



JOINT FAO/WHO FOOD STANDARDS PROGRAMME

CODEX COMMITTEE ON FATS AND OILS

Twenty-fourth Session

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DISCUSSION PAPER ON THE REVISION/AMENDMENT TO THE CAMPESTEROL LIMIT IN THE CODEX STANDARD FOR OLIVE OILS AND OLIVE POMACE OILS

Prepared by Argentina

INTRODUCTION AND BACKGROUND

1. In its 22nd session, the Codex Committee on Fats and Oils (CCFO) reviewed a discussion paper prepared by Australia in which new work was proposed to revise the campesterol limit in the *Standard for Olive Oils and Olive Pomace Oils* (CODEX STAN 33-1981), stressing the importance of maintaining the integrity and quality of the olive oil and the need to update the Codex standards when new scientific or other information becomes available. In this sense, it recalled that commodity standards should reflect global variations and focus on the essential characteristics of products. From this perspective, the delegation mentioned that some parameters of the existing standard do not reflect global variations properly as regards olive oil, and therefore some high-quality olive oils could not be traded in the international market.

2. Although the Committee agreed that there was no sufficient support to begin new work, it took note of the information provided by the representative of the IOC about the fact that a study on the levels of campesterol had begun and that all interested countries were invited to send samples to be included in the study. The Committee agreed that the delegation of Australia, in cooperation with Argentina, the United States and any other interested countries would revise the discussion paper for consideration at the next session, taking into account additional data that would become available in the meantime.

3. In its 23rd meeting, the Codex Committee on Fats and Oils reviewed a document to begin new work on the revision of the campesterol level in the *Standard for Olive Oils and Olive Pomace Oils*, prepared by Australia with the assistance of Argentina, the United States and New Zealand, taking into consideration the request made by the Chair of the Committee that additional data reflecting global variability were considered taking into account the geographic variation, the climatic and seasonal variation, the plant varieties, and the statistical soundness of data.

4. The delegation of Argentina then informed (see REP 13-FO, para 122) that its country had joined the International Olive Council (IOC) in 2009 and had requested the revision of the campesterol values in the IOC and Codex standards as its oils were not consistent with the existing parameters due to the varieties used and the temperatures of the production areas. For three years, and under the conditions established by the IOC, Argentina sent 40 samples, which were examined in European laboratories chosen by this organization, so that an expert group conducted a study and suggested appropriate measures for genuine oils from Argentina and other countries were not left out of the standard.

THE PROBLEM AND ITS TREATMENT IN THE IOC

5. The composition of fatty acids and other components of edible vegetable oils depends on the plant variety from which the oil is extracted and on the soil conditions, climate or seasonality of production areas. The deviation of these parameters is not a consequence of the quality or authenticity of the oils concerned but of the global variability observed in nature.

6. Under certain soil and climate conditions, some varieties of olive trees can produce genuine olive oils although some of their components fall outside the values established in the IOC standard, on which the Codex Alimentarius standard is based.

7. According to the scientific literature and the studies made by different countries and the IOC, the current limits of campesterol do not reflect properly the global variability present in genuine olive oils.

8. In these cases, it is important that international standards allow to keep the delicate balance between the necessary flexibility for all producers and trade operators to benefit from them and the appropriate measures to avoid the adulteration of olive oils with other oils not easily identifiable in order to ensure that legitimate trade is not affected.

9. In the face of the concern expressed by several countries, the IOC decided to begin new work in 2009 with a view to clarifying the concerns arising since the campesterol limit had been established in the Standard for olive oil. The IOC study "STUDY ON AUTHENTIC OLIVE OILS DISPLAYING OFF-LIMIT PARAMETERS: CAMPESTEROL"¹ also examined other deviations of interest to the members.

