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JOINT FAO/WHO FOOD STANDARDS PROGRAM

CODEX ALIMENTARIUS COMMISSION

Sixth Session

REPORT OF THE FIFTH SESSION OF THE JOINT ECE/CODEX ALIMENTARIUS
GROUP OF EXPERTS ON STANDARDIZATION OF FRUIT JUICES

1. The Joint ECE/Codex Alimentarius Group of Experts on Standardization of Fruit Juices held its fifth session in Rome from 25 to 29 March 1968.
2. The session was attended by 49 delegates and observers from 21 countries and 3 international organizations (see Appendix I for List of Participants).
3. Mr. J. Carballo (Spain) was elected Chairman and Mr. W. Orłowski (Poland) was re-elected Vice-Chairman.

Matters arising from the Reports of the Codex Committees on Food Additives (fourth session), Food Hygiene (fourth session), Food Labelling (third session) and Methods of Analysis and Sampling (third session)

4. The Group of Experts had before it the following documents: FJ.4, FJ.5, ALINORM 68/13, ALINORM 68/22-GS, Codex/Analys/67-2 and Codex/Analys/68-2(1). The Group of Experts took note of the comments and recommendations of the Codex Committees on Food Additives, Food Hygiene and Food Labelling and agreed that these comments and recommendations should be considered under the appropriate sections of the fruit juice standards. As regards methods of analysis and sampling, the Group agreed that, as one of the documents on this topic (Codex/Analys/68-2(1)) was not available prior to the session, it would be better to deal with this subject towards the end of the session.

Consideration of United Kingdom paper on the preservation of fruit juices by a combination of physical means and the use of chemical preservatives

5. The Group had before it the above paper (CODEX/FJ/68/2; AGRI/WP.1/538) together with government comments thereon contained in documents FJ.7, FJ.9 and FJ.11. Introducing the paper, the United Kingdom delegation indicated that the present methods of physical preservation of fruit juices did not always enable a safe and palatable product to be presented to the consumer at a reasonable price without some adverse effect on flavour, and that the use of certain chemical preservatives at relatively low levels, that is to say levels which would not in themselves be sufficient to preserve the juices, would help to offset these disadvantages by enabling commercial sterility to

be achieved without adverse effects on flavour. The delegation of the United Kingdom further pointed out that its proposals related to the use of chemical preservatives in conjunction with heat treatment and did not apply to juices preserved by refrigeration. The delegation of the United Kingdom also stated that it would have no objection to a declaration on the label of the chemical preservatives present in the juices; The delegations of Austria, Federal Republic of Germany, Finland, France, Italy, Poland, Switzerland and U.S.A. were opposed to the use of chemical preservatives in juices intended for direct consumption, on the grounds that the use of chemical preservatives was not technologically necessary. Following a full exchange of views on this matter, opinion was divided on whether the use of certain chemical preservatives in fruit juices preserved by physical means, and subject to appropriate labelling along the lines suggested by the United Kingdom, should be allowed. The Group therefore decided that this matter should be discussed again at its next session and that further comments should be sought, and in particular the comments of those interested countries, especially developing countries, which were not represented at the meeting.

6. New Format for Codex Commodity Standards

The Group had before it the Format for Codex Commodity Standards which had been adopted by the Codex Alimentarius Commission at its Fifth Session (document Cx 4/5). The Secretariat outlined the main features of the Format which was intended for use by the subsidiary bodies of the Commission in presenting their standards, with the object of achieving, as far as possible, a uniform presentation of commodity standards. The Group also had before it document FJ.12 (LIM) which contained the draft standard for apricot, peach and pear nectars, set out in Annex I to the Report of the Fourth Session of the Group, adapted to the new Codex Format by the Secretariat. The Group considered the new format which was also intended to serve as a model for the layout of other fruit juice standards, and agreed that the standards for fruit juices should be presented in this way. The Group noted that the format contained references to texts elaborated by other Codex Committees, and considered that, while the system of referencing in the standards could continue to be used during the various Steps of the Procedure for the Elaboration of Codex Standards, the standards when finally approved by the Commission for issuance to Governments for acceptance should quote such references in full. The Group recognized, however, that this might not be feasible for methods of analysis and sampling. The attention of the Group was also directed to the fact that the draft standards for fruit juices did not make any provision for minimum fill of container, and it was agreed that government comments should be sought on this matter.

7. Proposed Draft Provisional Standard for Apricot, Peach and Pear Nectars, ready for consumption and preserved exclusively by physical means

The Group had before it Annex I of document ALINORM 68/14, AGRI/278, AGRI/WP.1/504 which contained the draft minimum requirements for the nectars referred to above. The Group decided, in the light of government comments, that there should be a single standard for these nectars. The Group examined the text of Annex I in detail and made several amendments. The amended version appears as Appendix II to this Report. The Group agreed that the following remarks concerning various sections of the text set out in Appendix II should be recorded:

- a) The delegations of the Federal Republic of Germany, France and Italy declared that they could not accept a nectar-type product with less than 50 percent minimum fruit content for peaches or pears or 40 percent minimum fruit content

