimal value. However, if the majority of the countries agree to maintain two decimal places for trans-fatty acids, Canada could agree with the proposal to maintain the two decimal places in trans-fatty acids. 5. Section 3.2.3 4α-Desmethylsterols composition (% total 4α-desmethylsterols) CCFO27 (para 117 REP22 FO) agreed to put the following footnote in square brackets: “Virgin olive oil's authenticity is not compromised if one sterol, or their minimum content, does not fall within the ranges provided for, if all other sterols and parameters tested referred to in this standard fall within the stated ranges.” The draft revision proposes not to maintain this statement in the standard (strike out). Canada supports the inclusion of this statement in the standard and disagrees with the draft proposal to strike out this statement. The statement was proposed by the former chair of the EWG in 2021. It supports a key aspect to be covered in the revision of Section 3, which was agreed to by the Committee in 2017 when this work commenced, that is: “to accommodate the greater variability of olive oils composition due to introduction of olive cultivation into new areas.” (see CCFO Rep17/FO, Appendix X, Section 3, third bullet). The footnote provides accommodation for variations in authentic olive oils due to various factors and aligns CXS-33 with CXS-210, where a similar statement is used. The statement addresses the risk of excluding authentic olive oils that are grown in different regions and climates, and whose composition may now be affected by various geographical and climatic conditions. It has been shown that some olive varieties that originated in Europe are now grown in new production regions around the world and in addition, the climate events and effects (even in traditional areas) present challenges for dealing with the chemical composition of sterols. This statement would help address the need to have a decision tree for many of the off-limit values found in authentic oils. A copious amount of data from different parts of the world presented by Australia to the previous EWG has shown deficiencies in decision trees. These decision trees do not address these problems as there is a possibility that	

an authentic oil may have more than one parameter outside the prescribed ranges when grown in new production regions with different climates. Having this statement in the CXS 33-1981 would help to address the negative impacts to industry in some regions, and support global trade in authentic olive oils that may otherwise be excluded by this standard because of compositional differences due to varietal, climatic, geographical, and other factors. **Other Editorial Comments:** 6. Section 3.2.3 4α-Desmethyl sterols composition (% total 4α desmethylsterols) – The asterisk before footnote (a) should be removed as this is no longer needed after the footnotes were changed to (a), (b) and (c). *(a) When an authentic oil naturally has a campesterol level >4.0% and ≤ 4.5%, it is considered virgin or extra virgin olive oil if the stigmasterol level is ≤ 1.4% and the delta-7-stigmastenol level is ≤ 0.3%. The other parameters shall meet the limits set out in the standard. 7. Section 3.2.4 Total 4α-desmethylsterols content (mg/kg) The table is missing “virgin olive oils” in the first row of the first column, as shown below. Virgin olive oils Refined olive oil Olive oil composed of refined olive oil and virgin olive oils	
Sección 3. Composición esencial y factores de calidad ● Sección 3.2.1 Gamas de composición de ácidos grasos determinadas mediante cromatografía de gas líquido (CGL) (expresadas como porcentaje de ácidos grasos totales) - Chile apoya el valor propuesto de 55 % como valor mínimo de C18:1 ya que corresponde al principal ácido graso que caracteriza a los aceites de oliva auténticos. - Chile apoya los valores de C18:3 ≤ 1,0 % y la inclusión del árbol decisorio propuesto por el Consejo Oleícola Internacional (COI) con el parámetro “beta-sitosterol aparente / campesterol ≥ 24” para los aceites de oliva con 1,0 < ácido linolénico ≤ 1,4 %. - -Chile apoya el uso de dos decimales para el límite de ácidos grasos trans pero debe incluirse el signo ≤. ● Sección 3.2.3 Composición de 4α-desmetilesteroles (% de 4α-desmetilesteroles totales) - Chile no apoya la propuesta de eliminar la nota a pie de página con el texto general sobre los esteroles en el aceite de oliva virgen. Las condiciones climáticas y geográficas pueden influir en la composición de esteroles y dar lugar a que algunos aceites de oliva vírgenes auténticos presenten un valor de esteroles diferente del de la norma propuesta.	**Chile**
3.2.1 Table: If the ranges of fatty acid composition of olive oils and olive-pomace oils are the same, it is recommended to merge to make the table conciser. 3.2.2 Table: The method of COI/T 20/Doc. No 20 requires that the result is “the absolute value of the HPLC data minus the theoretical data”. It’s the absolute value of the measured value. It is recommended to delete absolute value sign. 3.2.3 note(b) in Table: “the value is >0,5 y ≤0,8%” is error. the value is >0,5 and ≤0,8%. 3.2.4 Table: The total 4α-desmethylsterols content in extra virgin olive oil and virgin olive oil is not provided. 3.2.9 and 3.3.5: It is recommended to merge 3.2.9 to 3.3.5.	**China**

Point 3.2.1 GLC ranges of fatty acid composition (expressed as percentages of total fatty acids) - Changing the lower limit for oleic acid (C18:1) to 53.0% The EU does not support this proposal, as a high oleic acid content is a factor of identity of olive oil and confers to the product part of its healthy properties. Therefore, the EU agrees not to change the lower limit for the oleic acid content. - Setting a limit for linolenic acid (C18:3) The EU supports setting the linolenic acid limit at ≤ 1,00 with a footnote stating the following: "For extra virgin and virgin olive oil with 1.00 < linolenic acid% ≤ 1.40, apparent β-sitosterol/campesterol must be ≥ 24" Linolenic acid is critical for detecting adulteration with other vegetable oils, most notably rapeseed oil. - Not changing the limit of trans-fatty acids (Σ(t-C18:1) and cΣ(t-C18:2) + Σ(t-C18:3)) The EU supports the proposal to keep the limits for trans-fatty acids unchanged, as they are essential in the detection of fraud. The rounding up of the limit to one decimal place would endanger this role. **Point 3.2.3 4** α-desmethylsterols composition (% total 4α-desmethylsterols) - The sentence "(Virgin olive oil's authenticity is not compromised if one sterol, or their minimum content, does not fall within the ranges provided for if all other sterols and parameters tested referred to in this standard fall within the stated ranges)." The EU agrees not to include this footnote in the standard. Furthermore, we note that this footnote was introduced at CCFO 27 as a compromise attempt. The EU considers that all sterol fractions are essential to check the authenticity of an olive oil, as olive oils have a characteristic pattern regarding sterols. No independent sterol can be replaced by another, because the limits for each sterol are set to detect fraud with a different kind of extraneous oils. While natural deviations in the sterol composition of olive oils do exist, decision trees can be introduced to acknowledge, through scientific evidence, the variability of some levels of sterols present in some olive oils coming from cultivars of specific origins. Such decision trees are used to verify that no extraneous oils are added to olive oil. For example, the IOC has introduced decision trees for delta-7-stigmastenol in all olive oil categories. Furthermore, the EU considers that all parameters in a standard have to be checked to confirm the category and authenticity of an olive oil and all parameters are equally important and valid. No analyses of the relative importance of the parameters in this standard has been presented to support this proposal. Last, but not least, it is the prerogative of the control authorities of Codex members to decide on the level of risk they wish to assume. This decision should not be pre-empted by the standard.	**European Union**
In terms of acidity, sensory evaluation and poor quality of ordinary virgin olive oil, Iran proposes to remove this category or improve it to the quality of edible oil such as Codex 210, whose Acid value is less than 4.0 mg KOH/g Oil. It is also suggested in this regard that poor quality virgin olive oil is considered lampante olive oil, which can be used after refining as refined olive oil for consumption	**Iran**
GLC ranges of fatty acid composition (expressed as percentages of total fatty acids) - to be amended header of the first column of the fatty acid values of the table to virgin olive oils so that it includes the values of (extra virgin olive oil , Virgin olive oil, Ordinary olive oil). Why were all the evidence and standards for Ordinary olive oil deleted? despite the fact that a footnote is included - - indicating that its circulation is permitted until CCFO 30	**Iraq**
C18:1 - agree with rate 55.0 – 85.0 **C18:3** - agree with ≤ 1.0	**Iraq**

we support a linolenic acid ratio of 18:3 not exceed 1.0 and support the footnote for the decision tree listed below ,The table for olive oil varieties whose percentage of linolenic acid exceeds one in order to guarantee the authenticity of the olive oil and protect it from adulteration	
3.2.1 Rangos GLC de composición de ácidos grasos (expresadas como porcentajes de ácidos grasos totales) Aceite de oliva virgen extra -Aceite de oliva virgen Debe decir Aceite de oliva extra virgen C18:1 55,0 – 85,0 Aceite de oliva virgen C18:1 53,0 – 85,0 En relación a los valores relacionados al ácido oleico para el aceite de oliva virgen consideramos que mientras se amplíen los parámetros hacia un menor porcentaje de ácido oleico podemos permitir que el aceite de oliva virgen genuinamente producido en nuestra región puedan ser considerados dentro de norma. Se presentará CRD (documento de sala) respecto a información (data) que respalde lo mencionado. 3.2.1 Rangos GLC de composición de ácidos grasos: * En los casos en que un aceite de oliva virgen comestible presente 1,0 < % de ácido linolénico ≤ 1,4, entonces este aceite es auténtico siempre que el β-sitosterol/campesterol aparente ≥ 24 y todos los demás factores de composición se encuentren dentro de los límites oficiales. No se presenta objeción a la propuesta del presidente del GTE 3.2.1 Mediciones de incertidumbre para los ácidos grasos trans No se presenta objeción a la propuesta del presidente del GTE 3.2.2 ECN42 (Diferencia entre el contenido de triglicéridos ECN 42 real y teórico) No se presenta objeción a la propuesta del presidente del GTE 3.2.3 Composición de 4α-desmetilesteroles (% de 4α-desmetilesteroles totales) Dice: [La autenticidad del aceite de oliva virgen no se ve comprometida si un esterol, o su contenido mínimo, no se encuentra dentro de los rangos previsto si todos los demás esteroles y parámetros analizados a los que se hace referencia en esta norma se encuentran dentro de los rangos indicados.] Debe decir: La autenticidad del aceite de oliva virgen no se ve comprometida si un esterol, o su contenido mínimo, no se encuentra dentro de los rangos previsto si todos los demás esteroles y parámetros analizados a los que se hace referencia en esta norma se encuentran dentro de los rangos indicados. Consideramos que el párrafo indicado debe incluirse en la norma, debido a que los aceites genuinamente producidos en ocasiones tienen el nivel de campesterol por encima del valor 4,0 y los demás esteroles y parámetros analizados están dentro de los rangos indicados. 3.3.1 Características organolépticas de los aceites de oliva vírgenes: No se presenta objeción a la propuesta del presidente del GTE 3.4 Absorbancia en la región ultravioleta a 270/o 268 nm(F)(expresado como K270/o K268) No se presenta objeción a la propuesta del presidente del GTE	**Peru**
3.2.1 GLC ranges of fatty acid composition: Syria doesn't support the addition of the last phrase to paragraph 3.2.1 "However, to provide clarity in the trade of lampante olive oil and crude olive-pomace oil, the values of	**Syrian Arab Republic**

the table, trans isomers excluded, may also be applied". Since lampante oils and crud pomace olive oil are not considered edible to be included in the Codex Standards. Regarding the same section 3.2.1 GLC ranges of fatty acid composition: Syria proposes amending the header of the fist list of fatty acid value to include all categories of edible virgin olive oil (extra virgin olive oil- virgin olive oil- ordinary virgin olive oil). Syria is astonished by the deletion of all values and criteria's regarding to ordinary olive oil from the whole document, despite the presence of a footnote refers that the deletion of ordinary olive oil category from the document is pending up to CCFO30. For the minimum value of oleic acid (C18:1) of [53%] or [55%] in the same section 3.2.1: Syria supports maintaining the minimum value of oleic acid (C18:1) to 55.0% and not to expand its range more than it is. Especially with the facts that we have many high oleic acid vegetable oils. For footnote associated with values of C18:3 in the same section 3.2.1: Syria supports the proposed minimum value of Ln ≤ 1.0% and the use of decisional trees as a footnote for the olive oils with 1.0 < Ln ≤ 1.4% to guarantee the authenticity of olive oil For the minimum value of arachidic acid (C20:0): Syria emphasize on its request to increase the minimum limit for 0.8% instead of 0.6%, as confirmed by studies that determined the fatty acid content of most Syrian olive oils, which were carried out in cooperation with international research centers. Regarding the "Trans fatty acids" mentioned in clause 3.2.1: Symbol ≥ should not be deleted, so please keep it. 3.2.3 "4α-Desmethylsterols composition": the letter "y" in the footnote b should be replaced by word "and" in addition to ΔECN value at the end of the same footnote should be put into absolute value like this ΔECN42 ≤ |0,4|. Regarding 3.2.3 footnote on a general statement on sterols in virgin olive oil "Virgin olive oil's authenticity is not compromised if one sterol, or their minimum content, does not fall within the ranges provided for, if all other sterols and parameters tested referred to in this standard fall within the stated ranges": Syria support keeping footnote of paragraph 3.2.3 on a general statement on sterols in virgin olive oil, because this footnote ensures fairness in describing virgin olive oil that its content of Δ7stigmasterol more than 0.5%, without taking into account the value of ΔECN which is determined according to the fatty acid composition and triglycerides, which are greatly affected by climatic and environmental conditions, therefore unconfirmed only one sterols compound does not mean that the oil not authentic if it confirmed the other purity criteria. 3.2.9 ΔK (f, g): Δk is a calculated value, not a composition factor, therefore it should be at quality criteria in the item 3.3.5 in this document. For the same point 3.2.9: we need to retain Δk's value for ordinary virgin olive oil with a footnote "retained untill CCFO30", or indicate that this value includes all virgin olive oils as we mentioned above. Please correct the sign of Δk equation to + instead of - , and place the same equation of ΔK within absolute value.	
Section 3.2.1 GLC range of fatty acid composition - Table: fatty acid composition Thailand is of the opinion that there is no fatty acid composition requirement for ordinary virgin olive oil as presented in the table. Therefore, we would like to ask for clarification whether the ordinary virgin olive oil should be included in the table for fatty acid composition. - Table: Trans fatty acids We noticed an editorial error in the limit of trans fatty acids. The symbol "≤" should be retained.	**Thailand**
a) Section 3.2.1 relatives aux limites des intervalles de la composition en acides gras – la valeur minimale de l'acide oléique C18 :1 53% ou 55%	**Tunisia**