10. For the IOC study, 198 samples from 13 countries (Algeria, Argentina, Australia, Cyprus, Greece, Israel, Morocco, Portugal, Slovenia, Spain, Syria, Tunisia and Turkey) were received out of which 133 were analyzed. Of these, the 34 samples sent by Argentina and 3 samples sent by Australia had deviations in the campesterol values as claimed by them in the different submissions made in Codex.

11. In October 2012, the IOC group of chemical experts concluded that indeed genuine olive oils could have higher values in some parameters, including campesterol. However, it specified that the campesterol values needed to be maintained to avoid fraud with other oils, particularly seed oils, and therefore suggested a decision tree to verify the authenticity of olive oils when the campesterol value is between 4 and 4.5% (see the above mentioned IOC study in par. 9). As a result of this study, the IOC, through Decision No. DEC-20/100-V/2013, resolved to incorporate this decision tree in the Trade Standard COI/T.15/NC No 3/Rev. 7 Applying to Olive Oils and Olive-Pomace Oils (May 2013)².

PROPOSAL:

12. Considering that the IOC has revised its standard on olive oils to address the concerns of its Members, given that the use of certain plant varieties and the soil and climate conditions in some production areas may cause different values in certain parameters, and that it has adopted measures to check that such deviations are not due to the adulteration with other oils, Argentina therefore proposes that the Codex begins new work to revise/amend the campesterol parameter and other underlying measures (decision tree) in the *Standard for Olive Oils and Olive Pomace Oils* (CODEX STAN 33-1981). The proposal for new work is attached as Appendix I.

¹ <http://www.alimentosargentinos.gov.ar/contenido/sectores/aceites/documentos/020.pdf>

² <http://www.alimentosargentinos.gov.ar/contenido/sectores/aceites/documentos/021.pdf>

APPENDIX 1

PROPOSED NEW WORK - CODEX COMMITTEE ON FATS AND OILS

Prepared by Argentina

1. Purpose and scope of the proposed work.

To review the *Standard for Olive Oils and Olive Pomace Oils* (CODEX STAN 33-1981) in order to revise the parameter established for campesterol in accordance with the modifications made in the IOC Trade Standard for Olive Oil, with a view to adopting appropriate measures which contribute to the facilitation of legitimate trade.

2. Relevance and timeliness

The proposed work is consistent with the mandate of the Codex Committee on Fats and Oils (CCFO): ***“To elaborate worldwide standards for fats and oils of animal, vegetable and marine origin, including margarine and olive oil”.***

For years, several countries have been calling the Committee's attention to the fact that their olive oils do not succeed in meeting the restrictive limits established, both in the IOC and in the Codex, for some parameters, particularly campesterol.

The International Olive Council (IOC) has conducted a study to examine, among other issues, the situation of olive oils falling outside the limits established for campesterol and has recognized that they are indeed genuine oils which may have higher values due to the plant varieties used or the soil and climate conditions in the production areas. By virtue of this study, the IOC has established a decision tree for those oils with campesterol values between 4 and 4.5%.

The existing Codex standard constitutes a barrier to trade in genuine olive oils falling outside the composition limits established in it because they do not reflect the situation of all producing countries in a proper way. Considering that these standards are the international reference for the World Trade Organization (WTO), measures need to be adopted for campesterol values not to become a technical barrier to trade.

3. Main aspects to be covered

To revise the campesterol limit taking into account the provisions adopted by the International Olive Council (IOC), the international reference organization of the United Nations as regards olive oils and table olives, in order to adopt appropriate measures which allow to continue ensuring the composition and quality of oils without restricting international trade in an improper way.

4. Assessment against the Criteria for the establishment of work priorities

This proposal for new work is consistent with the following criteria applicable to the products:

a) Consumer protection from the point of view of health, food safety, ensuring fair practices in the food trade and taking into account the identified needs of developing countries.

