ATTENTION: In the Official Gazette of Serbia and Montenegro, No. 56/2003 of December 26, 2003, the Rulebook on Quality and Conditions for Usage of Additives in Foodstuff and Other Requirements for Additives and their Mixtures which prescribes in Article 41, paragraph 2, item 27, that day when that Rulebook enter into force (eight day from the day of being published) the provisions related to usage of additives in the Rulebook on Quality of Fruit, Vegetables and Mushroom Products and Pectin Preparations, shall cease to be valid.

- The Rulebook on Declaration and Labeling of Packed Foodstuff published in the Official Gazette of Serbia and Montenegro, No. **4/2004 of January 23, 2004,** which prescribes in Article 34, item 24 that the day when that Rulebook enter into force (eight day from the day of being published), **provisions related to declaration and labeling of packed foodstuff** in the Rulebook on Quality of Fruit, Vegetable and Mushroom Products and Pectin Preparations, shall cease to be valid.

Based on the Article 32. paragraph 1 and Article 81, paragraph 2 of the Law on Standardization ("The Official Gazette of Socialist Federal Republic of Yugoslavia", No. 38/77), and in accordance with the president of Federal Commission for Agriculture, President of Federal Commission for Labor, Health and Social Security and Federal Secretary for Market and General Economic Affairs, the Director of the Federal Bureau for Standardization prescribes

# THE RULEBOOK

# ON QUALITY OF FRUIT, VEGETABLE AND MUSHROOM PRODUCTS AND PECTIN PREPARATIONS

# I. GENERAL PROVISIONS

## Article 1.

This Rulebook prescribes minimal conditions which have to be fulfiled with respect to quality of fruit, vegetable and mushroom products and pectin preparations

<sup>&</sup>quot;The Official Gazette of Socialist Federal Republic of Yugoslavia", No. 1/79, 20/82, 39/89, 74/90, 46/91,

<sup>&</sup>quot;The Official Gazette of Federal Republic of Yugoslavia", No. 33/95, 58/95, "The Official Gazette of Serbia and Montenegro", No. 56/2003, 4/2004, 12/2005

(hereinafter referred to as: products), as well and minimal conditions for ensuring and maintaining the quality of products.

The conditions prescribed in this Rulebook have to be fulfiled in the course of production and circulation of products.

#### Article 2.

The conditions prescribed in this Rulebook for group of related products referred to in this Rulebook shall be applied mutatis mutandis for products for which this Rulebook doesn't prescribe quality conditions and conditions for ensuring and maintaining quality and hygiene correctness.

The producer is obliged to prescribe producer specification before the beginning of production for products for which this Rulebook doesn't prescribe quality conditions.

The companies and other legal entities shall also prescribe producer specifications for products for which is that explicitly prescribed in this Rulebook.

The producer specification has to contain data from the declaration, referred to in Article 5 of this Rulebook, short description of the technology process for production of products, basic ingredients by descending sequence of used quantities and the report on performed laboratory analysis and percentage of basic ingredients.

The companies shall keep the record on prescribed producer's specifications and shall enter the following data in it:

- 1) the record number of the specification;
- 2) the name of the product and its trading name, if the product has it;
- 3) the date of enactment of the specification;
- 4) the date of performed laboratory examination of product;
- 5) the date of beginning of production based on such specification;
- 6) the group to which the product belongs.

# Article 3.

The products referred to in this Rulebook may be placed into circulation only in their original packages, unless this Rulebook prescribes otherwise for particular products.

The original package referred to in paragraph 1 of this Article, means the packaging of product in the packaging material which ensures the originality of quality of product until the moment of its consumption.

#### Article 4.

The fruit and vegetable products placed into circulation have to be declared in a manner prescribed in this Rulebook.

#### Article 5.

All products placed into circulation in their original package, have to bear the declaration on their wrapper, pot or label, unless this Rulebook prescribes otherwise for particular products.

The declaration contains:

- 1) the name of the products and its trading name, if the product has it;
- 2) the company, i.e., the name and the seat of the producer;
- 3) the date of production and expiration date or only "to be used by" or that product is usable until first day of the following indicated month or quarter, i.e. year;
- 4) the category of quality of products, if this Rulebook prescribes so;
- 5) the net quantity (the mass or cubage) of products;
- 6) the data on type of used colors, preserving agents, flavours and other additives which are allowed to be used by this Rulebook, if they were added;
- 7) the basic ingredients of products, if this Rulebook prescribes so;
- 8) the type and the quantity of substances with biological value added with the purpose of content enrichment. If the L-ascorbin acid has been added as antioxidans, doesn't have to be declared;
- 9) the data of the interest for the consumer, if this Rulebook prescribes so for products.

The declaration shall be easily visible, clear and readable.

The text of the declaration related to coloring and preserving of products, eg. colored with the artificial color, preserved with the sorbin acid, etc. have to be placed immediately below the name of the product.

Letters used for printing the name of the product and the company, i.e. the name of the producer, have to be bigger than the letters used for printing of data from the declaration, with exception of trading names for which there are no limitations for size of letters.

The declaration may not contain marks (names, paintings, pictures, etc) that may lead the consumer in confusion with respect to the origin and the quality of products.

Article 6.

In case that producer doesn't pack the fruit and vegetable products, the declaration has to contain, besides the data referred to in Article 5, paragraph 2 of this Article, the company, i.e., the name and the seat of the company which packed the product and the date of packaging.

In case that product is not packed in the original product, the declaration shall contain the name of the product which contains the data on group of products, the date of production and the expiration date.

The declaration for products referred to in paragraph 2 of this Article, shall be emphasized on suitable, visible place.

#### Article 7.

In case that the net quantity (mass) of the product to be placed into circulation in its original package doesn't exceed 35 gramms, the declaration shall contain the following: the name of the product, the company, i.e. the name of the producer, i.e. of the company which packed the goods, the net quantity, the expiration date and the date of production.

The declaration referred to in paragraph 1 of this Article shall contain the data on coloring and preserving, i.e. on added additives in accordance with the Article 5, paragraph, item 6 of this Rulebook.

#### Article 8.

The following derogations from the net quantity of products referred to in Article 7 of this Rulebook, which are declared in accordance with Article 5, paragraph 2, item 5 of this Rulebook are allowed for single packages:

	The maximum allowed derogation, in %
50	8
100	6
200	4
500	3
1000	2
2000	1,5
over 2000	1

The maximum allowed derogation of net quantity for desiccated fig may be for 2% higher from derogation limits which are prescribed for single packages of other products and listed in the chart referred to in paragraph 1 of this Article.

The allowed derogation for net quantity of products, which are declared in packages between quantities referred to in paragraph 1 of this Article is equal to average derogation which is prescribed for two closest net quantities.

The average of at least 10 packages have to correspond to declared net quantity of products.

## Article 9.

The coloring, sweetening and flavouring, preserving with chemical substances and ionization and ultraviolet radiation of fruit, vegetable and mushroom products, as well and adding other chemical substances to this products is prohibited, unless this Rulebook prescribes otherwise.

#### Article 10.

The provisions of this Rulebook shall applied on importation of products, as well and on products intended for exportation, unless otherwise prescribed for particular products.

#### Article 11.

The products may be transported and stored if there are provided conditions for maintenance of their quality.

#### Article 12.

The hygiene requirements for products are prescribed in regulations governing hygiene safety of foodstuff.

# Article 13.

The provisions of this Rulebook are applied on all companies, other legal entities and natural persons who produce and place products into circulation, unless this Rulebook prescribes otherwise.

#### Article 13a

The preserved fruit and vegetables in metal cans (pasteurized fruit, pasteurized vegetables, stewed fruit, fruit salads, citric basis, marinated vegetables, and similar) besides requirements prescribed in this Rulebook for particular types of fruit and vegetable products, have to fulfil the following conditions:

- 1) the metal can may not be misshapen;
- 2) the outer surface of the metal can have to be clean and without signs of corrosion;
- 3) the bottom and the cover of the metal can may have insignificant settement;
- 4) the stichings of the metal can have to be rightfully shapen;

- 5) the longitudinal stiching of the metal can have to be overlayed and protected with additional layer of lac;
- 6) the inner surfaces of the metal can have to be protected with the layer of lac which have to be chemically resistant on content from the can, except for compot made of apple, pear, peach, white cherry, white grape, pineapple, grapefruit, tangerine, bananas, papaya, mango and guava, as well and for fruit salad made of these types of fruit where only the bottom and the cover of the metal can may be protected.

## Article 14.

# CEASE TO BE VALID WITH 39/89 – The Rulebook on Quality of Additives for Foodstuff Products

# **II. THE FRUIT PRODUCTS**

## Article 15.

The fruit products, in terms of this Rulebook, shall mean:

the frozen fruit;
 the frozen fruit pulp;
 the pasteurized fruit;
 the pasteurized fruit pulp;
 the basic fruit juice;
 the fruit juice concentrate;
 the fruit syrup;
 compot;
 the fruit preserve;

11) jam;

12) marmelade;

13) confectionery;

14) fruit gelatin;

	15) fruit cheese;
	16) crystallized fruit;
	17) the desiccated fruit;
	18) the fruit juice in powder;
	19) mixed fruit and vegetable products;
	20) low-calories fruit products;
	21) citric basis;
	22) other fruit products.
	Article 16.
-	The fruit used for industrial processing have to fulfil the following conditions:
	1) have to be healthy and fresh;
	2) have to be in the phase of technological maturity;
	3) have to be without alien aromas and tastes;
	4) have to be without impurities;
	5) should contain residues of substances for plant protection in maximum allowed quantities determined in the regulation.
ι	The minimal dry substance of fruit (measured with refractometer at 20°C) which is used for calculation of part of dry substance in fruit for industrial processing for individual fruit have to be at least:
	1) for strawberry 6%
	2) for raspberry, blueberry and currant
	3) for bramble, greengage, lemon and grapefruit 8%
	4) for sweet cherry, cranberry, peach, quince and tangerine
	5) for apple, pear, appricot, orange and pinapple10%
	6) for dogberry11%

7) for pomegranate, cherry and plum, with exception of plum from Pozega and greengage....... 12%

8) for plum from Pozega and hazelnut......14%

9) for grape15%	
10) for cherry-maraska 20%	
11) for rhubarb (Rheum sp.)4%	
12) for acerola (Malpighia punicifolia), cranberry (Vaccinum vitis - idaea L.), dog brier (Hippogae rham-noides L.)7%	
13) for black elder-berry (Sambucus nigra)8%	
14) for guava (Psidium guajava) 9%	
15) for carambola (Averrhoa carambola L.), lulu (Solanum quitoense L.)10%	
16) papaja (Carica papaja L.) and cashew nuts (Anacardium occidental L.)11%	
17) kiwi (Actinidia chinensis planch), passion fruit (Passiflora edulissimus) and mango (Mangifera indica L.) 14%	
18) kaki (Diospuros kaki)15%	
19) guanabana (Anona muricata)16%	
20) cherimoa (Anona cherimola mill.)20%	
21) banana (Musa L.)22%.	

# 1. The frozen fruit

# Article 17.

The frozen fruit is product made by freezing fresh specialy prepared harvest of fruit or parts of fruit at the temperature of  $-30^{\circ}\text{C}$  or lower.

The temperature at the core of the unit of packed product shall be -15°C or lower.

After defrost, the fruit have to contain its genuine main ingredients and characteristics.

The frozen fruit without or with saccharin may not be frozen again after defrost.

# Article 18.

The saccharin, saccharin syrups and glucose syrups may be used in production of frozen fruit.

In production of frozen fruit with saccharin and frozen fruit with syrup in accordance with the Article 21, paragraph 1 of this Rulebook, at most 15% of saccharin may be added, calculated on total mass.

#### Article 19.

The following is considered as preparation for freezing, depending on the type of fruit: classification, removal of petiole, washing, separation of stones, peeling, blanching and treating with citric and ascorbin acid, and if needed, packaging in appropriate packaging material.

#### Article 20.

Depending on time needed for freezing, frozen fruit may be produced by: freezing, fast freezing and instant freezing.

The freezing means procedure in which freezing of product is achieved after 1 hour period.

Fast freezing means procedure in which freezing of product is achieved between 10 to 60 minutes.