La Tunisie est consciente des effets du changement climatique sur la composition physico-chimique de l'huile d'olive. Cependant, en aucun cas, la limite inférieure de l'acide oléique n'est passée au dessous de 53%. La Tunisie est donc en faveur du maintien de la limite de 55% vue que l'huile d'olive est reconnue par sa richesse en cet acide gras connu pour ses vertus nutritionnels et une teneur élevée en acide oléique est un facteur majeur d'identité de l'huile. Compte tenu des propriétés bénéfiques prouvées de l'acide oléique pour la santé humaine Cependant, la Tunisie peut soutenir les avis des pays qui veulent faire diminuer la limite de 55 à 53% s'ils présentent des preuves scientifiques sur l'effet du changement climatique sur la composition de leurs variétés authentiques et en l'occurrence le C18:1. b) Section 3.2.1 relatives aux limites des intervalles de la composition en acides gras – note en bas de page relative à la limite de l'acide linolénique C18 :3 inférieur ou égale à 1.0% et l'utilisation de l'arbre décisionnel Ln supérieure à 1 et inférieur ou égale à 1,4% La Tunisie soutient la fixation de la limite de l'acide linolénique C18:3 et l'utilisation de l'arbre décisionnel Ln supérieure à 1 et inférieur ou égale à 1,4% L'acide linolénique est essentiel pour détecter la falsification de l'huile d'olive avec d'autres huiles végétales. Le changement de la limite de 1.0 à 1.5% n'est pas une solution, en effet, l'augmentation de la limite d'un acide gras utile dans la détection de la fraude aura une influence sur le niveau de détection de la fraude. Des données expérimentales ont montré qu'une augmentation de la limite linolénique de 1,0 % à 1,5 % réduirait le pourcentage d'huile végétale détectable dans l'olive d'environ 6 %. Le risque de fraude augmentera par conséquence. L'augmentation de la limite linolénique de la valeur de 1,0% à la valeur de 1,5% va rendre difficile la détection de la fraude d'une huile d'olive par de l'huile de colza déstérolisée. En plus cette augmentation pourra influencer les valeurs du paramètre ΔECN42, qui constitue également un outil important dans la détection de fraude. c) Section 3.2.1 relatives aux limites des intervalles de la composition en acides gras – note en bas de page relative aux limites de l'acide linolénique C18:3 La Tunisie soutient la fixation de la limite de l'acide linolénique C18:3 et propose l'adoption de la proposition du COI de fixer la limite comme suit : Ln supérieure à 1 et inférieur ou égale à 1,4% avec un rapport entre b-sitostérol/campestérol supérieur ou égale à 24 La Tunisie tient à souligner que plusieurs études sur les écarts des huiles d'olive authentiques en termes d'acide linolénique ont été menées et que de nombreuses suggestions ont été mises en œuvre. L'arbre de décision finalement adopté dans la norme du Conseil Oléicole International a été vérifié avec de nombreuses huiles d'olive. Il a été confirmé que cet arbre décisionnel couvrirait la majorité des huiles d'olive présentant des écarts par rapport à la limite d'acide linolénique et protégerait l'huile d'olive de la falsification avec d'autres huiles végétales. Il faut souligner que l'étude réalisée par le COI pour rechercher des paramètres supplémentaires à appliquer uniquement aux huiles non conformes, et pour les considérer comme authentiques si elles respectaient ce paramètre supplémentaire, a montré que les pourcentages d'acide linolénique dans les huiles variaient entre 1,0 et 1,4 % d'acide linolénique et que si le rapport entre le béta-sitostérol apparent/campestérol était supérieur ou égale à 24, l'huile pouvait être considérée comme une huile d'olive authentique. La Tunisie appui l'utilisation de l'arbre décisionnel de la norme du COI pour les valeurs d'acide linolénique comprises entre 1 et 1.4%. d) Section 3.2.1 : Incertitudes de mesure pour les acides gras trans La Tunisie est en faveur de l'adoption de l'utilisation de deux décimales pour l'expression des teneurs en acides gras trans. En effet, la détermination des acides gras trans est un critère de pureté important de l'huile d'olive, utilisé pour la détection des huiles d'olive raffinées ou pour la détection d'autres	

huiles végétales. Les limites des acides gras trans pour les huiles d'olive vierges protègent ces huiles de l'ajout d'huiles raffinées. De plus, les limites des acides gras trans pour les huiles d'olive protègent également ces huiles de l'ajout d'autres huiles végétales ayant subi de fortes conditions de raffinage (huiles déstérolisées), D'autre part, les études menées par le COI sur ces limites prouvent l'impossibilité d'utiliser une seule décimale surtout en utilisant les méthodes d'analyse actuelles avec les incertitudes de mesure associées. L'adoption de cette proposition a une grande influence sur les limites. En particulier, l'efficacité de ce paramètre dans la détection de la fraude serait réduite, notamment dans le cas des huiles d'olive vierges comestibles. Par exemple, une huile d'olive vierge avec de l'acide trans-oléique 0,07, sera caractérisée comme non conforme à sa catégorie selon le Norme commerciale du COI, et comme conforme selon le CODEX. e) Section 3.2.3 : Note en bas de page pour la composition stérolique dans les huiles d'olive vierges Les limites pour chaque stérol individuel ont été adoptées après des recherches approfondies visant à détecter la falsification d'une huile d'olive avec un autre type d'huile végétale. Aucune limite de stérol ne peut être remplacée par une autre. Accepter une dérogation sans fixer un autre critère conduirait à conclure que le pétrole est incontrôlable, tant au niveau de sa commercialisation équitable que de sa consommation. Il convient de rappeler que, pour vérifier l'authenticité d'une huile d'olive, il convient de respecter tous les critères de pureté essentiels au contrôle de l'authenticité. Sinon, la probabilité qu'une huile d'olive soit frelatée avec des huiles qui n'en sont pas devient nettement plus élevée que la probabilité qu'une huile présente une composition anormale en raison de variations naturelles de sa teneur en stérols. Pour l'instant, le seul outil fiable pour faire face aux écarts de certaines huiles d'olive authentiques par rapport aux limites officielles concernant les différents stérols est l'adoption d'un arbre décisionnel basé sur des preuves scientifiques. Par conséquent, les propositions comme celle ci-dessus qui remettent en question l'application obligatoire des critères critiques d'authenticité ne peuvent être acceptées. La Tunisie est en faveur de l'élimination de la note de bas de page sur la déclaration générale sur les stérols.	
Comments to the Title 3.2.1 1) (C18:1) of [53%] or [55%] Position: Oleic acid is a major fatty acid of olive oil. Because of the authenticity and quality of olive oil, the lower limit should be kept as 55%. 2) Footnote associated with values of "C18:3 Ln ≤ 1.0% and to use decisional tree for olive oils with 1.0 < Ln ≤ 1.4%." Position: Linolenic acid is a very critical fatty acid for the detection of fraud. Therefore, Türkiye supports the retaining the limit as ≤ 1.0%. In national regulation we do not have a decision tree for Ln. On the other hand, for compromise we do not have any objection for using the IOC decision tree proposal. 3) Uncertainty measurements for trans fatty acids Position: Türkiye supports concerns about one decimal expression of the trans fatty acids limit and recommend that limits of the fatty acid composition and trans fatty acids be indicated in two decimals. Comments to the Title 3.2.3 Footnote on a general statement on sterols in virgin olive oil	**Turkey**

Position: The compliance of an olive oil with all purity criteria should be mandatory in order to confirm the authenticity of the oil. Türkiye supports not addition of footnote.	
Section 3. Essential Composition and Quality Factors • Section 3.2.1/GLC ranges of fatty acid composition (expressed as percentages of total fatty acids) - The United States does not support the proposed value of 55% as the minimum value of C18:1. To include authentic oils with low C18:1, the United States supports the minimum value of 53%. - The United States does not support inclusion of the footnote associated with values of C18:3 ≤ 1.0% that "In case where an edible virgin olive oil exhibits 1.0 < linolenic acid % ≤ 1.4, then this oil is authentic provided that apparent β-sitosterol/campesterol ≥ 24 and all other composition factors lie within the official limits." Olive oil produced in the United States can have C18:3 > 1.0% and may not pass the criteria of the decision tree because certain varieties grown in the United States, combined with climactic conditions, can result in high campesterol levels as well. Inclusion of decision tree can make oils from certain regions with high C18:3 to be disproportionately subject the conditional criteria of apparent β-sitosterol/campesterol ratio. There was no consensus on this inclusion at the EWG due to the concern that not all authentic oils would meet the proposed decision tree. The United States supports the development of a value that would accommodate authentic olive oils from all Member states. For example, the United States could support a value of ≤ 1.4 for C18:3. - The United States supports the use of two decimal places in the trans fatty acid limit. Rounding the trans fatty acid limit to one decimal point can allow for increased levels of trans fatty acids in virgin olive oils (e.g., 0.14 rounded to 0.1) • Section 3.2.3/4α-Desmethylsterols composition (% total 4α-desmethylsterols) - The United States does not support the proposal to eliminate the footnote "Virgin olive oil's authenticity is not compromised if one sterol, or their minimum content, does not fall within the ranges provided for, if all other sterols and parameters tested referred to in this standard fall within the stated ranges." Climatic and geographic conditions can impact sterol composition and may result in some authentic virgin olive oils with a sterol value different from that in the proposed standard. There are different decision trees for sterols, which do not necessarily account for all the olive oils from different geographical regions. Thus, to include authentic oils that may fall outside of one of the parameter or decision tree, the footnote should be retained.	**USA**
3.3 QUALITY FACTORS	
3.3.1 Australia does not support adoption of 3.5 as the median of the most perceived defect for virgin olive oil, and propose to retain the value of 2.5.	**Australia**
1. 3.3.1 Organoleptic characteristics of virgin olive oils – CCFO27: Median value of the most perceived defect for virgin olive oil – [2.5] [3] [3.5] Proposed revision: Increase the median of the most perceived defect to 3.5 for virgin olive oils with a footnote "includes the uncertainty predicted by the IOC method" Canada disagrees with this proposal. Canada's preference is to maintain the median value of the most perceived defect for virgin olive oils at 2.5. As an importer of olive oil, Canada supports a standard that will ensure that good quality olive oil is marketed to all consumers. Canada is of the opinion that increasing the median of defects to 3.5 for virgin olive oil is not beneficial to consumers, as this will allow virgin olive oils with more perceptible defects in the market. It is a general understanding that the average consumer cannot detect defects in virgin olive oils with a median of defects lower than 2.5. Increasing the median of defects to 3.5 for virgin olive oils appears to mainly favour producers and producing countries, but not consumers. 2. Section 3.3.4 Absorbance in the ultraviolet region at 270/or 268 nm(f) (expressed as K270/or K268)	**Canada**

