

codex alimentarius commission



FOOD AND AGRICULTURE
ORGANIZATION
OF THE UNITED NATIONS

WORLD
HEALTH
ORGANIZATION



JOINT OFFICE: Viale delle Terme di Caracalla 00100 ROME Tel: 39 06 57051 www.codexalimentarius.net Email: codex@fao.org Facsimile: 39 06 5705 4593

Agenda Item 4(c)

CX/PFV 04/22/6
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 CODEX STANDARD FOR CERTAIN CANNED VEGETABLES

(AT STEP 3)

Governments and interested international organizations wishing to submit comments on the attached revised ***proposed draft Codex Standard for Certain Canned Vegetables (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 certain canned vegetables and packing media for canned vegetables) scheduled for discussion at its current Session. In view of this, it decided to return all the proposed draft standards (including certain canned vegetables and packing media for canned vegetables) to Step 2 for redrafting, circulation for comments at Step 3 and consideration at its next Session. The proposed draft Codex Standard for Certain Canned Vegetables, including the proposed draft Codex Guidelines for Packing Media for Canned Vegetables, have been revised by a drafting group led by France¹.

2. The revised ***proposed draft Codex Standard for Certain Canned Vegetables*** (including packing media for canned vegetables) 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. In addition, the Annex contains comments on certain Sections of the Standard for which there may be a need for further discussion.

¹ ALINORM 03/27, paras. 95 - 97.

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

Product Definition

4. The last paragraph of Section 2.1 (1) “*This Standard does not cover vegetables that are lacto-fermented, pickled or preserved in vinegar*” refers more to the Scope as it states which products the Standard does not apply to. The Committee is invited to consider the insertion of this paragraph in the Scope for consistency with other Codex standard for processed fruits and vegetables.

Packing Media

Sweeteners

5. 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

6. It is noted that provisions for packing media for canned vegetables formerly covered by the proposed draft Codex Guidelines for Packing Media for Canned Vegetables² are now set out under a Section on Packing Media.

7. The Committee may feel that provisions for packing media for canned vegetables other than those covered by the present proposed draft Standard can be developed separately since they don’t introduce a great deal of details in the Standard as in the case of packing media for canned fruits. However, it is noted the Codex Standard for Canned Bamboo Shoots already refers under its Packing Media Section to the “Codex Guidelines for Packing Media for Canned Vegetables (under development)” on the understanding that the future Codex Guidelines for Packing Media for Canned Vegetable will cover packing media provisions for canned vegetables developed by CCPFV. This principle is in line with the simplification of Codex standards and the development of horizontal texts covering wider range of commodities when appropriate and possible.

8. The Committee is invited to consider:

- (a) the need for separate Codex Guidelines for Packing Media for Canned Vegetables covering canned vegetables in general or
- (b) the discontinuation of the elaboration of separate Codex Guidelines for Packing Media for Canned Vegetable and the introduction of specific provisions for packing media in individual standards covering canned vegetables other than those contained in the current proposed draft Standard.

If the Committee favours this decision:

- (i) the Codex Alimentarius Commission or its Executive Committee should be informed of the discontinuation of work on Codex Guidelines for Packing Media for Canned Vegetables, and
- (ii) the Codex Standard for Bamboo Shoots should be amended to introduce provisions for packing media suitable to the product³.

² CX/PFV 02/9.

³ In addition, see working document CX/PFV 04/22/3, General Considerations for Codex Standards for Processed Fruits and Vegetables concerning Packing Media (paras. 14 - 17).

Essential Composition and Quality Factors

9. The Committee is invited to consider the need for provisions for “Classification of Defectives” in Section 3.4.2 - Uniformity as usually applied to Codex standards for processed fruits and vegetables when considering requirements for “Definition of Defects”, “Defects and Allowances”, and “Lot Acceptance” (some of these provisions may be omitted or condensed according to the nature of the produce) and if so, apply the standardized language to the extent possible for consistency i.e. “*A container that fails to meet one or more of the applicable (quality)/uniformity requirements, as set out in Section 3.4.2 should be considered a “defective”.*”

Food Additives

10. Some of the food additive provisions has been aligned with the corresponding names as set out in the Class Names and International Numbering System for Food Additives⁴ (CAC/GL 36-1989, Rev. 7-2003)⁵.

Contaminants & Methods of Analysis and Sampling

11. 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).

REQUEST FOR COMMENTS

12. Codex Members and Observers are invited to comment at Step 3 on the attached revised ***proposed draft Codex Standard for Certain Canned Vegetables*** (including packing media provisions) as directed above.

⁴ Codex standards are available for downloading at: http://www.codexalimentarius.net/standards_search.asp.

⁵ In addition, see working document CX/PFV 04/22/3, General Considerations for Food Additives in Codex Commodity Standards and Codex Standards for Processed Fruits and Vegetables, paras. 18 - 22.

**PROPOSED DRAFT CODEX STANDARD FOR
CERTAIN CANNED VEGETABLES**

(AT STEP 3)

1. SCOPE

This Standard applies to certain canned vegetables, as defined in Section 2 below and offered for direct consumption, including for catering purposes or for repackaging if required. It does not apply to the product when indicated as being intended for further processing.

2. DESCRIPTION

2.1 PRODUCT DEFINITIONS

Canned vegetables are the products:

- (1) prepared from fresh (barring mature processed peas) or frozen [canned vegetables] and sound vegetables, as defined in Section 2.2, having reached appropriate maturity for processing. None of their essential elements are removed from them but they shall be washed and prepared appropriately, depending on the product to be produced. They undergo operations such as washing, peeling, grading, cutting, etc., depending on the type of product.

This Standard does not cover vegetables that are lacto-fermented, pickled or preserved in vinegar.

- (2) packed with a suitable liquid packing medium as indicated in Section 3.2 (Packing Media) below.

The product may be designated as “vacuum packaged” when the product is packaged without packing media, or with a packing media that does not exceed 20% of the product's net weight, and when the container is closed in such conditions as to generate the following minimum internal pressure at 20°C:

- (a) of 500 millibars for containers of a capacity of 2550 ml or less,
 - (b) of 300 millibars for containers with a capacity higher than 2550 ml.
- (3) processed by heat, in an appropriate manner, before or after being hermetically sealed in a container, so as to prevent spoilage and to ensure product stability in normal storage conditions at room temperature.

2.2 SPECIFIC DEFINITIONS OF PRODUCTS

Carrots

2.2.1 The name “carrots” stands for the product prepared using clean and sound roots of varieties (cultivars) of carrots complying with the characteristics of the species *Daucus carota* L., trimmed of their tops, green extremities and peel.

Green Beans or Wax Beans

2.2.2 The names “Green beans” or “wax beans” stand for the products prepared from the pods (or runners), incompletely ripe and with cut off ends, of *Phaseolus vulgaris* L, *Phaseolus coccineas* L, or *Phaseolus multiflorus* LMK. Beans of distinct varietal groups with respect to shape may be designated as:

- (1) **Round:** beans having a width not greater than 1 ½ times the thickness of the bean.
- (2) **Flat:** beans having a width greater than 1 ½ times the thickness of the bean.

Asparagus

2.2.3 The name “asparagus” stands for the product prepared from the edible portions of peeled or unpeeled stems of varieties of asparagus complying with the characteristics of *Asparagus officinalis* L.