Instant freezing means procedure in which freezing of products is achieved for time shorter than 10 minutes.

## Article 21.

The frozen fruit may be placed into circulation only in frozen condition. Depending on speed of freezing, manner of preparation and production, frozen fruit may be placed into circulation as: frozen fruit, fast frozen fruit, instantly frozen fruit, frozen fruit with saccharin, fast frozen fruit with saccharin, instantly frozen fruit with saccharin, frozen fruit with syrup, fast frozen fruit with syrup and instantly frozen fruit with syrup.

The name of the frozen fruit is eg. strawberry-fast frozen or strawberry with saccharin-instantly frozen.

## Article 22.

The frozen berry fruit may be placed into circulation in following categories: "rolend", "half-block", "block" and "semolina", depending of condition, i.e. whether harvests in frozen product are whole, single or in parts of harvests and mutually adherent.

The term "rolend" means frozen berry fruit which contains in unit of package at least 80% of mass of single frozen harvests.

The term "half-block" means frozen berry fruit which contains in unit of package at least 50% to 80% of mass of single whole frozen harvests.

The term "block" means frozen berry fruit which contains in unit of package at least 50% of mass of single whole frozen harvests.

The term "semolina" means frozen berry fruit which is consisted of parts of frozen harvests, and in package is in bulk condition.

## Article 23.

The frozen fruit referred to in Article 21 of this Rulebook which is placed into circulation after defrost, have to fulfil following quality conditions:

- 1) have to be healthy, clean and without impurities;
- 2) the color, aroma and taste have to be characteristic for the type, i.e. for variety of fruit from which the frozen fruit is produced;
- 3) have to be without alien aroma and tastes;
- 4) that quantity of pesticides and substances for protection of plants have to be in accordance with provisions of regulations governing maximum allowed quantities of pesticides in foodstuff.

#### Article 24.

The frozen fruit have to be packed in appropriate packaging material, hygienically safe and impermeable for water and water vapor.

## Article 25.

Stored products of frozen fruit are preserved at the temperature of -18°C or lower, with exception of frozen cherry and plum which are preserved at the temperature of -20°C or lower. During handling of frozen fruit, the increase of temperature of at most 2°C measured in the core of the unit of package, i.e. of harvest if the latter are separately packed is allowed.

#### Article 26.

The producer is obliged to prescribe the producer specification for frozen fruit which contains added saccharin, saccharin syrups and glucose syrups.

# Article 27.

The declaration for frozen fruit contains especially: the year of production and the date of packaging, and for frozen fruit with added saccharin, saccharin syrup and glucose syrup and the percentage of added saccharin.

# 2. The frozen fruit pulp

# Article 28.

The frozen fruit pulp is made by from mashing specially prepared harvests of fresh fruit. It is preserved by freezing at the temperature of -30°C or lower, so that the

temperature at the core of the product, i.e. in the core of the unit of package shall be -15°C or lower.

After defrost, the pulp have to contain its main ingredients and characteristics of appropriate fruit.

Defrost pulp may not be frozen again.

#### Article 29.

In production of frozen fruit pulp with added saccharin, at most 10% of saccharin may be added, calculated on total mass.

Instead of sugar (saccharin) the following may be added: glucose, glucose syrup, dextrose, dextrose syrup, fructose, fructose syrup and glucoso-fructose (high-fructose) syrup, where the total quantity of added saccharin may not exceed 10% of total quantity of pulp.

The usage of citric, apple, tataric and ascorbin acid is allowed.

Added quantity of saccharin, saccharin syrup and glucose syrup shall be declared at the package of frozen pulp.

#### Article 30.

The frozen fruit pulp which is placed into circulation shall fulfil the following conditions:

- 1) the color, aroma and taste have to be characteristic for the type of fruit from which the frozen pulp is produced;
- 2) have to be without impurities;
- 3) the content of pesticide and substances for protection residues are in accordance with provisions governing maximum allowed quantities of pesticides in foodstuff.

## Article 31.

The frozen fruit pulp has to fulfil, beside conditions referred to in Article 30 of this Rulebook, conditions related to content of dry substance (measured with refractometer at 20°C), where the content of dry substance determined for each type of fruit referred to in Article 16 of this Rulebook, may be decreased at most for 1, for appropriate type of the fruit pulp without saccharin.

The minimal dry substance for frozen fruit pulp with added saccharin is made of dry substance of fruit pulp increased for the percentage of added saccharin.

#### Article 32.

The frozen fruit pulp have to be packed in appropriate packaging material, hygienically safe and impermeable for water and water vapor.

#### Article 33.

The frozen fruit pulp is are preserved at the temperature of -18°C or lower, with exception of frozen pulp made of cherry and plum which are preserved at the temperature of -20°C or lower.

During handling of frozen fruit pulp, the increase of temperature of at most 2°C measured at the surface of the unit of package is allowed.

If the product is intended for immediate further processing, provisions referred to in paragraphs 1 and 2 of this Article are not applied on that product.

## Article 34.

Transportation of frozen fruit pulp is performed by transportation means which ensure hygienic conditions and preserving the temperature prescribed for chambers for storage of frozen pulps.

#### Article 35.

The frozen fruit pulp may be placed into circulation as: frozen fruit pulp and frozen fruit pulp with added saccharin.

The declaration for the frozen fruit pulp has to contain the data whether the fruit has been blanched before the freezing. For sclerotic fruit, in case that it was blanched, has to be indicated whether blanching was performed with the stone or without it, eg. "the pulp of certain fruit blanched with the stone".

The declaration for frozen fruit pulp has to contain the data on percentage of dry substance in the frozen fruit pulp (Article 31), while the declaration for frozen fruit pulp with added saccharin, besides the data on dry substance in frozen fruit pulp, has to contain the data on percentage of added saccharin.

The frozen fruit pulp which is not in original package also has to contain the data on dry substance and on saccharin in the frozen fruit pulp.

# 3. The pasteurized fruit (pasteurized pulp)

#### Article 36.

The pasteurized fruit (fruit preserved with the heat) is product made by preserving fruit harvests or their parts with pasteurization in hermetically closed packaging material, which may be used for consumption or for further processing.

The fruit intended for production of pasteurized fruit have to be unified in technological maturity and it may not contain more than 5% of harvests with damages from plant diseases and harmful organisms.

The heat may be used for preservation of harvests with the stone or without stone and with epidermis or without epidermis.

The colors intended for coloring foodstuff neither artificial flavours may not be used during production of pasteurized fruit.

L-ascorbin and citric acid may be used in production of pasteurized fruit as antioxidans.

#### Article 37.

The pasteurized fruit have to fulfil the following conditions:

- 1) to have color, aroma and taste characteristic for fruit from which it was produced;
- 2) it may contain up to 10% of over-cooked harvests or parts of harvests;
- 3) the content of total dry substance (measured with refractometre at 20 °C) may be at least 70% of value of dry substance for fruit referred to in Article 16 of this Rulebook;
- 4) it may not contain more infusion tham needed to cover the harvest;
- 5) the infusion have to be clear or opalescent;
- 6) it may not contain more than 0,05% of ash irresolvable in HCl;
- 7) it may not contain more than 1% of stones, calculated on total number of cherry, sweet cherry and plum harvests, if it was declared as fruit without stones;
- 8) the content of petiole in plums may not exceed 1%, calculated on total number of harvests;
- 9) it may not contain impurities.

#### Article 38.

The declaration for pasteurized fruit, besides elements referred to in Article 5 of this Rulebook, shall contain the following:

- 1) the data on pasteurization, i.e. the pasteurized plum;
- 2) the data whether the package contains whole harvests, halves of harvests or smaller parts of harvests, harvests with stones or without stones.

# 4. The pasteurized fruit pulp

## Article 39.

The pasteurized fruit pulp is product made by mashing fresh or frozen fruit of appropriate technological maturity, with or without added saccharin.

The pasteurized fruit pulp have to be preserved only with physical procedure.

#### Article 40.

In production of pasteurized fruit pulp with added sacharine, at most 10% of saccharin may be added, calculated on total mass.

The saccharin syrup or glucose syrup may be added instead of saccharin, when the total quantity of added saccharin may not exceed 10%.

L-ascorbin acid may be used as anti-oxidans in production of pasteurized fruit pulp in quantity which is necessary to achieve good quality of products.

The usage of citric, apple or tataric acid is allowed.

#### Article 41.

The pasteurized fruit pulp and pasteurized fruit pulp with added saccharin have to have color, aroma and taste which are characteristics for fruit from which they were produced, and they may not contain impurities.

The pasteurized fruit pulp without added saccharin, besides quality conditions referred to in paragraph 1 of this Article, have to fulfil conditions with respect to content of dry substance (measured with refraktometrom at 20°C), where the content of dry substance determined for each type of fruit referred to in Article 16 of this Rulebook, may be decreased at most for 1, for appropriate type of pasteurized fruit pulp.

The total dry substance for pasteurized fruit pulp with added saccharin is dry substance from fruit referred to in paragraph 2 of this Article, increased for percentage of added saccharin.

#### Article 42.

The pasteurized fruit pulp is placed into circulation as: pasteurized fruit pulp for certain fruit or pasteurized fruit pulp of certain fruit with added saccharin.

The declaration for pasteurized fruit pulp shall contain the percentage of dry substance in the pasteurized fruit pulp, while the declaration for pasteurized fruit pulp with added saccharin contains also the percentage of dry substance in pasteurized fruit pulp and the percentage of added saccharin.

# 5. The basic fruit juice

## Article 43.

The basic fruit juice is product received from mechanical processing of healthy, technologicaly mature fruit, which is note fermented but which is capable for fermentation.

L-ascorbin and citric acid may be added as anti-oxidans in production of basic fruit juice.

The color, aroma and taste of basic fruit juice have to characteristic for fruit from which the juice was produced.

The basic fruit juice may be preserved only by physical procedures.

The content of total dry substance in basic fruit juice (measured with refractometre at 20°C) may not be less than value which is lower for 1% from dry substance of fresch fruit referred to in Article 36 of this Rulebook.

The basic fruit juice may be stored and placed into circulation only in packaging material and under conditions which ensure preservation of quality of products and which do not lead to bigger organoleptic changes.

# Article 44.

The basic fruit juice may be milky and transparent.

#### Article 45.

The transparent basic fruit juice is product whose main characteristic is that it is transparent.

The transparency of basic fruit juice is achieved with removal of rudely and finely situated colloid particles which provoke turbidness of juice.

In terms of this Rulebook, allowed procedures and substances for purification of basic fruit juice are as follows:

- 1) separation by centrifuge;
- 2) filtration;
- 3) usage of infusion soil, pure cellulose, asbest, gelatine, agar-agar, albumine, kasein, tannin, as well and enzyme preparations which are not preserved with chemical substances.

## Article 46.

Milky basic fruit juice is product which contains fine situated colloid particles which may sediment partially.

6. The fruit juice

Articles 47 to 60

# CEASE TO BE VALID with sa 33/95 – The Rulebook on Quality of Fruit Juices, Fruit Nectars, Fruit Juices in Powder and Related Products

# 8. The fruit syrup

#### Article 61.

The fruit syrup is product of syrup consistency made by appropriate procedure from basic fruit juice or concentrated fruit juice with added saccharin or saccharin syrup.

The fruit syrup may be produced also from citric basis and other fruit basis.

Citric basis and other fruit basis which are used for production of fruit syrups may not contain chemical preserving agents.

#### Article 62.

In production of fruit syrups the following may be used:

- 1) up to 5% of juice from other fruit compared with total quantity of used juice;
- 2) saccharin (saccharose), saccharin syrup, glucose, glucose syrup, dexstrose, dextrose syrup, fructose, fructose syrup and glucose-fructose (high-fructose) syrup;
- 3) L-ascorbin, citric, apple or tataric acid;
- 4) stabilisators: pectin, alginat and agar-agar;
- 5) natural fruit aromas and naturally identical fruit aromas.