Superscripts and footnotes use both letters e.g. (f) and asterisks (* and **) which can be confusing. An editorial sweep of the whole text should be done to make all superscripts and footnotes consistent. Letters may be better than asterisks so a continuous system could be used.	
Sección 3.3.1 Características organolépticas de los aceites de oliva vírgenes Chile apoya el aumento del valor de la mediana del defecto más percibido para el aceite de oliva - virgen a 3,5 con la nota a pie de página que reza: "incluye la incertidumbre de la medición según - lo previsto por el método del COI".	**Chile**
3.3.5: note(f) in Table. The formula is error. It should be ΔK270=K270-(K266+K274)/2, ΔK268=K268-(K264+K272)/2	**China**
Point 3.3.1 Organoleptic characteristics of virgin olive oils - - The median of the most perceived defect for the virgin olive oil category The EU supports that the above-mentioned limit is set at 3.5, as it will promote the harmonisation between the International Olive Council (IOC) standard and the Codex standard, and will help the fair trade of olive oil and increase consumer understanding. However, a footnote should be included to clarify that the limit of 3.5 includes the uncertainty of measurement.	**European Union**
Iran sugessted the the Median of the most perceived defect in: - Virgin olive oil to be 2.5 and in - Ordinary virgin olive oil to be 2.5 < Me ≤ 4 The amount of 6 is high and causes the poor quality of virgin olive oil. It is suggested to reduce it to 4.	**Iran**
Virgin olive oil - Add a less than or equal to ≥ sign to virgin olive oil Free fatty acids (g/100 g, expressed as oleic acid 3-3-2 Refund of Ordinary virgin olive oil with a footnote approved until CCFO 30 3.3.3 Peroxide value (milliequivalents of active oxygen/kg oil) Determine the value of ordinary virgin olive oil with a footnote approved until CCFO 30	**Iraq**
Restoration of all quality factors for normal virgin olive oil with a footnote up to CCFO30.	**Jordan**
3.3.1 Organoleptic characteristics of virgin olive oils: Syria supports raising the minimum value of the median of the most intense defect in the category of virgin olive oil to 3.5 instead of 2.5. And supports the addition of a footnote refers that this limit includes the uncertainty predicted by the IOC method. In same section 3.3.1: Syria confirms the necessity to adding symbol "≥" to values of the median of defect in the category of virgin olive oil. 3.3.2 Free fatty acids: Syria confirms its request to retain the free fatty acid value for ordinary virgin olive oil's category with a footnote refers to "retained until CCFO30". 3.3.3 Peroxide value: Syria emphasizes returning peroxide value's for ordinary virgin olive oil's category with a footnote referring to "retained till CCFO30" as we mentioned above. 3.3.5 ΔK (f, g): Syria noted that the sign "-" in ∆k's equation is incorrect. So kindly replace it by sign "+" instead of "-", and place the whole equation of ΔK within absolute value.	**Syrian Arab Republic**

<table>
<tr><td>3.3.6 Fatty acid ethyl esters:

Syria disagree with the addition of fatty acid ethyl esters value in olive oil standard until more studies are conducted, and suggests to give countries more time by adding a footnote refers to that it's adoption is pending till CCFO30.</td><td></td></tr>
<tr><td>Section 3.3.1 Caractéristiques organoleptiques des huiles d'olive vierges - la médiane des défauts les plus perçus pour les huiles d'olive vierges avec une note de bas de page "inclut l'incertitude prédite par la méthode IOC".

La limite de 3,5 pour le défaut majoritaire dans la catégorie des huiles d'olive vierges adoptée dans la norme du COI inclut l'incertitude de la méthode. Par conséquent, l’équivalent de la limite médiane de défauts de 2,5 dans la norme Codex est bien la limite du COI de 3,5, étant donné que 3,5 prend en compte l’incertitude.

Considérant que la méthode COI/T.20/Doc.15., le paragraphe numéro 10.4 (évaluation organoleptique de l'huile d'olive vierge) précise que "L'erreur de méthode a été prise en compte lors de l'établissement des limites, qui sont donc considérées comme absolues.", les deux propositions suivantes sont équivalentes et identiques :

- Proposition 1. Limite 3,5 pour le défaut prédominant dans la catégorie des huiles d'olive vierges.

- Proposition 2. Limite 2,5 pour le défaut prédominant dans la catégorie des huiles d'olive vierges avec une note de bas de page « cette limite n'inclut pas l'incertitude prédite par la méthode IOC ».

La première proposition est celle adoptée par la norme commerciale du COI, qui n'a pas besoin d'être accompagnée d'une note de bas de page puisqu'il existe le paragraphe 10.4 de la méthode et la deuxième proposition est celle qui existe jusqu'à présent dans le CODEX STAN CXS 33-1981 sans la note de bas de page.

L’utilisation de l’une des propositions mentionnées ci-dessus conduit au même résultat, ce qui signifie que l’application uniforme des deux normes est obtenue.</td><td>Tunisia</td></tr>
<tr><td>Our view is that the 3.5 limit should be accepted as in IOC standards and EU Regulation.

“≤” symbol should be added before the value “3.5”</td><td>Turkey</td></tr>
<tr><td>Section 3.3.1 Organoleptic characteristics of virgin olive oils

- The United States does not support increasing the value of the median of the most perceived defect for virgin olive oil from 2.5 to 3.5 with a footnote “includes the uncertainty predicted by the IOC method”. As the largest importer of olive oils in the world (source: Trade Data Monitor), the United States has concerns that raising this parameter would reduce the quality of Extra virgin and Virgin olive oils for consumers.</td><td>USA</td></tr>
<tr><td colspan="2">8. METHODS OF ANALYSIS AND SAMPLING</td></tr>
<tr><td>Include the method in the table

- AOCS Ca 5a-40, titrimetric, type I

Matrix: Olive oils and olive pomace oils

<table>
<tr><td></td><td>Provision:</td><td>Method(s):</td><td>Principle:</td><td>Type:</td></tr>
<tr><td></td><td>Unsaponifiable matter</td><td>ISO 3596 / AOCS Ca 6b-53</td><td>Gravimetry, drying at 103ºC and titrimetric (colorimetry)</td><td>I</td></tr>
<tr><td></td><td>Acidity:</td><td>AOCS Ca 5a-40</td><td>Titrimetry</td><td>type I</td></tr>
</table>
Regarding the methods of analysis, Brazil would like to make the following comments:

a) Brazil suggests to include the method acidity -, because it is applicable to all crude and refined vegetable oils, marine oils and animal fats.</td><td>Brazil</td></tr>
</table>

b) Unsaponifiable matter: the method AOCS Ca 6b-53 is indicated for marine oils and also for deodorized vegetable oil and sludge. So Brazil would like to suggest its replacement for the method AOCS Ca 6a-40, that is used for fats and oils, except marine oils. Obs.: AOCS Ca 6a-40, gravimetry, type I.	
Section 8 and Section 3 of the Appendix, Methods of Analysis and Sampling – Canada agrees with the proposal on how the Methods of Analysis and Sampling in Section 8 and Section 3 of the Appendix will be dealt with in this review. Canada agrees that the methods are included here only for review and endorsement by CCFO, then these will be forwarded to CCMAS for updating the methods for olive oil in CXS 234-1999. When this step is completed, the list of methods will be removed from CXS 33-1981 and this will be replaced with the statement referring to CXS 234-1999. This will reduce the inconsistencies between the standards and CXS 234. For clarity, Canada suggests underlining the statement in Section 8 that will be retained in the standard once the methods are accepted and included in CXS 234-1999. For checking the compliance with this standard, the methods of analysis and sampling contained in the Recommended Methods of Analysis and Sampling (CXS 234 1999) relevant to the provisions in this standard, shall be used.	**Canada**
- The EU notes that the list of methods of analyses and sampling included in this section contains the methods of analyses for all parameters: both those contained in Section 3 of the Main Document and those contained in the Appendix. In addition, it contains the methods of analyses for the parameters 2-Diglycerides and Pyropheophytin “a”. - The EU considers that the inclusion of the two methods should depend on the inclusion of the two parameters themselves. - The EU supports the list of methods of analyses and sampling amended as above and agrees that it is sent to CCMAS. However, if other Codex Members can only accept that the full list of methods of analyses is sent to CCMAS, the EU could also agree to it.	**European Union**
Numeral 8 Métodos de análisis y muestreo No se presenta objeción a la propuesta del presidente del GTE	**Peru**
Agree as suggested. Numeral 8 Métodos de análisis y muestreo No se presenta objeción a la propuesta del presidente del GTE	**Turkey**
Section 8 and Section 3 of the Appendix: Methods of Analysis The United States supports the effort to harmonize the methods of analysis.	**USA**
APPENDIX I	
OTHER QUALITY AND COMPOSITION FACTORS	
Apéndice: Otros factores de composición y calidad ● Sección 1.5 1,2-diglicéridos (% de diglicéridos totales) -Chile no apoya la supresión de la disposición relativa a los 1,2-diglicéridos como factor de calidad adicional en el apéndice de la Norma. Este parámetro resulta útil para determinar la calidad del aceite de oliva virgen extra. ● Sección 1.6 Pirofeofitina “a” (% de pigmentos de clorofila totales) -Chile no apoya la supresión de la disposición relativa a la pirofeofitina “a” como factor de calidad adicional en el apéndice de la norma. Este parámetro es útil para determinar la calidad del aceite de oliva virgen extra.	**Chile**
1.2 Table: The ranges of moisture and volatile matter of the latter four oils are the same. It is recommended to merge. 2.4 title: “Wijs method” is not a unit.	**China**

CHEMICAL AND PHYSICAL CHARACTERISTICS Including values for the ordinary virgin olive oil in the tables, with a footnote indicating that this classification is approved until CCFO 30	**Iraq**
Inclusion of moisture, impurities and absorbency values... etc. for the regular extra virgin olive oil variety with a footnote showing that this classification is approved up to CCFO30. Chemical and Physical Properties: Inclusion of values for the regular virgin olive oil variety in the tables with a footnote indicating that this classification is approved up to CCFO30.	**Jordan**
Apéndice I OTROS FACTORES DE CALIDAD Y COMPOSICIÓN - 1.5 1,2-diglicéridos (% diglicéridos totales) - 1.6. Pirofeofitina “a” (% pigmentos de clorofila totales) - Numeral 3 Métodos de análisis y muestreo No se presenta objeción a la propuesta del presidente del GTE	**Peru**
Appendix I: 1. QUALITY CHARACTERISTICS: Syria confirm its demand to return all ordinary virgin olive oil category’s values like” Moisture, Insoluble impurities, ….etc ” in appendix I with a footnote referring to “retained till CCFO 30” as we mentioned above. Appendix I: 1.5 1,2-diglycerides: Syria support the deletion of diglycerides provisions form this standard until more studies are conducted on all environmental and technical factors that affect the content of these diacylglycerol compounds in olive oil are clarified. Appendix I: 1.6 Pyropheophytin: Syria supports the deletion of pyropheophytin (% total chlorophyll pigments) from the standard until more national studies are conducted.	**Syrian Arab Republic**
Appendix: Other Quality and Composition Factors • Section 1.5/1,2-diglycerides (% total diglycerides) - The United States does not support the removal of the provision for 1,2-diglycerides (DAGs) and its associated analytical method as an additional quality factor in the appendix of the Standard. This parameter is already highly used by industry and in the olive oil trade for determination of the quality of extra virgin olive oil, and thus, at very least, should be included in “Quality Characteristics” in the Appendix. • Section 1.6/Pyropheophytin "a" (% total chlorophyll pigments) - The United States does not support the removal of the provision for pyropheophytin “a” (PPP) and its associated analytical method as an additional quality factor in the appendix of the standard. PPP is a powerful quality parameter that is highly used by industry and in the olive oil trade. It is more reliable than peroxide value and FFA as a quality indicator for extra virgin olive oil and thus, at very least, should be included in “Quality Characteristics” in the appendix.	**USA**
QUALITY CHARACTERISTICS	
1.5 & 1.6 Australia does not support the deletion of these provisions. Australia supports the inclusion of these parameters in the main body of CXS-33 as quality parameters with the limits of minimum of 35% for DAGs and the maximum of 17% for PPP. In summary, DAGs and PPP are effective quality measures that:	**Australia**