- for apricots. The Polish delegation proposed 45 percent minimum fruit content for peaches and pears and 40 percent for apricots.
- b) The French and Italian delegations were opposed to the use of concentrates and reserved their position on this matter. The Group agreed that the term 'nectar' applied specifically to pulpy-type products only. The Group decided that it was necessary to provide under the labelling provisions of the standard for the declaration of the minimum fruit content, in the interests of the consumer. The Swiss delegation, however, stated that the actual percentage of fruit content present in the product should be declared on the label.
 - c) The Group confirmed the tentative proposal made at the last session of the Group for the use of malic acid as an acidifying agent for these products. In view of the fact that an acceptable daily intake had been established only for the D(-) form of this compound and noting that the Joint FAO/WHO Expert Committee on Food Additives did not deem it necessary to establish an ADI for the L(+) form, the Group considered that it would be desirable to make available to the Codex Committee on Food Additives information as to the extent to which racemic mixtures of malic acid and other isomeric forms were being used, in order to enable that Committee to examine the question. The delegation of the USA indicated that it would be willing to send information on this topic to the Secretariat.
 - d) The Group noted that the Codex Committee on Food Additives at its fourth session had endorsed the proposed limits for arsenic and had temporarily endorsed the limit for lead pending further toxicological investigation.
 - e) The Group also noted that the Codex Committee on Food Additives had referred the limit of 250 mg/kg for tin in nectars and juices packed in tinned containers back to the Group of Experts on Fruit Juices in view of reports of gastrointestinal disorders caused by levels of tin approaching this figure. Several delegations had different opinions as to a figure for tin content. The Group agreed, therefore, to retain provisionally the limit of 250 mg/kg for tin and to reconsider the matter at the next session. The delegation of Italy with the help of the delegation of France agreed to prepare a paper on this subject on the basis of their own research and comments to be received from governments by the 15th of October 1968. The delegation of Finland drew the attention of the Group to the possible detinning effect of nitrate present in potable water and the delegations of Finland and France undertook to supply the necessary information to the Italian delegation.
 - f) The Group noted a request by the Codex Committee on Food Additives to clarify the limit for total metal content precipitable by potassium hexacyanoferrate (II) in connection with the individual limits for metal contaminants. The Group agreed that the limit for total metal content precipitable by potassium hexacyanoferrate (II) was not in conflict with the limits set for other metals in the standard.
 - g) The Group discussed whether there was a need for the inclusion of cadmium in the standards. The delegation of Switzerland undertook to prepare a paper on this subject for the next session of the Group on the basis of comments to be received from governments before the 15th of October 1968.
 - h) As regards mould filaments, the Group considered that there was some doubt at this stage as to the figure of 20% in respect of maximum percentage of positive fields and accordingly decided to place this figure in square brackets.

i) The Group agreed that it was not necessary to declare the addition of water on the label.

8. Proposed Draft Provisional Standard for Apple Juice, ready for Consumption, preserved exclusively by physical means

a) The Group considered Annex III of ALINORM 68/14, AGRI/WP.1/504, which contained the draft minimum requirements for apple juice. The text, as amended by the Group, appears as Appendix III to this Report. As regards the definition, the Trench delegation reserved its position because it considered that reconstituted juices should not be dealt with in the same standard as natural juices. The French delegation reserved its position on all the fruit juice standards, because in its view the natural product obtained by direct extraction from the fruit and the reconstituted product were different, although the products could have certain similar characteristics from an organoleptic or analytical point of view. In view of the above, the French delegation proposed that the text under examination should read as follows, and that corresponding changes should be made in the other standards :

Title of the Standards "Minimum requirements for natural or reconstituted apple juice, ready for consumption, preserved exclusively by physical means.

Definition:

- i) Natural apple juices: Same definition as in Annex III of ALINORM 68/14.
- ii) Reconstituted apple juices: turbid or clear product, obtained from concentrated apple juice by the addition of water and having organoleptic and analytical characteristics identical with those of natural apple juice.

Labelling The technical description should read as follows :

- i) "natural apple juice" or "apple juice"
- ii) "reconstituted apple juice", and
- iii) the fact of reconstitution must be declared on the label.

The French delegation indicated that, following on the above, it might be necessary to make other alterations in this text and in the other texts.

- b) The delegation of the Federal Republic of Germany reserved its position on the agreed figure of 10°Brix, and indicated that they wished the figure to be 11°Brix.
- c) As regards labelling, the delegations of Finland, France, Italy, Japan and the U.S.A. stated that they were opposed to the deletion of the requirement that the fact of reconstitution should be declared on the label. The delegations of Austria, Denmark, France, Federal Republic of Germany, Italy and Switzerland were opposed to the addition of sugar on the grounds that it was not technologically necessary, and, therefore, also to the labelling provision requiring the declaration of added sugar.
- d) With regard to mould filaments, the Group briefly discussed the merits of the Howard Mould Count Method in relation to clear and turbid juices* The Swiss delegation agreed to forward to the Secretariat a new method being

elaborated by the International Federation of Fruit Juice Producers for determining the percentage of positive fields in juices.

- e) As regards contaminants, the delegation of Poland reserved its position on the figure agreed for copper, and proposed a figure of 3.5 mg/kg for all the fruit juice standards, including nectars. The decision taken regarding tin in the standard for nectars applied to this standard and to the other fruit juice standards.
- f) The delegations of the Netherlands, U.K. and U.S.A. reserved their positions on the decision of the Group not to include iso-ascorbic acid as an antioxidant, on the grounds that its use was technologically justified and that the Codex Committee on Food Additives had endorsed its use from a toxicological point of view in other products. The delegations of the Federal Republic of Germany, France and Switzerland reserved their positions regarding the requirement that l-ascorbic acid should be declared on the label. A number of delegations proposed the inclusion in the list of further clarifying agents. It was agreed that countries wishing to have further clarifying agents added to the list should furnish details about them, including their specifications of identity and purity and the extent, if any, to which they leave residues in the final product. The delegation of the Netherlands reserved its position regarding the complete listing of treatment aids, stating that if treatment aids constituted a health hazard, the problem should be dealt with under the paragraph relating to contaminants.
- g) On the subject of flavourings, the delegation of Argentina stated that when flavourings are used to reconstitute the aroma of the apple juice, the type of flavouring used should appear on the label, provided it referred exclusively to natural aromas.