Green Peas

2.2.4 The name “green peas” stands for the product prepared from immature (green) seeds of *Pisum sativum* L peas, of the smooth, wrinkled varieties, or other types (crosses or hybrids of the wrinkled of round seeded varieties).

When the peas are of sweet green wrinkled varieties or hybrids having similar characteristics, the name is “sweet green peas”.

Palm

2.2.5 The name “palm hearts” stands for the product prepared from the terminal buds of wild palms (upper and inferior meristems), where young stems rise, trimmed of fibrous parts. The product has a heterogeneous structure. These wild palms have the characteristics of *Euterpe edulis* (single stem) or *Euterpe oleracea* (several stems in a clump) and with other species of wild palms fit for human consumption. The name “shoots of palms” (or “hearts or shoots of cultivated palm”) correspond to the central part of the stem of young and sound shoots, rid of fibrous parts, of the cultivated palm of varieties derived from *Bactris gasipaes*, or other species of cultivated palm fit for human consumption.

Mature Processed Peas

2.2.6 The name “mature processed peas” stands for the product prepared using clean, sound, whole, threshed, and dried grains of the species *Pisum sativum* L., which has undergone soaking, but excluding the macrosporum sub-variety.

Sweet Corn

2.2.7 The name “sweet corn” stands for the product prepared from clean and sound grains of sweet corn, of white or yellow colour, complying with the characteristics of *Zea mays saccharata* L.

Baby Corn or Young Corn

2.2.8 The name “baby corn” or “young corn” stands for the product prepared from selected young corn cob without pollination of commercial varieties conforming to the characteristics of *Zea mays* L., from which silk and husk are removed.

2.3 STYLES

2.3.1 Carrots

(1) **Whole:**

- (a) Conical or cylindrical cultivars (for example, *Chantenay* and *Amsterdam* varieties): carrots, which, after processing, more or less keep their initial shape. The largest diameter of carrots, measured at right angles to the longitudinal axis, shall not exceed 50 mm. The ratio between the diameters of the biggest and smallest carrots shall not be greater than 3:1.
- (b) Spherical cultivars (“Paris’ carrots”): carrots that have reached full maturity, of rounded shape, whose largest diameter in each direction shall not exceed 45 mm.

- (2) ***Baby whole carrots:***
- (a) Conical or cylindrical cultivars: carrots whose diameter does not exceed 23 mm and whose length does not exceed 100 mm.
 - (b) Spherical cultivars: whole carrots whose diameter in each direction does not exceed 27mm⁶.
- (3) ***Halves***: Carrots cut along the longitudinal axis into two roughly equal parts.
- (4) ***Quarters***: Carrots cut into four roughly equal parts by slicing in two points perpendicularly to the longitudinal axis.
- (5) ***Lengthways portions***: Carrots sliced lengthways, in a straight or wavy manner, into four or more pieces of roughly equal dimensions, not less than 20 mm long and not less than 5 mm in width measured at maximum width.
- (6) ***Rounds or Sliced***: Carrots cut, in a straight or wavy manner, perpendicularly to the longitudinal axis, in rounds with a maximum thickness of 10 mm⁷ and a maximum diameter of 50 mm.
- (7) ***Diced***: Carrots cut into cubes with an approximately 12 mm⁸ sides at most.
- (8) ***Strips, Julienne, French style, or Shoestring***: Carrots cut lengthways, in a straight or wavy manner, into sticks. The section of the sticks should not exceed 5 mm (measured at the longest edges of the section).
- (9) ***Double-size diced***: carrots cut in regular pieces, of a square section, whose longer dimension is roughly twice the shorter, which should not exceed 12.5 mm.
- (10) ***Chunks or Pieces***: Whole carrots cut widthways into sections of a thickness above 10 mm, or whole carrots cut in two and sliced widthways into sections, or else carrot sections whose shape or grade may be irregular and whose size is greater than that of rounds or double-size diced.
- (11) ***Finger cuts***: Pieces of whole carrots, of at least 40 mm length and a diameter lower than or equal to 23 mm.

2.3.2 Green Beans and Wax Beans

2.3.2.1 Green beans and wax beans come in the following shapes and sizes:

- (1) Whole: whole pods of any length.
- (2) Cut/broken: pieces cut widthways with respect to the longitudinal axis; approximately uniform pieces of 20 mm.
- (3) Short cuts: pieces cut widthways of which 75%, by count, or more are less than 20 mm long.
- (4) Shoestring; Sliced lengthwise; French style: pieces in strips, of a thickness under 6.5 mm, of which the majority is cut slantwise or lengthways.
- (5) Diagonal cut: approximately 45 degrees to the longitudinal.

⁶ CL 1997/1- PFV - Annex XXIV : 18 mm.

⁷ CL 1997/1-PFV – Annex XXIV : 10 mm.

⁸ CL 1997/1-PFV – Annex XXIV: 12,5 mm.

2.3.2.2 Green beans and wax beans defined in (1) may be graded. If that is the case, they are graded in accordance with the following table. The grade is measured on the main axis at the widest point from one suture to the other.

Grading Requirements for Beans (French Beans or Wax Beans)

Categories	Grading Criterion (mm)	Maximum percentage (m/m of non conforming beans)
(1) Extra small	6.5	10%
(2) Very small	8.0	10%
(3) Small	9.0	15%
(4) Medium	10.5	25%
(5) Large	Out of grade	
(6) Not screened	Not screened (*)	Natural breakdown of the size beans (*)

(*) **Not screened:** beans in the natural proportion of size after cleaning, without the removal or addition of screened beans.

2.3.3 Asparagus:

2.3.3.1 Asparagus comes in the following shapes and sizes:

- (1) Long shoots or long spears: tip and adjoining part of the spear measuring at most 18 cm and at least 12 cm⁹ in length.
- (2) Shoots or spears: tip and adjoining part of the spear measuring at most 12 cm and at least 7cm¹⁰ in length.
- (3) Asparagus tips: upper extremity (bud) and adjoining part of spears measuring at most 10.5cm¹¹ and at least 4 cm in length.
- (4) Asparagus cut with tips or without tips: spears cut widthways into chunks with or without tips, measuring at most 6 cm¹² and at least 2 cm in length. This type of presentation shall comprise at least 20% with tips.
- (5) Cut asparagus: spears cut widthways into chunks measuring at most 6 cm in length. Tips may be present.

2.3.3.2 Asparagus are canned as follows in terms of their colour:

- (1) White asparagus: white, cream or yellowish spears; no more than 20% in number of spears may have violet, green, light green or yellowish green tips.
- (2) White asparagus with violet or green tips: asparagus, “short” asparagus and “tips” of white, cream or yellowish white asparagus may have violet, green, light green or yellowish green tips, and these colours may also apply to the adjoining region, but no more than 25% in number of the units may present these colours over more than 20% of their length.

⁹ CL 1997/1-PFV-Annex XXIII : 15 cm.

¹⁰ CL 1997/1-PFV-Annex XXIII : at most 15 cm, and at least 10,5 cm in length.

¹¹ CL 1997/1-PFV-Annex XXIII : 10,5 cm.

¹² CL 1997/1-PFV-Annex XXIII : 6 cm.

- (3) Green asparagus: the units are green, light green or yellowish green; no more than 20% in number of the units may present a white, cream or yellowish white colour in the lower part of the spear over more than 20% of their length.
- (4) Mixed: mixes of white, cream, yellowish white, violet, green, light green or yellowish green units.

