

# CODEX ALIMENTARIUS

INTERNATIONAL FOOD STANDARDS



Food and Agriculture  
Organization of  
the United Nations



World Health  
Organization

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## STANDARD FOR BANANAS

CXS 205-1997

Adopted in 1997. Amended in 2005, 2022.

### 2022 Amendment

The following amendments were made to the text of the standard following decisions taken at the forty-fifth session of the Codex Alimentarius Commission in December 2022.

| Page | Location                        | Original text  | Printed text  |
|------|---------------------------------|--|---|
| 1    | <u>1. Definition of produce</u> | <p>This standard applies to commercial varieties of bananas grown from <i>Musa</i> spp. (AAA), of the Musaceae family, in the green state, to be supplied fresh to the consumer, after preparation and packaging. Bananas intended for cooking only (plantains) or for industrial processing are excluded. Varieties covered by this standard are included in the annex.</p> | <p>This standard applies to commercial varieties of bananas grown from <i>Musa</i> spp. of the Musaceae family, in the green state, to be supplied fresh to the consumer, after preparation and packaging. Bananas intended for cooking only (plantains) or for industrial processing are excluded. Varieties covered by this standard are included in the annex.</p> |

## 1. DEFINITION OF PRODUCE

This standard applies to commercial varieties of bananas grown from *Musa* spp. of the Musaceae family, in the green state, to be supplied fresh to the consumer, after preparation and packaging. Bananas intended for cooking only (plantains) or for industrial processing are excluded. Varieties covered by this standard are included in the annex.

## 2. PROVISIONS CONCERNING QUALITY

### 2.1 Minimum requirements

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

- whole (taking the finger as the reference);
- 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;
- free of abnormal external moisture, excluding condensation following removal from cold storage, and bananas packed under modified atmosphere conditions;
- free of any foreign smell and/or taste;
- firm;
- free of damage caused by low temperatures;
- practically free of bruises;
- free of malformation or abnormal curvature of the fingers;
- with pistils removed; and
- with the stalk intact, without bending, fungal damage or desiccation.

In addition, hands and clusters must include:

- a sufficient portion of the crown of normal colouring, sound and free of fungal contamination; and
- a cleanly cut crown, not bevelled or torn, with no stalk fragments.

#### 2.1.1 The development and condition of the bananas must be such as to enable them:

- to reach the appropriate stage of physiological maturity corresponding to the particular characteristics of the variety;
- to withstand transport and handling; and
- to arrive in satisfactory condition at the place of destination in order to ripen satisfactorily.

### 2.2 Classification

Bananas are classified in three classes defined below:

#### 2.2.1 "Extra" class

Bananas in this class must be of superior quality. They must be characteristic of the variety and/or commercial type. The fingers must be free of defects, with the exception of very slight superficial defects, 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

Bananas in this class must be of good quality. They must be characteristic of the variety. The following slight defects of the fingers, however, may be allowed, provided these do not affect the general appearance of the produce, the quality, the keeping quality and presentation in the package:

- slight defects in shape and colour; and
- slight skin defects due to rubbing and other superficial defects not exceeding 2 cm<sup>2</sup> of the total surface area.

The defects must not, in any case, affect the flesh of the fruit.

### 2.2.3 Class II

This class includes bananas which do not qualify for inclusion in the higher classes, but satisfy the minimum requirements specified in Section 2.1 above. The following defects, however, may be allowed, provided the bananas retain their essential characteristics as regards the quality, the keeping quality, and presentation:

- defects in shape and colour, provided the product retains the normal characteristics of bananas; and
- skin defects due to scraping, scabs, rubbing, blemishes, or other causes, not exceeding 4 cm<sup>2</sup> of the total surface area.

The defects must not, in any case, affect the flesh of the fruit.

## 3. PROVISIONS CONCERNING SIZING

For the purposes of sizing bananas of the Gros Michel and Cavendish subgroups, the length of the fingers is determined along the outside curve from the blossom end to the base of the pedicel where the edible pulp ends, and the diameter is defined as the thickness of a transverse section between the lateral faces. The reference fruit for measurement of the length and grade is:

- for hands, the median finger on the outer row of the hand; and
- for clusters, the finger next to the cut section of the hand, on the outer row of the cluster.

The minimum length should not be less than 14 cm and the minimum grade not less than 2.7 cm.

## 4. PROVISIONS CONCERNING TOLERANCES

Tolerances in respect of quality and size shall be allowed for produce not satisfying the requirements of the class indicated.

### 4.1 Quality tolerances

#### 4.1.1 "Extra" class

Five percent by number or weight of bananas 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 percent by number or weight of bananas not satisfying the requirements of the class, but meeting those of class II or, exceptionally, coming within the tolerances of that class.

#### 4.1.3 Class II

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

### 4.2 Size tolerances

For all classes, 10 percent by number or weight of bananas not satisfying the requirements as regards sizing but falling within the size immediately above or below those indicated in Section 3.

## 5. PROVISIONS CONCERNING PRESENTATION

### 5.1 Uniformity

The contents of each package must be uniform and contain only bananas of the same origin, variety, and quality. The visible part of the contents of the package must be representative of the entire contents.