9. Remarks applicable to the fruit juice standards in general

In addition to the remarks made by the Trench delegation in paragraph 8 concerning the definition of apple juice which apply to all the other standards, the following remarks applicable to the standards in general were made. The delegation of Poland indicated that the maximum tolerance for copper content should not exceed 3.5 mg/kg. The delegation of Spain indicated that it was not in agreement with the figures adopted for arsenic and lead. The delegations of France, Italy and U.S.A. indicated that they were not opposed to providing for reconstituted juices in the standards provided that the fact of reconstitution was declared on the label©

10. Proposed Draft Provisional Standard for Orange Juice, ready for consumption, preserved exclusively by physical means

The Group considered Annex IV of ALINORM 68/14 which contained the draft minimum requirements for orange juice. The text as amended by the Group appears as Appendix IV to this report. The Group considered the question of whether to provide in the standard for a minimum Vitamin C content. As only two countries (Federal Republic of Germany and Japan) favoured this proposal, the Group decided to make no such provision in the standard. The Group considered the proposal of the delegation of the U.S.A. that the standard allow 10% by volume of the juice of oranges of the species *Citrus Reticulata* or hybrids thereof in order to improve the quality of the juice. This proposal was not however acceptable to the Group, and the delegation of the U.S.A. reserved its position on this point. As the delegation of the United Kingdom had

proposed a figure of 0.3 ml/kg for essential oils, the Group agreed to place the figure of 0.5 ml/kg which appeared in the standard, in square brackets.

11. Proposed Draft Provisional Standard for Grape Juice, ready for consumption, preserved exclusively by physical means

The Group considered Annex V of ALINORM 68/14 which contained the draft minimum requirements for grape juice. The text as amended by the Group appears as Appendix V to this report. Although some countries were in favour of reducing the maximum limit for sulphur dioxide down to 10 mg/kg, it was, however, agreed to retain the figure of 50 mg/kg, as it appeared in the standard, subject to appropriate labelling. The Japanese delegation reserved its position because they considered that the figure should be 30 mg/kg. The delegation of Poland similarly reserved its position taking the view that the maximum figure should be 20 mg/kg. As regards sugar, a small number of delegations expressed themselves as being opposed to the addition of sugar on the grounds that it was not technologically necessary. The majority of delegations, however, were in favour of adding sugar subject to labelling declaration. On this latter point the delegations of the Federal Republic of Germany, France, Poland and Switzerland reserved their positions.

12. Proposed Draft Provisional Standard for Tomato Juice, ready for consumption, preserved exclusively by physical means

The Group considered Annex VI of ALINORM 68/14 which contained the draft minimum requirements for tomato juice. The text as amended by the Group appears as Appendix VI to this report. As regards this standard, the delegations of Finland, France, Italy, Japan and U.S.A. were opposed to the principle of using concentrates for the manufacture of tomato juice. The delegation of Italy reserved its position. The delegations of Argentina, Finland, France, Italy, Roumania and U.S.A. stated that if reconstituted juice was permitted this fact should be declared on the label. The delegations of Italy, Switzerland and the U.S.A. were opposed to the addition of sugar in tomato juice. As regards soluble solids, the delegation of Argentina stated that as these would depend on very variable environmental and variety factors, the figure of 4.5% indicated in the standard should be reduced to 4.2%. The Group considered a proposal by the delegation of the United Kingdom to the effect that when ingredients such as spices, flavourings and lemon juice were added to tomato juice, the product should be called "Tomato Juice Cocktail" or "Tomato Cocktail". Following an exchange of views on the subject, the Group agreed that as the addition of spices would alter the organoleptic characteristics of tomato juice, tomato juice containing spices would no longer meet the definition of tomato juice in the standard. Consequently, the Group decided to delete the provision which allowed for the addition of spices.

13. Proposed Draft Provisional Standard for Lemon Juice, ready for consumption, preserved exclusively by physical means

The Group considered Annex VII of ALINORM 68/14 which contained the draft minimum requirements for lemon juice. The text as amended by the Group appears as Appendix VII to this Report. The delegation of the United Kingdom considered that the figure of 0.5 ml/kg for essential oils was too high and requested that the figure be set at 0.3 ml/kg. The Group agreed to delete the provision which stated that the addition of clouding or stabilizing agents was not permitted, on the grounds that anything which was not specifically provided for in a standard was not allowed. This applied equally to grapefruit juice.

14. Proposed Draft Provisional Standard for Grapefruit Juice, ready for consumption, preserved exclusively by physical means

The Group considered Annex VIII of ALINORM 68/14 which contained the draft minimum requirements for grapefruit juice. The text as amended by the Group appears as Appendix VIII to this Report. Other than the remark made in the last sentence of the previous paragraph no specific remarks were requested to be recorded regarding this standard.

