

codex alimentarius commission



FOOD AND AGRICULTURE
ORGANIZATION
OF THE UNITED NATIONS

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ORGANIZATION



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Agenda Item 4(b)

CX/PFV 04/22/5
June 2004

JOINT FAO/WHO FOOD STANDARDS PROGRAMME

CODEX COMMITTEE ON PROCESSED FRUITS AND VEGETABLES

22nd Session,

Washington, DC metro area, U.S.A., 27 September – 1 October 2004

PROPOSED DRAFT REVISED CODEX STANDARD FOR (PRESERVED) CANNED TOMATOES

(AT STEP 3)

Governments and interested international organizations wishing to submit comments on the attached revised *proposed draft Codex Standard for (Preserved) Canned Tomatoes (AT STEP 3)* are invited to do so **NO LATER THAN 30 AUGUST 2004, preferably by e-mail**, to Ms. Ellen Y. Matten, US Codex Office, Food Safety and Inspection Service, US Department of Agriculture, Room 4861 South Building, 1400 Independence Ave., S.W., Washington, DC 20250-3700, USA (Fax No.: +1.202.720.3157; E-mail: uscodex@usda.gov, with a copy to the Secretary, Codex Alimentarius Commission, Joint FAO/WHO Foods Standards Programme, Via delle Terme di Caracalla, 00100 Rome, Italy (Fax No. 39.06.5705.4593 or E-Mail codex@fao.org - preferably -).

BACKGROUND

1. The 21st Session of the Codex Committee on Processed Fruits and Vegetables (September 2002) agreed that it was not possible to review in detail the proposed draft standards (including canned tomatoes) scheduled for discussion at its current Session. In view of this, it decided to return all the proposed draft standards (including canned tomatoes) to Step 2 for redrafting, circulation for comments at Step 3 and consideration at its next Session. The proposed draft Codex Standard for Canned Tomatoes has been revised by a drafting group led by Italy¹.

2. The revised *proposed draft Codex Standard for (Preserved) Canned Tomatoes* is appended to this document. Some parts of the text has been aligned with the standardized language applying throughout the Codex standards for processed fruits and vegetables.

¹ ALINORM 03/27, paras. 95 - 97.

3. The Codex Secretariat would like to notice the following to the Committee:

Scope

4. Codex standards for processed fruits and vegetables usually apply to products offered for direct consumption including for catering purposes or for repacking if required. This statement is missing from the Scope.

5. It is therefore suggested that the Committee consider to use the standardized language in the Scope i.e. *“This Standard applies to the product as defined in Section 2 below and offered for direct consumption including for catering purposes or for repacking if required. This Standard also applies...”* in order to keep consistency with other Codex standards for processed fruits and vegetables when possible.

Optional Ingredients

6. See working document CX/PFV 04/22/3, General Considerations for Codex Standards for Processed Fruits and Vegetables as regards the use of the term “Sweeteners” (paras. 5 - 13).

Packing Media

7. See working documents CX/PFV 04/22/3, Packing Media (paras. 14 - 17) as to the need for specific requirements for packing media and CX/PFV 04/22/6 as to packing media requirements for canned vegetables (paras. 6 - 8).

Food Additives

8. See working document CX/PFV 04/22/3, General Considerations for Food Additive Provisions in Codex Commodity Standards and in Codex Standards for Processed Fruits and Vegetables (paras. 18 - 22) as to how to approach food additive provisions in this and other Codex standards for processed fruits and vegetables.

Labelling

9. The Committee is invited to consider whether:

- (a) provisions for any other presentation in Section 8.2.3 should be transferred into Section 2 - Description under the title “Other Styles” for consistency with other Codex standards for processed fruits and vegetables.
- (b) provisions for the labelling of non-retail containers is needed and if so, apply the standardized language for consistency with other Codex standards for processed fruits and vegetables.

