

**GUIDELINES FOR MIXED FRUIT JUICES**  
**CAC GL 11-1991**

1. **SCOPE**

These guidelines apply to mixed fruit juices as defined in Section 2 below, for direct human consumption, preserved exclusively by physical means. For the purpose of this Standard and at this time, preservation by physical means does not include ionizing radiation.

2. **DESCRIPTION**

A mixed fruit juice is the unfermented but fermentable juice, pulpy, turbid or clear, intended for direct consumption, as obtained by a mechanical process, from two or more species of sound ripe fruits or the flesh thereof, preserved exclusively by physical means. The juices may have been concentrated and later reconstituted with water suitable for the purpose of maintaining their essential composition and quality factors.

3. **ESSENTIAL COMPOSITION AND QUALITY FACTORS**

3.1 **Soluble Solids**

The soluble fruit solids content of each fruit juice (exclusive of added sugars) should not be less than a value which corresponds to the soluble solids content of the ripe fruit as determined by refractometer at 20 °C, uncorrected for acidity and read as °Brix on the International Sucrose Scales. However, in the case of fruit juices for which a Codex Standard has been elaborated, the minimum soluble fruit solids content stated therein should apply.

3.2 **Sugars**

One or more of the solid sugars, as defined by the Codex Alimentarius Commission, may be added. In the case of a fruit juice being reconstituted from concentrate, one or more of the sugars, as defined by the Codex Alimentarius Commission, may be added. The quantity of sugars added, calculated as dry sugar, should not exceed 100 g/kg. The addition of sugars should not be permitted when the juice has been acidified in accordance with Sections 4.1 and 4.2.

3.3 **Ethanol Content**

The ethanol content should not exceed 3 g/kg.

3.4 **Organoleptic Properties**

Natural volatile juice components may be restored to any juice obtained from the same type of fruits from which natural volatile juice components have been removed.

3.5 Use of Concentrates

Only concentrates obtained from the same type of fruit as contained in the mixture may be used.

4. FOOD ADDITIVES

	<u>Maximum level</u>
4.1 Citric acid )	
4.2 Malic acid )	Limited by GMP
4.3 Carbon dioxide	Limited by GMP

Note: The addition of the acids mentioned in Sections 4.1 and 4.2 is not permitted when the juice contains sugars added in accordance with Section 3.2.

5. CONTAMINANTS

	<u>Maximum level</u>
5.1 Arsenic (As)	0.2 mg/kg
5.2 Lead (Pb)	0.3 mg/kg <sup>1</sup>
5.3 Copper (Cu)	5 mg/kg
5.4 Zinc (Zn)	5 mg/kg
5.5 Iron (Fe)	15 mg/kg
5.6 Tin (Sn)	200 mg/kg <sup>1</sup>
5.7 Sum of copper, zinc and iron	20 mg/kg
5.8 Sulphur dioxide	10 mg/kg

6. HYGIENE

6.1 It is recommended that the products covered by the provisions of this standard be prepared in accordance with the Recommended International Code of Hygienic Practice for Canned Fruit and Vegetable Products (Ref. No. CAC/RCP 2-1969) and the General Principles of Food Hygiene (Ref. No. CAC/RCP 1-1985, Rev. 2) recommended by the Codex Alimentarius Commission.

6.2 When tested by appropriate methods of sampling and examination, the product:

- (a) should be free from microorganisms capable of development under normal conditions of storage; and
- (b) should not contain any substances originating from microorganisms in amounts which may represent a hazard to health.

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<sup>1</sup> These limits remain under review, taking into account a sampling plan.

## 7. WEIGHTS AND MEASURES

### 7.1 Fill of Container

#### 7.1.1 Minimum Fill

The juice should occupy not less than 90% v/v 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.

## 8. LABELLING

In addition to the requirements of the Codex General Standard for the Labelling of Prepackaged Foods (CODEX STAN 1-1985), the following provisions should apply:

### 8.1 The Name of the Food

8.1.1 The name of the food to be declared on the label should be "fruit juice" or "mixed fruit juice", or "blended fruit juice" where either the word "fruit" is replaced by the names of the types of fruits used in descending order of their quantitative predominance in the product, or this name is followed by the types of fruits in the same order. If more than two juices are used, their names may be given separately on the label in proximity to the name of the food. In this case the name of the product should be denominated "mixed fruit juice" or "blended fruit juice".

8.1.2 If the quantity of added sugar or sugars, calculated as dry sugar, exceeds 15 g/kg of the product, the words "x added" should plainly and conspicuously accompany the name of the product where "x" represents the name or names of the sugar or sugars added, or the word "sugar(s)". Instead of the term "x added" the term "sweetened" may be used.

8.1.3 In the case of mixed fruit juice made wholly or partially from concentrated juice, the fact of reconstitution should be declared as follows: "mixed x juice made from concentrate or from concentrated juices" where "x" represents the names of all fruits which have been concentrated. This information should be given in close proximity to the name of the food or in another prominent position on the label.

### 8.2 List of Ingredients

8.2.1 A complete list of ingredients shall be declared on the label in descending order of proportion and in accordance with the relevant requirements applicable to the individual juices. For this purpose, concentrated fruit ingredients shall be calculated as single strength. Water and volatiles added for reconstitution of the juice need not be declared. Where, however, information has been included in the name of the food (Section 4.1.1) it need not be repeated in the list of ingredients. In this case, it is sufficient to refer to fruit juices with an indication, as necessary, of whether these have been prepared from concentrates. If lemon or lime juice have been added for the purpose of acidification, they should be so declared.

### 8.3 Additional Requirements

The following additional specific provisions shall apply:

8.3.1 No fruit or fruit juice should be represented pictorially on the label except the species of fruit present in the product.

8.3.2 No claim shall be made in respect of "Vitamin C" nor shall the term "Vitamin C" appear on the label unless the food contains such quantity of "Vitamin C" as would be accepted by national authorities in the country in which the food is sold, as warranting such claim or the use of such term.

8.3.3 Where the food contains more than 2 g/kg of carbon dioxide the term "carbonated" shall appear in close proximity to the name of the food and carbon dioxide shall also be declared in the list of ingredients.

8.3.4 Where the fruit juice requires to be kept under conditions of refrigeration, there shall be information for keeping and, if necessary thawing of the food.

8.3.5 Where the fruit juice has been prepared from raw materials treated with ionizing radiation, it shall be labelled in accordance with Section 5.2.2 of the General Standard.

#### 8.4 Non-Retail Containers

Information for non-retail containers shall either be given on the container or in accompanying documents, except that the name of the product, lot identification and name and address of the manufacturer or packer shall appear on the container. However, lot identification and the name and address of the manufacturer or packer 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 Part VI of this publication.