# Article 63.

The fruit syrup which is placed into circulation have to fulfil the following conditions:

- 1) to have color, aroma and taste that is characteristic for fruit, basic fruit juice or citric basis from which it was produced;
- 2) have to be transparent, without opalescense and alluvium, with exception of syrup from citric basis and tropical fruit;
- 3) have to be of unified syrup consistency and without signs of stratification with exception of fruit syrup of citric basis and basis of tropical fruit;
- 4) may not contain alien aroma and taste;
- 5) the total dry substance in fruit syrup have to be at least 65%;
- 6) the total dry substance of fruit syrup have to consist from at least 5% of dry substance which originates from fruit, i.e. 3% of dry substance which originates

from berry fruit (Article 16), at most 60% of dry substance from added saccharin, with exception of syrup from berry fruit where percentage of dry substance may not exceed 62%.

The total content of dry substance in syrup from citric basis have to at least 3% of dry substance from citric basis, and at most 62% of dry substance from added saccharin;

7) when dissolved with water to contain dry substance of 10%, it may not contain more than 0,2 of volume percentage of etil-alcohol.

The pulp preserved with the dissolution of formic acid may be used for production of fruit syrup of berry fruit (strawberry, raspberry, briar and red currant) and fruit syrup of cherry and cherry-marasca.

The fruit syrup referred to in paragraph 2 have to fulfil conditions referred to in paragraph 1 of this Article, and it may contain residues of formic acid originating from pulp up to 1,7 g/l, with exception of strawberry fruit syrup in which the content of formic acid may not exceed 2,1 g/l.

# Article 64.

The production of mixed fruit syrup from more types of fruit is allowed.

The declaration for fruit syrup made of more types of fruit have to contain the data on types of used fruit, by sequence of prema redosledu zastupljenih quantities.

The declaration for fruit syrup produced from citric basis have to contain the data that the syrup was produced from citric basis.

If the fruit syrup was produced of pulp preserved with the formic acid, the declaration have to contain just below the name of the producta the data on quantity of formic acid expressed in g/l.

# 9. The compot

# Article 65.

The compot is product made by infusion of saccharin syrup of prepared whole or cut harvests of fruit, preserved with heat in hermetically closed packaging material.

Depending from the level of savouriness, the compot may be:

- 1) the less sweet compot;
- 2) the sweet compot.

# Article 66.

In production of compot, the following may be used:

- saccharin (saccharose), saccharin syrup, glucose, glucose syrup, dextrose, dextrose syrup, fructose, fructose syrup and glucoso-fructose (high-fructose) syrup;
- 2) L-ascorbinska acid;
- 3) citric, tartaric and apple acid.

## Article 67.

The compot has to fulfil the following conditions:

- the harvests, i.e. the parts of harvests have to have the consistency which is typical for the type of fruit, they shouldn't be over-cooked nor too hard. The aroma, taste and color have to be characteristic for the fruit from which the compot was produced;
- 2) the infusion (syrup) of compota should be transparent to opalescent and in quantity which covers harvests, i.e. parts of harvests;
- 3) it has to contain between 14 to 18% of total dry substance (measured with refractometer at 20 °C), with the indication "less sweet compot" an dit has to contain 18%, i.e. 22% of total dry substance (measured with refractometer at 20 °C), with the indication "sweet compot;
- 4) it may not contain impurities.

The strawberry compot have to fulfil quality conditions referred to in item 1 to 4 of this Articlea, an dit may contain up to 0.1 % of sand.

The declaration for compot have to contain the data on level of savouriness.

# The fruit salad (mixed compot)

# Article 68.

The production of compota from more types of fruit is allowed.

This compot may bear the name "fruit salad".

The fruit salad is compot produced from mixture of small cut pieces of fruit (peach, pear, pineapple, and similar) and harvests, i.e. berries of small (sweet cherry, grape, etc.).

The fruit salad is product made of fresh, frozen or pasteurized fruit, with added saccharin syrup, preserved with heat in hermetically closed packaging material.

Depending on the level of savouriness, the fruit salad may be less sweet fruit salad and sweet fruit salad.

## Article 69.

During production of fruit salad the following may be used:

- 1) saccharin (saccharose), saccharin syrup, glucose, glucose syrup, fructose, fructose syrup and glucose fructose (high-fructose) syrup;
- 2) L-ascorbin acid;
- 3) citric, apple and tartaric acid;
- 4) natural herb spices or their extracts, for purpose of improvement of aroma (vanilla, cinnamon etc.);
- 5) allowed colors for coloring of sweet cherry in compot.

# Article 70.

The technologically mature fruit which have to maintain the shape of cut pieces and suitable firmness of fruit meat in the end product is used during production of fruit salad.

The fruit harvests which are used for production of fruit salad have to be peeled and without the stone, with exception of sweet cherry, grape and similar harvests, which may be whole.

# Article 71.

The fruit salad have to fulfil quality conditions prescribed for compot.

The declaration for fruit salad have to contain the data on types of used fruit by sequence of quantity and the data on the level of savouriness.

# 10. The fruit preserve

#### Article 72.

The fruit preserve is product made by cooking whole harvests of parts of harvests of fresh fruit which are unified in technological maturity in compact saccharin syrup.

For production of the fruit preserve the good quality fruit pulp which is preserved with SO<sub>2</sub> may be used, and that is indicated in the declaration in following manner: "produced of fruit pulp preserved with SO<sub>2</sub>".

## Article 73.

In production of fruit preserve the following may be used as additives:

- 1) saccharin (saccharose), saccharin syrup, glucose, glucose syrup, dextrose, dextrose syrup, fructose, fructose syrup and glucoso-fructose (high-fructose) syrup;
- 2) L-ascorbin and citric acid;
- 3) vanilla, vanilla saccharin, lemon and other natural substances and extracts of these substances for purpose of having appropriate aroma and taste;
- 4) kernel of walnut, almond and other nut fruit.

#### Article 74.

The fruit preserve have to fufil the following conditions:

- have to contain the whole harvests, and parts of harvests only if its was produced from them. Exceptionally, the strawberry fruit preserve may contain besides the whole harvests their parts by which easilymay be recognized the type of the fruit from which the fruit preserve was produced;
- 2) have to have the taste, aroma and color which are characteristic for fruit from which it was produced;
- 3) have to contain at least 70% of total dry substance (measured with refractometer at 20°C), and of that at most 65% of saccharin calculated as total invert sugar;
- 4) it may not contain non-edible parts of harvests (petiole, sepals, seeds etc) with exception of fruit preserve from berry fruit and fig which may contain seeds of that fruit, and also it may not contain impurities;
- 5) it may not contain more than 0,05% of ash irresolvable in HCl, and the fruit preserve from berry fruit-not more than 0,1% (JUS E.H8.014);
- 6) it may not contain more than 0,01 % of SO2, if produced from fruit pulp.

## Article 75.

The rose coronal leaflets and watermelon skin as well and other parts of plants which are not fruit harvest may be used for production of fruit preserve.

The company is obliged to prescribes the producer specification before beginning of production of fruit preserve.

## Article 76.

The declaration for fruit preserve have to contain the data on type of the fruit from which the fruit preserve was produced.

# 11. The jam

#### Article 77.

The jam is gelatine product made by cooking fresh, frozen or half-processed whole fruit harvests or parts of fruit harvests which are unified in technological maturity, with added saccharin or saccharin syrup. The harvests or parts of harvest have to be in the end product in such condition so it enables to organoleptically determine the type of the fruit.

# Article 78.

In production of jam the following may be used:

- 1) the appropriate quantity of pectin preparation;
- 2) saccharin (saccharose), saccharin syrup, glucose, glucose syrup, dextrose, dextrose syrup, fructose, fructose syrup and glucozo-fructose (high-fructose) syrup;
- 3) up to 5% of fruit juices or other types of fruit, calculated on quantity of fruit mass prepared for processing, for purpose of color improvement;
- 4) citric, tartaric and apple acid;
- 5) L-ascorbin acid;
- 6) natural plant aromas.

# Article 79.

The jam has to fulfil the following conditions:

- 1) the taste, aroma and color have to be characteristic for fruit from which it was produced;
- 2) the parts of harvests in gelatine mass from which the juice is not separated;
- 3) have to contain at least 65% of total dry substance (measured with refraktometer at 20°C). At least 6% of dry substance have to originate from fruit, and in berry fruit- at least 5% of dry substance from fruit;

- 4) it may not contain more than two petiole or two stones in 1kg of end product, with the exception of jam made of berry fruit which may contain seeds of that fruit, bit without other impurities;
- 5) it may not contain more than 0,05% of ash irresolvable in HCl, and for jam made of berry fruit not more than 0,1% of that ash;
- 6) it may not contain more than 0,01% of SO2.

# 12. The marmelade

#### Article 80.

The marmelade is gelatine product made by cooking fresh or half-processed mashed fruit harvests with added saccharin or saccharin syrup.

## Article 81.

In production of marmelade the following may be used:

- 1) the appropriate quantity of gelatine preparation;
- 2) up to 5% of other types of fruit (calculated on quantity of fruit mass) for purpose of color improvement;
- 3) L-ascorbin acid;
- 4) citric, tartaric and apple acid;
- 5) up to 0,1 g of sorbin acid or appropriate quantity of potassiumsorbate or up to 0,1 g of formic acid calculated on layer of 1 dm surface and 5 mm fat, and only for surface processing;
- 6) glucose syrup instead of saccharin, where at most 30% of dry substance of added saccharin may be replaced with the appropriate quantity of dry substance of glucose syrup;
- 7) natural fruit aromas.

# Article 82.

The marmelade has to fulfil the following conditions:

1) has to have the taste, aroma and color which are characteristic for fruit from which it was produced;

- 2) it has to be of homogenic gelatine structure, without crystallized sacchari and without sineresis (separation of liquid);
- 3) it may not burn and show signs of brew;
- 4) have to contain at least 67% of dry substance (measured with refractometer at 20°C), and of that at least 7% of substance from fruit, i.e. at least 5% from berry fruit and citric fruit, calculated on total mass of end product;
- 5) it may not contain more than 0,05% of ash irresolvable in HCl (1:1);
- 6) it may not contain more than 0,01% of SO2, with exception of marmelade of hazelnut for which is allowed at most 0,015% of SO2;
- 7) it may not contain impurities.

#### Article 83.

The production of marmelade from more types of fruit is allowed. Such marmelade bears the name "mixed marmelade". The marmelade from more types of fruit have to fulfil conditions prescribed for marmelade.

## Article 84.

It is prohibited to place into circulation the marmelade under name "confiture".

The declaration for mixed marmelade have to contains indication of types of fruit from which the marmelade was produced, by sequence of used quantities. The type of fruit doesn't have to be declared if the used quantity doesn't exceed 5%, calculated on quantity of fruit mass for processing.

#### Article 85.

The declaration for the marmelade have to have indication from which type of fruit it was produced.

The declaration for marmelade and mixed marmelade, besides other, have to contain the data that it is protected at the surface with the formic acid or with potassiumsorbate.

# 13. The confectionery

## Article 86.

The confectionery is product made by cooking mashed or non-mashed fruit, without added saccharin.

The sugary confectionery is product made by cooking mashed or non-mashed fruit, with added saccharin up to 20% compared with the fruit mass.

## Article 87.

In production of confectionery or sugary confectionery, the following may be used:

- 1) L-ascorbin acid;
- 2) citric, tartaric and apple acid;
- 3) up to 0,1 g of sorbin acid or approprite quantity or potassium-sorbate or up to 0,1 g of formic acid calculated on 1 dm<sub>2</sub>, deep up to 5 mm, only for surface processing;
- 4) saccharin (saccharose), saccharin syrup, glucose, glucose syrup, dextrose, dextrose syrup, fructose, fructose syrup and glucoso-fructose (high-fructose) syrup.

#### Article 88.

The confectionery which is placed into circulation have to fulfil the following conditions:

- 1) has to have the color, taste and aroma which are combination of sugar-dye and the fruit from which it was produced;
- 2) it has to be of smear consistency;
- 3) it has to contain at least 60% of dry substance (measured with refractometer at 20°C);
- 4) it may not contain non-edible parts of harvests (stones, parts of stones, petiole, etc.), with the exception of confectionery made of berry fruit which may contain seeds of that fruit;
- 5) it may not burn, nor with chaf and it may not show signs of brew;
- 6) it may not contain more than 0,1% of ash irresolvable in HCl;
- 7) it may not contain impurities;
- 8) it may not contain more than 0,01% of SO<sub>2</sub>.