2.3.3.3 Asparagus may be designated in terms of their size as indicated in the Table below. The size corresponds to the maximum diameter of the thickest part of the unit measured perpendicularly to the longitudinal axis of the unit.

Styles	Peeled Asparagus	Unpeeled Asparagus
(1) Small	Up to 8 mm	Up to 10 mm
(2) Medium	From above 8 mm to 13 mm inclusive	From above 10 mm to 15 mm inclusive
(3) Large	From above 13 mm to 18 mm inclusive	From above 15 mm to 20 mm inclusive
(4) Very large	More than 18 mm	More than 20 mm
(5) Blend of sizes or assorted sizes- a mixture of two or more single sizes		

2.3.4 Green Peas

Green peas may be designated in terms of their size as follows:

Names	Diameter of the circular perforations of the corresponding screen (these perforations are those through which raw grains must pass)
GREEN PEAS	
(1) Extra small green peas	7.5 mm
(2) Very small green peas	8.2 mm
(3) Small green peas	8.75 mm
(4) Medium green peas	9.3 mm
(5) Large green peas	out of grade
SWEET GREEN PEAS	
(1) Extra small sweet green peas	7.5 mm
(2) Very small sweet green peas	8.2 mm
(3) Small sweet green peas	9.3 mm
(4) Medium sweet green peas	10.2 mm
(5) Large sweet green peas	Out of grade
(6) Sweet green peas*	Not screened

Green peas may be canned with mixes from different screens subject to the mandatory statement on the label of the percentage in weight coming from the different screens according to Section 7.

* Sweet garden peas: garden peas of wrinkled varieties, in the natural proportion of sizes after beating and cleaning, without the removal or addition of screened peas.

2.3.5 Wild Palm and Cultivated Palm

2.3.5.1 Palm is presented in the following table:

- (1) “Palm hearts” correspond to the terminal bud of the wild palm and the upper part of the stem, cut widthways into pieces having a minimum length of 40 mm and a maximum length depending on the size of the container¹³.
- (2) “Palm shoots” or “shoots (or hearts) of cultivated palm” correspond to the young shoots of the cultivated palm and come from the central part of the stem cut widthways into pieces having a minimum length of 40 mm and a maximum length depending on the size of the container⁸.
- (3) “Palm stem pieces” correspond to the conical part of the stem, from young shoots of cultivated palm, closest to the root, cut widthways into pieces having a minimum length of 40 mm and a maximum length depending on the size of the container⁸.
- (4) “Palm tips” correspond to the upper part of the stem from young shoots of cultivated palm, cut widthways into pieces having a minimum length of 40 mm and a maximum length depending on the size of the container.
- (5) “Rounds” of “palm hearts” or of “palm shoots” or of “palm shoots (or hearts) of cultivated palm”, or of “palm stems” of cultivated palm, or of “palm tips” of cultivated palm, as defined in (1), (2), (3), (4), correspond to these products cut widthways into pieces having a minimum thickness of 25 mm and a maximum thickness of 40 mm¹⁴.
- (6) “Slices” of “palm hearts” or of “palm shoots” or of “palm shoots (or hearts) of cultivated palm”, or of “palm stems” of cultivated palm, or of “palm tips” of cultivated palm shoots” as defined in (1), (2), (3), (4), correspond to these products cut into pieces having a minimum thickness of 3 mm and a maximum thickness of 25 mm¹⁵.

2.3.5.2 “Palm shoots” or “palm shoots (or hearts) of cultivated palms”, “palm stem pieces” and “palm tips” of cultivated palm may be graded as follows in terms of their diameter.

Size Designations	Criteria
(1) Small	10 mm ¹³ to 25 mm inclusive
(2) Medium	More than 25 mm to 35 mm inclusive
(3) Large	More than 35 mm to 50 mm inclusive
(4) Very large	More than 50 mm
(5) Mixed sizes	Mix of 2 sizes or more

Thickness is measured at the median part of the unit perpendicularly to the longitudinal axis.

2.3.6 Sweet Corn

2.3.6.1 Whole grains packaged with or without a liquid packing media.

2.3.6.2 Creamed corn: whole grains or relatively whole grains, packed with a creamy liquid derived from the corn grains, so as to obtain a product with a creamy consistency.

¹³ CL 1997/1-PFV- Annex XXIII : 120 mm maximum.

¹⁴ CL 1997/1-PFV-Annex XXIII : at least 15 mm and at most 35 mm.

¹⁵ CL 1997/1-PFV-Annex XXIII: 15 mm maximum.

2.3.7 Young Baby Corn

2.3.7.1 Baby corn comes in the following styles:

- (1) Whole: whole cob of baby corn from which silk, husk and shank are removed.
- (2) Cut Corn: baby corn with diameter not more than 25 mm cut crosswise into section having a length between 1,5 and 4 cm.

2.3.7.2 Canned-baby corn in whole style may be designated according to size in the following manner.

Cob Size	Length (cm)	Diameter (cm)
(1) Extra large	10 – 13	>1.8 [1.8 -2.5]
(2) Large	8 – 10	1.0 - 2.0
(3) Medium	6 – 9	1.0 - 1.8
(4) Small	4 – 7	< 1.5

2.4 OTHER STYLES

Any other presentation of the product should be permitted provided that the product:

- (a) is sufficiently distinctive from other forms of presentation laid down in the Standard and;
- (b) meets all relevant requirements of the Standard, including requirements relating to limitations on defects, drained weight, and any other requirements in the 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;
- (c) is adequately described on the label to avoid confusing or misleading the consumer.

3. ESSENTIAL COMPOSITION AND QUALITY FACTORS

3.1 COMPOSITION

3.1.1 Basic Ingredients

Vegetables as defined in Section 2 and the appropriate liquid packing medium for the product.

3.2 PACKING MEDIA

3.2.1 Any of the following packing media may be used. The liquid covers the vegetables or does not exceed 20% of the total net weight of the product when packed such that a high vacuum is created in the containers.

3.2.1.1 Water: eventually with added salt.

3.2.1.2 Water with added salt, and/or sugars and/or other sweeteners such as honey, or without added sugars, with or without aromatics plants, spices or extracts thereof, seasoning, regular or concentrated fruit juice, oil, or vinegar.

3.3 OPTIONAL INGREDIENTS

- (1) Vinegar;
- (2) Garnish composed of one or several vegetables within the limit of 10% of the net drained weight of the product;
- (3) Extract of mint;
- (4) Oil¹⁶.

3.4 QUALITY CRITERIA

3.4.1 Flavour, Texture and Colour

3.4.1.1 Canned vegetables shall have normal flavour, odour, and colour of canned vegetables, corresponding to the type of vegetable used and shall possess texture characteristic of the product. They shall be free of fibrous and/or tough parts.

3.4.1.2 Creamed corn should present a fine but not excessively fluid consistency, or which may be dense and thick but not excessively dry or pasty, so that after two minutes a moderate but not excessive separation of free liquid can be seen.

