

## CODEX ALIMENTARIUS COMMISSION



Food and Agriculture  
Organization of  
the United Nations



World Health  
Organization

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Agenda Item 3

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JOINT FAO/WHO FOOD STANDARDS PROGRAMME

CODEX COMMITTEE ON PROCESSED FRUITS AND VEGETABLES

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Comments on the

PROPOSED DRAFT CODEX STANDARD FOR TABLE OLIVES  
(revision of CODEX STAN 66-1981) (Step 3)

Comments Submitted by: Brazil, Chile, Costa Rica, Cuba, European Union, India, Kenya, United States of America

**BRAZIL**

In regard to the aforementioned draft standard, Brazil would like to congratulate EU efforts in the revision of the Codex Standard for Table Olives and to present some specific comments to the Draft.

**Specific Comments:**

**Section 2.2 PRODUCT DESIGNATION**

**Rationale**

The adopted text includes *treatments* as a classification parameter but “treatments” are under “trade preparations” (already listed). It also does not list “varietal types”, parameter under section 2.3.

**Suggestion – Editorial amendment**

**Section 2.2 PRODUCT DESIGNATION**

Table olives are classified in one of the following olive types, trade preparations, ~~treatments~~ **varietal types** and styles:

**Section 3.2.3 Definition of Defects (i) Defective stuffing**

**Rationale**

The adopted terminology maybe not as clear as current Standard's “olives without stuffing”, considered to be simple, clear and directly connected with provisions for “place” and “random” packed olives.

Alternatively consider defining place-packed and random-packed

**Suggestion– Editorial amendment**

(i) ~~Defective stuffing~~ **Olives without stuffing:**

<b>Section 3.2.3 Definition of Defects (k) and (l)</b>
<b>Rationale</b>
These provisions should be removed as they do not refer to any limit on Section 3.2.4 Defects and Allowances.
<b>Suggestion – Editorial amendment</b>
<del>(k) “Soft” – Units lacking the firmness that is characteristic for a particular variety.</del>
<del>(l) “Excessively Soft” – Units shall be considered excessively soft when the olives appear to be spongy or watery. Units that have the apparent shape of whole units, but appear to have disintegrated flesh and water texture shall be considered excessively soft. In addition, a unit shall be considered excessively soft if the pit can be felt when applying moderate pressure.</del>

<b>Section 3.2.3 Definition of Defects new provisions (k) and (l) for insects and mould damages (m) Skin defect not affecting flesh (n) Skin defect affecting flesh (o) Damage caused by abnormal cultivation practices</b>
<b>Rationale</b>
Provisions for insect and mould damages exist in current Standard (CODEX STAN 66-1981) and should be retained in the Draft to allow control of important sensorial characteristic to the final consumer.
Mould and insects damages are excessively repulsive, limit overall quality of the product and need to be controlled to ensure fair trade practices and protection to the final consumer.
Provisions for “Skin defect not affecting flesh”, “Skin defect affecting flesh” and “Damage caused by abnormal cultivation practices” exist in current Standard (CODEX STAN 66-1981) and should be retained in the Draft to allow control of the full set of damages without shortage or pitfall, covering the full set of important characteristics for the quality control of the product.
<b>Suggestion – Insertion of provision</b>
<b>(k) Cryptogamic and mould damage: Lustreless fruits and those with scattered, more or less dark stains caused by the mycelium of certain fungi (Macrophoma, Gloesporium, etc.), growing either within the olive and leading to dehydration of the tissues, or on the skin and affecting the colour of the fruit.</b>
<b>(l) Dacus oleae and insect damage (with exit hole): Deformed fruits and those with abnormal stains or whose mesocarp has an abnormal aspect characteristically caused by insects.</b>
<b>(m) Skin defect not affecting the flesh: Superficial marks which affect the epicarp (bruises, blows, stains induced by brushing against branches, etc.) but do not penetrate into the mesocarp and are not the consequences of disease.</b>
<b>(n) Skin defect affecting the flesh: Means imperfection or damage to the mesocarp which may or may not be associated with superficial marks. In the case of whole stoned (pitted) olives: olives so damaged by tearing of the mesocarp that the stone cavity or a large part of the mesocarp is visible.</b>
<b>(o) Damage caused by abnormal cultivation practices: Fruits whose epicarp has been accidentally burned.</b>
Limits to be included in the table for Defects and Allowances:

	<i>Extra category</i>			<i>First category</i>			<i>Second category</i>		
	<i>Green olives</i>	<i>Olives darkened by oxidation</i>	<i>Olives turning colour and black olives</i>	<i>Green olives</i>	<i>Olives darkened by oxidation</i>	<i>Olives turning colour and black olives</i>	<i>Green olives</i>	<i>Olives darkened by oxidation</i>	<i>Olives turning colour and lack olives</i>
<i>Cryptogamic and mould damage</i>	2	2	2	4	4	4	10	10	10
<i>Dacus oleae and insect damage</i>	3	3	3	5	5	6	10	10	12
<i>Skin defect not affecting the flesh</i>	3	3	4	5	6	7	7	10	12
<i>Skin defect affecting the flesh</i>	2	2	4	3	3	6	5	5	8
<i>Damage caused by abnormal cultivation practices</i>	<i>Devoid</i>	<i>Devoid</i>	<i>Devoid</i>	<i>Devoid</i>	<i>Devoid</i>	<i>Devoid</i>	<i>Devoid</i>	<i>Devoid</i>	<i>Devoid</i>

## CHILE

**Comment 1:** Bullet point (d) in section 2.2.2 (page 4) indicates that olives darkened without alkaline treatment shall fulfill the requirements in sections 3.1.3.1 and 3.1.3.2. However, these sections are not present in the document. This section should be clarified or deleted.

**Comment 2:** Reference should be made to tolerance limits for trade categories, since the terms “very slight” or “slight” are ambiguous and the tolerances are defined in this table. We propose the following wording (in bold):

### 3.2.1 Trade categories

Table olives may be classified in one of the following three trade categories or equivalent designations according to their quality:

#### 3.2.1.1 “Extra” or “Fancy” or “A”

The high quality olives endowed to the maximum extent with the characteristics specific to the variety and trade preparation are considered as belonging to this category. Notwithstanding, and providing this does not affect the overall favourable aspect or organoleptic characteristics of each fruit, they may have very slight colour, shape, flesh-firmness or skin defects, **the tolerances of which are defined in the table in section 3.2.4, under “Extra category”**.

Whole, split, stoned (pitted) and stuffed olives of appropriate varieties may be classified in this category.

#### 3.2.1.2 “First”, “1st”, “Choice” or “Select” or “B”

This category covers good quality olives with a suitable degree of ripeness and endowed with the characteristics specific to the variety and trade preparation. Providing this does not affect the overall favourable aspect or individual organoleptic characteristics of each fruit, they may have slight colour, shape, skin or flesh-firmness defects, **the tolerances of which are defined in the table in section 3.2.4, under “First category”**.

All the types, preparations and styles of table olives may be classified in this category, except for chopped or broken olives and olive pastes.

### 3.2.1.3 “Second”, “2nd” or “Standard” or “C”

This category includes good quality olives which, although they cannot be classified in the two previous categories, comply with the general conditions defined for table olives under this section, **the tolerances of which are defined in the table in section 3.2.4, under “Second category”.**

**Comment 3:** Delete the word “well” from section 7.1.1 as it does not help clarify the concept.

#### 7.1.1 Minimum Fill

The container should be ~~well~~ filled with the product (including packing medium) which should occupy not less than 90% (minus any necessary head space according to good manufacturing practices) of the water capacity of the container. This capacity is equal to the volume of distilled water at 20 oC which the container can hold when completely filled.

**Comment 4:** Include a note clarifying the use of “weight” instead of “mass” in section 4 page 12

## 4. CALCULATION AND EXPRESSION OF RESULTS

Subtract the weight found in 3.2 from the weight found in 3.3. The difference shall be considered to be the weight of water required to fill the container. Results are expressed as mL of water.

**Add in the footnote: The term “weigh” is used instead of “mass”, as the terms “net weight” and “drained weight” are recognized internationally.**

### COSTA RICA

Costa Rica supports the Proposed Draft as presented

### CUBA

#### (i) General Comments

### 2.2 PRODUCT DESIGNATION

#### 2.2.1 Types of Olives

(b) **Olives turning colour:** Fruits harvested during the ripening period, prior to coloring and when they have reached normal size.

**General Comment:** Regarding the Olives turning colour, we suggest to examine or propose another commercial name, unless this one in practice it is used in the commercial labeling of this specific grade of mature olives.

#### 3.2.1 Other permitted Ingredients

**General Comment:** Reference Codex Standards for Salt, Vinegar, Olive Oil, Sugars and Honey in subparagraphs a), b), c), d), and e).

#### 3.2.2 Uniformity of Size

**General Comment:** Must provide a test method to establish the size of olives.

#### 3.2.4 Defects and Allowances

The tolerances shall be assessed in a minimum sample of 200 olives taken in accordance with the appropriate sampling plan with an AQL of 6.5

**General Comment:** Needs to clarify or specify the minimum amount of olives in a container in accordance with the applicable sample plan (AQL of 6.5).