The provisions of this Article are applied on sugary confectionery as well.

#### Article 89.

The declaration for confectionery and sugary confectionery, besides other data, has to contain the data that the product is protected at the surface with the formic acid.

# 14. The fruit gelatin

# Article 90.

The fruit gelatin is product of jelly structure made by cooking fresh filtrated or half-processed fruit juice, with added saccharin.

#### Article 91.

In production of fruit gelatin the following may be used:

- 1) the appropriate quantity of pection preparation;
- 2) citric, tartaric and apple acid;
- 3) up to 5% of other natural fruit juices, calculated on quantity of fruit mass;
- 4) L-ascorbin acid;
- 5) saccharin (saccharose), saccharin syrup, glucose, glucose syrup, dextrose, dextrose syrup, fructose, fructose syrup and glucoso-fructose (high-fructose) syrup.

In production of fruit gelatine, artificial aromas and colors may not be used.

# Article 92.

The fruit gelatine which is placed into circulation has to fulfil the following conditions:

- 1) it has to be transparent and have color, taste and aroma which are typical for fruit whose fruit juice was used in production of fruit gelatine;
- 2) to have clammy consistency;
- 3) to contain at least 67% of dry substance (measured with refractometer at 20°C), where at least 6% of dry substance originates from fruit, with the exception of gelatine from berry fruit in which the content of dry substance of fruit has to be at least 4%;
- 4) it may not show signs of sineresis and signs of crystallization of saccharin;
- 5) it may not contain impurities.

#### Article 93.

The declaration for fruit gelatine produced of more types of fruit has to contain the data on types of fruit from which the fruit gelatine was produced, by sequence of their quantity.

# 15. The fruit cheese

## Article 94.

The fruit cheese is product with firm consistency made by cooking mashed fruit or fruit half-product from one or more types of fruit, with added saccharin.

#### Article 95.

In production of fruit cheese the following may be used:

- 1) the appropriate quantity of pectin preparation, as additional mean for gelatine;
- 2) up to 5% of other types of fruit compared with the quantity of fruit mass;
- 3) saccharin (saccharose), saccharin syrup, glucose, glucose syrup, dextrose, dextrose syrup, fructose, fructose syrup and glucoso-fructose (high-fructose) syrup.

## Article 96.

The fruit cheese has to fulfil the following conditions:

- has to have color, taste and aroma which are typical for fruit from which it was produced;
- 2) has to have homogenic and well jelly structure;
- 3) it may not burn and have to be without crystallized saccharin;
- 4) has to to contain at least 67% of dry substance (measured with refractometer at 20°C), where at least 7% of dry substance originates from fruit;
- 5) it may not contain more than 0,1% of ash irresolvable in HCl;
- 6) it may not contain more than 0,01% of SO2;
- 7) it may not contain impurities.

# 16. The crystallized fruit

#### Article 97.

The crystallized fruit is product infusion of whole harvests or parts of harvests in compact saccharin syrup.

The crystallized fruit may be glazed with saccharin or with pectin skim (foilt) or flour with saccharin.

# Article 98.

In production of crystallized fruit may be used color allowed for coloring of foodstuff.

# Article 99.

The crystallized fruit has to fulfil the following conditions:

- 1) to have the taste and aroma which are typical for the fruit from which it was produced, i.e. it may not contain alien aroma and taste and it may not contain impurities;
- 2) has to contain at least 75% of total dry substance;
- 3) it may not contain more than 0,01% of SO2.

# 17. The dessicated fruit

# Article 100.

The dessicated fruit is product made by dessication of whole harvests or parts of harvests of fresh and technologically mature fruit, in accordance with the appropriate procedure until it becomes suitable for longer preservation. po odgovarajućem postupku do takvog stepena da postane podesno za duže čuvanje.

## Article 101.

The dessicated fruit has to fulfil the following conditions:

- 1) has to have aromu and color which are typical for the appropriate type, i.e. variety of dessicated fruit;
- 2) has to show good ability of bunch fives after infusion in hot water in duration of 10 minutes;

- 3) that after rehidratation has aroma and taste of fruit from which it was produced, and which are characteristic for the dessicated fruit;
- 4) that it doesn't have stains from physiological damage of harvests, burning and similar;
- 5) that it doesn't have aroma and taste of over-smoked (burned) fruit, as well and other alien aroma and taste;
- 6) it may not contain chaf and it may not be contaminated with mechanical or bilogical impurities and it may not contain insects or their parts in whatever stage of development;
- 7) it may not contain more than 27% of water;
- 8) it may not contain more than 0,1% of ash irresolvable in HCl;
- 9) it may not be floured with starch, saccharin or similar substances;
- 10) it has to be big enough so it can be measured with number of harvests in the unit of package, which has to be specially declared.

# The dessicated (dry) plums

#### Article 102.

Dessicated plums which are placed into circulation have to fulfil the following minimal conditions besides quality conditions for dessicated fruit referred to in Article 101 of this Rulebook:

- 1) they have to have unified dark-black color and shinny epidermis, and the mesocarp of normal color, which is typical for the variety and the level or maturity;
- 2) they have to be whole, un-damaged, of normal shape and without petiole;
- 3) they have to be clean, without wounds and damages caused by parasites;
- 4) have to be without impurities;
- 5) to have at least 30% of total saccharin, and they may not contain more than 2% of total acids (calculated as apple acid);
- 6) have to originate from the same crop;
- 7) dessicated harvests have to be with meat, with elastic mesokarp;
- 8) they have to have characteristic aroma typical for dessicated plum and sweetsour taste;
- 9) they have to be without noticeable alien aromas;

- 10) they have to be without traces of chaf, fermentation, buring, smoking and at the surface they shouldn't have crystallized saccharin;
- 11) they may not contain more than 27% of water, with exception of technologically finished wet pasteurized dessicated plums.

It is prohibited to place into circulation mixtures of dessicated plums made by industrial dessication and smoking.

#### Article 103.

Technologically finished wet pasteurized dessicated plums have to fulfil conditions referred to in Article 102 of this Rulebook, with exception of content of wate which may be at most 35%.

#### Article 104.

Based on characteristics of their quality and their size, dessicated plums are classified in three quality groups for the purpose of placement into circulation: extra quality, I quality and II quality.

#### Article 105.

Dessicated plums of extra quality have to fulfil besides the conditions referred to in Articles 101 and 102 of this Rulebook, the following conditions:

- 1) the harvests have to be of unified size, typical for the variety to which they belong and big enough, so there are at most 90 harvests in half kilograme;
- 2) the unit of package shouldn't have more than 10% of harvests with total deficiencies, and within that at most: 5% of harvests with petiole and insignificant damages, 3% of harvests with non-elastic consistency and 2% of harvests with traces of crystallized saccharin or with scares from wounds.

Based on size of harvests, dessicated plums of extra quality are placed into circulation as: dessicated plums of 50 to 60 pieces, over 60 to 70 pieces, over 70 to 80 pieces and over 80 to 90 pieces in half of kilograme.

# Article 106.

Dessicated plums of I quality have to fulfil the following quality conditions:

- 1) harvests have to be of unified size and big enough, so there are at most 110 harvests in half kilograme;
- 2) the unit of package shouldn't contain more than 12% of harvests with total deficiencies, and within that at most: 8% of harvests with petiole, insignificant damages of epidermis or mesocarp, 5% of harvests with stains from plant diseases and harvests with visible stone or meat of darker color, 3% of harvests

with traces of crystallized saccharin and 1% of harvests with the epidermis of un-unified and lighter color.

Based on size of harvests, dessicated plums of I quality may be placed into circulation as: dessicated plums of 90 to 100 pieces or over 100 to 110 pieces in half of kilograme.

#### Article 107.

Dessicated plums of II quality have to fulfil the following quality conditions:

- 1) harvests have to be big enough, so there are at most 120 harvests in half kilograme;
- 2) the unit of package shouldn't contain more than 15% of harvests with total deficiencies, and within that at most: 10% of harvests with visible stone, 10% of harvests with mechanical damages, 15% of harvests with non-elastic consistency, 5% of harvests with petiole or traces of crystallized saccharin, 3% of harvests with epidermis of un-unified and lighter color and at most 2% of harvests with meat of darker or brown color.

#### Article 108.

Besides dessicated plums of extra, I and II quality, dessicated plum may be produced and placed into circulation as "prima E".

The dessicated plum of "prima E" quality means dessicated plum without stone, non-calibrated and without additional adding of water (watering).

Dessicated plum of "prima E" quality has to fulfil all general conditions for dessicated plum prescribed in the Article 102 of this Rulebook.

# Article 109.

Dessicated plum may be produced in industrial driers. Driers for dessicated plum have to fulfil hygienic and technical conditions needed for producing hygienically safe product.

# Article 110.

Dessicated plums produced in domestic driers has to fufil quality conditions prescribed in Article 102 of this Rulebook, where mild taste of smoke may be present which doesn't influence significantly on decrease of quality of dry plum.

## Article 111.

Dessicated plums may be released into circulation in original package (plastic bags etc) for immediate consumption, if finishing, etivation or sterilisation of dessicated plum was done in special technological procedure.

#### Article 112.

Dessicated plums prepared for immediate consumption, besides conditions prescribed in this Rulebook for dessicated plum, have to fulfil the following conditions:

- 1) they may not contain harvests with petiole;
- 2) they may not contain harvests with visible stone;
- 3) they may not have traces of crystallized saccharin;
- 4) they may not have harvests of non-elastic consistency;
- 5) they may not contain more than 35% of water;
- 6) they have to contain at least 30% of total saccharin.

In production of technologically finished wet pasteurized dessicated plum, up to total 0,02% of sorbin acid, potassium-sorbate or natrium benzoat may be used, and only for surface processing.

The declaration for technologically finished wet pasteurized dessicated plum has to contain the data pn quantity of humidity and the type of used preserving agent, as well and data that it is for immediate consumption.

# Article 113.

The declaration for dessicated (dry) plum has to contain the data on quality and the type (Articles 104, 108 and 112 of this Rulebook), size of harvests, number of pieces in half of kilograme (eg. "80/90"), as well and type of dry plums if these are products referred to in Articles 103 and 112 of this Rulebook.

# The dessicated (dry) figs

## Article 114.

Dessicated (dry) figs, besides conditions prescribed in Article 101 of this Rulebook for dessicated fruit, have to fuflil the following conditions:

- 1) to have sweer and delicious taste, reed yellow color and harvests with petiole;
- 2) they have to be dessicated as whole harvests and to have elastic meat;
- 3) they may not contain more than 25% of water;

- 4) they may not have traces of fermentation;
- 5) the harvests may not have chaf, stains, mechanical damages not alien taste and aroma;
- 6) they may not be contamined with live or dead insects, nor parts thereof;
- 7) the harvests at the surface may not be floured with starch substances;
- 8) the content of sulphide-dioxide may not exceed 0,015%.

#### Article 115.

Based on their quality, dessicated figs are placed into circulation as: dessicated figs of extra quality, dessicated figs of I quality and dessicated figs of II quality.

The declaration for dessicated fig, besides elements referred to in Article 5 of this Rulebook, has to contain the data on quality of dessicated fig, as well and data on content of SO<sub>2</sub> in end product if it was used.

#### Article 116.

The dessicated figs of extra quality have to have unified red yellow color and the harvests have to be of that size so there are at most 70 pieces in one kilograme.

# Article 117.

Dessicated figs of I quality have to have light umber color and harvests have to be of that size so there are at most 110 pieces (variety sorte guinea) in one kilograme, i.e. at most 90 pieces (variety cutcut). In the unit of package may be at most 5% of harvests with staines and scares.

#### Article 118.

Dessicated figs of II quality include harvests of varieties: šargulja, crnica, civulja, modrulja and popisa, and the size of harvests has to be such so there are at most 140 pieces in one kilograme.

The unit of package may contain up to 10% of harvests with stains and scares.

# Article 119.

Dessicated figs of II quality may be placed into circulation also in bulk condition.

# Article 120.

The packaging of dessicated fruit and dessicated grape in textile sacs which do nit ensure maintainance of quality of dessicated fruit is prohibited.

# The dessicated (dry) grape

#### Article 121.

The dessicated grape is product made by dessication of healthy, technologically mature grape of grape vine-Vitis vinifera L.