15. Proposed Draft Provisional Standard for Fermentable, Concentrated Apple, Orange and Grape Juices

The Group examined the draft minimum requirements for the above Juices which were contained in document SP 10/75 (May 1967). The texts, as amended by the Group, appear as Appendices IX, X and XI of this Report. The Group agreed that the Brix figures agreed upon for the concentrates were figures below which a juice could not be considered to be a concentrate. The delegation of the Federal Republic of Germany reserved its position regarding the minimum figure of 20°Brix agreed upon for concentrated apple juice, stating that, in its opinion, the minimum figure should be 22°Brix. The Group also agreed that the degree to which a juice was concentrated above the minimum levels fixed would depend on the use for which the juice was intended. Seven countries stated that separate standards should be elaborated for unsweetened and sweetened concentrates because the addition of sugars to unsweetened concentrates would mean that the Brix figure in the juice reconstituted from such a concentrate would not relate solely to the soluble fruit solids content. The Group agreed that this was a matter which should be examined further by the Group at its next session.

16. proposed Draft Provisional Standard for Pineapple Juice ready for consumption, preserved exclusively by physical means

As time did not allow the Group to examine the draft standard for pineapple juice which was before it at Step 2, it agreed that the standard should be sent out in the new Codex Format to Members of the Group for their comments. The standard would be examined by the Group in the light of these comments at its next session at Step 2.

17. Standards going forward at Step 5 of the Procedure for the Elaboration of Codex Standards

The Group agreed that the Standards for Apricot, Peach and Pear Nectars, Apple Juice, Orange Juice, Grape Juice, Tomato Juice, Lemon Juice and Grapefruit Juice as well as the Standards for Concentrated Apple, Orange and Grape Juice should go forward to the Commission at Step 5.

18. Methods of Analysis and Sampling for Fruit Juices

The Group took note of the Synopsis of Methods of Analysis for Fruit Juices which had been prepared by the delegation of the Federal Republic of Germany (SP 10/75; SP 10/101; Codex/ANALYS/67-2), the digest of comments received from Governments and international organizations on this synopsis (Codex/ANALYS/68-2(1)) and the Methods of Analysis for Preservatives in Fruit Juices set out in document FJ.4. The Group agreed to examine the subject of Methods of Analysis of Fruit Juices at its next session and to make proposals in this regard for submission to the Codex Committee on Methods of Analysis and Sampling for endorsement.

19. Code of Hygienic Practice for Frozen Fruit Juices

The Group noted the remarks made by the Codex Committee on Food Hygiene regarding the elaboration of a Code of Hygienic Practice for Frozen Fruit Juices, and requested that Committee to elaborate such a Code and to give consideration also to Chilled Fruit Juices.

20. Chairmanship of the Joint ECE/Codex Alimentarius Group of Experts on Standardization of Fruit Juices

The Group was informed of the recommendation of the Executive Committee, which had been endorsed by the Codex Alimentarius Commission at its Fifth Session, that it should consider adopting the Codex Alimentarius Commission's procedures by electing at the end of each session its chairman for the next session. The Group agreed with this recommendation and elected Prof. Dr. W. Pilnik (Netherlands) as Chairman of the Joint Group to serve in that capacity from the end of the fifth to the end of the sixth session.

21. Future Work

In addition to the work to be dealt with by the Group as a result of the decisions it took at the present session, the following programme of future work was agreed to:

- i) First draft standard, for the following small fruit nectars to be drawn up by the delegation of Finland and the delegations of other Scandinavian countries: blackcurrants, red currants, strawberries, raspberries, cranberries, whortleberries, bilberries, cloud berries and rowan berries.
- ii) First draft standard for the following nectars to be drawn up by the delegation of the U.S.A.: passion fruit, paw-paw and guava.
- iii) First draft standard for bilberry juice to be drawn up by the delegation of Poland.
- iv) First draft standard for cranberry juice to be drawn up by the delegation of the U.S.A.
- v) First draft standard for lime juice. to be drawn up by the delegation of the United Kingdom;
- vi) First draft standard for blackcurrant juice to be drawn up by the delegations of the United Kingdom and Poland.
- vii) First draft standard for fruit juice beverages with a high juice content (neither nectars nor soft drinks) to be drawn up by the Spanish delegation.
- viii) First draft standard for citrus juices of the species "Citrus reticulata" to be drawn up by the delegations of the U.S.A. and Japan.
- ix) First draft standard for tomato juice cocktail to be drawn up by the delegations of the Netherlands and the U.S.A.

The Group noted that the Codex Committee on Processed Fruits and Vegetables was elaborating a standard for tomato concentrate and that copies of the draft would be circulated to members of the Group.

It was agreed that all the above first draft standards should be presented in the Codex Format. It was also agreed that all of the above drafts would not necessarily

appear on the provisional agenda for the next session of the Group and that discretion should be exercised so as to avoid overloading the agenda.

22. Time and Place of the next session

The Group noted that its next session would probably be held in the Spring of 1969 in Geneva.

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PROPOSED DRAFT PROVISIONAL STANDARD FOR APRICOT, PEACH AND PEAR
NECTARS, READY FOR CONSUMPTION, PRESERVED EXCLUSIVELY BY
PHYSICAL MEANS^a

(To be submitted to the Codex Alimentarius Commission
at Step 5 of the Procedure)

1. DESCRIPTION

Unfermented but fermentable nectar, ready for direct consumption, obtained by blending the total edible sieved part of sound and ripe apricots, peaches or pears, concentrated or unconcentrated, with water and sugars, and preserved exclusively by physical means.