The limits for campesterol have been established to determine if there is adulteration of the olive oil with other edible oils, thus ensuring fair practices in the food trade. At present, the campesterol limit does not reflect in a proper way the global variability existing as a result of the entry of new production areas in which the behavior of varieties is different as well as seasonal, soil and climate conditions. The campesterol values have no relation to the safety of the food and public health.

b) Volume of production and consumption in individual countries, and volume and pattern of trade between countries.

According to the data published by the IOC³, **the world production of olive oil** totaled 3,270,500 t, accounting for an increase of 36% in relation to the previous year. The 2013/14 year has been so far the second best year (the best one being the 2011/12 year with 3,321,000 t). IOC member countries reached a total production of 3,199,500 t, i.e., **98%** of world production. The European producing countries reached 2,476,500 t, a 69% increase as compared to the previous year (Spain had a record year with 1,775,800 t; Italy 461,200 t; Greece 131,900 t; Portugal 91,600 t; Cyprus 5,600 t; Croatia 4,900 t; France 4,900 t; and Slovenia 600 t). For the rest of IOC member countries as a whole, it fell 16% (first, Turkey with 190,000 t, followed by Syria with 165,000 t; Morocco with 120,000 t; Tunisia with 70,000 t, a strong reduction in relation to the previous year; Algeria with 44,000 t; Argentina and Jordan with 30,000 t each; Lebanon with 20,500 t;

³ <http://www.internationaloliveoil.org> NEWSLETTER - OLIVE MARKET - NOVEMBER 2014

Israel and Libya with 15,000 t each; Albania with 10,500 t; Iran with 5,000 t; and the other four members with smaller volumes). It should be stressed that the Spanish production for this year increased 187% as compared to the previous year and accounted for 54% of world production.

The world consumption for the 13/14 year amounted to 3,030,000 t, out of which 1,717,000 t corresponded to the EU/28 countries, accounting for a 6% increase as compared to the previous year. Consumption in the rest of IOC member countries was reduced by 11%, the largest reductions taking place in Syria, Tunisia, Egypt, Algeria and Albania. Consumption in the rest of non IOC member countries increased 6%. The cases of the United States with a 5% increase, Australia with 19% (for this country it is the 2013 spring harvest), Canada with 9%, and Japan with 6% should be highlighted. However, consumption fell sharply in China (18%) and slightly in Brazil (1%).

Imports and exports for the 2013/14 year totaled 794,000 t and 817,500 t, respectively.

World trade in olive oil and olive pomace oil ends the 2013/14 year (October 2013 - September 2014) with an increase of 10% in Canada; 5% in the United States; 4% in Japan; 1% in Australia, as compared to the previous year. Imports fell in the markets of China (15%) and, to a lower degree, of Brazil (2%). Russian data are only available for up to April 2014. For the 7 months of the year, they show an increase of 8%.

c) Diversification of national legislations and apparent resultant or potential impediments to international trade.

Codex Standards are the international reference as regards food standards for the WTO, both for health and technical regulations. This is evidenced in the EC - Sardines panel. Member States should take into account the standards prepared by international reference organizations, if any, when establishing their national regulations.

Considering the characteristics of its olive oils, Argentina needed to set campesterol values at 4.5% because, due to the varieties used and the geographical and climatic conditions of production areas, the value established in the IOC and Codex does not reflect the characteristics of the national oils in a proper way, thus affecting its trade.

According to the information provided in CX/FO 13/23/09 in 2010, the United States Department of Agriculture (USDA) completed the revision of the national standards on quality grades for olive oil and olive pomace oil (*United States Standards for Grades of Olive Oil and Olive-Pomace Oil*). In revising the standard, the USDA established a campesterol limit ($\leq 4.5\%$) different from that of the Codex standard; however, this new limit, which is less restrictive, does not constitute a barrier to international trade.