## Article 122.

The dessicated grape is product made by dessication of grape varieties without seed, i.e. by dessication of grape from which seeds were removed. Therefore, the product has to be declared as dessicated grape without seeds, or as dessicated grape with removed seeds.

Exceptionally from provisions of paragraph 1 of this Article, dessicated grape made by dessication of grape of variety malaga and similar varieties, may be placed into circulation as whole, i.e. part of bunch of grapes with whole petiole, and that has to be declared.

## Article 123.

Based on its quality, dessicated grape is placed into circulation as: dessicated grape of extra quality, dessicated grape of I quality and dessicated grape of II quality.

#### Article 124.

Dessicated grape of extra quality has to have unified characteristic yellow color for white, i.e. umber-black for black or red varieties of grape. Besides that, it has to fulfil the following conditions:

- 1) the content of humidity may not exceed 19%;
- 2) has to be without mechanical and other impurities;
- 3) the number of damaged berries may not exceed 1%;
- 4) the content of total saccharin have to be at least 48%;
- 5) the number of petiole may not exceed 5% compared with number of berries;
- 6) the content of sulphide-dioxide may not exceed 0,015%.

#### Article 125.

Dessicated grape of I quality has to have unified yellow to yellow-umber color for white, i.e. umber-black for black or red varieties of grape. It is allowed to have up to 5% of kernels of other color. Besides that, dessicated grape of I quality has to fulfil the following conditions:

- 1) the content of humidity may not exceed 22%;
- 2) has to be without mechanical impurities;
- 3) the number of damaged berries may not exceed 2%;
- 4) the content of total saccharin have to be at least 45%;
- 5) the number of petiole may not exceed 7% compared with number of berries;
- 6) the content of sulphide-dioxide may not exceed 0,015%.

#### Article 126.

The dessicated grape of II quality has to have characteristic color. It is allowed for up to 10% of berries to have color different than basic. Besides these, the dessicated grape of II quality has to fulfil the following conditions:

- 1) the content of humidity may not exceed 24%;
- 2) the presence of mechanical impurities should be minimal, i.e. in traces;
- 3) the content of sulphide-dioxide may not exceed 0,015%.
- 4) the number of damaged berries may not exceed 4%;
- 5) the content of total saccharin have to be at least 43%;
- 6) the number of petiole may not exceed 8% compared with number of berries;

#### Article 127.

The declaration for dessicated grape, besides elements referred to in Article 5 of this Rulebook, has to contain the indication on category of quality and the percentage of

SO2 in end product if it was used.

# Article 128.

Dessicated grape of II quality may be placed into circulation also in bulk condition.

# 18. The fruit juice in powder

#### **Articles 129 to 133**

CEASE TO BE VALID with 33/95 – The Rulebook on Quality of Fruit Juices, Fruit Nectars, Fruit Juices in Powder and Related Products

# 19. The mixed products of fruit and vegetables

## Article 134.

The products produced from fruit and vegetables, i.e from vegetables and fruit belongs to group mixed products from fruit and vegetables. The characteristics of made products depend on quantities of used fruit, i.e. vegetables.

In fruit and vegetables products belong products which contain from total used mass of fruit, i.e. vegetables at least 60% of fruit, i.e. 40% of vegetables.

In vegetables and fruit products belong products which contain from total used mass of vegetables, i.e. fruit at least 60% of vegetables, i.e. 40% of fruit.

Mixed fruit and vegetables products may be produced of fresh, frozen, sterilised and dessicated fruit and vegetables.

In products referred to in paragraphs 2 and 3 of this Article, the relation of presence of mass of fruit and vegetables of 60: 40 parts is calculated for froyen, sterilised and dessicated products (whole and in pieces), fruit preserve, compots and crystallized products, while for other groups that relation is shown as 60% to 40% of dry substance.

## Article 135.

The fruit and vegetables products, i.e. vegetables and fruit products bear the name depending on presence of basic ingredients, eg.: mixed marmelade of fruit and vegetables, i.e. mixed marmelade of vegetables and fruit.

#### Article 136.

The mixed fruit and vegetables products have to fulfil conditions prescribed by this Rulebook for same group of fruit or vegetables products, with exception of aroma and taste which have to be delicious for these products.

# Article 137.

The company is obliged to prescribe the producer specification before beginning of production of mixed fruit and vegetables products.

#### Article 138.

The declaration, besides the basic data referred to in Article 5 of this Rulebook, has to contain the data on type of fruit and vegetables, by their sequence of used quantities which are inleuded in content of the product.

# 20. The low-calories fruit products

#### Article 139.

As low-calories fruit products are considered only those products for which the content of dry substance is for at least 20% lower from the content of dry substance which is prescribed in this Rulebook for classic products. The decrease of content of dry substance includes only added saccharin.

Besides listed types of fruit products, in group of low-calories fruit products belongs also products made by mixing fruit and vegetables and which have characteristics of listed products.

#### Article 140.

The low-calories fruit products have to fulfil quality conditions prescribed by this Rulebook for classic fruit products, with the exception of content of dry substance.

## Article 141.

In production of low-calories gelatine fruit products it is allowed to use pectins and appropriate preparations for jelly as well and allowed calcium salts in quantity which is necessary for adequate jelly. All other characteristics shall be same as for classic fruit products.

## Article 142.

In production of low-calories fruit products such as: jam, marmelade, fruit cheese, etc as preserving agent may be used sorbin acid up to 0.08% or potassium-sorbate up to 0.1%.

## Article 143.

The company is obliged to prescribe the producer specification before beginning of production of liw-calories fruit products.

# Article 144.

The declaration for low-calories fruit products, has to contain the data on content of total dry substance, quantity of added saccharin and the calories value in 100 g of product.

## 21. Citric basis

### Article 145.

Citric basis are products made by mixing concentrated juice of certain type of citric fruit and homogenic firm residue of harvest (the skin and the pulp).

Natural substances for improvement of color, aroma, taste and consistency may be added to citric basis if needed.

### Article 146.

In production of citric basis the following may be used: saccharose, glucose, glucose syrup, fructose, invert sugar, citric acid, apple and ascorbin acid, allowed stabilisators and emulgators, natural aromatic oils, natural flavours an dnaturally-identical flavour colors and glucoso-fructose (high-fructose) syrup.

The artificial means for improvement of coor, aroma or some other organoleptic characteristics may not be added to citric basis.

Adding of natural flavours and color has to be separately declared.

## Article 147.

The total dry substance in citric basis has to be at least 42%, with exception of lemon basis for which it is allowed to have 32% of dry substance (measured with refractometer at 20°C) including the dry substance from added saccharin.

The share of dry substance of concentrated juice in citric basis has to be at least 25%, calculated on total dry substance of basis.

# Article 148.

Citric basis may be stored and placed into circulation under conditions which guarantee maintenance of the quality of product.

Citric basis may be preserved with chemical preserving agents including natrium bensoat of concentration up to 0.18% and potassium-sorbate of concentration up to 0.15%. Natriumbensoat and potassium-sorbate may be used in combination at most up to 0.18% of concentration.

### Article 149.

The declaration for citric basis which are placed into circulation has to contain the following data:

- 1) on total content of dry substance;
- 2) on percentage of share of dry substance from juice or concentrate;
- 3) on added substances used for correction;
- 4) on added preserving agents, with indicated concentration.

### Article 150.

Citric basis have to fulfil the following conditions:

- in diluted condition citric basis, with water with content of dry substance of 10%, organoleptic and physical characteristics have to be typical for the fruit from which the basis was produced;
- 2) taste, aroma and color of citric basis, diluted with water with content of dry substance of 10%, has to be typical for the type of fruit from which the basis was produced.

### Article 151.

Basis of other types of fruit have to be produced in accordance with the producer specification.

# 22. Other fruit products

## **Table olive**

### Article 152.

The preserved table olive (olive), Olea europaea sativa Hoffg. Link, is product made by processing of healthy, clean, enough mature olive harvests, preserved in appropriate manner for purpose of maintenance of quality and production characteristics of the product. The product may be packed with or without appropriate infusion and suitable choosen ingredients.

## Article 153.

Based on color, level of maturity and the manner of processing, products may be:

- 1) the green table olives, not bitter;
- 2) the green table olives, bitter;
- 3) the black table olives, not bitter;
- 4) the black table olives, bitter crne stone;

- 5) the black table olives, naturally corrugated, bitter;
- 6) the filled table olives.

As not bitter table olives means olives whose bitternes is removed with treatment with alkaline solutions of natrium-hidroxide (NaOH).

The green table olives are produced from firm, whole and completely developed olive harvests, which are resistant on finger pressure, and which are rugobe before full maturity. Their color has to be light-green to reed-yellow.

The green table not bitter olives are treated with alkaline solutions of natrium-hidroxide (NaOH), and then placed into colution of natrium-chloride and preserved in one of following manners:

- biological fermentation with lactic acid;
- biological fermentation and pasteurization;
- sterilisation and pasteurization;
- added chemical preserving agents;
- freezing.

The green table bitter olives are preserved by direct placement in solution of natrium-chloride in oredr to be treated with biological fermentation.

The black table olives are produced from firm, whole mature olive harvests whose epidermis is smooth and shinny, and after processing they can be softened. The color may be red-black, violet-black, dark violet to yellow-black or dark-brown. If they are bitter, they have stronger characteristic taste.

The black table not bitter olives are treated with alkaline solutions of natrium-hidroxide (NaOH), and after natural oxidation, preserved at one of following manners or with their combination:

- salt solution;
- sterilisation or pasteurization;
- adding of chemical preserving agents.

The black table bitter olives are preserved with direct placement of black olive harvests in solution of natrium chloride and preserved in one of following manners or with their combination:

- salt solution;
- sterilisation or pasteurization;
- adding of chemical preserving agents.

The black naturally corrugated table bitter olives are produced of olive harvests rugobed in full maturity, corrugated at the tree, and they are preserved with salt solution of natrium chloride.

Filled table olives are produced of harvests with removed stone and which are filled with one or more appropriate products, such as spices, vegetables and fruit, which has to be separately declared.

In production of table olives, beside the natrium chloride (kitchen salt) may be used spices, vegetables, fruit, olive oil and additives indicated in the following chart:

Types of additives	The maximum allowed quantity
ANTIOXSIDANS:	
- L - ascorbin acid	Up to 200 mg/kg
ACIDS:	
- vinegar acid	Up to 15 g/kg (individually or in combination)
- lactic acid	
PRESERVING AGENTS:	
- benzoat acid and its	Up to 1 000 mg/kg (shown as
Na and K salts	benzoat acid)
<ul> <li>sorbin acid and its Na and K salts</li> </ul>	Up to 500 mg/kg (shown as sorbin acid)
PRESERVING AGENTS: - benzoat acid and its Na and K salts	Up to 1 000 mg/kg (shown as benzoat acid)

### Article 154.

Table olives are placed into circulation as:

- 1) the green not bitter table olives (olives) in salt solvate;
- 2) the green bitter table olives (olives) in salt solvate;
- 3) the black not bitter table olives (olives) in salt solvate;
- 4) the black bitter table olives (olives) in salt solvate;
- 5) filled table olives (olives);
- 6) the black naturally corrugated table olives (olives).

The manner of preservation has to be indicated at the declaration

## Article 155.

The preserved stone olive has to fulfil the following conditions:

- 1) the color of harvests has to be characteristic for certain type of olive;
- 2) the harvests have to be whole, of unified size and firm enough;

- 3) the harvests have to have characteristic aroma and taste;
- 4) the salt solvate has to be transparent to opalescent, with natural aroma and taste;
- 5) the solvate in small packages has to be transparent, and in big not-hermetic packages, intended for pre-packaging, may be light opalescent;
- 6) it may not contain impurities;
- 7) the green table olive treated with lactic fermentation may have content of total acids, shown as lactic acid, of at least 0,4%;
- 8) the content of kitchen salt (natrium-chloride) in green table olives treated with lactic fermentation have to be at least 5%, and pH at most 4, an dfor not-hermetic packages the content of kitchen salt have to be at least 6%, and pH at most 4,5. For black table olives in salt solvate the content of kitchen salt may not be less than 7%;
- 9) the content of benzoat acid and its salts may not exceed 1 000 mg/kg, sorbin acid and its salts 500 mg/kg, and the content of ascorbin acid may not exceed 200 mg/kg.