2. ESSENTIAL COMPOSITION AND QUALITY FACTORS

2.1 Minimum Content of Fruit Ingredient

The product shall contain not less than 40% in the case of peach and pear nectars, and not less than 35% in the case of apricot nectars, by weight of single strength fruit ingredient or the equivalent derived from any concentrated fruit ingredient.

2.2 Sugars

The following sugars may be used: sucrose, dextrose and glucose syrup as defined by the Codex Alimentarius Commission. The maximum quantity of sucrose which may be replaced by glucose syrup is limited to 25%.

2.3 Honey

Honey, as defined by the Codex Alimentarius Commission, may be used when it is the sole added sweetening ingredient;

2.4 Soluble Solids

The soluble solids content of the product shall be not less than 13°Brix determined by refractometer at 20°C, uncorrected.

2.5 Fluidity

The fluidity of the product shall be such that the flow-time is not less than 30 seconds, as determined by the method referred to in paragraph 7 of this standard.

2.6 Ethanol Content

Ethanol content shall not exceed 3 g/kg.

2.7 Hydroxymethyl Furfural

Not more than 10 mg/kg.

^a The Group of Experts does not take preservation by physical means to include ionizing radiation. This matter is being examined by other international bodies, including FAO/IAEA, and will be re-examined by the Group when advice becomes available.

2.8 Organoleptic Properties

The product shall have the characteristic colour, aroma and flavour of the fruit from which it is made.

3. FOOD ADDITIVES

3.1 The following provisions in respect of food additives have been endorsed by the Codex Committee on Food Additives:

3.1.1 Acidifying Agents

Citric acid .
[Malic acid]
Lemon juice (does not require endorsement)

3.1.2 Antioxidants

I-ascorbic acid

4. CONTAMINANTS

4.1 Pesticide Residues

The product shall comply with such requirements as may be specified by the Codex Committee on Pesticide Residues.

4.2 Other Contaminants

4.2.1 The following provisions in respect of contaminants other than pesticide residues have been endorsed by the Codex Committee on Food Additives:

4.2.1.1	<u>Contaminant</u>	<u>Maximum level</u>
	Arsenic (As)	0.2 mg/kg
	Lead (Pb)	0.3 mg/kg (temporarily endorsed)
	Copper (Cu)	5 mg/kg
	Zinc (Zn)	5 mg/kg
	Iron (Fe)	15 mg/kg
	[Cadmium (Cd)]	to be considered
	Tin (Sn)	[250 mg/kg](not endorsed)
4.2.1.2	Total metal content precipitable by potassium hexacyano-ferrate (II)	20 mg/kg expressed as Fe.

5. HYGIENE

5.1 The following provisions in respect of the food hygiene of the product are subject to endorsement by the Codex Committee on Food Hygiene:

5.1.1 Micro-organisms capable of development - None under normal conditions of storage

5.1.2 The product shall be free from any pathogen infectious to man and from any toxic substance originating from micro-organisms.¹ (This requirement is subject to review after information is received from the WHO Expert Committee on Food Hygiene).

Mould Filaments

- The maximum percentage, of positive fields shall not exceed [20%], as determined by the Howard mould count method.

¹ Endorsed by the Codex Committee on Food Hygiene

5.2 It is recommended that the products covered by the provisions of this standard be prepared in accordance with the Code of Hygienic Practice for Canned Fruit and Vegetable Products.

6. LABELLING

6.1 The provisions of Section 2.1 to 2.5, 2.7 to 2.9 and 2.11 to 2.12 of the General Standard for the Labelling of Prepackaged Foods shall apply.

6.2 The following specific provisions in respect of the labelling of the product are subject to endorsement by the Codex Committee on Food Labelling:

6.2.1 The name of the product shall be "apricot nectar", "peach nectar", or "pear nectar", as the case may be.

6.2.2 Only the species of fruit present or the nectar there from may be represented on the label.

6.2.3 The minimum percentage of fruit content shall be declared on the label.

6.2.4 The addition of l-ascorbic acid shall be declared on the label as an additive. The term 'Vitamin C' shall not appear on the label² but this does not refer to vitaminized juices intended for special purposes.

² Endorsed by the Codex Committee on Food Labelling

7. METHODS OF ANALYSIS AND SAMPLING

The methods of analysis and sampling described hereunder are international referee methods which are to be endorsed by the Codex Committee on Methods of Analysis and Sampling; (Methods to be established). The method for determining the fluidity of the product shall be that of Lamb and Lewis (JA.O.A.C, Vol. 42, No.2, p.411, 1959).

PROPOSED DRAFT PROVISIONAL STANDARD FOR APPLE JUICE, READY FOR CONSUMPTION. PRESERVED EXCLUSIVELY BY PHYSICAL MEANS^a

(To be submitted to the Codex Alimentarius Commission
at Step 5 of the Procedure)

^a The Group of Experts does not take preservation by physical means to include ionizing radiation. This matter is being examined by other international bodies, including FAO/IAEA, and will then be re-examined by the Group of Experts when advice becomes available.

1. DESCRIPTION

Unfermented but fermentable juice, ready for direct consumption, obtained by a mechanical process from sound, ripe apples, preserved exclusively by physical means. The juice may be concentrated and later diluted. It may be turbid or clear.

