

codex alimentarius commission



FOOD AND AGRICULTURE
ORGANIZATION
OF THE UNITED NATIONS

WORLD
HEALTH
ORGANIZATION



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Agenda Item 4(b)

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JOINT FAO/WHO FOOD STANDARDS PROGRAMME

CODEX COMMITTEE ON FRESH FRUITS AND VEGETABLES

Ninth Session, 9-13 October 2000

Mexico City, Mexico

PROPOSED DRAFT CODEX STANDARD FOR APPLES

Governments and interested international organizations wishing to submit comments on the attached *Proposed Draft Codex Standard for Apples* (see ALINORM 99/35A, paras. 186 & 188) are invited to do so **no later than 31 July 2000** to Lic. Carmen Quintanilla Madero, Directora General de Normas, Secretaría de Comercio y Fomento Industrial, Av. Puente de Tecamachalco No. 6, Sección Fuentes, Naucalpan de Juárez, Estado de México, C.P. 53950 México (Telefax No. 52.5.729.9484 or E-mail mmurfin@correo.secofi.gob.mx), with a copy to the Chief, Joint FAO/WHO Food Standards Programme, Viale delle Terme di Caracalla 00100 Rome, Italy (Fax No. 39.06.5705.4593 or E-Mail Codex@FAO.Org).

BACKGROUND

1. The 8th Session of the Codex Committee on Fresh Fruits and Vegetables (Mexico City, Mexico, 1-5 March 1999) accepted the offer of the Government of Uruguay assisted by the United States to prepare a *Proposed Draft Codex Standard for Apples* subjected to approval by the 23rd Session of the Codex Alimentarius Commission (Rome, Italy, 28 June – 3 July 1999).¹
2. The elaboration of the *Proposed Draft Codex Standard for Apples* was approved by the 23rd Session of the Codex Alimentarius Commission as new work, with the understanding this task should be done in close collaboration with the United Nations Economic Commission for Europe (UN/ECE)² as provided for in the Committee's Terms of Reference.

¹ ALINORM 99/35A, paras. 186 & 188.

² ALINORM 99/37, para. 206

3. The Codex Secretariat has revised the text and aligned some sections of the proposed draft with the standard language used throughout the Codex standards for fresh fruits and vegetables.

4. Governments and interested international organizations are invited to comment at Step 3 on the attached ***Proposed Draft Codex Standard for Apples*** as directed above.

PROPOSED DRAFT CODEX STANDARD FOR APPLES
(At Step 3 of the Procedure)

1. DEFINITION OF PRODUCE

This standard applies to commercial varieties (cultivars) of apples grown from *Malus domestica Borkh.* to be supplied fresh to the consumer, after preparation and packaging. Apples for industrial processing are excluded.¹

2. PROVISIONS CONCERNING QUALITY

2.1 MINIMUM REQUIREMENTS

In all classes, subject to the special provisions for each class and the tolerances allowed, the apples must be:

- whole;
- sound, produce affected by rotting or deterioration such as to make it unfit for consumption is excluded;
- clean, practically free of any visible foreign matter;
- practically free of pests affecting the general appearance of the produce;
- practically free of damage caused by pests;
- practically free of damage caused by low and/or high temperature during storage;
- free of abnormal external moisture, excluding condensation following removal from cold storage;
- free of any foreign smell and/or taste.

2.1.1 The apples must have been carefully picked and have reached an appropriate degree of development and ripeness in accordance with criteria proper to the variety and to the area in which they are grown.²

The development and condition of the apples must be such as to enable them:

¹ Governments, when indicating the acceptance of the Codex Standard for Apples, should notify the Commission which provisions of the Standard would be accepted for application at the point of import, and which provisions would be accepted for application at the point of export.

² Due to the varietal characteristics of certain varieties such as Fuji concerning maturity at harvest, radial watercore is permitted provided this is contained within the vascular bundles of each fruit.

- to withstand transport and handling, and
- to arrive in satisfactory condition at the place of destination.

2.2 CLASSIFICATION

Apples are classified in three classes defined below:

2.2.1 “Extra” Class

Apples in this class must be of superior quality. Their shape, size and colouring must be characteristic of the variety and the stalk must be intact. They must be free of defects, with the exception of very slight superficial defects of the skin, provided these do not affect the general appearance of the produce, the quality, the keeping quality and presentation in the package.