In Australia, the Australian Olive Association prepared the Australian Olive Industry Code of Practice and the national standard for olive oils and olive pomace oils, which is of a voluntary nature (AS 5264-2011). Like the American standard, the Australian standard establishes a less restrictive limit for campesterol ($\leq 4.8\%$), thus preventing genuine olive oils from being excluded, while protecting their authenticity with a stricter limit for stigmastadiene and the introduction of tests for pyropheophytins and diacylglycerols.

d) International or regional market potential.

While Mediterranean countries will maintain their leadership in the production of olive oil as evidenced by the latest figures of the IOC (Spain and its record year with 1,775,800 t; Italy with 461,200 t; Turkey 190,000t., followed by Syria with 165,000 t; Greece with 131,900 t; and Morocco with 120,000 t), new producing countries like Argentina, the USA, Brazil, South Africa, China and Australia, among others, should also be covered by the standard.

e) Amenability of the commodity to standardization.

The *Codex Standard for Olive Oils and Olive Pomace Oils* (CODEX STAN 33-1981) is in force since 1981. However, with the entry of new producing countries into international trade, it is

It is necessary to revise certain parameters so as to prevent it from becoming a trade barrier. The study made by the IOC called "IOC STUDY ON AUTHENTIC OLIVE OILS DISPLAYING OFF-LIMIT PARAMETERS: CAMPESTEROL"⁴ and other available data should be examined.

f) Coverage of the main consumer protection and trade issues by existing or proposed general standards.

While addressing all the aspects, the Codex Standard does not take properly into account the natural variation of composition based on the variety of olive used and the geographic and climatic conditions.

⁴ <http://www.alimentosargentinos.gob.ar/contenido/sectores/aceites/documentos/020.pdf>

g) Work already undertaken by other international organizations in this field and/or suggested by the relevant international intergovernmental body(ies).

The study "IOC STUDY ON AUTHENTIC OLIVE OILS DISPLAYING OFF-LIMIT PARAMETERS: CAMPESTEROL" has been recently published to examine the authenticity of olive oils with parameters above the regulated campesterol values. Almost 200 samples received from 13 countries were used to adopt a decision tree applicable to those cases where campesterol values are between 4 and 4.5%.

Also, scientific bibliography referred to the campesterol values observed in genuine olive oils of Argentina, Spain, Australia, etc. was submitted to the Codex in previous years.

5. Relevance in relation to Codex strategic objectives

The proposed new work would contribute to guaranteeing the adoption of fair practices in international olive oil trade, taking into account the special needs and concerns of all countries, as the following strategic priorities and objectives included in the Codex Alimentarius Commission Strategic Plan 2008-2013 are met.

Goal 1: Promoting sound regulatory frameworks.

The elaboration of Codex standards which are more representative of global variability will contribute to facilitating trade and ensuring further adoption by member States.

Goal 2: Promoting widest and consistent application of scientific principles and risk analysis.

The proposed work will promote the elaboration of Codex standards on products based on a rigorous scientific analysis of data collected in all regions, for composition parameters to be pertinent in the entire world.

Goal 4: Promoting cooperation between Codex and relevant international organizations.

The proposed work is intended to achieve consistency between the provisions recently approved by the IOC⁵ and the Codex Standard.

6. Information on the relationship between the proposal and existing Codex documents

The purpose of the new work is the revision of the *Standard for Olive Oils and Olive Pomace Oils* (CODEX STAN 33-1981).

7. Identification of any requirement for and availability of expert scientific advise

None.

8. Identification of any Need for Technical Input to the Standard from External Bodies so that this can be Planned for

None identified.

9. Proposed Timeline for Completion of the New Work, Including the Start Date, the Proposed Date for Adoption at Step 5/8, and the Proposed Date for Adoption by the Commission

- Approved as new work by the CAC38 2015
- Proposed draft amendments considered at step 4 by the CCFO25 in 2017
- Adopted at Step 5/8 in the CAC40 in 2017.

⁵ <http://www.alimentosargentinos.gob.ar/contenido/sectores/aceites/documentos/021.pdf>