3.4.2 Uniformity

3.4.2.1 *Asparagus*

- (1) Length: the specifications required in Section 2.3.3 regarding the types of presentation of asparagus are met when:
 - (a) The predominant length of the units in the sample falls within the designated style classification; and
 - (b) The length of the units is reasonably uniform. By “reasonably uniform”, on the basis of the average of the samples, the following is meant:
 - (i) Asparagus (or long asparagus), short asparagus and asparagus tips: at least 75% of the number of units do not deviate by more than 1cm from the most frequent length and at least 90% of the number of units do not deviate by more than 2 cm from the most frequent length.
 - (ii) Asparagus cut with tips or without tips: at least 75% of the number of units do not deviate by more than 1 cm from the most frequent length and at least 90% of the number of units do not deviate by more than 2 cm from the most frequent length.
- (2) Diameter: compliance with respect to the individual size names.
 - (a) When a product is said to be, presented or sold as complying with the names of the individual sizes of Section 2.3.3, the sampling unit should comply with the specified diameter for each individual grade, provided no more than 25% in number of all the units contained in the container belong to the group (or groups) of adjacent sizes.
 - (b) Any container or sampling unit, which exceeds the tolerance of 25% laid down above, should be considered “defective” as far as sizing is concerned.

¹⁶ Proposed by Thailand.

3.4.2.2 Carrots

- (1) Length: for carrots defined in 2.3.1 (1) and (2) at least 75% of the drained weight shall not deviate by more than 5 mm from the average carrot length, and at least 90% of the net drained weight shall not deviate by more than 10 mm from the average carrot length.
- (2) Diameter and other measurements: there is a 10% tolerance with respect to the maximum dimension.
- (3) Any container or sampling unit that exceeds the tolerances set forth in (1) and (2) above should be considered defective.

3.4.2.3 Palms

- (1) Length: the specifications laid down in Section 2.3.5 concerning the types of presentation of palm are met when :
 - (a) The most frequent length of the sample units remains within the limits laid down for the category of type of presentation.
 - (b) The length of units is reasonably uniform. On the basis of the average of samples and subject to compliance with the provisions of Section 2.3.5, “reasonably uniform” means that the gap between the length of all the units and the predominant length does not exceed approximately $\pm[5] \pm[10]$ mm and the gap between the thickness of all the units and the predominant thickness does not exceed $[5] [10]$ mm.
- (2) Diameter: When a product is said to be, presented or sold as complying with the individual grade provisions laid down in Section 2.3.5.2, the sampling unit or the container is considered as complying with the specified diameter for each individual size provided when no more than $[30\%][20\%]$ in number for products from cultivated palms, belong to the group (or groups) of adjacent sizes.

3.4.2.4 Baby Corn or Baby Corn Cob

- (1) For every size of whole baby corn, the length of the longest cob should not be more than 3 cm longer than the length of the shortest cob in each container.
- (2) Any container or sampling unit that exceeds the tolerances laid down in paragraph (1) should be considered defective.

3.4.2.5 Lot Acceptance

A lot should be considered as meeting the applicable quality requirements about individual grades referred to in Section 3.4.2 when the number of “defective” units 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).

3.4.3 Defects and Allowances

Canned vegetables should be substantially free from defects. Certain common defects should not be present in amounts greater than the following limitations.

3.4.3.1 Carrots**Whole Carrots and Whole Young Carrots, Carrots in Halves, in Quarters, Strips, Finger Cuts**

DEFECTS	Tolerances as a percentage of the drained product weight
(1) <u>Blemished carrots</u> : blemished or faded zones with a diameter above 5 mm.	20
(2) <u>Mechanical damage</u> : carrots that are crushed or grazed during canning.	10
(3) <u>Malformations</u> : deformations or fissures that appeared during growth.	20
(4) <u>Unpeeled parts</u> : 30% or more of the surface is unpeeled.	20
(5) <u>Fibrous</u> : carrots that are hard or woody owing to their fibrousness.	10
(6) <u>Black or dark green collar</u> : collar with a ring that is one millimetre thick over more than half its circumference.	20
(7) <u>Foreign vegetal matter</u> : vegetal substance from the carrot or any other innocuous vegetal matter.	1 piece per 1000g of total content in the container

The total amount of defects from (1) to (6) shall not exceed 35% of the drained product weight.

Defects (3), (4) and (6) do not apply to diced, rounds, strips, double-size diced; for these presentations the total amount of defects (1), (2) and (5) shall not exceed 25% of the drained product weight.

3.4.3.2 Green Beans and Wax Beans**3.4.3.2.1 Definitions of Defects**(1) Tough Strings:

A bean is recognised as being stringy if one of the strings on each side of the pod resists being pulled.

(2) Damaged pods:

Beans are deemed to be damaged if they have pods presenting rust, blemishes greater than 5 mm in diameter, spots, or — upon organoleptic examination — whose skin has grown thick, thereby diminishing the food value.

(3) Harmless plant material:

Parts of the plant (bean) and innocuous foreign vegetal matter are considered as vegetal debris.

(4) Pieces of beans:

Pieces of beans whose length is lower than 20 mm (for cans of whole beans).

(5) Pods without ends removed:

Beans whose attachment is still present (beans where only the protuberance remains where the peduncle was attached are not considered as pods without ends removed).

3.4.3.2.2 Defect Tolerances

The following limitations of defects are expressed in percentages, and related to the drained weight of the product.

When tested in accordance with the Joint FAO/WHO Codex Alimentarius Sampling Plans for Prepackaged Foods (AQL-6.5) (CODEX STAN 233-1969), canned beans shall be free of defects to the extent indicated below:

Proposal 1

CATEGORY	Stringy pods	Pods without ends removed	Defective pods	Bean pieces	Harmless Plant material	Aggregate defects
(1) Extra small French beans	2	3	3	3	1	8
(2) Very small French beans	3	3	3	3	3	10
(3) Small French beans	3	3	3	3	3	10
(4) Small wax beans	3	3	3	3	3	10
(5) Medium French beans	3	3	4	4	4	15
(6) Medium wax beans	3	3	4	4	4	15
(7) French beans	3	3	5	5	5	20
(8) Wax beans	3	3	5	5	5	20

Proposal 2

Defects	Tolerances % m/m
(1) Stringy pods	3
(2) Pods without ends removed	3
(3) Defective pods	4
(4) Bean pieces	4
(5) Harmless plant material	4
(6) AGREGATE DEFECTS	15

3.4.3.3 Asparagus

Defects and Allowances		Maximum
(1)	Asparagus tips and other parts crushed (broken or crushed pieces to the extent that they seriously impair the product aspect and comprising fragments under 1 cm in length).	The product should be reasonably free of such defects.
(2)	Foreign matter (such as sand, soil or substances from soil).	The product should be practically free of such defects.
(3)	Asparagus with skin (only in the case of asparagus presented peeled) (units comprising unpeeled zones which seriously impair the aspect or the edibility of the product).	10% in number
(4)	Hollow asparagus (hollow units to the extent that they seriously impair the product aspect), and fibrous, tough asparagus.	10% in number
(5)	Deformed asparagus (comprising spears or tips that are very curved, or any unit seriously impaired by splitting into two or any other malformation) and open tips.	10% in number
(6)	Damaged asparagus (by a colour defect, a mechanical lesion, a disease, or damaged by any other means to the extent that the aspect or the edibility of the product is seriously impaired).	10% in number
Total of all the defects described in (1), (4), (5), (6), for the following types of presentation:		
Asparagus	15% in number	
Short Asparagus	15% in number	
Asparagus tips	15% in number	
Asparagus cut with tips	20% in number	
Cut Asparagus	25% in number	

3.4.3.4 Green Peas and Sweet Green Peas

Canned peas may contain a slight amount of sediment and shall be reasonably free from defects within the limits set forth as follows:

Defects	Maximum Limits (Based on the weight of drained peas)
(1) Blemished peas (consisting of peas which are slightly stained or spotted).	[5% m/m] [3% m/m]
(2) Seriously blemished peas (consisting of peas which are spotted, discoloured or other-wise blemished (including worm-eaten peas) to the extent that the appearance or eating quality is seriously affected).	1% m/m
(3) Pea fragments (consisting of portions of peas; separated or individual cotyledons; crushed, partial, or broken cotyledons; and loose skins; but not including entire intact peas with skins detached).	[10% m/m] [5% m/m]
(4) Yellow peas (entire pea is substantially yellow and is not a so-called "blond" pea which is very pale in colour).	2% m/m
(5) Extraneous plant material (consisting of any vine or leaf or pod material from the pea plant, or other harmless plant material not purposely added as an ingredient).	0.5% m/m
Total of the foregoing defects (1), (2), (3), (4), (5)	[12% m/m] [10% m/m]

3.4.3.5 Sweet Corn

Sweet corn grains should have a reasonably tender texture, offering some resistance to chewing yet without being hard or tough.