2.2.2 Class I

Apples in this class must be of good quality. They must be characteristic of the variety. The stalk may be missing provided there is no skin damage. Slight defects in shape, development, colouring and from scarring, however, may be allowed, as is handling and physiogenetic damage, provided these do not affect the general appearance of the produce, the quality, the keeping quality and presentation in the package.

Slight skin defects must not extend beyond the following limits:

- 2 cm in length for defects of elongated shape;
- 1 cm² total surface area for other defects, with the exception of scab (*Venturia inaequalis*), which must not have a cumulative area of more than 0.25 cm²;
- slight bruising not exceeding 1 cm² in area and no discolouring.

The stalk may be missing, provided the break is clean and the adjacent skin is not damaged.

2.2.3 Class II

This class includes apples which do not qualify for inclusion in the higher classes, but satisfy the minimum requirements specified in Section 2.1 above.

Defects in shape, development, colouring and from scarring may be allowed, as is handling and physiogenetic damage, provided the apples retain their essential characteristics as regards the quality, the keeping quality and presentation.

Skin defects must not extend beyond the following limits:

- 4 cm in length for defects of elongated shape;
- 2.5 cm² total surface area for other defects, including slight bruising, with the exception of scab (*Venturia inaequalis*), which must not have a cumulative area of more than 1 cm².

3. PROVISIONS CONCERNING SIZING

Size is determined by maximum diameter of equatorial section or by weight. However, when sizing by weight, the minimum weight must be ensured for all fruit, as appropriate, according to the minimum diameters for all categories determined below.

The minimum diameter for all categories is 50 mm.

To ensure there is uniformity of size within a package, the difference in diameter between fruit in the same package shall be limited to:

- 5 mm for fruit packed in rows and layers;
- 10 mm for fruit packed in bulk or in pre-packaging.

4. PROVISIONS CONCERNING TOLERANCES

Tolerances in respect of quality and size shall be allowed in each package (or in each lot for produce presented in bulk) for produce not satisfying the requirements of the class indicated.

4.1 QUALITY TOLERANCES

4.1.1 “Extra” Class

Five per cent by number or weight of apples not satisfying the requirements of the class, but meeting those of Class I or, exceptionally, coming within the tolerances of that class.

4.1.2 Class I

Ten per cent by number or weight of apples not satisfying the requirements of the class, but meeting those of Class II or, exceptionally, coming within the tolerances of that class.

This tolerance includes 2% of apples that have unhealed light superficial damage, slight traces of rotting or damage to the flesh.

4.1.3 Class II

Ten per cent by number or weight of apples satisfying neither the requirements of the class nor the minimum requirements, with the exception of produce affected by rotting or any other deterioration rendering it unfit for consumption.

Within this tolerance, a maximum of 5% by number or weight of fruit may show the following defects:

- serious corklike blemishing (bitter pit) or watercore;
- slight damage or unhealed broken skin;
- very slight traces of rotting.

4.2 SIZE TOLERANCES

For all classes, 10 per cent by number or weight of apples corresponding to the size immediately above and/or below that indicated on the package, with, for fruit classified in the smallest grade allowed, a maximum variation of 5 mm below the minimum.

5. PROVISIONS CONCERNING PRESENTATION

5.1 UNIFORMITY

The contents of each package (or lot for produce presented in bulk) must be uniform and contain only apples of the same origin, variety, quality and size (if sized) and visibly of the same degree of ripeness and development. For “Extra” Class, colour should be uniform. The visible part of the contents of the package (or lot for produce presented in bulk) must be representative of the entire contents.

Uniformity of variety is not required for “Extra” Class and Class I apples in pre-packed units with a net weight not exceeding 2 kg.

5.2 PACKAGING

Apples must be packed in such a way as to protect the produce properly. The materials used inside the package must be new,³ clean, and of a quality such as to avoid causing any external or internal damage to the produce. The use of materials, particularly of paper or stamps bearing trade specifications is allowed, provided the printing or labelling has been done with non-toxic ink or glue.