### 5.2 Packaging

Bananas must be packed in such a way as to protect the produce properly. The materials used inside the package must be new,<sup>i</sup> 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.

Bananas shall be packed in each container in compliance with the *Code of Practice for Packaging and Transport of Fresh Fruits and Vegetables* (CXC 44-1995).<sup>1</sup>

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<sup>i</sup> For the purposes of this standard, this includes recycled material of food-grade quality.

### 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 bananas. Packages must be free of all foreign matter and smell.

### 5.3 **Presentation**

- The bananas must be presented in hands and clusters (parts of hands) of at least four fingers. Bananas may also be presented as single fingers.
- Clusters with no more than two missing fingers are allowed, provided the stalk is not torn but cleanly cut, without damage to the neighbouring fingers.
- Not more than one cluster of three fingers with the same characteristics as the other fruit in the package may be present per row.

## 6. **MARKING OR LABELLING**

### 6.1 **Consumer packages**

In addition to the requirements of the *General Standard for the Labelling of Pre-packaged Foods* (CXS 1-1985),<sup>2</sup> the following specific provisions apply:

#### 6.1.1 **Nature of produce**

If the produce is not visible from the outside, each package shall be labelled as to the name of the produce and may be labelled as to 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.

##### 6.2.1 **Identification**

Name and address of exporter, packer and/or dispatcher. Identification code (optional).<sup>ii</sup>

##### 6.2.2 **Nature of produce**

Name of the produce if the contents are not visible from the outside. Name of the variety or commercial type (optional).

##### 6.2.3 **Origin of produce**

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

##### 6.2.4 **Commercial identification**

- bananas in fingers (when appropriate);
- class; and
- net weight (optional).

##### 6.2.5 **Official inspection mark (optional)**

## 7. **CONTAMINANTS**

7.1 The produce covered by this standard shall comply with the maximum levels of the *General Standard for Contaminants and Toxins in Food and Feed* (CXS 193-1995).<sup>3</sup>

7.2 The produce covered by this standard shall comply with the maximum residue limits for pesticides established by the Codex Alimentarius Commission.

## 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 *General Principles of Food Hygiene* (CXC 1-1969),<sup>4</sup> *Code of Hygienic Practice for Fresh Fruits and Vegetables* (CXC 53-2003),<sup>5</sup> 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 and Guidelines for the Establishment and Application of Microbiological Criteria Related to Foods* (CXG 21-1997).<sup>6</sup>

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<sup>ii</sup> The national legislation of some 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.

## ANNEX

## LIST OF THE MAIN GROUPS, SUBGROUPS AND CULTIVARS OF BANANAS FOR DESSERT

| Groups | Subgroups    | Main cultivar                               |
|--------|--------------|---|
| AA     | Sweet-fig    | Sweet-fig, Pisang Mas, Amas Date, Bocadillo |
| AB     | Ney Poovan   | Ney Poovan, Safet Velchi                    |
| AAA    | Cavendish    | Dwarf Cavendish                             |
|        |              | Giant Cavendish                             |
|        |              | Lacatan                                     |
|        |              | Poyo (Robusta)                              |
| AAA    | Cavendish    | Williams                                    |
|        |              | Americani                                   |
|        |              | Valery                                      |
|        |              | Arvis                                       |
| AAA    | Gros Michel  | Gros Michel                                 |
|        |              | Highgate                                    |
| AAA    | Pink Fig     | Pink Fig                                    |
|        |              | Green pink Fig                              |
| AAA    | Ibota        |   |
| AAB    | Apple Fig    | Apple Fig, Silk                             |
|        | Pome (prata) | Pacovan<br>Prata Ana                        |
|        | Mysore       | Mysore, Pisang Ceylan, Gorolo               |

## NOTES

<sup>1</sup> FAO and WHO. 1995. *Code of Practice for Packaging and Transport of Fresh Fruits and Vegetables*. Codex Alimentarius Code of Practice, No. CXC 44-1995. Codex Alimentarius Commission. Rome.

<sup>2</sup> FAO and WHO. 1985. *General Standard for the Labelling of Pre-packaged Foods*. Codex Alimentarius Standard, No. CXS 1-1985. Codex Alimentarius Commission. Rome.

<sup>3</sup> FAO and WHO. 1995. *General Standard for Contaminants and Toxins in Food and Feed*. Codex Alimentarius Standard, No. CXS 193-1995. Codex Alimentarius Commission. Rome.

<sup>4</sup> FAO and WHO. 1969. *General Principles of Food Hygiene*. Codex Alimentarius Code of Practice, No. CXC 1-1969. Codex Alimentarius Commission. Rome

<sup>5</sup> FAO and WHO. 2003. *Code of Hygienic Practice for Fresh Fruits and Vegetables*. Codex Alimentarius Code of Practice, No. CXC 53-2003. Codex Alimentarius Commission. Rome.

<sup>6</sup> FAO and WHO. 1997. *Principles and Guidelines for the Establishment and Application of Microbiological Criteria Related to Foods*. Codex Alimentarius Guideline, No. CXG 21-1997. Codex Alimentarius Commission. Rome.