The finished product shall be practically free of fragments of cobs, silks, shucks, grains with an abnormal colour or a malformation, foreign vegetal matter and other defects not expressly mentioned, within the limits set forth as follows:

Defects	Definition of Defects	Tolerances m/m (%)
(1) Foreign vegetal matter	Fragments of cobs, awns, shucks, foreign grains or a different variety of sweet corn.	0.2
(2) Blemished grains	Grains affected by a lesion due to insects or diseases, or presenting an abnormal colour.	1
(3) Torn grains	Grains keeping a piece of cob or hard matter adhering to them.	2
(4) Split grains or empty skins	Entirely open grains.	[5] [10]

Any unit where the proportion of defects exceeds the tolerances laid down above shall be considered defective.

3.4.3.6 *Wild Palms and Cultivated Palms*

(1) Definition of Defects

- (a) Defective texture: hard or fibrous and/or excessively soft texture, which seriously impairs product edibility.
- (b) Mineral impurities: such as sand, gravel or other soil elements.
- (c) Damaged units: units presenting colour defects, scars and grazes, abrasions and other imperfections of the same type which seriously impair product appearance.
- (d) Mechanical damage: broken or split units, fragments or detached pieces, which seriously impair product appearance.
- (e) Abnormal colour: colour considerably different from the typical colour of the product.
- (f) Physiological defects: for “palm hearts” and “palm hearts in rounds”, units with palm tree stem apical meristems

Defects	Weight Percentage with respect to the drained weight product
(a) Defective texture	10
(b) Mineral impurities	0.1
(c) Damaged units	15
(d) Mechanical damage	10
(e) Abnormal colour	10
(f) Physiological defects	10
TOTAL amount of defects for palm hearts, palm shoots or shoots of cultivated palm, palm stem pieces and palm tips.	20
TOTAL amount for other styles	25

3.4.3.7 Mature Processed Peas

Defects	Maximum Limits in drained weight (%)
(1) <u>Blemished peas</u> : peas with slight blemishes or spots.	10 m/m
(2) <u>Seriously blemished peas</u> : peas with spots and colour defects or otherwise blemished to the extent that their aspect or edibility are seriously affected; worm-eaten peas come under this category.	2 m/m
(3) <u>Pea fragments</u> : fractions of peas such as separated or detached cotyledons, crushed cotyledons partially or totally broken, and detached skins.	10 m/m
(4) <u>Foreign vegetal matter</u> : any fragment of tendril, peduncle, leaf or pod and any other foreign matter.	0.5m/m

The total of the defects (1), (2), (3) and (4) should not exceed **[15% m/m]** [20% m/m] by weight.

3.4.3.8 Baby Corn(1) Whole Baby Corn

Defects	Maximum limit in drained weight (simple size 1 kg)
(1) Discolour	5%
(2) Irregular shape	5%
(3) Young husk and shank	10%
(4) Silk broken from the cob	20 cm of broken silks put together
(5) Brown tip	5%
(6) Broken tip with the diameter larger than 5 mm (Broken tip means tips of the cobs that are broken after packing. When these pieces are put together, the cob shape will be formed.)	5%
(7) Damage resulting from cutting	10%
(8) Broken pieces (broken pieces means the portions of broken pieces that cannot be put together to form the cob shape.)	2%
TOTAL DEFECTS without (4)	25%

(2) Cut Baby Corn

Defects	Maximum limits in drained weight (sample size 1 kg)
(1) Over/under size	5%
(2) Discolour	5%
(3) Peel	5%
(4) Silk	20 cm of broken silks put together
TOTAL DEFECTS without (4)	[20%] [15%]

3.5 CLASSIFICATION OF “DEFECTIVES”

A container that fails to meet one or more of the applicable quality requirements, as set out in Section 3.4 (except those based on sample average) should be considered as “defective”.

3.6 LOT ACCEPTANCE

A lot should be considered as meeting the applicable quality requirements referred to in Section 3.4 when:

- (1) for those requirements which are not based on averages, the number of defectives, as defined in Section 3.4, 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
- (2) the requirements of Section 3.4, which are based on sample averages, are complied with.

4. FOOD ADDITIVES**4.1 FLAVOUR ENHANCERS**

INS No.	Name of Food Additive	Maximum Level
621	Monosodium glutamate	[Limited by GMP (for use in canned peas, canned green beans and canned wax beans)]

4.2 FIRMING AGENTS

INS No.	Name of Food Additive	Maximum Level
509	Calcium chloride	Limited by GMP (for use in canned mature processed peas)
578	Calcium gluconate	

4.3 COLOURS

INS No.	Name of Food Additive	Maximum Level
102	Tartrazine	200 mg/kg (for use in canned mature processed peas, singly or in combination)
133	Brilliant blue FCF	

4.4 COLOUR RETENTION AGENTS

INS No.	Name of Food Additive	Maximum Level
386	Disodium ethylene-diamine-tetra-acetate (EDTA)	30 mg/kg (for use in canned baby corn)
512	Stannous chloride	25 mg/kg (calculated as tin, for use in vegetables packaged in glass jars or in entirely coated cans)

4.5 ACIDITY REGULATORS

INS No	Name of Food Additive	Maximum Level
260	Acetic acid, glacial	Limited by GMP
261(i)	Potassium acetate	
262(i)	Sodium acetate	
263	Calcium acetate	
270	Lactic acid (L-, D-, and DL)	
300	Ascorbic acid (L-)	
301	Sodium ascorbate	
302	Calcium ascorbate	
325	Sodium lactate	
326	Potassium lactate	
327	Calcium lactate	
330	Citric acid	
331(i)	Sodium dihydrogen citrate	
331(iii)	Trisodium citrate	
332(i)	Potassium dihydrogen citrate	
332(ii)	Tripotassium citrate	
333	Calcium citrates	
334	Tartaric acid (L(+)-)	
335 (i)	Monosodium tartrate	
335 (ii)	Disodium tartrate	
336(i)	Monopotassium tartrate	
336(ii)	Dipotassium tartrate	
337	Potassium sodium tartrate	
575	Glucono-delta-lactone	
296	Malic acid (DL-)	

5. CONTAMINANTS

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

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

6. HYGIENE

6.1 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, Rev. 4-2003), Recommended International Code of Hygienic Practice for Low-Acid and Acidified Low-Acid Canned Foods (CAC/RCP 23-1979, Rev. 1-1989), and other relevant Codex texts such as Codes of Hygienic Practice and Codes of Practice.