Contaminants & Methods of Analysis and Sampling

10. See working document CX/PFV 04/22/3, General Considerations for Codex Standards for Processed Fruits and Vegetables as regards Contaminants (para. 23) and Methods of Analysis and Sampling (para. 24). In this regard, AOAC Method 945.46 (Mould Count) has been transferred to working document CX/PFV 04/22/11.

REQUEST FOR COMMENTS

11. Codex Members and Observers are invited to comment at Step 3 on the attached revised *proposed draft Codex Standard for (Preserved) Canned Tomatoes* as directed above.

**PROPOSED DRAFT REVISED CODEX STANDARD FOR
(PRESERVED) CANNED TOMATOES**

(AT STEP 3)

1. SCOPE

This Standard applies to the product as defined in Section 2 and offered for direct consumption. This standard also applies (excluding the Section 3.3.7 and the Section 7) to product when indicated as being intended for further processing. The Standard does not include the preserved tomatoes containing other vegetables such as pepper and onions in quantities that materially alter the flavour, aroma and taste of the tomato component.

2. DESCRIPTION

2.1 PRODUCT DEFINITION

Preserved tomatoes is the product:

- (a) prepared from washed, ripened tomatoes, conforming to the characteristics of the fruit of *Lycopersicon esculentum* P. Mill, of red or reddish varieties which are clean and which are substantially sound;
- (b) packed with or without a suitable liquid packing medium and seasoning ingredients appropriate to the product; and
- (c) processed by heat, in an appropriate manner, before or after being hermetically sealed in a container, so as to prevent spoilage. The tomatoes shall have had the stems and calices removed and shall have been cored, except where the internal core is insignificant as to texture and appearance.

2.2 VARIETAL TYPE

Tomatoes of distinct varietal groups (cultivars OP or hybrids) with respect to shape or other similar physical characteristics may be designated as:

2.2.1 Round: globular or semi-globular shape.

2.2.2 Cylinder, Pear, Egg or Plum: elongated shape.

2.3 STYLES

Preserved tomatoes in these styles are prepared in whole or not whole form. The whole form normally is prepared with peel removed; if the peel is not removed, the style is considered additionally as "Unpeeled":

2.3.1 Whole: Tomatoes which keep their initial shape after processing.

2.3.2 Unwhole (Pieces): Tomatoes crushed or cut into sections whose shape may be irregular or regular

2.4 TYPES OF PACK

2.4.1 Solid Pack - without any added liquid.

2.4.2 Regular Pack - with a packing medium added, as specified in Section 3.1.2.

3. ESSENTIAL COMPOSITION AND QUALITY FACTORS

3.1 COMPOSITION

3.1.1 Basic Ingredients

Tomatoes as defined in Section 2 and liquid packing medium appropriate to the product, as defined in Section 3.1.2

3.1.2 Packing Media

Preserved tomatoes may be packed in the following packing media:

- (a) **Juice:** the unconcentrated, undiluted liquid obtained from ripened tomatoes or from the residue resulting from preparing tomatoes for canning;
- (b) **Tomato puree or Tomato paste:** as described in the Codex Standard for Tomato concentrates;
- (c) **Pulp:** skinless grinded tomatoes;
- (d) **Water:** only in unpeeled preserved tomatoes.

3.1.3 Optional Ingredients

- (a) Spices, aromatic plants (such as basil leaves) and natural extracts of these and seasonings excluding tomato flavouring;
- (b) Salt (sodium chloride);
- (c) When acidifying agents are used, dry nutritive carbohydrate sweeteners including sucrose, dextrose and dried glucose syrup, as listed in Codex Standard for Sugars (CODEX STAN 212 – 1999, Amd. 1 – 2001) with specific labelling.

3.2 QUALITY CRITERIA

3.2.1 Definitions

3.2.1.1 Whole or Almost Whole: a tomato of any size in which the contour is not materially altered by coring or trimming; the unit may be readily restored to practically its original conformation; it may be slightly cracked or split but not to the extent that there is a material loss of placenta.

3.2.1.2 Objectionable core material: tough and fibrous texture or tomato tissue representing the tomato core that is definitely objectionable as to appearance and edibility.