• are considered very good parameters for extra virgin olive oil quality and for the evaluation of its quality at any point in the supply chain from oil extraction to the final customer, • have been in increasing use in the trade since about 2005 after they were developed by the well respected German Society for the Science of Fats DGF, • have a positive impact on label compliance in retail markets affected by those standards, which improves consumer protections • are more effective in this regard than the parameter FAEE which has already been adopted into CXS-33, • are supported by major companies, importer groups and producers, and • add effectiveness to the suite of parameters that protect extra virgin olive oils from adulteration including from substitution with inferior quality olive oils.	
1.5: Brazil supports the elimination of the % 1,2-diacylglycerol from the Appendix until there is a consensus about the reliability and usefuness of this parameter. 1.6: Brazil supports the elimination of the % Pyropheophytin from the Appendix until there is a consensus about the reliability and usefuness of this parameter.	**Brazil**
1. <u>Appendix</u> <u>Section 1.5 : 1,2 diglycerides (% total diglycerides)</u> – CCFO27 : [Extra virgin olive oil] [> 35] <u>*Proposed revision:*</u> Eliminate the % 1,2-diacylglycerol from the Appendix together with the corresponding method. Canada does not support the proposal to eliminate the 1,2-diacylglycerol from the Appendix together with the corresponding method. This quality parameter, 1,2-DAG, is a useful indicator of both the age and handling of virgin olive oil. The DAGs method has been utilized by global producers and competent authorities for many years and the method was adopted by ISO in 2009. In addition, the DAGs parameter is part of the Australian and South African national standards and the California, USA standards. It is of note that the aim of the EWG is "to produce the best standard possible based on the latest methodology and parameters in line with the most recent standards". In order to harmonize these national standards, Canada is of the opinion that the DAGs method has proven to be useful in being part of the Codex standard along with the FAEE and PPP methods. **2.** <u>Appendix, Section 1.6 : Pyropheophytin "a" (% total chlorophyll pigments)</u> CCFO27: [Extra virgin olive oil] [< 17] <u>*Proposed revision:*</u> Eliminate the % Pyropheophytin a from the Appendix together with the corresponding method. Canada does not support the proposal to eliminate the % Pyropheophytin from the Appendix together with the corresponding method. This is also a quality parameter. PPP value is affected by light, temperature and time. Just like the DAGs method, the PPP method has been utilized by global producers and competent authorities for many years and the method was adopted by ISO in 2009. In addition, the PPP parameter is part of Australian, South African, and California/USA standards. As the aim of the EWG is "to produce the best standard possible based on the latest methodology and parameters in line with the most recent standards", Canada's position is that to harmonize the national standards, the PPP method should also be included in the Codex standard along with the FAEE and DAG methods.	**Canada**
<u>Point 1.5 1,2-diglycerides (% total diglycerides)</u> The EU agrees not to include this parameter in the standard. The EU would like to remind of the study carried out by the IOC in 2020 on this matter, which concludes that many doubts remain on its usefulness as quality parameter and on the methods for its determination. The % value of 1,2-diacylglycerol does not add any additional qualitative information to the current parameters used to classify extra virgin olive oil. Indeed, the evolution over time of this parameter is not very predictable and not strictly related to oxidation. This	**European Union**

parameter has a poor correlation with the other quality parameters (organoleptic, chemical and chemical-physical). Point 1.6 Pyropheophytin "a" (% total chlorophyll pigments) The EU agrees not to include this parameter in the standard. The EU would like to remind of the study carried out by the IOC in 2020 on this matter. The study casts some doubts on the predictability of this parameter, which in turn raises questions on its usefulness as quality parameter. Indeed, the parameter is extremely susceptible to light and heat, to the point that an oil could be altered only when exposed for some time to standard illumination conditions in a supermarket.	
Iran agrees with the addition of two new indicators in the appendix section due to their importance in the freshness of extra virgin olive oil. [1.5 1,2-diglycerides (% total diglycerides)] [Extra virgin olive oil] [> 35] [1.6 Pyropheophytin "a" (% total chlorophyll pigments)] [Extra virgin olive oil] [≤ 17]	**Iran**
Listing the values of moisture, impurities, absorbency, etc. for the ordinary virgin olive oil, with a footnote indicating that this classification is approved for until CCFO 30	**Iraq**
Appendix I: 2. CHEMICAL AND PHYSICAL CHARACTERISTICS: Syria confirm its demand to return all values for ordinary virgin olive oil category in appendix with a footnote referring to “retained till CCFO 30” as we mentioned above.	**Syrian Arab Republic**
En 2020, le COI a réalisé une étude sur les paramètres 1,2 diglycérides et pyrophéophytine « a » et a conclu que de nombreux doutes subsistent quant à leur utilité comme paramètres de qualité et quant aux méthodes de leur détermination. Ainsi, les dispositions relatives aux 1,2-diglycérides (% de diglycérides totaux) et à la Pyrophéophytine « a » et à leurs méthodes correspondantes ne doivent pas être ajoutées à la norme CXS 33-1981, étant donné que les méthodes comportent de nombreuses variables susceptibles d'influencer les résultats, et il existe d'autres méthodes disponibles pour évaluer la qualité. La Tunisie voit que la meilleure solution à ce problème serait celle proposée aux paragraphes 21 et 23 du document CX/FO 24/28/8, qui stipule que : « Les dispositions relatives aux 1,2-diglycérides (% de diglycérides totaux) et à la pyrophéophytine « a » (% de pigments de chlorophylle totaux) pour l'huile extra vierge et leurs méthodes d'analyse correspondantes ne doivent pas être ajoutées à la norme. Cette proposition n’empêcherait pas les Membres individuels d’utiliser ces méthodes comme ils le faisaient jusqu’à présent. La Tunisie est en faveur d’éliminer l’appendix 1.5 et 1.6 de la norme.	**Tunisia**
Comments to the Title 1.5 and 1.6 Position: We do not think it is appropriate to include this parameter in this standard, even as appendix, since the studies have still been ongoing.	**Turkey**
3. METHODS OF ANALYSIS AND SAMPLING	
Regarding the methods of analysis, Brazil would like to make the following comments: a) Acidity: Brazil suggests to include the method AOCS Ca 5a-40 (acidity, Titrimetry, type I), because it is applicable to all crude and refined vegetable oils, marine oils and animal fats. b) Unsaponifiable matter: the method AOCS Ca 6b-53 is indicated for marine oils and also for deodorized vegetable oil and sludge. So Brazil would like to suggest its replacement for the method AOCS Ca 6a-40, that is used for fats and oils, except marine oils. Obs.: AOCS Ca 6a-40, gravimetry, type I.	**Brazil**

Section Appendix, 3. Methods of Analysis and Sampling The following statement and note should be added before the table: For checking the compliance with this standard, the methods of analysis and sampling contained in the Recommended Methods of Analysis and Sampling (CXS 234 1999) relevant to the provisions in this standard, shall be used. Note: The list of methods will be deleted from the standard after the acceptance by CCFO and a sentence above is going to be the reference to the methods.	**Canada**
Sección 8 y sección 3 del Apéndice: Métodos de análisis ● Chile valora la labor de armonización de los métodos de análisis y apoya la lista de métodos propuesta, pero no está de acuerdo que se eliminen los métodos de análisis para 1,2-diglicéridos y la pirofeofitina “a”	**Chile**
The EU notes that the methods included in this section are identical to the methods included in Section 8 of the Main Document. Therefore, please see our comments on Section 8 above.	**European Union**
Section 8 and Section 3 de l’annexe, Méthodes d’analyses La liste des méthodes d'analyse et d'échantillonnage de la section 8 du corps principal et de la section 3 de l'annexe, telle que présentée dans l'avant-projet de norme révisée, a pris en compte les commentaires soulevés dans le CRD24 et les exigences du CCMAS. Par conséquent, ces méthodes peuvent être transmises au CCMAS aux fins de révision et de mise à jour des méthodes pour l'huile d'olive dans la norme CXS 234-1999. Par la suite, ils seraient supprimés et remplacés par une déclaration faisant référence à CXS 234-1999, à savoir : « Pour vérifier le respect de la présente norme, les méthodes d'analyse et d'échantillonnage contenues dans les méthodes d'analyse et d'échantillonnage recommandées (CXS 234- 1999) pertinent aux dispositions de la présente norme doit être utilisé. A l’exception des méthodes d’analyses des 1,2 diglycérides et la pyrophéophytine « a », toutes les autres méthodes citées dans la section 8 du corps principal et dans la section 3 de l’annexe sont bonnes. La Tunisie propose de supprimer les deux méthodes d’analyses des 1,2 diglycérides et la pyrophéophytine « a ».	**Tunisia**
Agree as suggested.	**Turkey**
Section 8 and Section 3 of the Appendix: Methods of Analysis The United States supports the effort to harmonize the methods of analysis.	**USA**

COMMENTS RECEIVED VIA EMAIL

KENYA

Comment: Kenya thanks the Electronic Working Group (EWG) chaired by Spain and co-chaired by Argentina for the work well done. However, Kenya would like to seek clarification of the deletion of values in the trans-fatty acid profiling to exact figures.

NEW ZEALAND

New Zealand strongly supports Australia's positions on olive oil which are also aligned with Canada and USA. As with Australia, some New Zealand oils also fall outside the proposed ranges for oleic and linolenic limits. Barnea and Koroneiki varieties are common in New Zealand along with some Souri, which may also fall outside the proposed decision tree concerning sterols.

INTERNATIONAL OLIVE COUNCIL (IOC) (ENGLISH)

Dear Chair, Co-chairs, Codex Secretariat and Members of the CCFO,

The Executive Secretariat (ES) of the International Olive Council (IOC) would like to begin by expressing its compliments for the work and activities carried out by the Secretariat of the Codex Alimentarius Commission and by the Chair and Co-chairs of the CCFO electronic Working Group (eWG) since 2017, as well as for the Commission's collaboration with the IOC on the revision of the standard for olive oils and olive-pomace oils (CODEX STAN 33-1981).

It should be noted that great progress was made in CCFO27 (based on the four years of work of the CCFO eWG) and many issues were harmonized in the two standards (CODEX STAN 33-1981 and IOC TRADE STANDARD). However, complete harmonization was not achieved. Discussions during the three (3) rounds of consultations conducted by the eWG (from 2022 to 2023) did not reach a broad consensus on all outstanding issues from CCFO27.

In this document **CX/FO 24/28/8** prepared by the eWG chaired by Spain and co-chaired by Argentina, a brief overview regarding the arguments for and against each pending issue is provided. A further exchange of views regarding this document's contents would perhaps be useful for reaching a consensus on these issues.

PROPOSED DRAFT REVISION OF SECTIONS 3, 8 AND APPENDIX OF CXS 33-1981- issues placed in square brackets (January 2024).

The issues outstanding from CCFO27, especially the provisions that were placed in square brackets, as highlighted in the report of CCFO27, are eight (8) in total. They are included in document CX/FO 24/28/8.

These issues have been discussed in depth and no consensus has been achieved. Below we examine said issues in order to investigate approaches that can be taken to achieve the harmonization of the two standards (CODEX STAN and IOC TRADE STANDARD).

a) Section 3.2.1: GLC ranges of fatty acid composition - the minimum value of oleic acid (C18:1) of [53%] or [55%].

DOCUMENT CX/FO 24/28/8 {LIMIT 55%: AFFIRMATIVE ANSWERS 14, NEGATIVE ANSWERS 4 (against US, AU, CA, Saudi Arabia)}

IOC COMMENTS

A high oleic acid content is a major factor of identity of olive oil. Early observations regarding the healthy properties of olive oil (before polyphenols had been discovered in EVOO) highlighted the existence of this acid. In addition, oleic/linolenic ratios are extremely relevant for the particular nutritional characteristics of olive oil and its shelf-life.

Taking into account the proven beneficial properties of oleic acid for human health, we should be very cautious about considering changes regarding a lower oleic acid limit. It is well known that, nowadays, the production of vegetable oils with high oleic acid is constantly increasing due to the proven beneficial properties of oleic acid for human health.

In addition to the above, the countries requesting an oleic acid limit of 53% have not provided evidence that demonstrates that the deviations regarding oleic acid concern a large amount of their produced olive oils. It would be interesting to check the real percentage of affected production.

b) Section 3.2.1: GLC ranges of fatty acid composition - Footnote associated with values of **C18:3 Ln ≤ 1.0%** and to use decisional tree for olive oils with 1.0 < Ln ≤ 1.4%.

c) Section 3.2.1: GLC ranges of fatty acid composition - Footnote associated with values of C18:3 - **Use the IOC proposal for olive oils with 1.0 < Ln ≤ 1.4%: apparent b-sitosterol/campesterol ≥ 24**.

b) C18:3 Ln ≤ 1.0%: AFFIRMATIVE ANSWERS 14, NEGATIVE ANSWERS 4 (against US, AU, CA, Saudi Arabia)

c) Use the IOC proposal for olive oils with 1.0 < Ln ≤ 1.4%: apparent b-sitosterol/campesterol ≥ 24. AFFIRMATIVE ANSWERS 13, NEGATIVE ANSWERS 5 (against US, AU, CA, Saudi Arabia, Iran)

IOC COMMENTS

b) C18:3 Ln ≤ 1.0%

Linolenic acid is critical for detecting the adulteration of olive oil with other vegetable oils. By adopting a maximum limit of 1.0% for linolenic acid and an effective decision tree for the out of limits authentic olive oils, olive oils are protected from fraud.