6.2 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)

6.3 To the extent possible in good manufacturing practice, the product shall be free from objectionable matter.

6.4 When tested by appropriate method of sampling, the product:

- (1) shall be free from micro-organisms capable of development in the product under normal conditions of storage, and
- (2) shall not contain any substance originating from micro-organisms in amounts, which may represent a hazard to health.

6.5 Canned vegetables has to undergo a heat treatment in order to destroy *Clostridium Botulinum* spores.

7. WEIGHTS AND MEASURES

7.1 FILL OF CONTAINER

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. This provision does not apply to vacuum packaged vegetables.

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 should 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).

7.2 MINIMUM DRAINED WEIGHT

The drained weight of the product should not be 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 filled¹⁷.

7.2.1 Carrots

Type of Presentation	Minimum drained weight (%)
Whole carrots	56.5 (average diameter > 22mm) 62.5 (average diameter < 22mm)
Halves, Baby whole carrots	62.5
Lengthways portions	52.00
Diced, double-size diced	62.5
Strips	56.5
Quarters, pieces, rounds	56.5
Chunk or pieces	56.5
Finger cuts	62.5

7.2.2 Green Beans and Wax Beans

Type of presentation	Minimum drained weight (%)
Whole	50
Other presentations, except strips	54
Strips	50

7.2.3 Asparagus

Type of presentation	Minimum drained weight (%)	
	Peeled	Unpeeled
White asparagus Short white asparagus	59	57
Green asparagus	54	57
Other types of presentation	58	55

¹⁷ 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.

7.2.4 Sweet Corn

Type of presentation	Minimum drained weight (%)
With a liquid packing medium	66 [61]
Vacuum packaged or without a liquid packing medium	67

7.2.5 Green Peas and sweet green peas

Type of presentation	Minimum drained weight (%)
Extra small	66%
Very small	
Small	
Medium	62.5%
Large	
Not graded	

When green peas are not graded, drained weight should not be less than 62.5%.

7.2.6 Palm

Type of presentation	Minimum drained weight(%)
Hearts, shoots (or palm), stems, palm tips	[58]
Other styles	59

7.2.7 Baby Corn

The minimum drained weight of whole baby corn and cut baby corn should not be less than 45%.

7.2.8 Lot Acceptance

A lot should be considered as meeting the requirements of Section 7.1.4 when it complies with the checking of the average (on average the quantity contained in all the containers of the lot is not lower than the quantity stated on the label), and also when the number of defectives (a container that fails to meet the requirements for drained weight as set out in Section 7.2 should be considered a “defective”) 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).

8. LABELLING

8.1 The products 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 names of the canned products shall be those defined in Section 2.2.

8.2.2 When the vegetables are sized, the styles and the size (or sizes when sizes are mixed) , as defined in Section 2.3, shall be declared as part of the name or in close proximity to the name.

8.2.3 For asparagus, colour has to be included into the styles defined in paragraph 2.2.3. For white asparagus, the words “not peeled” shall be declared if that is the case.

8.2.4 When colour of mature processed peas is not green, colour of peas should be declared (for example: brown peas or yellow peas); canned processed peas may be named “mature processed peas” or “processed peas” or “mature cooked peas”.

8.2.5 For sweet corn, the word “white” is declared part of the name when white variety is used.

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

8.2.7 The type of packaging (“vacuum packaged”) shall be declared as part of the name or in close proximity to the name, when products are canned as defined in Section 2.1 (1)).

8.2.8 If an added ingredient does alter the flavour characteristic of the product, the name of said ingredient should be affixed to the commercial designation of the product or in close proximity.

8.3 LABELLING OF NON-RETAIL CONTAINERS

Information for non-retail containers shall be given on the container or in accompanying documents, except that the name of the product, lot identification and the name and address of the manufacturer, packer or distributor, as well as storage instructions, shall appear on the container. However, lot identification, and the name and address of the manufacturer, packer or distributor may be replaced by an identification mark, provided that such mark is clearly identifiable with the accompanying documents.

9. METHODS OF ANALYSIS AND SAMPLING

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

ANNEX

This Annex contains comments
made by countries on certain Sections of the Standard
for which there may be a need for further discussion.

2.1 PRODUCT DEFINITION**Point (1)**

United States and Thailand want to include frozen raw materials in the proposed draft. This is a current practice into numerous countries. We think that frozen raw materials permit to postpone the use of seasonal vegetables (as asparagus), or to process canned mixed vegetables after the period of harvest.

Thailand wants to add canned raw materials. Manufacturers don't use this practice for canned vegetables intended for direct consumption. Canned vegetables may sometimes be used to process another products; for example, canned baby corn may be used to make pickles with vinegar.

In the proposed draft, we think that using canned raw materials, would lower quality, particularly because the effect of the second cooking. In addition, this practice is very expensive most of the time.

Thailand is invited to indicate which products are concerned, and to send justifications about this practice

Point (2)

United States wants to delete the words "without packing medium".

France agrees with this proposal.

The proposed draft forecasts to use the words "vacuum packaged" when the product is packaged without packing media, and when the container is closed with a high vacuum in the container, of 300 or 500 millibars in function of the size of the container. United States proposes to delete this provision and Egypt suggests a minimum negative pressure of 100mm mercury in all container sizes).

In order to identify the different products ("vacuum packaged" or "with packing medium"), it is necessary to apply an adequate internal pressure, already widely used by canned sweet corn manufacturers. This provision is necessary to reflect the difference with the canned vegetable with packing media (in this case internal pressure is not higher than 200 mb).

It would be useful to have justifications about the different practices.

2.2 SPECIFIC DEFINITIONS OF PRODUCTS**Section 2.2.2**

United States suggests using the words "green beans" instead of "French beans", and adding two distinct varietal groups: 1) round, and 2) flat.

France agrees with this proposal.

United States wish to include another varietal group: "Phaseolus coccineas"; this variety has its origin in Mexico; the common name of this green bean is "Scarlet runner bean". The French translation is "haricots d'Espagne".

France agrees with this proposal.

Section 2.2.5

Uruguay points out that labelling and styles (2.3.5) of the product are not the same as in the existing Standard.

Important evolutions had effected canned palms since 15 years. Wild palm has been the only product traded during eighty years. Now, cultivated palm represents 80% of the trade in Europe.

Wild palm and cultivated palm are very different. Palm heart is prepared from the terminal bud of the wild palm; but with cultivated palms, the central part of the stem of young shoots is used instead. In addition, distinct varietal groups are used (*Euterpe edulis* or *Euterpe oleracea*. for wild palm, *Bactris gasipaes* for cultivated palm; taste, texture (heterogeneous texture for wild palm, homogeneous texture for cultivated palm) and colour are different.

These two varieties of palm have to be distinguished in order to provide flexibility and allowv different labelling between the two products for the consumers:

- “palm heart” for the wild palm heart
- “shoot of palm” or “shoot (or heart) of cultivated palm” for cultivated palm.