For pasteurized olives of all types, the content of NaCl may be decreased for 2%, but pH value may be at most 4,3 of quantity of product.

Sterilised olives of all types do not have limitation sin terms of concentration of NaCl and pH value.

The presence of potassium sorbate up to 0,1% is allowed for olives prepacked in plastic packaging material of small cubage.

The declaration for olives, besides basic data referred to in Article 5 of this Rulebook, has to contain the data on quantity of added ingredients and the country from which the product was imported.

### Article 156.

The producer is obliged to prescribe the producer specification for almond, cashew nut, hazelnut, peanut, carob and coconut products.

# **III. THE VEGETABLES PRODUCTS**

## Article 157.

The vegetable products, in terms of this Rulebook, means:

- 1) the frozen vegetables;
- 2) sterilised vegetables;

- 3) the pasteurized vegetables;
- 4) marinated vegetables (vegetables in vinegar);
- 5) biologically preserved vegetables;
- 6) the vegetable juice;
- 7) the concentrated vegetable juice;
- 8) dessicated vegetables;
- 9) the vegetable sauce;
- 10) other vegetable products.

## Article 158.

The vegetables used for industrial processing has to fulfil the following conditions:

- 1) has to be in stage of technological maturity;
- 2) has to be fresh and healthy;
- 3) it may not contain impurities;
- 4) with no alien taste and aroma;
- 5) it may not contain more than 3% of harvests danaged from disesaes or harmful organisms, more than 5% of harvests with mechanical damages, nor more than 5% of harvests with frost damages, where total damaged harvests may not exceed 8%;
- 6) it may not contain visible residues of substances for plant protection and traces of mechanical impurities.

# 1. The frozen vegetables

### Article 159.

The frozen vegetables is product made from fresh harvests or parts of vegetable harvests, specially prepared, preserved with aplication of low temperatures (freezing). The temperature of freezing has to be -35°C or lower, so in the core of the product, i.e. in the unit of package, the temperature is -15°C or lower.

Defrost vegetables should have all its initial main characteristics and ingredients.

Defrost vegetables may not be frozen after defrost.

#### Article 160.

As preparation of vegetables for freezing, depending on type of vegetables, means: classification, removal of petiole, washing, cutting, peeling, blanching, treating with citric and L-ascorbin acid or with sulphide-dioxide, if prescribed by this Rulebook, and if needed, packaging in the appropriate packaging material.

### Article 161.

Depending on time needed for freezing, frozen vegetables may be produced by: freezing, fast freezing and instant freezing.

The freezing means procedure in which freezing of product is achieved after 1 hour period.

Fast freezing means procedure in which freezing of product is achieved between 10 to 60 minutes.

Instant freezing means procedure in which freezing of products is achieved for time shorter than 10 minutes.

### Article 162.

The frozen vegetables may be placed into circulation only in frozen condition. Depending on speed of freezing, the manner of preparation and production, frozen vegetables may be placed into circulation as: frozen vegetables, fast frozen vegetables, and instantly frozen vegetables.

# Article 163.

The frozen vegetables have to be packed in appropriate packaging material, hygienically safe and impermeable for water vapor.

The frozen vegetables which is placed into circulation, have to fulfil following quality conditions:

- 1) have to be healthy, clean and without impurities;
- 2) the color, aroma and taste have to be characteristic for the type, i.e. for variety of vegetables from which the frozen vegetable is produced;
- 3) that quantity of pesticides and substances for protection of plants have to be in accordance with provisions of regulations governing maximum allowed quantities of pesticides in foodstuff.

### Article 164.

The frozen vegetables is maintained and stored in cooling apparatus which have to fulfil certain minimal conditions in terms of preservation of temperature, packaging material and hygiene.

### Article 165.

The frozen vegetables are preserved at the temperature of -18°C or lower. During handling of frozen vegetables, the increase of temperature of at most 1°C measured in the core of the unit of package, i.e. of harvest if the latter are separately packed.

### Article 166.

Transportation of frozen vegetables is performed by transportation means which ensure hygienic conditions and preserving the temperature prescribed for chambers for storage of frozen products.

### Article 167.

If only one type of vegetable is frozen, the name of the product is "frozen", "fast frozen", i.e. "instantly frozen" green beans, peas etc.

If there are more types of vegetables in the package, the name of the product is "frozen vegetables", "fast frozen vegetables" or "instantly frozen vegetables" when particular types of vegetables are indicated by sequence of used quantities.

The declaration shall contain the percentage of SO<sub>2</sub> in end productu, if it was used.

# 2. Sterilised vegetables

## Article 168.

Sterilised vegetables is product preserved exclusively by procedure of heat sterilisation of vegetable harvests or their parts in hermetically closed packaging material. This product may be used for immediate consumption or for further processing.

# Article 169.

The group of sterilised vegetables includes:

- 1) peas;
- 2) green beans;
- 3) carrot;
- 4) djuvec;
- 5) asparagus etc.

### Article 170.

In production of sterilised vegetables may be used kitchen salt, edible oil, saccharin, natural spices, extracts of natural spices, macerates of natural spices etc.

### Article 171.

Corrugation of inner surface of the metal can is not considered as deficiency in quality of sterilised vegetables.

# Sterilised peas

### Article 172.

Sterilised peas is placed into circulation and declared as sterilised peas of I quality and sterilised peas of II quality.

Sterilised peas of I quality has to fulfil the following conditions:

- 1) to have aroma, taste and color, which are typical for sterilised peas;
- 2) to have the infusion which is opalescent or milky but not in jelly condition, and in the metal can is present only in quantity necessary to cover kernels of peas;
- 3) it may not contain more than 2% of kitchen salt in homogenic sample (the homogenic sample includes the kernel and the infusion in relation which is present in the product);
- 4) the kernel of peas may not contain more than 17% of substances irresolvable in alcohol;
- 5) it may not contain more than 1% of impurities originating from peas (parts of plant, legumes of peas), calculated on net mass of the product;
- 6) it may not contain impurities.

Sterilised peas of II quality has to fulfil the following conditions:

- 1) to have aroma and taste, which are typical for sterilised peas;
- 2) to have the infusion which is opalescent or milky, and in the metal can is present only in quantity necessary to cover kernel of peas;
- 3) it may not contain more than 2% of kitchen salt in homogenic sample (the homogenic sample includes the kernel and the infusion in relation which is present in the product);

- 4) the kernel of peas may not contain more than 24% of substances irresolvable in alcohol;
- 5) it may not contain more than 2% of impurities originating from peas (parts of plant, legumes of peas), calculated on net mass of the product;
- 6) it may not contain impurities.

In case that sterilised peas of II quality is packed in glass packaging material, it is allowed presence of smaller quantity of aqueous starch in the infusion.

# Sterilised green beans

Sterilised green beans is placedinto circulation and declared as green beans of I and II quality.

#### Article 173.

Sterilised green beans of I quality has to fulfil the following conditions:

- 1) to have aroma, taste and color, which are typical for sterilised green beans;
- 2) to have the infusion which is transparent or lightly opalescent, and in the metal can is present only in quantity necessary to cover the harvest;
- 3) it may not contain more than 2% of kitchen salt in homogenic sample (the homogenic sample includes the harvest and the infusion in relation which is present in the product);
- 4) the longitude of pieces in cut green beans is unified, but that is not quality condition;
- 5) it may not contain impurities;
- 6) it may not contain more than 5% of kernels, calculated on total mass of harvests in the product;
- 7) it may not contain more than 33% of legumes with developed strings, calculated on total mass of harvests in the product;
- 8) it may not contain more than 3% of legumes with un-removed crowns, calculated on total mass of harvests in the product;
- 9) the legumes have to be of unified color;
- 10) it may not contain more than 1% of impurities originating from the green bean (parts of tree, leaves), calculated on net mass of the product.

Sterilised green beans of II quality has to fulfil the following conditions:

- 1) to have aroma, taste and color, which are typical for sterilised green beans;
- 2) it may not contain more than 2% of kitchen salt in homogenic sample (the homogenic sample includes the harvest and the infusion in relation which is present in the product);
- 3) the longitude of pieces in cut green beans is unified, but that is not quality condition;
- 4) it may not contain more than 2% of impurities originating from the green bean (parts of tree, leaves), calculated on net mass of the product.
- 5) to have the infusion which is transparent or lightly opalescent, and in the metal can is present only in quantity necessary to cover the harvest;
- 6) it may not contain more than 10% of kernels, calculated on total mass of harvests in the product;
- 7) it may not contain more than 5% of legumes with un-removed crowns, calculated on total mass of harvests in the product;
- 8) it may not contain more than 10% of legumes with developed strings, calculated on total mass of harvests in the product;
- 9) it may not contain impurities.

Smaller non-unification of color of legumes is allowed.

# **Sterilised djuvec**

## Article 174.

Sterilised djuvec is the product made by mixing of previously prepared whole harvests or parts of vegetables harvests, where the pepper and the red tomato are considered as basic.

Djuvec is produced as roasted or not-roasted and as such is placed into circulation.

### Article 175.

Sterilised djuvec has to fulfil the following conditions:

- 1) to have the taste and aroma characteristic for djuvec and vegetables from which it was produced;
- 2) harvests, i.e. pieces of harvest may not be over-cooked (pulpous);
- 3) the liquid part of product is milky;

- 4) it may not contain more than 2% of kitchen salt in homogenic sample (the homogenic sample includes the harvest and the liquid part-infusion);
- 5) it may not contain impurities.

Traces of non-edible parts of vegetables which is part of diuvec are tolerated.

The producer specification is obligatory for the sterilised diuvec.

Cut pieces of vegetables in djuvec shall be of unified size and shape, butthat is not quality condition.

### Article 176.

The declaration for djuvec shall contain types of used vegetables, by sequence of used quantities.

## **Sterilised carrot**

### Article 177.

Sterilised carrot is product made by previously prepared parts or whole roots of carrots, and it has to fulfil the following conditions:

- 1) it has to be produced from technologically mature carrots,
- 2) to have taste, aroma and color typical for carrot,
- 3) to have the infusion which is transparent or lightly milky, and in the metal can is present only in quantity necessary to cover the harvests;
- 4) the mass of end product shall not contain more than 2% of kitchen salt in homogenic sample (homogenic rot with the infusion);
- 5) it may not contain impurities.

# Article 178.

For asparagus and other sterilised vegetables are applied provisions of this Rulebook related to similar products, and the company is obliged to prescribe the producer specification before the beginning of production.

The declaration for mixed sterilised vegetables has to contain types of used vegetables, by sequence of their quantity.

# 3. Pasteurized vegetables

### Article 179.

Pasteurized vegetables is product made by preservation of vegetables harvests or their parts by pasteurization in hermetically closed packaging material. The product may be used immediately for consumption or for further processing.

For production of vegetables preserved by pasteurization, may be used vegetables which is in accordance with conditions prescribed in Article 158 of this Rulebook.

### Article 180.

The following products fall into group of pasteurized:

- 1) cucumber;
- 2) pepper;
- 3) beet root;
- 4) chilli peppers (sweet and hot);
- 5) ajvar;
- 6) mixed salads;
- 7) pelats etc.

# Article 181.

In production of pasteurized vegetables may be used: kitchen salt, saccharin, edible oil, spices, extracts, i.e. distillates of natural spices, acids (vinegar, citric, apple and ascorbin), horse radish and extracts and distillates of horse radish.

## Article 182.

If pasteurized vegetables is produced of half-products, it may contain sorbin acid up to 0.1% or appropriate quantity of potassium-sorbate or natrium-benzoat, where in the declaration has to be indicated that the product is produced from half-product along with the types and quantity of used preserving agent.

### Article 183.

Pasteurized vegetables has to fulfil the following conditions:

- 1) to have taste and aroma characteristic for certain product;
- 2) to be of firm consistency characteristic for that product (with exception of ajvar and pelats);
- 3) it may not contain non-edible parts of harvests and impurities, with exception of petiole in whole harvests of pepper, chilli pepper and cucumber;
- 4) the infusion shall be transparent to opalescent, with the exception of pelat, where it can be milky, and it has to be in quantity enough to preserve the duration of quality of producta;
- 5) the product may not contain more than 2% of kitchen salt;
- 6) it may not contain more than 2% of acid (in homogenic product) calculated on vinegar acid;
- 7) the pasteurized cucumber besides conditions referred to in items 1 to 6 of this Article, may contain up to 0,1% of sand.