The increase of the linolenic acid limit from 1.0% to 1.5% is not a solution. As previously stated, linolenic acid is a critical fatty acid. Increasing the limit of a useful fatty acid in the detection of fraud will have influences on the fraud detection level. Experimental data have shown that increasing the linolenic limit from 1.0% to 1.5% will decrease the percentage of detectable vegetable oil in olive about 6%. Hence, the risk of fraud will increase about 6%. The following table presents these results.

Table: Detection of olive oil fraud with rapeseed oil using olive oils with different linolenic acid composition.

	C18:3	C18:3	C18:3	C18:3	C18:3
OLIVE OIL	0.2	0.4	0.6	0.8	1
RAPESEED	8.3	8.3	8.3	8.3	8.3

MIXTURES %						
OLIVE OIL	RAPESEED	C18:3	C18:3	C18:3	C18:3	C18:3
99	1	0.28	0.48	0.68	0.87	1.07
97	3	0.44	0.64	0.83	1.02	1.22
94.5	5.5	0.64	0.83	1.02	1.21	1.4
93	7	0.77	0.95	1.14	1.32	1.51
92	8	0.85	1.03	1.21	1.4	1.58
91	9	0.93	1.11	1.29	1.47	1.66
90	10	1.01	1.19	1.37	1.55	1.73
88	12	1.17	1.35	1.52	1.7	1.87
86	14	1.33	1.5	1.68	1.85	2.02
84	16	1.49	1.66	1.83	2	2.16

Increasing the linolenic limit from the value of 1.0% to the value of 1.5%, will have the following consequences:

- The linolenic acid parameter could not be used for the detection of fraud given the increase in the range of its values. In addition, there would no longer be an effective parameter for the detection of fraud of an olive oil with desterolised rapeseed oil.
- Values of linolenic acid from 1.0% to 1.5% might have a great influence on the values of the parameter ΔECN42, which is also a valuable tool in the detection of fraud.

c) Use the IOC proposal for olive oils with 1.0 < Ln ≤ 1.4%: apparent b-sitosterol/campesterol ≥ 24

The IOC would like to emphasize that the study on deviations of authentic olive oils in terms of linolenic acid took a long time and many suggestions were implemented. The decision tree finally adopted was checked with many olive oils from different origins. It was confirmed that this decision tree would: (1) cover the majority of olive oils with deviations from the linolenic acid limit and (2) protect olive oil from adulteration with other vegetable oils. A decision tree is not expected to cover **every authentic oil,** as mentioned in paragraph 11 of document CX/FO 24/28/8: "*It was noted that the IOC, **with the aim of not excluding any authentic oil** with non-compliant percentages of linolenic acid, different studies since 2003 and lastly a 3-year study were carried out to look for additional parameters to be applied only to non-compliant oils, and to consider them authentic if they met this additional parameter. The study concluded that the percentages of linolenic acid in oils ranged*

between 1.0 to 1.4% of linolenic acid and if the ratio between apparent β-sitosterol/campesterol was ≥ 24, the oil could be considered authentic olive oil."

Taking into consideration that our main purpose is to protect olive oil from adulteration, a decision tree for deviant authentic olive oils is considered effective if the majority of deviated olive oils from different origins comply with it.

The IOC considers that any country that disagrees with this decision tree should check the compliance of its olive oils with said tree, bearing in mind that linolenic acid is valuable for detecting adulteration.

The IOC welcomes any proposals that may address the issue of deviations of authentic olive oils due to natural variations, as long as the margins of olive oil adulteration are not increased.

d) Section 3.2.1: Uncertainty measurements for trans fatty acids

DOCUMENT CX/FO 24/28/8 AFFIRMATIVE ANSWERS 17, NEGATIVE ANSWERS 1 (against CA)

IOC COMMENTS

The determination of trans-fatty acids is an important purity criterion of olive oil, used for the detection of refined olive oils or for the detection of other vegetable oils. The limits of trans-fatty acids for virgin olive oils protect these oils from the addition of refined oils. Moreover, the limits of trans-fatty acids for olive oils also protect these oils from the addition of other vegetable oils that have undergone strong refining conditions, e.g. desterolised oils.

The IOC does not support the proposal of expressing trans-fatty acid limits to one-decimal place. Adopting this proposal has a great influence on the limits. Particularly, the effectiveness of this parameter in detecting fraud would be reduced, especially in the case of edible virgin olive oils. For example, a virgin olive oil with trans-oleic acid 0.07, will be characterized as non-compliant with its category according to the IOC TRADE STANDARD, and as compliant according to the CODEX STAN. Consequently, expressing trans-fatty acid limits to one-decimal place can result in the non-uniform implementation of international standards.

e) Section 3.2.3: Footnote on a general statement on sterols in virgin olive oil - "Virgin olive oil's authenticity is not compromised if one sterol, or their minimum content, does not fall within the ranges provided for, if all other sterols and parameters tested referred to in this standard fall within the stated ranges."

DOCUMENT CX/FO 24/28/8 AFFIRMATIVE ANSWERS 12, NEGATIVE ANSWERS 5 (against US, AU, CA, Syria, USP)

IOC COMMENTS

The above statement refers to both individual and total sterols. It allows one deviation from the official limits on any individual sterol or total sterols content of an olive oil in order to avoid an uncertain decision on authenticity. However, this proposal contradicts the fact that individual sterols are essential for checking the authenticity of olive oils.

The limits for each individual sterol were adopted after thorough research to detect the adulteration of an olive oil with a different kind of vegetable oil. No sterol limit can be replaced by another. Accepting a deviation without setting another criterion would lead to the conclusion that the oil is uncontrollable, both in terms of its fair marketing and its consumption.

It should be reiterated that, in order to verify an olive oil's authenticity, its compliance with all the purity criteria that are critical for authenticity control should be. Otherwise, the probability that an olive oil becomes adulterated with oils that are not olive oil becomes significantly higher than the probability of an oil exhibiting an anomalous composition due to natural variations in terms of its sterol content.

For the time being, the only reliable tool for facing the deviations of some authentic olive oils from the official limits regarding individual sterols is the adoption of a decision tree based on scientific evidence. This way, the authenticity of an oil that comes from cultivars with specific origins can be recognised, while at the same time excluding the risk of adulteration.

Consequently, proposals like the one above that challenge the mandatory application of the critical authenticity criteria cannot be accepted.

f). Section 3.3.1: Organoleptic characteristics of virgin olive oils - the median of the most perceived defect for virgin olive oils with a footnote "includes the uncertainty predicted by the IOC method."

DOCUMENT CX/FO 24/28/8 AFFIRMATIVE ANSWERS 12, NEGATIVE ANSWERS 5 (against US, AU, CA, Syria, USP)

IOC COMMENTS

The limit of 3.5 for the predominant defect in the virgin olive oil category adopted in the IOC standard the uncertainty of the method. Therefore, the equivalent of the 2.5 median defect limit in the Codex standard is indeed the IOC limit of 3.5, given that 3.5 takes uncertainty into account.

Taking into consideration that the method COI/T.20/Doc. No 15 (organoleptic assessment of virgin olive oil) paragraph 10.4 states that *"The error of the method has been taken into account when establishing the limits, which are therefore considered to be absolute.",* the following two proposals are equivalent and identical.

- **Proposal 1**. Limit 3.5 for the predominant defect in virgin olive oil category.
- **Proposal 2**. Limit 2.5 for the predominant defect in virgin olive oil category with a footnote "this limit does not include the uncertainty predicted by the IOC method".

The first proposal is the one adopted by the IOC TRADE STANDARD, which does not need to be accompanied by a footnote since there is paragraph 10.4 of the method and the second proposal is the one that exists so far in the CODEX STAN without the footnote.

Using any of the aforementioned proposals leads to the same result, which means that the uniform application of the two standards is achieved.

g.1.) APPENDIX 1.5. 1,2-diglycerides (% total diglycerides)

g.2.) APPENDIX 1.6. Pyropheophytin "a" (% total chlorophyll pigments)

DOCUMENT CX/FO 24/28/8 AFFIRMATIVE ANSWERS 13, NEGATIVE ANSWERS 4 (against US, AU, CA, USP)

IOC COMMENTS

The study carried out by the IOC in 2020 on the parameters 1,2 diglycerides and Pyropheophytin "a" concluded that many doubts still remain regarding their usefulness as quality parameters and concerning the methods for their determination. Thus, the provisions for 1,2-diglycerides (% total diglycerides) and Pyropheophytin "a" and their corresponding methods should not be added to the standard CXS 33-1981, given that the methods have many variables that might influence the results, and there are other methods available for evaluating quality.

The best solution for this issue would be the one provided in paragraphs 21 and 23 of document CX/FO 24/28/8, which states:

"The provisions for 1,2-diglycerides (% total diglycerides) and for Pyropheophytin "a" (% total chlorophyll pigments) for extra virgin oil and their corresponding methods of analysis not to be added to the Standard. This proposal would not prevent individual Members from using these methods as they did until now."

The IOC remains open to carry out further scientific studies on PPP & DAGs.

h) Section 8 and Section 3 of the Appendix, Methods of Analysis

DOCUMENT CX/FO 24/28/8 AFFIRMATIVE ANSWERS 14, NEGATIVE ANSWERS 3 (against US, AU, CA)

IOC COMMENTS

The list of the Methods of Analysis and Sampling of Section 8 of the main body and Section 3 of the Appendix, as presented in the proposed draft revised standard, took into account the comments raised in CRD24 and the requirements of CCMAS. Therefore, these methods can be forwarded to CCMAS for the purposes of revising and updating the methods for olive oil in the standard CXS 234-1999. Following that, they would be removed and replaced by a statement making reference to CXS 234-1999, i.e.: "For checking the compliance with this standard, the methods of analysis and sampling contained in the recommended Methods of Analysis and Sampling (CXS 234-1999) relevant to the provisions in this standard shall be used."

The IOC proposes deleting the methods of analyses for the parameters 1, 2-Diglycerides and Pyropheophytin "a" from the amended list of Section 3 of the Appendix, since it does not agree with their adoption in an international standard.

CONCLUSION

The Chairperson of CCFO27 noted that, despite the remarkable work done on the proposed revision of CXS 33-1981, the standard was not ready to progress. She urged the delegations to work together between now and the next session to come to an agreement on all pending issues so that the draft revision could be finalised by CCFO28.

The IOC considered that the proposals where consensus was reached at the 27th plenary session of the CCFO should be adopted, and that work on a scientific and objective basis should be done in order to reach a consensus on the other items. The IOC's expert chemists are working in this direction.

Hopefully, the presentation of arguments concerning the unresolved matters will convince the countries that are in disagreement, and harmonization between CODEX CXS 33-1981 and IOC TRADE STANDARD can be achieved on the occasion of the CCFO28.

It should be emphasized that the main purpose of international standards is to facilitate trade, prevent olive oil fraud and to protect consumers.

COMMENTAIRES DU COI - FRENCH

Chers président, coprésidents, secrétariat du Codex et membres du CCHG,

Le Secrétariat exécutif (SE) du Conseil oléicole international (COI) souhaite tout d'abord exprimer ses compliments pour le travail et les activités réalisés par le Secrétariat de la Commission du Codex Alimentarius et par le président et les coprésidents du groupe de travail électronique (GTe) du CCHG depuis 2017, ainsi que pour la collaboration de la Commission avec le COI sur la révision de la norme pour les huiles d'olive et les huiles de grignons d'olive (CODEX STAN 33-1981).

Il convient de noter que de grands progrès ont été réalisés au sein du CCHG27 (sur la base des quatre années de travail du GTe du CCHG) et que de nombreux points ont été harmonisés dans les deux normes (CODEX STAN 33-1981 et NORME COMMERCIALE DU COI). Toutefois, l'harmonisation n'est pas encore complète. Les discussions au cours des trois (3) cycles de consultations menées par le GTe (de 2022 à 2023) n'ont pas permis de parvenir à un large consensus sur toutes les questions en suspens du CCHG27.

Le présent document **CX/FO 24/28/8**, préparé par le GTe présidé par l'Espagne et coprésidé par l'Argentine, donne un bref aperçu des arguments pour et contre chaque question en suspens. Un nouvel échange de vues sur le contenu de ce document serait peut-être utile pour parvenir à un consensus sur ces questions.