2.3 STYLES

CRD 5 India comments: Sub-paragraphs 2.3.1, 2.3.2, 2.3.3, 2.3.4, 2.3.5, 2.3.6,2.3.7 may be deleted for the reasons explained at agenda item n°1. - namely:

- The Standards laid down for various canned fruit and vegetable products are too descriptive and difficult to compliance by the developing and underdeveloped countries. The mandate of the Codex is to focus on food safety rather than food quality standards. Therefore, approach of Codex should be towards horizontal standards (safety standards) rather than vertical standards (product standards).
- The sizes of the canned products mentioned under paragraphs “Styles” and “Defects and allowances” are unnecessary and may act as a trade barrier in international trade as the developing/underdeveloped countries do not have such sophisticated machineries / technologies for adherence to such specifications. There is no scientific justification indicating that difference in size of the pieces may affect the safety of the consumer. The decision on these parameters should be left on the national Government. In view of this, the paragraphs pertaining to “Styles” and “Defect and Allowances” where ever it appears in the standards , may be deleted and may be substituted with “The product should be uniform in size to the extent possible.”
- As a general principle, Codex standard should not be restricted to particular edible species only. All edible species including those grown in developing countries should be included. Alternately, decision on edible species may be left to National Governments.

2.3.1 Carrots

Point (5) - Lengthways portions

France agrees with this proposal.

2.3.2 Green Beans and Wax Beans

Point (2) Cut/Broken

United States proposed to delete “to 50 mm length”. France has no objection, but it is necessary to have an adequate homogeneity for the product.

Point (3) - Short Cuts

United States suggests to write “of which 75%, by count, or more are less than 20 mm long”, instead of “with respect of the longitudinal axis, pieces as uniform as possible of 10 mm to 20 mm length”.

France is not in favour of this modification, because 25% of pieces may have more than 20 mm, without a higher limit ; so the product will be heterogeneous, and there is no limit for little pieces of beans.

2.3.2.2 - Grading Requirements for Beans (French Beans or Wax Beans)

United States proposes to delete the grading requirements for green beans and wax beans. France is not in favour of this modification. Indeed, in the international trade green beans and wax beans are currently graded.

France proposes to modify the paragraph in order to specify that grading requirements are optional and used when manufacturers decide to use them.

Morocco wants to include a tolerance of 8% for the categories (1), (2), (3) and (4) (France agrees with this proposal), and suggest deleting categories (5) and (6).

2.3.3 Asparagus**2.3.3.1 Asparagus - Shapes/Sizes**

France agrees with the different modifications in paragraphs (1), (2), (3), and (4).

2.3.3.2 Asparagus - Colour

United States wants to change in paragraphs 2.3.3.2 (2) and 2.3.3.2 (3) the percentage of the part of the colored tips (violet, green, light green or yellowish green) from 25% to 50%

France thinks that this change doesn't fit with manufacturers' practices, and has negative effect on quality. So it is better to maintain the current provision.

It would be necessary to give justifications about this proposal.

2.3.3.3 Asparagus - Sizes

France agrees with the addition of mixture of different sizes.

2.3.4 Green Peas

The comment from France is the same as for green beans and wax beans (2.3.2.2.).

In order to clarify the text, the term “green peas” is put on the place of “garden peas” (Comment from US).

2.3.5.2 Cultivated/Wild Palm Shoots - Diameter

Manufacturers informed French authorities that it is more suitable to measure the diameter in the median part of the units, because of the conic shape of many shoots of palm.

2.3.7.2 Canned Baby Corn - Size

Whole baby corn may be packed by count, provided that the size uniformity is achieved. (Additional proposal by Thailand).

The correction of diameter proposed by Thailand induces a sizes overlap between “extra large” and “large”. France does not completely agree with this proposal.

3.2 Packing Media

United States notices that these requirements are too restrictive arguing that the seven existing standards allow additional ingredients (May also refer to the Codex Guidelines for Packing Media in Canned Vegetables).

This paragraph introduces the proposed guidelines for packing media proposed by France.

About additional ingredients, this Section includes only ingredients added in canned vegetables intended for international trade.

For that reason, the following ingredients, present in several existing standards, have not been retained in the proposed draft:

- butter, margarine or other edible fats or oils of animal or vegetal origin ;
- cheese sauce containing cheese,
- natural starches (unmodified) or modified.

3.4.2 Uniformity

(CRD 5 India comments: The whole paragraph including sub-paragraphs 3.4.2.1 to 3.4.3.8 may be deleted for the reasons explained at agenda item n° 1. See Annex, Section 2.3 Styles

3.4.2.2 Carrots

Point (1) - Length

United States suggests deleting this paragraph about uniformity for carrots.

This paragraph concerns only whole carrots and baby whole carrots.

France thinks that consumers expect homogeneous product, when purchasing a can. As for other canned vegetables, it is justified to introduce provisions about uniformity.

Point (3) - Tolerances

United States suggests deleting this paragraph about uniformity for carrots.

France thinks that consumers expect homogeneous product, when purchasing a can. As for other canned vegetables, it is justified to introduce provisions about uniformity.

3.4.2.3 Palms

Point (2) - Diameter

France agrees with this proposal.

3.4.3.1 Defects and Tolerances for Carrots

United States should have preferred to keep the original text, but are OK to maintain as it is now.

3.4.3.2 Defects and Allowances for Green Beans and Wax Beans

Point (1) - Tough Strings

United States suggests deleting this method, and replacing it by the following method: "A tough string is a string that will support the weight of 250 grams for five seconds or longer".

During the committee meeting, in San Antonio, the working group on methods of analysis has decided that the two methods were able to coexist.

Point (4) - Pieces of beans

Morocco wants to put 40 mm in place of 20mm.

Point (5) - Pods without ends removed

Morocco suggests adding another category of defect: clearly presence of set seeds)

France thinks that this defect concerns the bigger sizes, and there are difficulties to control this defect in laboratories.

3.4.3.2.2 Defect Tolerances

Proposal 2

United States proposes to delete defects and tolerances table for green beans and wax beans, and to substitute it by the existing standards.

France thinks that the table may be modified, and the new proposed table doesn't include grade references.

So two tables are proposed for comments.

Despite the United States remark, it seems necessary to retain easy to measure criterions. For example the reference to a drained weight of 340g (existing standard) is difficult to apply, because of the large number of capacity sizes used in international trade.

So the new proposal consists in a simplified table which permits to fix defects tolerances in percentage in relation with drained weight (m/m), that fits with trade practices.

Morocco suggests limiting the aggregate defects:

- extra small French beans: 4 instead of 8
- very small French beans: 6 instead of 10
- small French beans: 8 instead of 10
- medium French beans: 10 instead of 15.

3.4.3.4 Defects and Allowances for Green Peas and Sweet Green Peas

United States proposed to delete the proposal table and to replace it by the original text. France thinks that it is useful to simplify the table, but that existing limits are too high compared with manufacturers' current practices.

Varietal groups have changed since 15 years; particularly, hybrids varieties are more homogeneous. Furthermore, process has improved, and defective peas are more easily eliminated.

For sweet green peas, varietal groups are less homogeneous and it is possible that rate of defects may be higher.

Proposal provisions by France are in square brackets in simple type, and US proposals are in bold type.

3.4.3.5 Defects and Allowances for Sweet Corn

Thailand proposed to delete the following words: “offering some resistance to chewing yet without being hard or tough”. This quality criterion is obviously difficult to measure; but is necessary to have a provision about texture.

Table on Defects/Definition of Defects/Tolerances

- United States suggests to delete the table and to insert the original provisions.

France has proposed this table of defects and tolerances because the existing table is too complex : size of the sample (400g or 600g) only although the trade uses numerous cansizes, pieces of cob measure by cm³, pieces of husk measure by cm², blemished kernels by 28g of drained weight.

In order to simplify, and to harmonise the requirement for defect tolerances in canned vegetables, it would be better to adopt tolerances by % m/m.