In production of celery salad the sulphide acid may be used, where in the mass of end producta the content doesn't exceed 0,03% (in homogenic product).

In production of pasteurized vegetables cut in pieces, the size and shape of pieces of vegetables should be unified for each type of vegetables, but that is not quality condition.

The company is obliged to prescribe the producer specification for mixed pasteurized vegetables, before the beginning of production.

The declaration for pasteurized vegetables has to contain the name of the vegetable, and for mixed pasteurized vegetables – and types of used vegetables by sequence of quantity present in the product.

# **Aivar**

# Article 184.

Ajvar is product made by processing (milling, mashing, etc.) of pepper with or without added eggplant, extracts of spices and distillates of natural spices.

## Article 185.

Ajvar has to fulfil the following conditions:

- 1) the content of total dry substance may not be less than 9%;
- 2) it has to be unified, without separation of liquid and it has to be of smooth consistency;

- 3) the color has to be typical for color of used vegetables. The color doesn't have to be red;
- 4) it may not contain alien taste and aroma (it may not be bitter);
- 5) it may not contain impurities;
- 6) it may not contain more than 2% of added kitchen salt.

The company is obliged to prescribe the producer specification before the beginning of production of ajvar.

The hot ajvar may be also produced, but that has to be indicated in the declaration.

In the declaration have to be indicated types of used vegetables, by sequence of their quantity.

### Article 185a.

Ajvar with vegetables is product made by processing (milling, mashing, etc.) of pepper or pepper and eggplant with added on etype or more types of other vegetables, spices, extracts of spices, distillates of spices and saccharin (saccharose), where the total quantity of added othet types of vegetables, with exception of pepper may not exceed 25% (m/m).

## Article 185b.

The product referred to in Article 185a. has to fulfil conditions referred to in Article 185 of this Rulebook.

The company is obliged to prescribe the producer specification before the beginning of production of ajvar with vegetables.

In the declaration of ajvar with vegetables, besides data referred to in Article 5 of this Rulebook, the types of added vegetables have to be indicated, by sequence of used quantities.

# 4. Marinated vegetables (vegetables in vinegar)

### Article 186.

Marinated vegetables is product made by preserving harvests or parts of fresh harvests or bologicalky preserved vegetables with vinegar acid. Marinated vegetables is packed in hermetical and non-hermetical packaging material.

In production of marinated vegetables may be used raw material in accordance with conditions prescribed in Article 158 of this Rulebook.

## Article 187.

In production of marinated vegetables the following additives may be used:

- 1) vinegar, citric, apple, tartaric and ascorbin acid;
- 2) kitchen salt and saccharin, i.e. means for sweetening, for correction of taste;
- 3) spices, extracts of spices and distillates of natural spices;
- 4) horse radish, extracts and distillate of horse radish;
- 5) sorbin acid up to 0,1% or potassium-sorbate up to 0,13%, i.e. benzoat acid or natrium-benzoat up to 0,1% and edible oil.

The declaration of the produc for which some of means for sweetening was used instead of the name of the group has to contain the data on type of used mean for sweetening.

### Article 188.

Marinated vegetables has to fulfil the following conditions:

- 1) to have the taste and aroma typical for the vegetable from which it was produced;
- 2) to be of firm consistency characteristic for vegetables from which it was produced, i.e. not to be pituitous and softened;
- 3) to contain up to 6% of total acids in the mass of the end product, expressed as vinegar acid, and up to 3% of kitchen salt in homogenic sample;
- 4) it may not contain impurities.

Marinated horse radish may contain in the mass of end product up to 0,1% of sulphide-dioxide.

# 5. Biologically preserved vegetables

### Article 189.

The biologically preserved vegetables is product made by preserving vegetables with lactic acid, which is created with fermentation of saccharin from harvests or parts of vegetables which is preserved.

## Article 190.

The group of bologically preserved vegetables includes:

1) cabbage;

- 2) cucumber;
- 3) pepper;
- 4) green tomato;
- 5) other vegetables.

### Article 191.

In production of biologically preserved vegetables may be used vegetables which fulfils conditions referred to in Article 158 of this Rulebook.

## Article 192.

In production of bologically preserved vegetables may be used:

- 1) kitchen salt, saccharin, spices and extracts of natural spices;
- 2) up to 0,13% of potassium-sorbat or appropriate quantity of sorbin acid.

## Article 193.

Biologically preserved vegetables has to fulfil the following conditions:

- 1) to have taste, aroma and color characteristic for certain type of biologically preserved vegetables;
- 2) the harvests shall be juicy and elastic, with the consistency characteristic for that product;
- 3) the infusion shall be milky, without presence of maceration (pituitous), with the exception pasteurized sour cabbage;
- 4) the content of kitchen salt in the mass of end product has to be from 1,5% to 4%:
- 5) it has to contain from 0,5% to 2,5% of total acids, expressed as lactic acid;
- 6) it may not contain more than 0,7% of vaporable acids, expressed as vinegar acid;
- 7) it may not contain impurities.

### Article 194.

The name of the vegetables product is consisted of the name of vegetables to which is added "biologically preserved", with the exception of cabbage which may bear the name "sour cabbage".

It is allowed to place into circulation the biologically preserved vegetables in the bulk condition.

# 6. The vegetables juice

### Article 195.

The vegetables juice is product made by processing of fresh or frozen vegetables, finishing of vegetables pulp or transparent basic vegetables juice, as well and by dilution of concentrated vegetables juice which was previously preserved by physical procedure.

The vegetables juice may be preserved by physical procedures.

Based on the content of irresolvable ingredients of vegetables, vegetables juice may be: transparent, milky and pulpous.

#### Article 196.

In production of vegetables juice may be used:

- 1) kitchen salt;
- 2) up to 5% of saccharin;
- 3) spices, extracts of spices and distillates of natural spices;
- 4) citric, apple, tartaric and vinegar acid;
- 5) L ascorbin acid.

# Article 197.

The vegetables juice has to fulfil the following conditions:

- 1) to have the color, taste and aroma typical for the vegetables from which it was produced;
- 2) it may not have taste and aroma with chaf, nor other alien taste and aroma;
- 3) it may not be brewed, or in condition of brewing unless the brewing is normal characteristic of this product, where that has to be separately declared;
- 4) it may not contain impurities.

### Article 198.

The name (title) of the product is "vegetables juice", with the indication of the type of vegetables.

The name of mixed vegetables juice has to contain data on all used types of vegetables, by sequence of used quantities.

If the vegetables juice was produced by dilution of concentrated vegetables juice that has to be separately declared.

The declaration for vegetables juice and mixed vegetables juice has to contain the indication whether the juice is transparent, milky or pulpous.

# 7. The concentrated vegetables juice

### Article 199.

The concentrated vegetables juice is product made by concentration of juice made from fresh or frozen vegetables or by concentration of raw or basic juice which was previously preserved by physical procedure.

The concentration is done by vaporation of water in vacuum apparatus and by freezing.

The concentrated vegetables juice has to be produced in accordance with the producer specification.

### Article 200.

The declaration for concentrated vegetables juice has to contain the indication of percentage of dry substance and the instruction for usage.

### Article 201.

The concentrated juice of red tomato (concentrate of tomato) is product made by concentration of juice of technologically mature harvests of red tomato in accordance with the appropriate procedure in order to get certain content of dry substance.

# Article 202.

Based on the content of dry substance (measured with refractometer), not counting the dry substance of kitchen salt, the concentrated tomato juice is placed into circulation as:

- 1) simple concentrate of red tomato with 14 to 16% of dry substance;
- 2) double concentrate of red tomato with 28 to 30% of dry substance;

- 3) triple concentrate of red tomato with 38 to 40% of dry substance;
- 4) multi concentrate of red tomato with over 50% of dry substance.

The declaration for red tomato concentrate has to contain the data on the content of dry substance.

### Article 203.

In production of double, triple and multi red tomato concentrate, packed in the non-hermetic packaging material, up to 0.13% of potassium sorbate or appropriate quantity of sorbin acid, or up to 0.15% of natrium-benzoat may be used.

The presence of preserving agent is allowed for products which are made with adding one part of triple or multi red tomato concentrate or in packages of red tomato concentrate which are subsequently finished from triple red tomato concentrate, and that in the quantity which results from used quantities of preserving agent in production of this concentrate.

The declaration of the concentarte has to contain the data whether ot was made of triple, i.e. multi red tomato concentrate as well and the type and the quantity of preserving agent in end product.

### Article 204.

The red tomato concentrate which is placed into circulation has to fulfil the following conditions:

- 1) to have natural red color of mature red tomato, which may have yellow tone, but it may not be umber;
- 2) it may not contain impurities;
- 3) to have delicious specific aroma and taste;
- 4) it may not be brew, in condition of brewing nor with signs of burning;
- 5) it has to contain at least 40% of reducing substances expressed as invert sugar in relation to dry substance of the product;
- 6) it may not contain more than 10% of added kitchen salt in relation to total quantity of dry substance;
- it may not contain more than 10% of total acids, expressed as citric acid in relation to total quantity of dry substance, not counting dry substance of kitchen salt;
- 8) it may not contain more than 0,1% of ash irresolvable in HCl

- one kilograme of product may not contain more than 20 mg of copper, 2 mg of leads and 1 mg of arsenic;
- 10) it may not contain more than 50 % of positive fields of chaf (by Howard);
- 11) it may not contain total chlorides originating from the raw material expressed as natrium chloride more than 13%, calculated on double concentrate.

# 8. The dessicated vegetables

### Article 205.

The dessicated vegetables is product made by whole harvests or parts of vegetables, fresh or technologically mature and healthy vegetables or from root and leafe which are previously prepared and by physical procedure dessicated to the extent that make them suitable for longer preservation.

### Article 206.

The dessicated vegetables has to fulfil the following conditions:

- 1) to have aroma and color typical for that type of dessicated vegetables;
- 2) after infusion in hot water for 10 minutes have to show good ability of corrugation, to imbibe water to extent that the percentage of total water in rehidrated harvests or their parts is close to percentage in fresh vegetables before dessication;
- 3) after rehidratation to have aroma and taste of fresh vegetables from which it was produced;
- 4) it may not contain aroma and taste of over -cooked (burned) vegetables, nor alien aroma and taste;
- 5) it may not contain staines as result of physiological damage of harvests due to buring etc.;
- 6) it may not be with chaf nor contamined with mechanical or biological impurities and it may not contain insects and their parts in whichever stage of their development;
- 7) it may not contain more than 10% of water, 0,1% of ash irresolvable in HCl and 0,1% of SO<sub>2</sub>.

## Article 207.

The declaration for dessicated vegetables has to contain the instruction for usage and the data on quantity of fresh, cleaned and for dessication prepared vegetables,

compatible with the content of package of dessicated vegetables. If the dessicated vegetables was made by mixing more types of vegetables, the declaration has to contain the data on types of vegetables, by sequence of used quantities.

# The pepper

### Article 208.

The milled spicy pepper is product made by milling of mature harvests of pepper (Capsicum annum L. var. Longum, grossum, abreviatum, tupicum, etc.). The pericarp and the seed are milled.

The milled spicy pepper which is placed into circulation has to fulfil the following conditions:

- 1) it has to be characteristically red, red-orange or light-red;
- 2) the taste should be no hot, hit or mild hot;
- 3) to have delicious and characteristic aroma;
- 4) it may not contain alien aromas and bad taste (sour, bitter, with chaf, rancid aroma);
- 5) it may not contain live or dead insects or their parts, contaminations from rodents and chaf visible with eye or with usage of 10 times magnifier;
- 6) it may not contain alien substances and other substances or plant origin, coloring substance, oils and other substances which virtually improve quality and cover deficiencies. These substances may be partially discovered with microscope.

## Article 209.

The milled spicy pepper is placed into circulation as:

- 1) delicates extra milled spicy pepper;
- 2) delicates milled spicy pepper;
- 3) red sweet milled spicy pepper;
- 4) red hot milled spicy pepper;
- 5) light-red hot milled spicy pepper.