#### Table of Defects and Allowances

**General Comment:** Although Cuba proposes the removal of Olive Paste as a product covered under the Standard, it has also noted that this product has been left out of the “Defects and Allowances” table.

#### 7.1.4 Minimum Net Drained Weight.

**General Comment:** The table shown does not set a minimum net drained weight for each container type; this is a “Defects” table that should be included under Section 3.2.4. This issue must be clearly established in a manner similar to that set forth in the Codex Standards for Certain Vegetables and Fruit Preserves. In addition, the table establishes that the weight of a container must not exceed 1500g. This contradicts the sampling plan, which includes containers that weigh up to 4,5 kilograms.

#### (ii) Specific Comments

##### 1. SCOPE

This standard applies to the fruit of the cultivated olive tree (*Olea europaea* L.), **harvested at different grades of technological maturity** as defined in Section 2, which has been suitably treated or processed, and which is offered for direct consumption as table olives, including for catering purposes or olives packed in bulk containers which are intended for repacking into consumer size containers. It does not apply to the product when indicated as being intended for further processing.

**Rationale:** Propose including the word “cultivated” given that it is obvious that olive trees must be cultivated first, and then they must be harvested for processing. Furthermore, it is important to emphasize that they must be suitable for harvesting and processing at any grade of technological maturity, as outlined in Section 2 of the Standard.

##### 2. DESCRIPTION

###### 2.1 PRODUCT DEFINITION

“Table olives” is the product:

(a) Prepared from the sound fruits of varieties of the cultivated **and harvested** olive tree (*Olea europaea* L.), that are chosen for their production of olives whose volume, shape, flesh-to-stone ratio, fine flesh, taste, firmness and ease of detachment from the stone make them particularly suitable for processing;

**Rationale:** Same comment as in Section 1.

(b) Treated to remove its bitterness and preserved by natural fermentation, and/or by **an adequate** heat treatment, and/or by other means **prior to or after it has been hermetically sealed in a container, either rigid or flexible,** so as to prevent spoilage and to ensure product stability in normal storage conditions at room temperature, ~~with or without the addition of preservatives;~~

**Rationale:** The Spanish version of the document must use the word “amargor” (substantive) instead of “amargo”, which is an adjective. [This comment only applies to the Spanish version]. It is also important to emphasize on the use of an adequate heat treatment, capable of guaranteeing the stability of the product under normal storage conditions at room temperature, and the use of a hermetically sealed container, and an explanation for inclusion of flexible containers, which are widely used for packaging of this type of product. Propose eliminating the phrase “with or without adding preservatives” as this issue pertains to Section 4 of the Standards.

(c) packed with or without a suitable liquid packing medium in accordance with Section 3.1.3, **regular pack, or**

**(d) A compact container that packs the fruits tightly and does not include a liquid covering medium; a sweetening ingredient may be used.**

**Rationale:** This clarification must be added to the definition to be consistent with 3.1.1.

###### 2.2.2 Trade Preparations

Olives shall undergo the following trade preparations and/or treatments:

(a-3) Treated black olives **in brine**.

~~(a-4) Green ripe olives.~~

**Rationale:** Consider adding “in brine” to a-3 to be consistent with all other denominations. Consider deleting a-4 because the term is an oxymoron, olives cannot be green and ripe at the same time. [This comment only applies to the Spanish version].

**2.4.5 Olives with capers or medley:** Whole or stoned (pitted) olives, usually small in size, with capers and with or without stuffing, packed with other edible products such as pieces of onion, carrot, celery, **pepper** and other **edible suitable** ingredients, **as defined by 3.1.2** where the olives are the most numerous compared with the entire product marketed in this style.

**Rationale:** Propose reformulating the sentence to read “olives with capers” not “capers with olives”, to highlight that olives are the main product rather than capers. We propose adding the word “pepper” as it is a common ingredient in this type of preparation, and it deserves to be included given that others are. Propose deleting the word “edible” since it is obvious that all ingredients must be safe to consume, and replacing it with the word “suitable” in according to 3.1.2

~~2.4.6 Olive Paste: Exclusively olive flesh, finely crushed.~~

**Rationale:** Propose removing this concept given that it does not apply to the type of product covered by the Standard.

### 3.2.1 Other permitted Ingredients

Other ingredients may be used such as:

- (a) Water;
- (b) Food-grade salts;
- (c) **Vinegar** ~~Vinegar~~; [This comment only applies to the Spanish version].
- (d) **Aceite** ~~Aceite~~ de oliva; [This comment only applies to the Spanish version].
- (e) **Azúcares** ~~Azúcares~~ y/o productos alimentarios que confieren (al alimento) un sabor dulce, por ejemplo, la miel; [This comment only applies to the Spanish version].
- (f) Cualquier producto comestible simple o compuesto utilizado como acompañamiento o como relleno, como por ejemplo: pimienta, cebolla, almendra, apio, anchoa, alcaparra, o sus pastas; [This comment only applies to the Spanish version].
- (g) Especies y hierbas aromáticas o sus extractos naturales. [This comment only applies to the Spanish version].