AVANT-PROJET DE RÉVISION DES ARTICLES 3, 8 ET DE L'ANNEXE CXS 33-1981- questions placées entre crochets (janvier 2024).

Les questions en suspens du CCHG27, en particulier les dispositions qui ont été placées entre crochets, comme le souligne le rapport du CCHG27, sont au nombre de huit (8) au total. Elles sont mentionnées dans le document CX/FO 24/28/8.

Ces questions ont fait l'objet de discussions approfondies et aucun consensus n'a été atteint. Nous examinons ci-dessous ces questions afin d'étudier les approches qui peuvent être adoptées pour harmoniser les deux normes (CODEX STAN et NORME COMMERCIALE DU COI).

a) Section 3.2.1 : Intervalles CGL de composition en acides gras - valeur minimale de l'acide oléique (C18:1) de [53%] ou [55%].

DOCUMENT CX/FO 24/28/8 {LIMITE 55% : RÉPONSES AFFIRMATIVES 14, RÉPONSES NÉGATIVES 4 (contre US, AU, CA, Arabie saoudite)}

COMMENTAIRES DU COI

Une teneur élevée en acide oléique est un facteur majeur de l'identité de l'huile d'olive. Les premières observations concernant les bienfaits de l'huile d'olive pour la santé (avant la découverte des polyphénols ne soient découverts dans l'huile d'olive vierge extra) ont mis en évidence l'existence de cet acide. En outre, les rapports oléique/linolénique sont extrêmement importants pour les caractéristiques nutritionnelles particulières de l'huile d'olive et sa durée de conservation.

Compte tenu des propriétés bénéfiques avérées de l'acide oléique pour la santé humaine, il convient de faire preuve d'une grande prudence avant d'envisager des modifications visant à abaisser la limite de l'acide

oléique. Il est bien connu qu'à l'heure actuelle, la production d'huiles végétales à forte teneur en acide oléique est en constante augmentation en raison des propriétés bénéfiques prouvées de l'acide oléique pour la santé humaine.

En outre, les pays qui demandent une limite de 53% pour l'acide oléique n'ont pas fourni de preuves démontrant que les écarts relatifs à l'acide oléique concernent une grande partie de leur production d'huiles d'olive. Il serait intéressant de vérifier le pourcentage réel de la production concernée.

b) Section 3.2.1 : Intervalles CGL de composition en acides gras - Note de bas de page associée aux valeurs de **C18:3 Ln ≤ 1,0%** et à l'utilisation d'un arbre de décision pour les huiles d'olive avec 1,0 < Ln ≤ 1,4 %.

c) Section 3.2.1 : Intervalles CGL de composition en acides gras - Note de bas de page associée aux valeurs de C18:3 - **Utiliser la proposition du COI pour les huiles d'olive avec 1,0 < Ln ≤ 1,4 % : b-sitostérol/campestérol apparent ≥ 24**.

DOCUMENT CX/FO 24/28/8

b) C18:3 Ln ≤ 1,0% : RÉPONSES AFFIRMATIVES 14, RÉPONSES NÉGATIVES 4 (contre US, AU, CA, Arabie saoudite**)**

c) Utiliser la proposition du COI pour les huiles d'olive avec 1,0 < Ln ≤ 1,4% : b-sitostérol/campestérol apparent ≥ 24. RÉPONSES AFFIRMATIVES 13, RÉPONSES NÉGATIVES 5 (contre US, AU, CA, Arabie saoudite, Iran**)**

COMMENTAIRES DU COI

b) C18:3 Ln ≤ 1,0%

L'acide linolénique est essentiel pour détecter l'adultération de l'huile d'olive avec d'autres huiles végétales. L'adoption d'une limite maximale de 1,0% pour l'acide linolénique et d'un arbre de décision efficace pour les huiles d'olive authentiques hors limites permet de protéger les huiles d'olive contre la fraude.

L'augmentation de la limite d'acide linolénique de 1,0% à 1,5% n'est pas une solution. Comme indiqué précédemment, l'acide linolénique est un acide gras essentiel. L'augmentation de la limite d'un acide gras utile pour détecter les fraudes aura une influence sur le niveau de détection des fraudes. Les données expérimentales ont montré que l'augmentation de la limite de l'acide linolénique de 1,0% à 1,5% diminuera d'environ 6% le pourcentage d'huile végétale détectable dans les olives, ce qui signifie que le risque de fraude augmentera d'environ 6%. Ces résultats sont indiqués dans le tableau ci-après.

Tableau : Détection de la fraude avec de l'huile de colza dans des huiles d'olive présentant différentes compositions d'acide linolénique.

		C18:3	C18:3	C18:3	C18:3	C18:3
OLIVE OIL		0.2	0.4	0.6	0.8	1
RAPESEED		8.3	8.3	8.3	8.3	8.3
MIXTURES %						
OLIVE OIL	RAPESEED	C18:3	C18:3	C18:3	C18:3	C18:3
99	1	0.28	0.48	0.68	0.87	1.07
97	3	0.44	0.64	0.83	1.02	1.22
94.5	5.5	0.64	0.83	1.02	1.21	1.4
93	7	0.77	0.95	1.14	1.32	1.51
92	8	0.85	1.03	1.21	1.4	1.58
91	9	0.93	1.11	1.29	1.47	1.66
90	10	1.01	1.19	1.37	1.55	1.73
88	12	1.17	1.35	1.52	1.7	1.87
86	14	1.33	1.5	1.68	1.85	2.02
84	16	1.49	1.66	1.83	2	2.16

L'augmentation de la valeur de la limite linolénique de 1,0% à 1,5% aura les conséquences suivantes :

- Le paramètre acide linolénique ne pourra pas être utilisé pour la détection de la fraude en raison de l'augmentation de l'intervalle de ses valeurs. En outre, il n'y aura plus de paramètre efficace pour la détection des fraudes dans l'huile d'olive avec de l'huile de colza déstérolisée.
- Les valeurs d'acide linolénique comprises entre 1,0% et 1,5% pourraient avoir une forte influence sur les valeurs du paramètre ΔECN42, qui est également un outil précieux pour la détection des fraudes.

c) Utiliser la proposition du COI pour les huiles d'olive avec 1,0 < Ln ≤ 1,4% : b-sitostérol/campestérol apparent ≥ 24

Le COI tient à souligner que l'étude sur les écarts d'acide linolénique dans les huiles d'olive authentiques a été très longue et que de nombreuses suggestions ont été appliquées. L'arbre de décision finalement adopté a été vérifié avec de nombreuses huiles d'olive de différentes origines. Il a été confirmé que cet arbre permettait (1) de couvrir la majorité des huiles d'olive présentant des écarts par rapport à la limite d'acide linolénique et (2) de protéger l'huile d'olive de l'adultération avec d'autres huiles végétales. Un arbre de décision n'est pas censé couvrir **toutes les huiles authentiques,** comme indiqué au paragraphe 11 du document CX/FO 24/28/8 : « *Il a été noté que le COI,* ***dans le but de n'exclure aucune huile authentique*** *présentant des pourcentages d'acide linolénique non conformes, a réalisé différentes études depuis 2003 et, en dernier lieu, une étude de trois ans afin de rechercher des paramètres supplémentaires à appliquer uniquement aux huiles non conformes, et de les considérer comme authentiques si elles satisfont à ce paramètre supplémentaire. L'étude a conclu que les pourcentages d'acide linolénique dans les huiles se situaient entre 1,0 et 1,4% d'acide linolénique et que si le rapport entre* β *-sitostérol/campestérol apparent était ≥ 24, l'huile pouvait être considérée comme une huile d'olive authentique.* »

Notre principal objectif étant de protéger l'huile d'olive de l'adultération, un arbre de décision pour les huiles d'olive authentiques déviantes est considéré comme efficace si la majorité des huiles d'olive déviantes de différentes origines s'y conforment.

Le COI considère que tout pays en désaccord avec cet arbre de décision devrait vérifier la conformité de ses huiles d'olive avec ledit arbre, en gardant à l'esprit que l'acide linolénique est un paramètre précieux pour la détection de l'adultération.

Le COI accueille favorablement toute proposition visant à résoudre la question des écarts dus à des variations naturelles dans les huiles d'olive authentiques, à condition que les marges d'adultération de l'huile d'olive ne soient pas augmentées.

d) Section 3.2.1 : Mesures d'incertitude pour les acides gras trans

DOCUMENT CX/FO 24/28/8 RÉPONSES AFFIRMATIVES 17, RÉPONSES NÉGATIVES 1 (contre CA**)**

COMMENTAIRES DU COI

La détermination des acides gras trans est un critère de pureté important de l'huile d'olive, utilisé pour la détection des huiles d'olive raffinées ou pour la détection d'autres huiles végétales. Les limites d'acides gras trans dans les huiles d'olive vierges protègent ces huiles de l'ajout d'huiles raffinées. En outre, ces limites protègent également les huiles d'olive de l'ajout d'autres huiles végétales soumises à des conditions de raffinage rigoureuses, notamment les huiles déstérolisées.

Le COI ne soutient pas la proposition d'exprimer les limites d'acides gras trans à une décimale. L'adoption de cette proposition aurait une grande répercussion sur les limites, car elle réduirait l'efficacité de ce paramètre pour détecter les fraudes, en particulier dans le cas des huiles d'olive vierges comestibles. Une huile d'olive vierge avec un acide trans-oléique de 0,07 serait ainsi caractérisée comme non conforme à sa catégorie selon la NORME COMMERCIALE DU COI, et comme conforme selon la STAN du CODEX. L'expression des limites d'acide gras trans à une décimale entraînerait donc une mise en œuvre non uniforme des normes internationales.

e) Section 3.2.3 : Note de bas de page relative à une déclaration générale sur les stérols dans l'huile d'olive vierge – « L'authenticité de l'huile d'olive vierge n'est pas compromise si un stérol, ou sa teneur minimale, ne se situe pas dans les intervalles prévus, si tous les autres stérols et paramètres testés visés dans la présente norme se situent dans les intervalles indiqués ».

DOCUMENT CX/FO 24/28/8 RÉPONSES AFFIRMATIVES 12, RÉPONSES NÉGATIVES 5 (contre US, AU, CA, Syrie, USP)

COMMENTAIRES DU COI

La déclaration ci-dessus se réfère à la fois aux stérols individuels et aux stérols totaux. Elle autorise un écart par rapport aux limites officielles de la teneur en stérols individuels ou totaux d'une huile d'olive afin d'éviter une décision incertaine sur l'authenticité. Toutefois, cette proposition est en contradiction avec le fait que les stérols individuels sont essentiels pour vérifier l'authenticité des huiles d'olive.

Les limites pour chaque stérol ont été adoptées après des recherches approfondies visant à détecter l'adultération d'une huile d'olive avec un autre type d'huile végétale. Aucune limite de stérol ne peut être remplacée par une autre. Accepter un écart sans fixer d'autre critère conduirait à la conclusion que l'huile ne peut pas être contrôlée, tant sur le plan de sa commercialisation loyale que de sa consommation.

Il convient de rappeler que, pour vérifier l'authenticité d'une huile d'olive, il faut qu'elle soit conforme à tous les critères de pureté qui sont essentiels pour le contrôle de l'authenticité. Dans le cas contraire, la probabilité qu'une huile d'olive soit adultérée avec des huiles qui ne sont pas de l'huile d'olive devient nettement plus élevée que la probabilité qu'une huile présente une composition anormale due à des variations naturelles en termes de teneur en stérols.

Actuellement, le seul outil fiable pour faire face aux écarts de certaines huiles d'olive authentiques par rapport aux limites officielles concernant les stérols individuels est l'adoption d'un arbre de décision reposant sur des preuves scientifiques. De cette manière, il est possible de reconnaître l'authenticité d'une huile provenant de cultivars d'origines spécifiques, tout en excluant le risque d'adultération.

Par conséquent, les propositions comme celle qui précède, qui remettent en cause l'application obligatoire des critères d'authenticité critique, ne peuvent être acceptées.

f). Section 3.3.1 : Caractéristiques organoleptiques des huiles d'olive vierges - la médiane du défaut le plus apparent pour les huiles d'olive vierges avec une note de bas de page « inclut l'incertitude prévue par la méthode du COI ».

DOCUMENT CX/FO 24/28/8 RÉPONSES AFFIRMATIVES 12, RÉPONSES NÉGATIVES 5 (contre US, AU, CA, Syrie, USP)

COMMENTAIRES DU COI

La limite de 3,5 pour le défaut le plus apparent dans la catégorie de l'huile d'olive vierge adoptée dans la norme du COI tient compte de l'incertitude de la méthode. Par conséquent, l'équivalent de la limite de 2,5 pour la médiane du défaut dans la norme Codex est bien la limite de 3,5 du COI, car ce chiffre tient compte de l'incertitude.