Article 210.

The delicates extra milled spicy pepper is produced of healthy and mature harvests of first crop, from purely sweet varieties of pepper and it has to fulfil the following conditions:

- 1) it may not contain humidity more than 11%;
- 2) it may not contain more than 7% of ash nor more than 0,30% of ash irresolvable in HCl in relation to dry substance;
- 3) it may contain at most 14% of etar extract compared to dry substance;
- 4) it has to contain in 1 kg of dry substance at least 3,5 g of capsantine and it may not contain capsaicine.

### Article 211.

The delicates milled spicy pepper is produced of healthy and mature harvests of first and second crop of purely sweet varieties. This quality may not contain more than 5% of periodically sickened parts of pericarp.

The delicates milled spicy pepper which is placed into circulation has to fufil the following conditions:

- 1) it may not contain humidity more than 11%;
- 2) it may not contain more than 7% of ash nor more than 0,30% of ash irresolvable in HCl in relation to dry substance;
- 3) it may contain at most 14% of etar extract compared to dry substance;
- 4) it has to contain in 1 kg of dry substance at least 3,5 g of capsantine and it may not contain capsaicine.

### Article 212.

The red sweet milled spicy pepper is produced from mature and healthy harvests of first and second crop of sweet varieties of pepper. This quality may contain in it small part of hot harvests, and may not contain more than 10% of periodically sickened parts of pericarp.

The red sweet milled spicy pepper which is placed into circulation has to fufil the following conditions:

- 1) it may not contain humidity more than 11%;
- 2) it may not contain more than 7,5% of ash nor more than 0,55% of ash irresolvable in HCl in relation to dry substance;
- 3) it may contain at most 16% of etar extract compared to dry substance;
- 4) it has to contain in 1 kg of dry substance at least 2 g of capsantine and hardly visible quantity of capsaicine.

### Article 213.

The red hot milled spicy pepper is produced from mature and healthy harvests of first and second crop of good quality hot varieties of pepper. This quality may not contain more than 10% of periodically sickened parts of pericarp. Red hot milled spicy pepper which is placed into circulation has to fufil the following conditions:

- 1) it may not contain humidity more than 11%;
- 2) it may not contain more than 7,5% of ash nor more than 0,55% of ash irresolvable in HCl in relation to dry substance;
- 3) it may contain at most 16% of etar extract compared to dry substance;
- 4) it has to contain in 1 kg of dry substance at least 2 g of capsantine and 0,05 to 0,07% of capsaicine.

### Article 214.

The light-red hot milled spicy pepper is produced from not-mature and healthy harvests of all crops.

The light-red hot milled spicy pepper which is placed into circulation has to fufil the following conditions:

- 1) it may not contain humidity more than 11%;
- 2) it may not contain more than 8,5% of ash nor more than 0,85% of ash irresolvable in HCl in relation to dry substance;
- 3) it may contain at most 17% of etar extract compared to dry substance;
- 4) it has to contain in 1 kg of dry substance at least 1,20 g of capsantine and at least 0,07% of capsaicine.

## Article 215.

The milled spicy pepper may be placed into circulation only in original package. It is packed in sheepskin vesicles coated from outside with cellophane, aluminium folie or sheepskin with metal packaging material.

The packaging material in which is packed milled spicy pepper has to be clean and made of such substance which doesn't pass light, water and oil.

# Article 216.

The extract from pepper is product made by extraction of milled pepper, and contains natural color and other basic spicy ingredients which are dissolved in natural pepper oil.

The extract from pepper may be produced and placed into circulatiob in form of paste.

### Article 217.

The extract from pepper which is placed into circulation may contain extraction substance only in traces.

### Article 218.

The necessary quantity of antioxsidans may be added to extract from pepper.

## Article 219.

The extract of pepper may be placed into circulation only in original package.

### Article 220.

The declaration for extract from pepper has to contain the data on content of color and capsaicine.

# 9. The vegetables sauce, ketchup and related products

### Article 221.

The vegetables sauce and ketchup are products made by appropriate technological procedure of minced parts of vegetables and added ingredients for achieving characteristic aromas and tastes.

### Article 222.

In production of products referred to in Article 221 of this Rulebook, the following may be used:

- 1) plants proteins;
- 2) flour and starch up to 5% (m/m);
- 3) kitchen (NaCl) up to 3% (m/m);
- 4) saccharin (saccharose), starch syrup, invert sugar, glucose, glucose syrup, dextrose and dextrose syrup;
- 5) vinegar, natural spices, extracts and distillates of natural spices.

In production of vegetables sauce may be used fats and oils of plant and animal origin, as well and meat extract or beef tea.

In production of vegetables sauce, ketchup and related products may be used additives listed in the following chart:

Types of additives	The maximum allowed quantity
AROMAS:	
<ul> <li>natural and naturally identical COLORS:</li> </ul>	
- natural	
ANTIOXSIDANS:	
<ul><li>citric acid</li><li>ascorbilpalmitat</li></ul>	
- tokoferol	Up to 0,5 g/kg
- butilhydroksianisol	Up to 0,2 g/kg
- butilhydroksitoluen,	
propil, oktil and dodecil-golat	Up to 0,1 g/kg (single or in combination)
ACIDS:	
- vinegar acid	
<ul><li>L-tartaric acid</li><li>citric acid</li></ul>	
TASTE AMPLIFIERS:	Up to 0.30 g/kg of product
<ul><li>mononatrium-glutaminat</li><li>ribonucleotides</li></ul>	Up to 0,20 g/kg of product Up to 0,5 g/kg of product
SALTS:	, , , ,
- pyropfosfates K i Na	Up to 600 mg/kg (single or in combination)
EMULGATORS, STABILISATORS AND COAGULATORS:	•
- mono and diglicerides of fat acids	Up to 10 g/kg (single or in
exterificated with one organic acid (vinegar, lactic, citric)	combination)
- saccharoglicerides	Up to 10 g/kg (single or in
- potassium and natrium salts of	combination) Up to 20 g/kg (single or in
algin acid	combination)
- natrium-kaseinat	Up to 16 g/kg
- agar-agar - karegenani	Up to 20 g/kg Up to 20 g/kg
- guar rubber	Up to 20 g/kg
- tragakant rubber	Up to 20 g/ kg
- flour of endosperm of seed of carob	Up to 20 g/kg (single or in combination)
Ca. 05	Combination

rubberarabika
pectin
dextrines
Up to 20 g/kg
Up to 20 g/kg
Up to 50 g/kg

combination)

PRESERVING AGENTS:

- sorbin and bensoat acid and their Up to 2 g/kg (single or in

K and Na salts combination)

### Article 223.

The vegetables sauce has to fulfil the following conditions:

- 1) to have taste, aroma and color typical for the vegetables from which it was produced;
- 2) to be of pulpous to compact consistency, with visible parts of vegetables or without them;
- 3) it shouldn't be burned and with signs of fermentation;
- 4) it has to contain at least 5% of dry substance originating from vegetables;
- 5) it may not contain more than 0,05% of asch irresolvable in HCl, with the exception of vegetables sauce with mushrooms and horse radish sauce, for which the content of ash irresolvable in HCl may not exceed 0,1%;
- 6) the vegetables sauce with horse radish, oignon or garlic may not contain more than 0,1% of sulphide-dioxide (SO<sub>2</sub>);
- 7) it may not contain impurities.

# Article 224.

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## Article 225.

The ketchup may be produced from various types of vegetables, and it has to fulfil the following conditions:

1) to have taste, aroma and color typical for the vegetables from which it was produced;

- 2) to be of lightly compact, homogenic and smooth consistency, without visible parts of vegetables;
- 3) it may not contain impurities;
- 4) it shouldn't be burned and with signs of fermentation;
- 5) it has to contain at least 5% (m/m) of dry substance originating from vegetables, with the exception of tomato ketchup which has to contain at least 8% (m/m) of dry substance originating from tomato;
- 6) it has to contain at most 0,05% of ash irresolvable in HCl.

### Article 226.

The producer is obliged to prescribe the producer specification in production of products related to vegetables sauce and ketchup.

#### Article 227.

The declaration for vegetables sauce and ketchup, has to contain besides data referred to in Article 4 of this Rulebook to contain the data on total dry substance.

If more types of vegetables was used in production of vegetables sauce, ketchup and related products, they have to be indicated in the declaration by descending sequence of their presence.

# 10. Other vegetables products

### Article 228.

The producers are obliged to prescribe the producer specification before beginning of production of prepared meals (mashed potato in pire in fuzz, mashed potato), chips \*) and other products.

## Article 228a.

In production of products referred to in Article 228 of this Rulebook, the following extracts of spoces and additives listed in the following chart may be used:

Types of additives	Maximum allowed quantity

<sup>\*)</sup> See: Article 51 of the Rulebook on Quality and Other Requirements for Fine Bakery Products, Breakfast Cereals and Snack Products ("The Official Gazette of Serbia and Montenegro No. 12/2005) - 9. note of Intermex.

### **EMULGATORS:**

monoglicerides of fat acids
 natrium-alginat
 natrium-kaseinat
 Up to 1%
 Up to 1,6%

### ANTIOXIDANS:

- citric acid

- ascorbilpalmitat Up to 0,5 g/kg - tocoferol Up to 0,2 g/kg

- butilhydroksianisol Up to 0,1 g/kg (single or in

combination)

- butilhydroksitoluen

SALTS:

- ropfosfates K and Na Up to 600 mg/kg (single or in

combination)

PRESERVING AGENTS:

COLORS:

- natural colors

AROMAS:

- natural and naturally identical

In products referred to in Article 228 of this Rulebook, the quantity of sulphide-dioxide (SO2) may not exceed 250 mg/kg.

# **IV. THE MUSROOM PRODUCTS**

# 1. The mushrooms preserved with heat

Articles 229 to 244.

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# V. THE PECTIN PREPARATIONS

### Article 245.

The pectin preparations are natural substances for making jelly which serve as auxiliary means for production of jelly products.

### Article 246.

The pectin preparations are placed into circulation as pectin in powder or as pectin extract.

### Article 247.

The pectin in powder which is placed into circulation has to fufil the following conditions:

- 1) has to be of powder consistency and light-yellow to openly umber color;
- 2) the level of jelly has to be at least 100% by Tarr-Beaker (SAG-method);
- 3) it may not contain more than 8% of water.

## Article 248.

The pectin extract has to fulfil the following conditions:

- 1) has to be viscose and opalescent solvate of light-yellow to openly umber color;
- 2) the level of jelly has to be at least 80% by Tarr-Beaker (SAG-method);
- 3) it has to contain at least 2% of pectin expressed as calcium pectinat;
- 4) it has to contain at least 7% of dry substance.

# Article 249.

The pectin preparations are placed into circulation only in original package, and that is the packaging material which is water resistant.

The declaration for pectin preparations has to contain the data on level of yelly in accordance with Tarr-Beaker (SAG-method), as well and the instruction for usage.

# **VI. THE TRANSITIONAL AND FINAL PROVISIONS**

## Article 250.

The provisions of this Rulebook shall not apply on products produced before the date this Rulebook is applied.

## Article 251.

The date this Rulebook starts with application, the provisions of Articles 303 to 449 of the Rulebook on Quality of Fruit, Vegetables and Mushrooms and Fruit, Vegetables and Mushroom Products ("The Official Gazette of Socialist Federal Republic of Yugoslavia", No. 27/64, 32/64, 25/65, 27/68 and 10/71), whose provisions are applied as provisions of the Rulebook on Quality of Fruit, Vegetables and Mushrooms and Fruit, Vegetables and Mushroom Products ("The Official Gazette of Socialist Federal Republic of Yugoslavia", No. 13/78) shall cease to be valid.

### Article 252.

This Rulebook shall be applied after six months of date of being published in "The Official Gazette of Socialist Federal Republic of Yugoslavia".

### Article 253.

This Rulebook shall come into force on the eighth day from the day of its publishing in the "The Official Gazette of Socialist Federal Republic of Yugoslavia".

No. 4984/2 October 18, 1978 Belgrade

The Director of the Federal Bureau for Standardization , **Milan Krajnović**, p. s.