**Rationale:** All the subparagraphs should begin with small caps.

### 3.1.3 Paragraph 3: mL ml

**Rationale:** Write the correct abbreviation for milliliters.

### 3.2.2 Uniformity of Size

The size scale (in mm), in one kilogramme, is as follows:

**Rationale:** It is necessary to specify the unit of measure for the size of an olive.

### 3.2.4 Defects and Allowances

La evaluación de las tolerancias se realizará con una muestra mínima de 200 aceitunas recogida según el plan de muestreo apropiado con un ~~NQA~~ **NCA** de 6,5. [This comment only applies to the Spanish version].

**Rationale:** Correct the typo in Spanish.

### 7.11 Minimum Fill

The container should be well filled with the product (including packing medium), which should occupy not less than 90% (minus any necessary head space according to good manufacturing practices) of the water capacity of the container. The water capacity of the container is the volume of distilled water at 20°C which the sealed **rigid** container (**glass or metal, excluding any flexible container**) will hold when completely filled.

**Rationale:** Must clarify the type of container, given that there is no test method to determine the water capacity of a flexible container.

**9. METHODS OF ANALYSIS AND SAMPLING**

Provision	Method	Principle	Type
Acidity of brine	AOAC 942.15	Titrimetry	I
	ISO 750:1998 Fruits and Vegetables products titratable acidity determination		I
pH of the brine	ISO 1842:1991 Codex General Method for Processed Fruits and Vegetables	Potentiometry	IV
	AOAC 981.12 Codex General Method for Processed Fruits and Vegetables		III
	NMKL 179:2005 Codex General Method for Processed Fruits and Vegetables		II
Drained Weight	AOAC 968.30 Canned Vegetables – Drained Weight Procedure (Codex General Method for processed fruits and vegetables)  OIML R 87 Quantity of product in prepackages	Sieving  Gravimetry	I
Fill of containers (glass containers)	CAC/RM 46:1972 (Codex General Method for Processed Fruits and Vegetables)	Weighing	I
Fill of containers (metal containers)	ISO 90.1:1986 (Determination of water capacity of metal containers)	Weighing	I
Soluble solids content	ISO 2173:1998 Fruits and Vegetables products Determination of soluble solids content Refractometry Method  AOAC 932.14C Solids in Syrups Hydrometers, pycnometers)	Refractometry	I
Net Weight	OIML R 87:2004 Quantity of product in prepackages	Weighing	I
Lead	ISO 6633:1984 Fruits, vegetables and derived products - Determination of Lead Content - Flame atomic absorption spectrometric method.  AOAC 972.25 Lead in foods Spectroscopy / Atomic Absorption Spectroscopy	Spectrometry	I

Provision	Method	Principle	Type
Tin	ISO 2447:1998 Fruits and vegetable products - Levels of Tin content  AOAC 980.19 Tin in foods Spectroscopy / Atomic Absorption Spectroscopy	Spectrometry	I
Cadmium	ISO 6561:2005  Section 1: Fruits and vegetable products - Levels of Cadmium Content Atomic Absorption Spectroscopy Method, using a graphite furnace  Section 2: Fruits and vegetable products - Levels of Cadmium Content Atomic Absorption Spectroscopy Method, using a graphite furnace	Spectrometry	I
Olive's caliber	??????	????	????

## EUROPEAN UNION

The European Union and its Member States (EUMS) wish to thank the delegations that participated in the electronic Working Group for their useful contributions in the development of the proposed draft standard.

The EUMS support the proposed draft standard as presented in Appendix I of document CX/PFV 12/26/3 with the following comments:

### Section 3.2.4:

In the table indicating the defects and allowances, the tolerance for "broken fruit" for the first category of "olives turning colour and black olives" should be 5 instead of 3.

### Section 7.1.4:

To ensure that consumer is not misled, this section should contain the provisions on the minimum drained weight, which are present in other standards for canned fruits and of vegetables. To this end, the EUMS suggest adding a new point 7.1.4.1 before the table on tolerances:

The drained weight of the product should be not less than the following percentages, calculated on the basis of the weight of distilled water at 20°C which the sealed container will hold when completely filled<sup>1</sup>.