Apples shall be packed in each container in compliance with the Recommended International Code of Practice for Packaging and Transport of Tropical Fresh Fruit and Vegetables (CAC/RCP 44-1995).

5.2.1 Description of Containers

The containers shall meet the quality, hygiene, ventilation and resistance characteristics to ensure suitable handling, shipping and preserving of the apples. Packages (or lot for produce presented in bulk) must be free of all foreign matter and smell.

5.3 PRESENTATION

The apples may be presented under one of the following forms:

- a) In regular layers according to size, in open or closed containers. This form of presentation is obligatory for the “Extra” Class and optional for Classes I and II;
- b) In bulk, comprising up to three consecutive sizes. This form of presentation is only permitted for Classes I and II.

6. MARKING OR LABELLING

6.1 CONSUMER PACKAGES

In addition to the requirements of the Codex General Standard for the Labelling of Pre-packaged Foods (CODEX STAN 1-1985, Rev. 2-1999), the following specific provisions apply:

³ For the purposes of this Standard, this includes recycled material of food-grade quality.

6.1.1 Nature of Produce

If the produce is not visible from the outside, each package (or lot for produce presented in bulk) shall be labelled as to the name of the produce and may be labelled as to the name of the variety.

6.2 NON-RETAIL CONTAINERS

Each package must bear the following particulars, in letters grouped on the same side, legibly and indelibly marked, and visible from the outside, or in the documents accompanying the shipment.⁴ For produce transported in bulk these particulars must appear on a document accompanying the goods.

6.2.1 Identification⁵

Name and address of Exporter, Packer and/or Dispatcher. Identification code (optional).⁶

6.2.2 Nature of Produce

Name of produce if the contents are not visible from the outside. Name of variety or varieties (where appropriate).

6.2.3 Origin of Produce

Country or countries (where appropriate) of origin and, optionally, district where grown or national, regional or local place name.

6.2.4 Commercial Identification

- Class;
- Size, regardless of form of presentation.

⁴ Governments, when indicating their acceptance of this Standard, should notify the Commission as to which provisions of this Section apply.

⁵ Unit packs of produce pre-packed for direct sale to the consumer shall not be subject to these marking provisions but shall conform to national requirements. However, the markings referred to shall be shown on the transport packaging containing such unit packs.

⁶ The national legislation of a number of countries requires the explicit declaration of the name and address. However, in the case where a code mark is used, the reference "packer and/or dispatcher (or equivalent abbreviations)" has to be indicated in close connection with the code mark.

6.2.5 Official Inspection Mark (optional)

7. CONTAMINANTS

7.1 HEAVY METALS

Apples shall comply with those maximum levels for heavy metals established by the Codex Alimentarius Commission for this commodity.

7.2 PESTICIDE RESIDUES

Apples shall comply with those maximum residue limits established by the Codex Alimentarius Commission for this commodity.

8. HYGIENE

8.1 It is recommended that the produce 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. 3-1997), and other relevant Codex texts such as Codes of Hygienic Practice and Codes of Practice.

8.2 The produce 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).

ANNEX I**COLOURING**

The different varieties of apple shall be classified into four groups according to colouring:

GROUP A: VARIETIES WITH RED COLOURING

Extra Class: At least $\frac{3}{4}$ of the surface of the fruit is red in colour

Class I: At least $\frac{1}{2}$ of the surface of the fruit is red in colour

Class II: At least $\frac{1}{4}$ of the surface of the fruit is red in colour

GROUP B: VARIETIES WITH SEMI-RED OR MIXED COLOURING

Extra Class: At least $\frac{1}{2}$ of the surface of the fruit has semi-red colouring

Class I: At least $\frac{1}{3}$ of the surface of the fruit has semi-red colouring

Class II: At least $\frac{1}{10}$ of the surface of the fruit has semi-red colouring

GROUP C: VARIETIES WITH STRIPES AND SLIGHT RED COLOURING

Extra Class: At least $\frac{1}{3}$ of the surface of the fruit has striped red colouring

Class I: At least $\frac{1}{10}$ of the surface of the fruit has striped red colouring

Class II: At least $\frac{1}{10}$ of the surface of the fruit has striped red colouring

GROUP D: GREEN AND YELLOW VARIETIES