2. ESSENTIAL COMPOSITION AND QUALITY FACTORS

2.1 Soluble Solids

The soluble solids content of apple juice shall be not less than 10°Brix determined by refractometer at 20°C, uncorrected.

2.2 Sugars

The following sugars may be added: sucrose, dextrose and dried glucose syrup, as defined by the Codex Alimentarius Commission.

2.3 Ethanol Content

The ethanol content shall not exceed 5 g/kg.

2.4 Volatile Acids

The volatile acids content shall not exceed 0.4 g/kg expressed as acetic acid.

2.5 Organoleptic Properties

The product shall have the characteristic colour, aroma and flavour of apple juice. The restitution of natural apple juice flavour to apple juice from which the flavour has been removed is allowed.

2.6 Use of Concentrate

The addition of concentrate to juice is permitted.

3. FOOD ADDITIVES

3.1 The following provisions in respect of food additives have been endorsed by the Codex Committee on Food Additives:

3.1.1 Antioxidants

l-ascorbic acid

3.1.2 Clarifying Agents¹

3.1.2.1 Clarifying enzymes² without preservatives.

3.1.2.2 Edible gelatine

3.1.2.3 Tannin

3.1.2.4 Bentonite, with low soluble iron content

3.1.2.5 Colloidal solution of silica (silica sol)

3.1.2.6 Filtration aids (asbestos, diatomite, cellulose)

¹ Shall conform to the technical and purity requirements fixed by the International Vine Office, where such exist.

² Pectolytic and proteolytic enzymes have been endorsed by the Codex Committee on Food Additives. The use of the term "clarifying enzymes" will be brought to that Committee's attention.

3.2 Such other clarifying agents as may be considered to be technologically necessary and are subsequently endorsed by the Codex Committee on Food Additives.

3.3. Others

3.3.1 Pure vegetable carbon

3.3.2 Pure carbon dioxide

4. CONTAMINANTS

4.1 Pesticide Residues

The product shall comply with such requirements as may be specified by the Codex Committee on Pesticide Residues.

4.2 Other contaminants

4.2.1 The following provisions in respect of contaminants other than pesticide residues have been endorsed by the Codex Committee on Food Additives:

4.2.1.1	<u>Contaminant</u>	<u>Maximum level</u>
	Arsenic (As)	0.2 mg/kg
	Lead (Pb)	0.3 mg/kg
	Copper (Cu)	5 mg/kg
	Zinc (Zn)	5 mg/kg
	Iron (Fe)	10 mg/kg
	[Cadmium (Cd)]	to be considered
	Tin (Sn)	[250 mg/kg] (not endorsed)
4.2.1.2	Total metal content precipitable by potassium hexacyano-ferrate (II)	- 12 mg/kg, expressed as Fe
4.2.1.3	The maximum amount of sulphur dioxide which may be present in the final product shall not exceed 10 mg/kg total SO ₂	
4.2.2	Mineral impurities insoluble in 10% hydrochloric acid shall not exceed 20 mg/kg.	

5. HYGIENE

- 5.1 The following provisions in respect of the food hygiene of this product are subject to endorsement by the Codex Committee on Food Hygiene:
- 5.1.1 Micro-organisms capable of development - None under normal conditions of storage
 - 5.1.2 The product shall be free from any pathogen infectious to man and from any toxic substance originating from microorganisms. (This requirement is subject to review after information is received from the WHO Expert Committee on Food Hygiene (Food Microbiology)).
 - 5.1.3 Mould Filaments - Technologically unavoidable traces. The maximum percentage of positive fields to be specified later using the Howard Mould Count Method.
- 5.2 It is recommended that the products covered by the provisions of this standard be prepared in accordance with the Code of Hygienic Practice for Canned Fruit and Vegetable Products.

6. LABELLING

- 6.1 The provisions of Section 2.1 to 2.5, 2.7 to 2.9 and 2.11 to 2.12 of the General Standard for the Labelling of Prepackaged Foods shall apply.
- 6.2 The following specific provisions in respect of the labelling of the product are subject to endorsement by the Codex Committee on Food Labelling:
- 6.2.1 The name of the product shall be "apple juice"
 - 6.2.2 The addition of sugars shall be declared on the label
 - 6.2.3 The term "carbonated" or an equivalent term in other languages shall be declared on the label if the apple juice contains more than 2 g/kg of carbon dioxide.
 - 6.2.4 The addition of l-ascorbic acid shall be declared on the label as an additive. The term 'Vitamin C' shall not appear on the label ¹, but this does not refer to vitaminized juices intended for special purposes.

¹ Endorsed by the Codex Committee on Food Labelling.

- 6.2.5 For the representation of fruit and fruit juices, only apples and apple juice may be represented on the label.

7. METHODS OF ANALYSIS AND SAMPLING

The methods of analysis and sampling described hereunder are international referee methods which are to be endorsed by the Codex Committee on Methods of Analysis and Sampling. (Methods to be established).

PROPOSED DRAFT PROVISIONAL STANDARD FOR ORANGE JUICE, READY FOR CONSUMPTION, PRESERVED EXCLUSIVELY BY PHYSICAL MEANS^a

(To be submitted to the Codex Alimentarius Commission
at Step 5 of the Procedure)

1. DESCRIPTION

Unfermented but fermentable juice, ready for direct consumption, obtained by a mechanical process from the endocarp of sound, ripe oranges (Citrus sinensis (L) Osbeck) preserved exclusively by physical means. The juice may be concentrated and later diluted.