Styles	Minimum drained weight
Whole olives	50%
Stoned (pitted) and stuffed olives	40%

With a footnote:

<sup>1</sup> For non-metallic rigid containers such as glass jars, the basis for the determination should be calculated on the weight of distilled water at 20°C which the sealed container will hold when completely filled less 20 ml.

Concerning the main issues raised by the eWG, the EUMS would like to make the following comments:

- 1) The EUMS would prefer to retain the provisions of sections 3.1.3.1 and 3.1.3.2 for packing brines because they are of particular importance for table olives to ensure the hygienic quality and safety of the product thus benefiting the consumer. They also give useful guidance for the industry. However, in the spirit of compromise, the EUMS can accept the new simplified provisions in point 3.1.3 as proposed by the eWG.
- 2) The EUMS consider the provisions on trade categories in section 3.2.1 very useful as they allow trade in different quality categories in a transparent manner and provide important information for the consumer.

- 3) The EUMS support the provisions on defects and allowances in section 3.2.4 because clear and detailed provisions on quality tolerances discourage the creation of non-harmonised requirements and therefore ensure fair trade practices and facilitate international trade of table olives.
- 4) The EUMS are of the view that in a small fruit like olives the maximum area of skin defects should be limited to 6 mm<sup>2</sup> in the definition of “blemished fruit” in point 3.2.3(b).

## INDIA

### General Comments:

Table on defects and allowances in section 3.2.4 is relevant however complexity of table is a concern as also agreed by eWG. Further, the criteria in case of Stoned (pitted) or stuffed olives, % tolerance for broken fruits in Olives turning colour & black olives under First category is less than other two types whereas in part 2 of the table at page 9, % tolerance of most of the defects in Olives turning colour & black olives under First category, is more than the other two types needs further clarification. The table needs to be reframed for more clarity and briefly indicate the defect allowances.

### Specific Comments:

#### Section 2.2.2 Trade Preparations

##### Subsection 2.2.2(d) - Olives darkened by oxidation

The text of 4<sup>th</sup> line in the para needs to be modified as under

“Olives darkened without alkaline treatments shall fulfil the requirements in sections 3.1.3 ~~3.1.3.1 and 3.1.3.2~~

**Rationale:** There are no sections 3.1.3.1 and 3.1.3.2 in the document and appropriate section need to be quoted.

#### Section 3.1 COMPOSITION

##### Subsection 3.1.3 Packing Media (packing brines)

The text in first line at page 6 of document may be modified as under:

“Brine shall be clean, free from ~~unauthorized~~ foreign matter, abnormal flavor and odour and shall comply with the hygiene rules laid down in Section 6.”

**Rationale:** Any foreign matter is undesirable unless until certain limits are given for the same. When it should be free from foreign matter, the question of authorized or unauthorized is irrelevant. Therefore, the term ‘unauthorized foreign matter’ in the above sentence is discordant.

#### Section 3.2.3 Definitions of Defects

##### Subsection 3.2.3 (a)

Definition of Harmless extraneous material may be modified as under:

**Harmless extraneous material** - ~~Any vegetable matter not injurious to health, nor aesthetically undesirable, for example leaves, separated stems, but not including substances the addition of which has been authorized in the Standard~~ means any vegetable substance (such as, but not limited to, a leaf or portion thereof, or a stem) that is harmless and which tends to detract from the appearance of the product.

**Rationale:** Reference to the substances which are authorized for addition may not be required in the definition because such substances have been allowed considering that they are harmless. Moreover, uniformity need to be maintained in the Codex text as the definition of harmless extraneous material is same as proposed above in Codex Standard for Canned Stone Fruits (CODEX STAN 242-2003).

##### Subsection 3.2.3 (b)

Definition of Blemished fruit may be modified as under:

Olives with marks or stains on the skin ~~that are more than [6mm<sup>2</sup>] [9mm<sup>2</sup>] in surface area and~~ that may or may not penetrate through to the fleshes, ~~which~~ singly or in the aggregate, materially affect the appearance or eating quality of olives.

**Rationale:** When Maximum tolerance as% of fruit is given for blemished fruit under section 3.2.4, the specific size of blemish may not be required.

## KENYA

### 2.2 PRODUCT DESIGNATION

Kenya would like to propose that we add a new statement as [a-3] to cover treated black olives in brine as indicated below

#### 2.2.2 Trade Preparations Olives shall undergo the following trade preparations and/or treatments:

(a) **Treated olives:** Green olives, olives turning colour or black olives that have undergone alkaline treatment, then packed in brine without fermentation or with complete or partial fermentation, and preserved or not by the addition of acidifying agents and/or cold or heat treatment:

(a-1) Treated green olives in brine;

(a-2) Treated olives turning colour in brine;

#### COMMENT

**New-- to be [a-3] Treated black olives in brine**

(a-3) Treated black olives.- to be [a-4]

(a-4) Green ripe olives - to be [a-5]

### 3. ESSENTIAL COMPOSITION AND QUALITY FACTORS

#### 3.1 COMPOSITION

##### 3.1.3 Packing Media (packing brines)

This term applies to solutions of food grade salts as defined in *Standard for Food Grade Salt (CODEX STAN 150-1985)* dissolved in potable water, with or without the addition of all or some of the ingredients listed under Section 3.1.2.