3.2.1.3 Blemishes: areas which are abnormal and contrast strongly in colour and/or texture with the normal tomato tissue and which would normally be removed in the preparation of tomatoes for culinary use.

3.2.1.4 Extraneous plant material: tomato leaves, stems, calyx bracts, and similar plant material.

3.2.1.5 Peel (or skin): the residual pieces of skin, having a length higher than 5 mm, which adheres to the tomato flesh or is found loose in the container. .

3.2.2 Colour

The colour of the drained tomatoes shall have normal colour characteristics for ripened tomatoes that have been properly prepared and properly processed.

3.2.3 Flavour

Preserved tomatoes shall have a normal flavour and odour free from flavours or odours foreign to the product and preserved tomatoes with special ingredients shall have a flavour characteristic of that imparted by the tomatoes and the other substances used.

3.2.4 Size or Wholeness

Size or wholeness, as such, is only a factor in the style designated as "Whole" style. Preserved tomatoes of "Whole" style shall consist of not less than 65% m/m of drained tomatoes in whole or almost whole units, except that in any container there may be one unit that is not whole.

3.2.5 Defects and Allowances

The finished product shall be prepared from such materials and under such practices that it shall be substantially free from objectionable core material and extraneous plant material and shall not contain excessive defects—whether specifically mentioned in this standard or not. Certain common defects shall not be present in amounts greater than the following limitations:

3.2.5.1 *Peel* (only for whole and peeled styles):

Whole peeled: not more than 30 cm² aggregate area per kg of total contents.

3.2.5.2 *Blemishes*

Not more than 3.5 cm² aggregate area per kg of total contents.

3.2.5.3 *Mould Count*

- (a) For preserved tomatoes packed with or without tomato juice, pulp, puree or paste, the lot shall be considered nonconforming if, when the liquid obtained by mixing the tomatoes and the cover liquid is analysed, the average mould count in 6 samples is more than 50%.
- (b) For unpeeled preserved tomatoes packed with water, the lot shall be considered non conforming if, when the liquid obtained by crushing the tomatoes is analysed, the average mould count in 6 samples is 15% or more.

3.2.5.4 *pH*

Maximum level for pH must be 4.5.

3.2.6 Classification of "Defectives"

A container that fails to meet one or more of the applicable quality requirements, as set out in Section 3.2 (except 3.2.5.3 Mould count, which are based on an average of 6 samples) shall be considered a "defective".

3.2.7 Lot Acceptance

A lot should be considered as meeting the applicable quality requirements referred to in Section 3.2.6 when:

- (a) for those requirements which are not based on averages, the number of "defectives", as defined in Section 3.2.6 does not exceed the acceptance number (c) of the appropriate sampling plan in the FAO/WHO Codex Alimentarius Sampling Plans for Prepackaged Foods (AQL- 6.5) (CODEX STAN 233-1969); and
- (b) the requirements which are based on sample averages are complied with.

These acceptance criteria only apply to the containers having a net weight equal to or lower than 4,5kg.

4. FOOD ADDITIVES

4.1 ACIDITY REGULATORS - Any acidity regulator listed in Table 3 of the Codex General Standard for Food Additives or listed in food category 04.2.2.4 (Canned or bottled (pasteurized) or retort pouch vegetables (including mushrooms and fungi, roots and tubers, pulses and legumes, and aloe vera), and seaweeds) in Tables 1 and 2 of the Codex General Standard for Food Additives.

4.2 FIRMING AGENTS – Calcium salts as firming agents may be added such that calcium ion content in the end product in the styles unwhole (Section 2.3.2) is not greater than 0.08%, and calcium ion content in the end product in the styles “whole”(Section 2.3.1) is not greater than 0.045%.

5. CONTAMINANTS

5.1 The product covered by the provisions of this Standard shall comply with those maximum levels for contaminants established by the Codex Alimentarius Commission for this product.

5.2 The product covered by the provisions of this Standard shall comply with those maximum residue limits established by the Codex Alimentarius Commission for this product.