Compte tenu du fait que la méthode COI/T.20/Doc. nº 15 (évaluation organoleptique de l'huile d'olive vierge), paragraphe 10.4, indique que « *Les limites de ces intervalles ayant été établies en tenant compte de l'erreur de la méthode, elles sont considérées comme absolues*», les deux propositions suivantes sont équivalentes et identiques.

- **Proposition 1**. Limiter à 3,5 le défaut le plus apparent dans la catégorie huile d'olive vierge.
- **Proposition 2**. Limiter à 2,5 le défaut le plus apparent dans la catégorie huile d'olive vierge avec une note de bas de page indiquant que « cette limite n'inclut pas l'incertitude prévue par la méthode du COI ».

La première proposition est celle adoptée par la NORME COMMERCIALE DU COI, qui n'a pas besoin d'être accompagnée d'une note de bas de page puisqu'elle figure dans le paragraphe 10.4 de la méthode, et la deuxième proposition est celle qui figure jusqu'à présent dans le CODEX STAN sans note de bas de page.

Le choix de l'une ou l'autre des propositions susmentionnées aboutit au même résultat, ce qui signifie que l'application uniforme des deux normes est garantie.

g.1.) ANNEXE 1.5. 1,2-diglycérides (% diglycérides totaux)

g.2.) ANNEXE 1.6. Pyrophéophytine « a » (% de pigments de chlorophylle totaux)

DOCUMENT CX/FO 24/28/8 RÉPONSES AFFIRMATIVES 13, RÉPONSES NÉGATIVES 4 (contre US, AU, CA, USP)

COMMENTAIRES DU COI

L'étude réalisée par le COI en 2020 sur les paramètres 1,2 diglycérides et pyrophéophytine « a » a conclu que de nombreux doutes subsistent quant à leur utilité en tant que paramètres de qualité et quant aux méthodes de leur détermination. Par conséquent, les dispositions relatives aux diglycérides-1,2 (% de diglycérides totaux) et à la pyrophéophytine « a » ainsi que les méthodes correspondantes ne devraient pas être ajoutées à la norme CXS 33-1981, étant donné que les méthodes comportent de nombreuses variables susceptibles d'influencer les résultats et qu'il existe d'autres méthodes d'évaluation de la qualité.

La meilleure solution à ce problème serait celle qui figure aux paragraphes 21 et 23 du document CX/FO 24/28/8, qui stipule que :

« *Les dispositions relatives aux 1,2-diglycérides (% de diglycérides totaux) et à la pyrophéophytine « a » (% de pigments de chlorophylle totaux) pour l'huile vierge extra et les méthodes d'analyse correspondantes ne doivent pas être ajoutées à la norme. Cette proposition n'empêcherait pas les membres individuels d'utiliser ces méthodes comme ils l'ont fait jusqu'à présent.* »

La COI reste ouvert à la réalisation d'autres études scientifiques sur les PPP et les DAG.

h) Section 8 et section 3 de l'annexe, Méthodes d'analyse

DOCUMENT CX/FO 24/28/8 RÉPONSES AFFIRMATIVES 14, RÉPONSES NÉGATIVES 3 (contre US, AU, CA)

COMMENTAIRES DU COI

La liste des méthodes d'analyse et d'échantillonnage de la section 8 du corps principal et dans la section 3 de l'annexe, telle que présentée dans l'avant-projet de norme révisée, tient compte des observations formulées dans le document CRD24 et des exigences du CCMAS. Ces méthodes peuvent donc être transmises au CCMAS aux fins de la révision et de la mise à jour des méthodes relatives à l'huile d'olive dans la norme CXS 234-1999. Elles seront ensuite supprimées et remplacées par une déclaration faisant référence à la norme CXS 234-1999, à savoir : « Pour vérifier la conformité à la présente norme, les méthodes d'analyse et d'échantillonnage contenues dans les méthodes d'analyse et d'échantillonnage recommandées (CXS 234-1999) en rapport avec les dispositions de la présente norme doivent être utilisées ».

Le COI propose de supprimer les méthodes d'analyse des paramètres 1, 2-diglycérides et pyrophéophytine « a » de la liste modifiée de la section 3 de l'annexe, car il n'est pas favorable à leur adoption dans une norme internationale.

CONCLUSION

La présidente du CCFO27 a noté que, malgré le travail remarquable effectué sur la proposition de révision de la norme CXS 33-1981, la norme n'était pas prête à progresser. Elle a exhorté les délégations à travailler ensemble d'ici la prochaine session pour parvenir à un accord sur toutes les questions en suspens afin que le projet de révision puisse être finalisé par le CCHG28.

Le COI a estimé que les propositions ayant fait l'objet d'un consensus lors de la 27e session plénière du CCHG devaient être adoptées et qu'il convenait de travailler sur une base scientifique et objective afin de parvenir à un consensus sur les autres points. Les experts chimistes du COI travaillent dans ce sens.

Il faut espérer que la présentation des arguments concernant les questions en suspens convaincra les pays qui sont en désaccord, et que l'harmonisation entre la norme CODEX CXS 33-1981 et la NORME COMMERCIALE du COI pourra être réalisée à l'occasion de la 28e session du CCHG.

Il convient de souligner que l'objectif principal des normes internationales est de faciliter le commerce, de prévenir la fraude sur l'huile d'olive et de protéger les consommateurs.

OBSERVACIONES DEL COI - SPANISH

Estimados presidente, copresidentes, Secretaría del Codex y miembros del CCFO:

La Secretaría Ejecutiva (SE) del Consejo Oleícola Internacional (COI) desearía empezar dando la enhorabuena por el trabajo y las actividades que han realizado desde 2017 la Secretaría de la Comisión del Codex Alimentarius y la presidencia y vicepresidencias del grupo de trabajo electrónico (GTe) sobre el CCFO, así como por la colaboración que la Comisión ha mantenido con el COI en relación con revisión de la norma para los aceites de oliva y aceites de orujo de oliva (CODEX STAN 33-1981).

Cabe señalar que se avanzó mucho en la CCFO27 (con base en los cuatro años de trabajo del GTe sobre el CCFO) y se armonizaron muchas cuestiones en las dos normas (CODEX STAN 33-1981 y NORMA COMERCIAL DEL COI). Sin embargo, no se logró una armonización completa. Las deliberaciones que tuvieron lugar durante las tres (3) rondas de consultas celebradas por el GTe (de 2022 a 2023) no alcanzaron un consenso amplio sobre todas las cuestiones pendientes de la CCFO27.

En este documento **CX/FO 24/28/8** preparado por el GTe presidido por España y copresidido por Argentina, se presenta un breve resumen de los argumentos a favor y en contra de cada cuestión pendiente. Quizás sería útil un nuevo intercambio de puntos de vista con relación a los contenidos de este documento para alcanzar un consenso sobre estas cuestiones.

ANTEPROYECTO DE REVISIÓN DE LAS SECCIONES 3, 8 Y EL APÉNDICE DE CXS 33-1981- cuestiones entre corchetes (Enero de 2024).

Las cuestiones pendientes de la CCFO27, especialmente las disposiciones que se hicieron constar entre corchetes, como se pone de relieve en el informe de la CCFO27, suman un total de ocho (8). Se incluyen en el documento CX/FO 24/28/8.

Estas cuestiones se han tratado en profundidad y no se ha logrado ningún consenso. A continuación examinamos dichas cuestiones para estudiar posibles enfoques que pueden adoptarse para conseguir la armonización de las dos normas (CODEX STAN y NORMA COMERCIAL DEL COI).

a) Sección 3.2.1: Gamas de composición de ácidos grasos determinadas mediante cromatografía de gas líquido (CGL) - el valor mínimo de ácido oleico (C18:1) de [53 %] o [55 %].

DOCUMENTO CX/FO 24/28/8 {LÍMITE 55 %: RESPUESTAS AFIRMATIVAS 14, RESPUESTAS NEGATIVAS 4 (en contra Estados Unidos, Australia, Canadá, Arabia Saudí)}

OBSERVACIONES DEL COI

Un contenido alto de ácido oleico es un factor fundamental de identidad del aceite de oliva. Las primeras observaciones relacionadas con las propiedades saludables del aceite de oliva (antes de que se descubrieran los polifenoles en el AOVE) ponían de relieve la existencia de este ácido. Además, las relaciones entre ácido oleico y ácido linolénico son sumamente relevantes para las características nutricionales particulares del aceite de oliva y su vida útil.

Teniendo en cuenta las propiedades beneficiosas demostradas del ácido oleico para la salud humana, debemos ser muy cautelosos al considerar posibles cambios relacionados con un límite inferior de ácido oleico. Como es bien sabido, actualmente, la producción de aceites vegetales con un alto contenido de ácido oleico está aumentando de forma constante debido a las propiedades beneficiosas demostradas de este ácido para la salud humana.

A esto se suma que los países que solicitan un límite de ácido oleico del 53 % no han aportado pruebas que demuestren que las desviaciones relativas al ácido oleico afecten a una gran cantidad de los aceites de oliva que producen. Sería interesante comprobar el porcentaje real de producción afectada.

b) Sección 3.2.1: Gamas de composición de ácidos grasos determinadas mediante CGL - Nota al pie asociada con los valores de **C18:3 Ln ≤ 1,0 %** y utilizar el árbol de decisiones para aceites de oliva con 1,0 % < Ln ≤ 1,4 %.

c) Sección 3.2.1: Gamas de composición de ácidos grasos determinadas mediante CGL - Nota al pie asociada con los valores de C18:3 - **Utilizar la propuesta del COI para aceites de oliva con 1,0 % < Ln ≤ 1,4 %: β-sitosterol aparente/campesterol ≥ 24**.

DOCUMENTO CX/FO 24/28/8

b) C18:3 Ln ≤ 1,0 %: RESPUESTAS AFIRMATIVAS 14, RESPUESTAS NEGATIVAS 4 (en contra Estados Unidos, Australia, Canadá, Arabia Saudí)

c) Utilizar la propuesta del COI para aceites de oliva con 1,0 % < Ln ≤ 1,4 %: β-sitosterol aparente/campesterol ≥ 24. RESPUESTAS AFIRMATIVAS 13, RESPUESTAS NEGATIVAS 5 (en contra Estados Unidos, Australia, Canadá, Arabia Saudí, Irán)

OBSERVACIONES DEL COI

b) C18:3 Ln ≤ 1,0 %

El ácido linolénico es crucial para detectar la adulteración del aceite de oliva con otros aceites vegetales. Al adoptar un límite máximo del 1,0 % para el ácido linolénico y un árbol de decisiones eficaz para los aceites de oliva auténticos que rebasan los límites, los aceites de oliva quedan protegidos frente al fraude.

El aumento del límite del ácido linolénico de 1,0 % a 1,5 % no es una solución. Como se ha dicho anteriormente, el ácido linolénico es un ácido graso fundamental. Elevar el límite de un ácido graso útil para detectar el fraude incidirá en el nivel de detección de fraudes. Los datos experimentales han demostrado que, si se incrementa el límite del ácido linolénico de 1,0 % a 1,5 %, el porcentaje de aceite vegetal detectable en el aceite de oliva descenderá en un 6 % aproximadamente. Por tanto, el riesgo de fraude aumentará en torno a un 6 %. La tabla siguiente presenta estos resultados.

Tabla. Detección de fraudes relacionados con el aceite de oliva mezclado con aceite de colza mediante el uso de aceites de oliva con diferente composición de ácido linolénico.