2. ESSENTIAL COMPOSITION AND QUALITY FACTORS

2.1 Soluble Solids

The soluble solids content of orange juice shall be not less than 10.5°Brix determined by refractometer at 20°C, uncorrected.

2.2 Sugars

The following sugars may be added: sucrose, dextrose and dried glucose syrup, as defined by the Codex Alimentarius Commission. The quantity added shall not exceed 50 g/kg.

2.3 Ethanol Content

The ethanol content shall not exceed 3 g/kg.

2.4 Volatile Acids

Only traces are allowed.

2.5 Essential Oils

The essential oils content shall not exceed [0.5] ml/kg.

2.6 Organoleptic Properties

The product shall have the characteristic colour, aroma and flavour of orange juice. The restitution of natural orange juice flavour to orange juice from which the flavour has been removed is allowed.

2.7 Use of Concentrate

The addition of concentrate to juice is permitted. Only concentrate from Citrus sinensis (L) Osbeck may be used;

^a The Group of Experts does not take preservation by physical means to include ionizing radiation. This matter is being examined by other international bodies, including FAO/IAEA, and will then be re-examined by the Group of Experts when advice becomes available;

3. CONTAMINANTS

3.1 Pesticide Residues

The product shall comply with such requirements as may be specified by the Codex Committee on Pesticide Residues.

3.2 Other Contaminants

3.2.1 The following provisions in respect of contaminants other than pesticide residues have been endorsed by the Codex Committee on Food Additives:

3.2.1.1	<u>Contaminant</u>	<u>Maximum level</u>
	Arsenic (As)	0.2 mg/kg
	Lead (Pb)	0.3 mg/kg
	Copper (Cu)	5 mg/kg
	Zinc (Zn)	5 mg/kg
	Iron (Fe)	15 mg/kg
	[Cadmium (Cd)]	to be considered
	Tin (Sn)	[250 mg/kg](not endorsed)
3.2.1.2	Total metal content precipitable by potassium hexacyano-ferrate (II)	20 mg/kg. expressed as Fe

4. HYGIENE

4.1 The following provisions in respect of the food hygiene of this product are subject to endorsement by the Codex Committee on Food Hygiene:

- 4.1.1 Micro-organisms capable of development - None under normal conditions of storage
- 4.1.2 The product shall be free from any pathogen infectious to man and from any toxic substance originating from microorganisms. (This requirement is subject to review after information is received from the WHO Expert Committee on Food Hygiene (Food Microbiology)).
- 4.1.3 Mould Filaments - Technologically unavoidable traces. The maximum percentage of positive fields to be specified later using the Howard Mould Count Method.

4.2 It is recommended that the products covered by the provisions of this standard be prepared in accordance with the Code of Hygienic Practice for Canned Fruit and Vegetable Products.

5. LABELLING

5.1 The provisions of Section 2.1 to 2.5, 2.7 to 2.9 and 2.11 to 2.12 of the General Standard for the Labelling of Prepackaged Foods shall apply.

5.2 The following specific provisions in respect of the labelling of the product are subject to endorsement by the Codex Committee on Food Labellings

- 5.2.1 The name of the product shall be "orange Juice".
- 5.2.2 The addition of sugars shall be declared on the label.
- 5.2.3 For the representation of fruit and fruit juices, only oranges and orange juice may be represented on the label.

6. METHODS OF ANALYSIS AND SAMPLING

The methods of analysis and sampling described hereunder are international referee methods which are to be endorsed by the Codex Committee on .
Methods of Analysis and Sampling. (Methods to be established).

PROPOSED DRAFT PROVISIONAL STANDARD FOR GRAPE JUICE, READY FOR CONSUMPTION, PRESERVED EXCLUSIVELY BY PHYSICAL MEANS^a

(To be submitted to the Codex Alimentarius Commission
at Step 5 of the Procedure)

^a The Group of Experts does not take preservation by physical means to include ionizing radiation. This matter is being examined by other international bodies, including FAO/IAEA, and will then be re-examine by the Group of Experts when advice becomes available.

1. DESCRIPTION

Unfermented but fermentable juice, ready for direct consumption, obtained by a mechanical process from sound, ripe grapes, preserved exclusively by physical means. The juice may be concentrated and later diluted,, It may be turbid or clear.

2. ESSENTIAL COMPOSITION AND QUALITY FACTORS

2.1 Soluble Solids

The soluble solids content of grape juice shall be not less than 16°Brix determined by refractometer at 20°C, uncorrected.

2.2 Sugars

The following sugars may be added: sucrose, dextrose and dried glucose syrup, as defined by the Codex Alimentarius Commission.

2.3 Ethanol Content

The ethanol content shall not exceed 5 g/kg,

2.4 Volatile Abide

The volatile acids content shall not exceed 0.4 g/kg expressed as acetic acid.

2.5 Organoleptic Properties

The product shall have the characteristic colour, aroma and flavour of grape juice. The restitution of natural grape juice flavour to grape juice from which the flavour has been removed is allowed.

2.6 Use of Concentrate

The addition of concentrate to juice is permitted.

3. FOOD ADDITIVES

3.1 The following provisions in respect of food additives have been endorsed by the Codex Committee on Food Additives :

3.1.1 Antioxidants

l-ascorbic acid

3.1.2 Clarifying agents¹

3.1.2.1 Clarifying enzymes² without preservatives

- 3.1.2.2 Edible gelatine
- 3.1.2.3 Tannin
- 3.1.2.4 Bentonite, with low soluble iron content
- 3.1.2.5 Colloidal solution of silica (silica sol)
- 3.1.2.6 Filtration aids (asbestos, diatomite, cellulose).

