

GENERAL STANDARD FOR VEGETABLE JUICES
CODEX STAN 179-1991

1. **SCOPE**

This standard applies to all vegetable juices as defined below. It does not apply to vegetable juices for which specific Codex Commodity Standards exist.

2. **DESCRIPTION**

2.1 "Vegetable juice" is the liquid unfermented but fermentable product or lactic acid fermented product intended for direct consumption obtained from the edible part of one or more sound vegetables and preserved exclusively by physical means.¹ The juice shall be free from skins, seeds and other coarse parts of the vegetables. It may be clear, turbid or pulpy. It may have been concentrated and reconstituted with water suitable for the purpose of maintaining the essential composition and quality factors of the juice.

2.2 Vegetables for the purpose of the standard are: the parts of edible plants including roots, corms and tubers (e.g. carrots, garlic and potatoes), stems and shoots (e.g. asparagus), leaves and flowers (e.g. spinach, cauliflower) and legumes (e.g. peas). Pumpkins and rhubarb are also considered as being vegetables for the purpose of this standard.

3. **ESSENTIAL COMPOSITION AND QUALITY FACTORS**

3.1 Organoleptic Properties

The product shall have the characteristic colour, aroma and flavour of the vegetables from which it has been prepared taking into consideration the addition of ingredients and possible lactic acid fermentation. Natural volatile constituents may be restored to the juice or nectars. They shall be derived from the same types of vegetables used in the manufacture of the product.

3.2 Use of Concentrate

The addition of concentrated vegetable juice is permitted.

3.3 Blanching and Washing

The vegetables shall retain no more water from these operations than technologically unavoidable.

3.4 Ingredients

The following ingredients may be used:

- (a) food grade salt as defined in the Codex Alimentarius,
- (b) vinegar, except in vegetable juices treated by lactic acid fermentation,

¹ For the purpose of this standard and at this time preservation by physical means does not include ionizing radiation.

- (c) sugars in dry form and honey,
- (d) seasoning, spices and herbs,
- (e) fruit or fruit based products from which the essential elements of the fruit have not been extracted,
- (f) whey or lactoserum having undergone lactic fermentation, not more than 100 g/kg.

4. FOOD ADDITIVES

	<u>Maximum level</u>
4.1 L-ascorbic acid	400 mg/kg in the final product
4.2 Citric acid	GMP
4.3 Lactic acid (not in products having undergone lactic acid fermentation)	GMP
4.4 Malic acid	GMP
4.5 Glutamic acid and its sodium or potassium salt	GMP
4.6 Natural flavour obtained from seasonings, spices, herbs and fruit juices	GMP
4.7 Carbon dioxide	GMP

5. CONTAMINANTS

	<u>Maximum level</u>
5.1 Arsenic (As)	0.2 mg/kg
5.2 Lead (Pb)	0.3 mg/kg ¹
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 ¹
5.7 Sum of copper, zinc and iron	20 mg/kg
5.8 Sulphur dioxide	10 mg/kg
5.9 Mineral impurities insoluble in 10% hydrochloric acid shall not exceed	100 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 1-1969, Rev. 2-1985) recommended by the Codex Alimentarius Commission.

¹ These limits remain under review, taking into account a sampling plan.

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

- (a) shall be free from microorganisms capable of development under normal conditions of storage, except that in products having undergone lactic acid fermentation, the microorganisms technologically necessary for this fermentation may be present.
- (b) shall not contain any substances originating from microorganisms in amounts which may represent a hazard to health.

7. MARKING OR LABELLING

7.1 Containers Destined for the Final Consumer

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

7.1.1 The Name of the Food

The name of the food shall be "x juice" or "juice from x" in which "x" is the name(s) of the vegetable(s) used. In the case of juices made from two or more types of vegetables the product may be called "vegetable juice cocktail". If ingredients are used in quantities which characterize the product a declaration in the name of the food shall be made, e.g. "sweetened x juice" or "spiced x juice". If a juice has been obtained by lactic acid fermentation this fact shall be declared by naming the juice/nectar "lactic acid fermented" or by putting the words "obtained by lactic acid fermentation" in close proximity to the name of the food.

7.1.2 List of Ingredients

7.1.2.1 A complete list of ingredients shall be declared on the label in accordance with Section 4.2 of the General Standard, except that water added for reconstitution of concentrates need not be declared.

7.1.2.2 If juices have been made from concentrates, this shall be declared in the list of ingredients as follows: "x juice made from concentrate" or "reconstituted x juice" or "x juice made from concentrated x juice".

7.1.3 Additional Requirements

7.1.3.1 No vegetables or vegetable products may be represented pictorially on the label except those present in the product.

7.1.3.2 Where the product contains more than 2 g/kg of carbon dioxide the term "carbonated" shall appear on the label.

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

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

7.2 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.

8. METHODS OF ANALYSIS AND SAMPLING

See Part VI of this publication.