	C18:3	C18:3	C18:3	C18:3	C18:3
OLIVE OIL	0.2	0.4	0.6	0.8	1
RAPESEED	8.3	8.3	8.3	8.3	8.3

MIXTURES %						
OLIVE OIL	RAPESEED	C18:3	C18:3	C18:3	C18:3	C18:3
99	1	0.28	0.48	0.68	0.87	1.07
97	3	0.44	0.64	0.83	1.02	1.22
94.5	5.5	0.64	0.83	1.02	1.21	1.4
93	7	0.77	0.95	1.14	1.32	1.51
92	8	0.85	1.03	1.21	1.4	1.58
91	9	0.93	1.11	1.29	1.47	1.66
90	10	1.01	1.19	1.37	1.55	1.73
88	12	1.17	1.35	1.52	1.7	1.87
86	14	1.33	1.5	1.68	1.85	2.02
84	16	1.49	1.66	1.83	2	2.16

Elevar el límite del ácido linolénico del valor de 1,0 % al valor de 1,5 % tendrá las consecuencias siguientes:

- El parámetro del ácido linolénico no podría emplearse para detectar fraudes, dado el aumento del rango de sus valores. Además, ya no habría un parámetro eficaz para detectar fraudes relacionados con el aceite de oliva mezclado con aceite de colza desesterolizado.
- Los valores del ácido linolénico de 1,0 % a 1,5 % podrían ejercer una gran influencia en los valores del parámetro ΔECN42, que también es una herramienta valiosa para detectar el fraude.

c) Utilizar la propuesta del COI para aceites de oliva con 1,0 % < Ln ≤ 1,4 %: β-sitosterol aparente/campesterol ≥ 24

El COI querría destacar que el estudio de las desviaciones de los aceites de oliva auténticos en cuanto a ácido linolénico llevó mucho tiempo y numerosas sugerencias se pusieron en práctica. El árbol de decisiones finalmente adoptado se probó con muchos aceites de oliva de distintos orígenes. Se confirmó que este árbol de decisiones cumpliría los cometidos siguientes: 1) cubriría la mayoría de los aceites de oliva que presentan

desviaciones respecto del límite del ácido linolénico; y 2) protegería el aceite de oliva frente a la adulteración con otros aceites vegetales. No se espera que un árbol de decisiones cubra **todos los aceites auténticos,** como se menciona en el párrafo 12 del documento CX/FO 24/28/8: *«Se puntualizó que el COI, **a fin de no excluir ningún aceite de oliva auténtico** cuyos porcentajes de ácido linolénico no se ajustaran a los límites, había realizado diferentes estudios desde 2003 y un estudio de tres años con el objetivo de encontrar parámetros adicionales para aplicarlos solo a los aceites que no presentaran el rango admitido y considerarlos auténticos si satisfacían un parámetro adicional. El estudio concluyó que los porcentajes de ácido linolénico de los aceites estaban entre 1,0 % y 1,4 % y que, si la relación entre el β-sitosterol aparente/campesterol era ≥ 24, se podía considerar un aceite como aceite de oliva auténtico.»*

Considerando que nuestro propósito principal es proteger el aceite de oliva frente a la adulteración, se considera que un árbol de decisiones para aceites de oliva auténticos que se desvían de los valores fijados será eficaz si la mayoría de los aceites de oliva desviados procedentes de distintos orígenes cumplen con los requisitos que dicho árbol establece.

El COI opina que cualquier país que no esté de acuerdo con este árbol de decisiones debe comprobar la conformidad de sus aceites de oliva con dicho árbol, teniendo presente que el ácido linolénico es una herramienta valiosa para detectar adulteraciones.

El COI acoge con beneplácito cualquier propuesta que pueda resolver la cuestión de las desviaciones de los aceites de oliva auténticos debidas a variaciones naturales, siempre y cuando no se incrementen los márgenes de adulteración del aceite de oliva.

d) Sección 3.2.1: Mediciones de la incertidumbre para los ácidos grasos trans

DOCUMENTO CX/FO 24/28/8 RESPUESTAS AFIRMATIVAS 17, RESPUESTAS NEGATIVAS 1 (en contra Canadá)

OBSERVACIONES DEL COI

La determinación de los ácidos grasos trans es un importante criterio de pureza del aceite de oliva, que se utiliza para detectar aceites de oliva refinados u otros aceites vegetales. Los límites de ácidos grasos trans para los aceites de oliva vírgenes protegen estos aceites frente a la adición de aceites refinados. Además, los límites de ácidos grasos trans para los aceites de oliva también protegen estos aceites frente a la adición de otros aceites vegetales que se han sometido a condiciones de refinado intenso, por ejemplo los aceites desesterolizados.

El COI no apoya la propuesta de expresar los límites de ácidos grasos trans con un decimal. La adopción de esta propuesta repercute en gran medida en los límites. En particular, la eficacia de este parámetro a la hora de detectar fraudes podría verse reducida, sobre todo en el caso de los aceites de oliva vírgenes comestibles. Por ejemplo, un aceite de oliva virgen con un valor de 0,07 en ácido oleico trans se caracterizará como no conforme con su categoría de acuerdo con la NORMA COMERCIAL DEL COI y como conforme según la CODEX STAN. En consecuencia, expresar los límites de ácidos grasos trans con un decimal puede provocar que las normas internacionales no se apliquen de manera uniforme.

e) Sección 3.2.3: Nota al pie con un texto general sobre los esteroles en el aceite de oliva virgen - «La autenticidad del aceite de oliva virgen no se ve comprometida si un esterol o su contenido mínimo no está dentro de los rangos previstos, siempre y cuando todos los demás esteroles y parámetros analizados a los que se refiere esta norma estén dentro de los rangos indicados.»

DOCUMENTO CX/FO 24/28/8 RESPUESTAS AFIRMATIVAS 12, RESPUESTAS NEGATIVAS 5 (en contra Estados Unidos, Australia, Canadá, Siria, USP)

OBSERVACIONES DEL COI

El enunciado anterior alude a esteroles tanto individuales como totales. Permite una desviación respecto de los límites oficiales en cualquiera de los esteroles individuales o el contenido total de esteroles de un aceite de oliva con el fin de evitar una decisión incierta en materia de autenticidad. Sin embargo, esta propuesta contradice el hecho de que los esteroles individuales son esenciales para comprobar la autenticidad de los aceites de oliva.

Los límites para cada esterol individual se adoptaron tras una investigación exhaustiva para detectar la adulteración de un aceite de oliva con otro tipo de aceite vegetal. Ningún límite de esteroles puede sustituirse

por otro. Si se acepta una desviación sin establecer otro criterio, se llegaría a la conclusión de que el aceite es incontrolable, tanto en lo que se refiere a su comercialización justa como a su consumo.

Cabe reiterar que, para verificar la autenticidad de un aceite de oliva, este debe cumplir con todos los criterios de pureza que resultan críticos para el control de la autenticidad. De lo contrario, la probabilidad de que un aceite de oliva se adultere con aceites diferentes del de oliva es considerablemente mayor que la probabilidad de que un aceite presente una composición anómala debida a variaciones naturales relacionadas con su contenido de esteroles.

Por el momento, la única herramienta fiable para afrontar las desviaciones de algunos aceites de oliva auténticos respecto de los límites oficiales relacionados con esteroles individuales es la adopción de un árbol de decisiones basado en pruebas científicas. De esta manera, se puede reconocer la autenticidad de un aceite procedente de cultivares de orígenes específicos, a la vez que se evita el riesgo de adulteración.

Por lo tanto, no se pueden aceptar propuestas como la mencionada anteriormente, que ponen en cuestión la aplicación obligatoria de los criterios críticos de autenticidad.

f) Sección 3.3.1: Características organolépticas de los aceites de oliva vírgenes - La mediana del defecto más percibido para los aceites de oliva vírgenes con la nota al pie que reza: «incluye la incertidumbre de la medición según lo previsto por el método del COI».

DOCUMENTO CX/FO 24/28/8 RESPUESTAS AFIRMATIVAS 12, RESPUESTAS NEGATIVAS 5 (en contra Estados Unidos, Australia, Canadá, Siria, USP)

OBSERVACIONES DEL COI

El límite de 3,5 para el defecto predominante en la categoría de aceite de oliva virgen adoptado en la norma del COI tiene en cuenta la incertidumbre del método. Por tanto, el equivalente del límite de 2,5 para la mediana del defecto en la norma del Codex es en realidad el límite de 3,5 del COI, dado que 3,5 toma en consideración la incertidumbre.

Habida cuenta de que el método COI/T.20/Doc. n.º 15 (valoración organoléptica de los aceites de oliva vírgenes) expone en su sección 10.4 que *«los límites han sido establecidos teniendo en cuenta el error del método, por lo que son considerados como absolutos»,* las dos propuestas siguientes son equivalentes e idénticas.

- **Propuesta 1.** Límite de 3,5 para el defecto predominante en la categoría de aceite de oliva virgen.
- **Propuesta 2.** Límite de 2,5 para el defecto predominante en la categoría de aceite de oliva virgen con una nota al pie que reza: «este límite no incluye la incertidumbre de la medición según lo previsto por el método del COI».

La primera propuesta es la adoptada por la NORMA COMERCIAL DEL COI, que no necesita ir acompañada de ninguna nota al pie ya que consta la sección 10.4 del método, mientras que la segunda propuesta es la que ha figurado hasta ahora en la CODEX STAN sin la nota al pie.

El uso de cualquiera de las propuestas anteriores produce el mismo resultado: se logra la aplicación uniforme de ambas normas.

g.1.) APÉNDICE 1.5. 1,2-diglicéridos (% de diglicéridos totales)

g.2.) APÉNDICE 1.6. Pirofeofitina «a» (% de pigmentos de clorofila totales)

DOCUMENTO CX/FO 24/28/8 RESPUESTAS AFIRMATIVAS 13, RESPUESTAS NEGATIVAS 4 (en contra Estados Unidos, Australia, Canadá, USP)

OBSERVACIONES DEL COI

El estudio realizado por el COI en 2020 sobre los parámetros referentes a los 1,2-diglicéridos y la pirofeofitina «a» concluyó que aún quedan muchas dudas con respecto a su utilidad como parámetros de calidad y a los métodos para su determinación. Así pues, las disposiciones relativas a los 1,2-diglicéridos (% de diglicéridos totales) y la pirofeofitina «a», y sus métodos correspondientes, no deben añadirse a la norma CXS 33-1981, dado que los métodos tienen numerosas variables que pueden influir en los resultados, y hay otros métodos disponibles para evaluar la calidad.

La mejor solución a esta cuestión sería la que se propone en los párrafos 21 y 23 del documento CX/FO 24/28/8, a saber:

«que no se incluyan en la norma las disposiciones sobre los 1,2-diglicéridos (% de diglicéridos totales) y sobre la pirofeofitina "a" (% de pigmentos de clorofila totales) para el aceite virgen extra, ni el método analítico correspondiente, habida cuenta de que, de todos modos, ello no impide a ningún miembro utilizar el método».

El COI sigue mostrándose abierto a realizar más estudios científicos sobre la pirofeofitina y los diacilgliceroles (DAG).

h) Secciones 8 y 3 del apéndice: Métodos de análisis

DOCUMENTO CX/FO 24/28/8 RESPUESTAS AFIRMATIVAS 14, RESPUESTAS NEGATIVAS 3 (en contra Estados Unidos, Australia, Canadá)

OBSERVACIONES DEL COI

La lista de los métodos de análisis y muestreo de la sección 8 del cuerpo principal del documento y la sección 3 del apéndice, tal y como se ha presentado en el anteproyecto de revisión de la norma, ha tenido en cuenta las observaciones formuladas en el documento CRD24 y los requisitos del CCMAS. Por tanto, estos métodos pueden remitirse al CCMAS para que se revisen y actualicen los métodos aplicables al aceite de oliva en la norma CXS 234-1999. Después se eliminarían y sustituirían por una declaración que hiciera referencia a la norma CXS 234-1999, a saber: «Para comprobar el cumplimiento de esta norma deben utilizarse los métodos de análisis y muestreo que figuran en los métodos de análisis y de muestreo recomendados (CXS 234-1999) pertinentes para las disposiciones de esta norma.»

El COI propone suprimir los métodos de análisis para los parámetros referentes a los 1,2-diglicéridos y la pirofeofitina «a» de la lista enmendada de la sección 3 del apéndice, pues no está de acuerdo con que se adopten en una norma internacional.

CONCLUSIÓN

La presidenta de la CCFO27 señaló que, pese al trabajo notable realizado en torno a la propuesta de revisión de CXS 33-1981, la norma no estaba lista para avanzar. Instó a las delegaciones a trabajar juntas de aquí a la próxima sesión para alcanzar un acuerdo sobre todas las cuestiones pendientes, de manera que el proyecto de revisión pueda estar listo para la CCFO28.

El COI consideró que deberían adoptarse las propuestas que concitaron consenso en la 27.ª sesión plenaria del CCFO, y que debería realizarse un trabajo basado en datos científicos y objetivos para alcanzar un consenso sobre los demás asuntos. Los expertos químicos del COI están trabajando en esta dirección.

Ojalá que la presentación de argumentos relacionados con las cuestiones pendientes convenza a los países discrepantes y que, con ocasión de la CCFO28, se pueda lograr la armonización entre la CODEX CXS 33-1981 y la NORMA COMERCIAL DEL COI.

Cabe destacar que el propósito principal de las normas internacionales es facilitar el comercio, prevenir el fraude relacionado con el aceite de oliva y proteger a los consumidores.