#### COMMENT

**Kenya would like to delete the word 'unauthorized' and 'abnormal' for there is no such word like unauthorized. We replaced the word 'abnormal' with the word 'off' on the clause below**

3.1.2 Brine shall be clean, free from ~~unauthorised~~ foreign matter, ~~abnormal~~ off flavour and odour and shall comply with the hygiene rules laid down in Section 6.

##### 3.2.3 Definitions of Defects

#### COMMENT

**Kenya recommends 6mm squared.**

(b) **Blemished fruit: Olives with marks or stains on the skin that are more than [6 mm<sup>2</sup>] [9-mm<sup>2</sup>]** in surface area and that may or may not penetrate through to the flesh which singly or in the aggregate, materially affect the appearance or eating quality of the olives

## UNITED STATES

#### General comment:

The United States welcomes the opportunity to comment on the Proposed Draft Codex Standard for Table Olives, and appreciates efforts of the e-working group led by the European Commission in this regard.

The U.S. proposed changes are placed within the relevant sections of the draft standard with new text in [green square brackets] and [deleted text in red square brackets] with "strike through". The rationale for both deletions and additions are indicated in a succeeding sentence or paragraph.

Draft 16 February 2012

**PROPOSED DRAFT CODEX STANDARD FOR TABLE OLIVES**  
(Revision of CODEX STAN 66-1981)

**3. ESSENTIAL COMPOSITION AND QUALITY FACTORS****3.1 COMPOSITION****3.1.3 Packing Media (packing brines)**

This term applies to solutions of food grade salts as defined in *Codex Standard for Food Grade Salt (CODEX STAN 150-1985)* dissolved in potable water, with or without the addition of all or some of the ingredients listed under Section 3.1.2.

Brine shall be clean, free from unauthorised foreign matter, abnormal flavour and odour and shall comply with the hygiene rules laid down in Section 6.

Fermented olives held in a packing medium may contain micro-organisms used for fermentation, notably lactic bacteria and yeasts. ~~The number of such micro-organisms (lactic bacteria and/or yeasts) in a selective culture medium may, for each one, be up to 10<sup>9</sup> colony-forming units/ml of brine or per g of flesh depending on the level of fermentation.~~ [In accordance with the Recommended Code of Hygienic Practice for Low-Acid and Acidified Low-Acid Canned Foods (CAC/RCP 23-1979)]

**U.S Proposal:** The U.S recommends deletion of the second sentence, and replacing it

with a reference to the "*Recommended Code of Hygienic Practice for Low-Acid and Acidified Low-Acid Canned Foods (CAC/RCP 23-1979)*".

**Rationale:**

- i. Referencing a pre-existing existing Codex document is consistent with (a) 20<sup>th</sup> Edition of the Codex Procedural Manual Section II: Elaboration of Codex texts- Relations between Commodity Committees and General Subject Committees (b) Section 5 on Contaminants and Section 6 on Hygiene.
- ii. The U.S believes that repeating/ or inserting the provisions from an existing Codex code of practice d is redundant an unnecessarily lengthens and or complicates the standard.

~~Physico-chemical characteristics of the packing brine or of the juice after osmotic balance and characteristics of the thermal pasteurisation and sterilisation treatment applied to table olives, as evaluated in the packing brine or flesh:~~

Type and preparation	Minimum sodium chloride content	Maximum pH limit	Least sterilizing value of the scheduled process
Treated olives	4.0%	4.3	-
Natural olives	5.0%	4.3	-
Pasteurized treated olives	GMP	4.3	15.0 — $PU_{62.4^{\circ}C}^{5.25}$
Pasteurized natural olives	GMP	4.3	15.0 — $PU_{62.4^{\circ}C}^{5.25}$
Dehydrated and/or shrivelled olives	8.0%	GMP	-
Olives darkened by oxidation with alkaline treatment	GMP	GMP	15.0 — $F_0^{10}_{12^{\circ}C}$

GMP: — Good manufacturing practice

~~$PU_{rr}^z$~~  : Pasteurisation units, defined as the cumulative lethal rate during heat processes performed at temperatures below 100°C. Propionic bacteria shall be considered the reference micro-organisms for table olives, for which the equation of the thermal death time is defined by a reference temperature equal to 62.4°C and a z curve of 5.25.