France would appreciate that the proposed table, which corresponds to international practices, would be maintained.

European Union is the largest importer of canned sweet corn in the world: every exporter, from USA, Thailand, Hungary, complies with EU standards without any difficulty.

- Thailand suggests to fix defect tolerance about foreign vegetal matters to 0,5%/m/m, instead of 0,2%/m/m, considering that it is necessary to adopt the same tolerance as for green peas.

France thinks that conditions are different. When cobs arrive at the factory, different parts of the plant are removed (husk...); cobs are practically clean. In the opposite, mechanised harvest of green peas carries many foreign vegetal matters to the factory, and it is not easy to eliminate them perfectly.

So, France prefers to maintain the tolerance to 0,2%/m/m, unless technical evidences are provided, proving that the level is too low.

3.4.3.7 Defects and Allowances for Mature Processed Peas

Thailand suggests fixing the total amount to 20%/m/m.

3.4.3.8 Defects and Allowances for Baby Corn

Point (2) - Cut Baby Corn

Thailand has corrected the total amount to 20%

4. Food Additives

United States suggests referring to table III, and the appropriate Section of Tables I and II in the General Standard for Food Additives.

France thinks that while CCFAC pursues its current work on the GSFA the working group should concentrate on the technological interest of food additives in canned vegetables.

(Uruguay comments CX/PFV 02/9-Add1: the additives defined are more limiting and the firming agents are approved only for peas. The INS for stannous chloride does not correspond).

4.3 Colours

Some comments from United States are included into this Section.

- food additives are grouped by functional effect,
- about **acidity regulators**: one have been assigned an ADI of “not limited” by JECFA are indicated in Section 4.1. The others are included in Table 3 of the draft GSFA.
- About tartrates, which have been assigned a numerical ADI, it is necessary to develop numerical use level in the draft commodity standard. These additives would be deleted from the draft GSFA if a numerical level was not provided by the 35th CCFAC (ALINORM 03/12, paragraph 60).
- **Glucono delta lactone (INS 575)**: is included in Table 3 of the draft GSFA, and permitted for use in canned vegetables ; in Europe the same regulation is applicable.
- **EDTA (INS 386)**: The current draft GSFA provides for the use of EDTA in canned vegetables at a maximum use level of 365 mg/kg ; but the use of disodium EDTA or calcium disodium EDTA in canned corn is not indicated. European regulation permits the use of EDTA into canned leguminous, canned vegetables, canned artichokes and canned mushrooms at a maximum level of 254 mg/kg.

United States suggest to introducing the use of disodium EDTA (INS 386) as a colour retention agent in canned black-eyed peas, kidney beans and cooked chickpeas. France considers that these products are not in the scope of this Standard.

- **Malic acid**: this additive is not used in Europe for canned asparagus. It has a taste effect on the products.
- **Firming agents**: US suggests to add Calcium citrates (INS 333), Calcium sulfate (INS 516) and Calcium Hydroxide (INS 526); these additives are permitted in Europe, but is necessary to limit their use to canned processed peas as indicated into the existing Standard.
- **Colours** : Green solid FCF (INS 142) is deleted, because this additive has not been assigned an ADI by JECFA.

The use of Tartrazine (INS 102) and Brilliant Blue FCF (INS 133) is limited to canned processed peas, as indicated in the existing Standard; it is necessary to justify the extension of their use to others canned vegetables. It is not a common practice in the international trade to add colours into canned vegetables.

- United States suggest introducing **emulsifiers and stabilizers agents**; France thinks that these additives can only have an interest when butter or margarine is added. This proposal doesn't cover this category of products because they are significant part of the international trade.

About INS 321 monosodium glutamate, the proposal has put into square brackets; France thinks that this additive would be deleted, because its technological interest for canned vegetables is not be proved. Generally this additive is used into ready-to-eat foods.

5. Contaminants

(Poland comments CX/PFV 02/9-Add1, concerning maximum levels of heavy metals in processed fruits and vegetables: Additional limits of mercury, arsenic, zinc are established in the Polish food regulations as follows:

- for processed fruit, except juices and tomato concentrates: Hg no more than 0,02mg/kg, As no more than 0,20 mg/kg, Zn no more than 15 mg/kg, Pb no more than 0,30 mg/kg, Cd no more than 0,03 mg/kg.)

7.2 Minimum Drained Weight

(Uruguay comments CX/PFV 02/9-Add1: the minimum drained weights for canned vegetables are too strict and detailed for each one of the specific cuts and styles of vegetables. This may result in some products being considered as non-complying with the Standard, thus presenting difficulties in trade. Uruguay proposes that the minimum drained weight should not be less than 50% for canned vegetables).

United States proposes to delete all tables because requirements as stated are not in line with manufacturing practices. And it was recalled that the U.S Department of Agriculture has done significant research into drained weights and has established recommended minimum drained weights for canned vegetables. In general, smaller can sizes (less than a No. 303) have a lower capacity and therefore a lower drained weight percentage near 45%. Established drained weights range from approximately 45% to 65% depending on the product and the style.

If drained weights are to be included, US recommends the original text (In no case should the proposed drained weights be more restrictive than the existing Codex standard).

Minimum drained weight for canned vegetables corresponds to manufacturers' current practice and to a consumers' request. Of course it is necessary that minimum drained weight takes into account the different elements which have an effect on the filling as the size of the cans, the size of vegetables pieces, the kind of can (metallic or glass)...

So, in Europe the filling rates and drained weights are often different according to the can size and the styles of vegetables.

The objective of the proposal is to take into account the previous elements and the practices in the international trade.

About the drained weight of jars, the same provisions were already adopted during the 21st session of the Committee for the proposed Codex draft for canned stone fruits ; it is an useful provision which corresponds to the special difficulty to fill glass jars.

7.2.1 Carrots

The drained weight proposed in the existing Standard about the different styles is too low in comparison with the trade practices. In Europe, drained weights for carrots are approximately 10 points above the Codex standard. It would be advisable for the working group to find a compromise.

The OEITFL Standard for drained weight in Europe is indicated in the table above.

7.2.2 Green Beans and Wax Beans

There are not big differences between the existing Standard and the new proposal, so it can be possible to retain the original text.

7.2.3 Asparagus

This table corresponds to the existing Standard, so it is possible to retain it.

7.2.4 Sweet Corn

Thailand suggests to fix the drained weight to 61% for sweet corn packed with liquid media. France agrees with this proposal.

About vacuum packed sweet corn there was no provision in the original Standard. The proposed drained weight of 67% corresponds to a standard trade practice.

7.2.5 Green Peas and Sweet Green Peas

France proposes to modify the table. When green peas are graded the table would be retained. When green peas are not graded, drained weight should be fixed to 62.5%, which corresponds to European manufacturers' practices, and doesn't lead to any difficulty, because it is very easy to pack green peas.

Perhaps it is more difficult to pack sweet green peas; for them it would be possible to fix the drained weight to 60% (according with the original Standard).

7.2.6 Palm

For the other styles 59% corresponds to the drained weight of the existing Standard.

8.1 Labelling

United States proposes that the styles be optional; but the Codex standard of labelling includes the styles into the name.

Thailand proposes that this Section should be amended taking into account the wording in the original text, which is more flexible.

8.2.2 Name of the Product

Vegetables are not always sized; but when vegetables are sized, it is necessary to indicate the size, and this information on the label is significant for manufacturers and is very important for consumers.