6. HYGIENE

6.1 It is recommended that the product 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, Rev. 4-2003), and other relevant Codex texts such as Codes of Hygienic Practice and Codes of Practice.

6.2 The product 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)

7. WEIGHTS AND MEASURES

7.1 FILL OF CONTAINER

This Section applies only to the containers having a net weight equal to or lower than 4,5 kg.

7.1.1 Minimum Fill

The container should be well filled the product (including packing medium) which should occupy not less than 90% 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 container will hold when completely filled.

When preserved tomatoes are packed in glass containers, the water capacity shall be reduced by 20 ml before the percentage referred to in the previous paragraph is calculated.

7.1.2 Classification of "Defectives"

A container that fails to meet the requirement for minimum fill (90% container capacity) of Section 7.1.1 shall be considered a "defective".

7.1.3 Lot Acceptance

A lot should be considered as meeting the requirements of Section 7.1.1 when the number of "defectives", as defined in Section 7.1.2, does not exceed the acceptance number (c) of the appropriate sampling plan in the FAO/WHO Codex Alimentarius Sampling Plans for Prepackaged Foods (AQL-6.5) (CODEX STAN 233-1969).

7.1.4 Minimum Drained Weight

7.1.4.1 The drained weight of the product should be not less than 50%, calculated on the basis of the weight of distilled water at 20°C which the sealed container will hold when completely filled.

7.1.4.2 The requirements for minimum drained weight shall be deemed to be complied with when the average drained weight of all containers examined is not less than the minimum required, provided that there is no unreasonable shortage in individual containers.

8. LABELLING

8.1 The product covered by the provisions of this Standard shall be labelled in accordance with the Codex General Standard for the Labelling of Prepackaged Foods (CODEX STAN 1-1985, Rev. 1-1991). In addition, the following specific provisions apply:

8.2 NAME OF THE PRODUCT

8.2.1 The name of the product shall be:

- (a) "Peeled Tomatoes" or "Whole peeled Tomatoes", for the products "Whole", if the peel has been removed
- (b) "Tomatoes", for the other presentations
- (c) "Unpeeled tomatoes", if the peel has not been removed or if the allowances indicated in Section 2.3.5.1 are not respected

8.2.2 The styles, as defined in Section 2.3 and the packaging media defined in Section 3.1.2 shall be declared as part of the name or in close proximity to the name. For the not whole tomatoes the style should be better specified according with the type of grinding or cutting:

- (a) **Diced**: tomatoes cut into cubes;
- (b) **Sliced**: tomatoes cut perpendicularly to the longitudinal axis in rounds with a regularly thickness;
- (c) **Wedges**: tomatoes cut into four roughly equal parts;
- (d) **Pulp or crushed or chopped**: tomatoes crushed, ground or pulped when appropriate.
- (e) **Pizza top**: the product obtained by not refined juice concentration (without elimination of peels and seeds).

8.2.3 Any other presentation of the product shall be permitted provided that the product:

- (a) is sufficiently distinctive from other forms of presentation laid down in this standard;
- (b) meets all relevant requirements of this standard, including requirements relating to limitations on defects, drained weight, and any other requirements in this standard which are applicable to that style in the standard which most closely resembles the style or styles intended to be provided for under this provision; and
- (c) is adequately described on the label to avoid confusing or misleading the consumer.

8.2.4 If an added ingredient, as defined in Section 3.2.3, gives characteristics flavour to the product, the name of this ingredient "with X" must be stated on the label as to be easily discernible by the consumer.

8.2.5 If the product is produced in accordance with the other styles provision (Section 2.4), the label shall contain in close proximity to the name of the product such additional words or phrases that will avoid misleading or confusing the consumer.

8.2.6 The following may be stated on the label:

- (a) ***the type***: "solid pack" if the pack complies with Section 2.5.2;
- (b) ***the packing material***: "juice" or other, if the packing medium complies with Section 3.1.2 .

9. METHODS OF ANALYSIS AND SAMPLING

See working document CX/PFV 04/22/11.