~~*r<sub>t</sub>*: — The reference temperature is the temperature corresponding to a decimal reduction time which, together with the z curve, defines the logarithmic representation of the T.D.T. curve of a given microorganism.~~

~~*z*: — Curve that plots the logarithmic representation of the thermal death times according to temperature (T.D.T.); it is equivalent to the number of degrees for the curve to traverse one log cycle.~~

~~*F<sub>0</sub>*: — Cumulative sterility value: integral, or sum of the partially lethal rates, obtained during sterilisation and expressed as exposure time at a reference temperature. When the reference temperature *R<sub>t</sub>* is fixed at 121°C and the z curve at 10°C, the *F<sub>0</sub>* value applicable to olives darkened by oxidation is obtained.~~

~~Trade preparations of table olives not complying with the above physico-chemical characteristics may only be marketed if they are made according to traditional methods the food safety of which is guaranteed by an official body which authorises their distribution and sale.~~

~~The presence of propionic acid and its salts may be observed in table olive trade preparations that have undergone fermentation in conformity with good manufacturing practice.]~~

**U.S Proposal:** The U.S recommends deletion of the entire section on Physico-chemical characteristics of the packing brine.

The U.S. supports the current general reference found in Section 6 (Hygiene). However, the U.S. suggests that any additions (e.g., information on Physico-chemical characteristics of the packing brine or of the juice after osmotic balance and characteristics of the thermal pasteurisation and sterilisation treatment applied to table olives) to the current general reference be referred to the Committee on Food Hygiene for endorsement.

**Rationale:**

- i.** Section 6 of the standard on “Hygiene” sufficiently deals with this matter.
- ii.** The Procedural Manual<sup>1</sup> states that Section 6 of the Standard (Hygiene), should contain the general reference to the Recommended International Code of Practice – General Principles of Food Hygiene and the Principles for the Establishment and Application of Microbiological Criteria for Foods without reference to specific provisions on food hygiene:

“It is recommended that the products covered by the provisions of this Standard be prepared and handled in accordance with the appropriate sections of the Recommended International Code of Practice - General Principles of Food Hygiene (CAC/RCP 1-1969), and other relevant Codex texts such as Codes of Hygienic Practice and Codes of Practice.”

“The products should comply with any microbiological criteria established in accordance with the Principles for the Establishment and Application of Microbiological Criteria for Foods (CAC/GL 21-1997).” Reference should also be made to applicable codes of hygienic practice.

- iii.** The Procedural Manual further states that commodity committees shall refer any emptions from, or additions to, the general reference above to the Committee on Food Hygiene for endorsement.

**3.2.4 Defects and Allowances**

**Issue:** This section of the standard has provision only for Classified whole, stoned (pitted) or stuffed olives (Section 2.4.1) and Table 1. Whereas, there is an absence of defects limits/defects allowed or minimum quality parameters for (i) Unclassified Whole and Pitted Styles for classification is optional. Section 3.3.1 “table olives may be classified...” and for (ii) Non-whole styles per sections 2.4.2 (b) - 2.4.2 (g).

**U.S. Proposal:** Establish a table of Defects limits for (i) Unclassified Whole and Pitted Olive Styles and (ii) a table of defect limits for each Non-whole style per sections 2.4.2 (b) - 2.4.2 (g). The introductory text on Defects and Allowances and the proposed four (4) tables follow rationale below.

Since the tolerances for defects are based on different sample sizes for whole (by count) and non whole styles (by weight), the U.S recommends indicating on the basis the tolerance is measured for each style.

<sup>1</sup> Codex Alimentarius Commission, Procedural Manual, Nineteenth edition, 2010.

**Rationale:**

1. Since classification of whole table olives is optional per section 3.2.1. and Table 1 deals only with “classified whole pitted and non-pitted table olives”. It is prudent to have requirements when un-classified whole pitted and non-pitted table olives are traded.
2. The standard must be consistent and set the limits of defects allowed or for all trade styles/presentations for trade facilitation and transparency reasons.
3. The absence of Table of Tolerances for un-classified whole pitted and non-pitted table olives and for the other Non-whole style per sections 2.4.2 (b) - 2.4.2 (g) gives the impression that either no quality defects are allowed or quality defects do not matter.

**PROPOSAL****3.2.4 Defects and Allowances**

The maximum defect tolerances for each trade category, for each type of olives and for olives darkened by oxidation are as follows:

- [Whole olives - pitted and unpitted styles]: - The tolerances shall be assessed in a minimum sample of 200 olives taken in accordance with the appropriate sampling plan with an AQL of 6.5.
- [All other styles: The tolerances shall be assessed in a minimum sample of 300 gram sample of olives taken in accordance with the appropriate sampling plan with an AQL of 6.5.]

**Table 2- Defects limits when Table Olives are NOT Classified**

**Defects for Whole and Pitted Styles (200 count sample)**

List of defects for whole and pitted olives	Green olives	Olives turning color and olives darkened by oxidation (Green Ripe)	Black Olives
<b>Appearance Defects:</b>			
Major blemishes	25	10	12
Major wrinkles, shrivel	10	10	10
Mutilated	20	6	10
Pitter, blowouts, cross-pitted or plunger damage	30	30	30
Mechanical Damage	20	10	10
Split pit or Misshapen (Whole)		5	
<i>Dacus Oleae</i> / insect damage	10		12
Harmless extraneous material	2	2	2
Stems (over 4 mm)	4	6	5
Pits or pit fragments	1.3	1.3	2
Defects not specifically mentioned (insignificant defects, white residue, etc.)	10	10	10
Bruises	6		
Abnormal color			10

List of defects for whole and pitted olives	Green olives	Olives turning color and olives darkened by oxidation (Green Ripe)	Black Olives
Damage caused by abnormal cultivation practices	Devoid	Devoid	Devoid
Cryptogamic and mould damage	0.8	0	0
<b>Stuffing defects:</b>			
Olives without stuffing:			
-Place packed	7	7	7
-Thrown	7	7	7
Defective stuffing	10	10	10
<b>Character defects:</b>			
Soft (with excessive soft included in total)	10	10	12
Excessive soft	5	5	6
<b>Under no circumstances shall the total tolerance figure exceed:</b>	<b>22%</b>	<b>22%</b>	<b>22%</b>

Table 3- Defects for Segmented and Broken Styles (300 gram sample)

Defects for Segmented and Broken Styles	Green olives	Olives turning color and olives darkened by oxidation	Black Olives
Harmless Extraneous Material	2	2	2
Stems (over 4 mm)	4	6	5
Broken Pieces ( <b>Segmented only</b> ) –(pieces less than 75% of an apparent segment or poorly cut unit)	50	50	50
Major blemishes and wrinkles	25	25	25
Olive to stuffing material ratio ( <b>Broken / Salad olives</b> )	65:35	65:35	65:35
Pit or pit fragments	1.3	1.3	2
<b>Character:</b>			
Soft (with excessive soft included in total)	10	10	12
Excessive soft	5	5	6

**Table 4. Defects for Sliced Olive Styles (300 gram sample)**

Defects for Sliced Styles	Green olives	Olives turning color and olives darkened by oxidation	Black Olives
Harmless Extraneous Material	2	2	2
Stems (over 4 mm)	4	6	5
Broken Pieces –(pieces less than 75% of an apparent slice or poorly cut unit)	50	50	50
Olive to stuffing material ratio ( <b>Sliced Salad</b> )	65:35	65:35	65:35
Pit or pit fragments	1.3	1.3	2
<b>Character:</b>			
Soft (with excessive soft included in total)	10	10	12
Excessive soft	5	5	6

**Table 5: Defects for Chopped / Minced Olive Styles (300g sample):**

Defects for Chopped / Minced Styles	Green olives	Olives turning color and olives darkened by oxidation	Black Olives
Harmless Extraneous Material	2	2	2
Stems (over 4 mm)	4	6	5
Pit or pit fragments	1.3	1.3	2

[The presence of a stone (pit) or stone (pit) fragment shall be tolerated in every 300 g of net drained content of olive flesh presented in the halved, quartered, divided, sliced, chopped or minced, broken, salad olive (except when prepared with whole olives) and olive paste styles:]

- (a) **Stems:** Stems attached to the olives and which measure more than 3 mm in length when measured from the shoulder of the olive. Not considered a defect in whole olives presented with stem attached.
- (b) **Defective stuffing:** Olives presented in the stuffed olive style which are totally or partly empty in comparison with the trade preparation in question and with the average of a representative sample of the lot.
- (c) **Stone (pit) or stone (pit) fragments (except for whole olives):** Whole stones (pits) or stone (pit) fragments measuring more than 2 mm along their longest axis.
- (d) **“Soft”** – Units lacking the firmness that is characteristic for a particular variety
- (e) **“Excessively Soft”** – Units shall be considered excessively soft when the olives appear to be spongy or watery. Units that have the apparent shape of whole units, but appear to have disintegrated flesh and water texture shall be considered excessively soft. In addition, a unit shall be considered excessively soft if the pit can be felt when applying moderate pressure.