¹ Shall conform to the technical and purity requirements fixed by the International Vine Office, where such exist.

² Pectolytic and proteolytic enzymes have been endorsed by the Codex Committee on Food Additives. The use of the term "clarifying enzymes" will be brought to that Committee's attention.

3.2 Such other clarifying agents as may be considered to be technologically necessary and are subsequently endorsed by the Codex Committee on Food Additives.

3.3 Others

3.3.1 Pure vegetable carbon

3.3.2 Pure carbon dioxide

4. CONTAMINANTS

4.1 Pesticide Residues

The product shall comply with such requirements as may be specified by the Codex Committee on Pesticide Residues.

4.2 Other Contaminants

4.2.1 The following provisions in respect of contaminants other than pesticide residues have been endorsed by the Codex Committee on Food Additives:

4.2.1.1 <u>Contaminant</u>	<u>Maximum level</u>
Arsenic (As)	0.2 mg/kg
Lead (Pb)	0.3 mg/kg
Copper (Cu)	5 mg/kg
Zinc (Zn)	5 mg/kg
Iron (Fe)	15 mg/kg
[Cadmium (Cd)]	to be considered
Tin (Sn)	[250 mg/kg](not endorsed)
4.2.1.2 Total metal content precipitable by potassium hexacyano-ferrate (II)	- 17 mg/kg, expressed as Fe
4.2.1.3 The maximum amount of sulphur dioxide which may be present in the final product shall not exceed 50 mg/kg total SO ₂ . ^a	

^a After an interval of 3 years from the date of publication of this standard for acceptance by governments, this figure will be reduced to 10 mg/kg.

4.2.2 Mineral impurities insoluble in 10% hydrochloric acid shall not exceed 20 mg/kg.

5. HYGIENE

5.1 The following provisions in respect of the food hygiene of this product are subject to endorsement by the Codex Committee on Food Hygiene :

- 5.1.1 Micro-organisms capable of development - None under normal conditions of storage
- 5.1.2 The product shall be free from any pathogen infectious to man and from any toxic substance originating from microorganisms. (This requirement is subject to review after information is received from the WHO Expert Committee on Food Hygiene (Food Microbiology)).
- 5.1.3 Mould filaments - Technologically unavoidable traces. The maximum percentage of positive fields to be specified later using the Howard Mould Count Method.

5.2 It is recommended that the products covered by the provisions of this standard be prepared in accordance with the Code of Hygienic Practice for Canned Fruit and Vegetable Products.

6. LABELLING

6.1 The provisions of Section 2.1 to 2.5, 2.7 to 2.9 and 2.11 to 2.12 of the General Standard for the Labelling of Prepackaged Foods shall apply.

6.2 The following specific provisions in respect of the labelling of the product are subject to endorsement by the Codex Committee on Food Labelling:

- 6.2.1 The name of the product shall be "grape juice".
- 6.2.2 The addition of sugars shall be declared on the label.
- 6.2.3 The term "carbonated" or an equivalent term in other languages shall be declared on the label if the grape juice contains more than 2 g/kg of carbon dioxide.
- 6.2.4 The addition of 1-ascorbic acid shall be declared on the label as an additive. The term "Vitamin C" shall not appear on the label ¹ but this does not refer to vitaminized juices intended for special purposes.
- 6.2.5. For the representation of fruit and fruit juices, only grapes and grape juice of the colour corresponding to the juice may be represented on the label.
- 6.2.6 [The fact of reconstitution shall be declared on the label].
- 6.2.7 The presence of sulphur dioxide shall be declared on the label. ²

¹ Endorsed by the Codex Committee on Food Labelling;

² The question of the level above which the presence of sulphur dioxide shall be declared on the label is to be examined at the next session of the Group.

7. METHODS OF ANALYSIS AND SAMPLING

The methods of analysis and sampling described hereunder are international referee methods which are to be endorsed by the Codex Committee on Methods of Analysis and Sampling. (Methods to be established).

PROPOSED DRAFT PROVISIONAL STANDARD FOR TOMATO JUICE, READY
FOR CONSUMPTION PRESERVED EXCLUSIVELY BY PHYSICAL MEANS^a

(To be submitted to the Codex Alimentarius Commission
at Step 5 of the Procedure)

^a The Group of Experts does not take preservation by physical means to include ionizing radiation. This matter is being examined by other international bodies, including FAO/IAEA, and will then be re-examined by the Group of Experts when advice becomes available.

1. DESCRIPTION

Unfermented but fermentable juice, ready for direct consumption) obtained by a mechanical process from sound, ripe, red or reddish tomatoes, preserved exclusively by physical means, the juice being strained free from skins, seeds and other coarse parts of tomatoes, and from other hard substances and impurities. The juice may be concentrated and later diluted.

2. ESSENTIAL COMPOSITION AND QUALITY FACTORS

2.1 Soluble Tomato Solids (exclusive of added sugar and salt)

The soluble tomato solids content of tomato juice shall be not less than 4.5°Brix determined by refractometer at 20°C, uncorrected.

2.2 Sugars

The following sugars may be added: sucrose, dextrose and dried glucose syrup, as defined by the Codex Alimentarius Commission.

2.3 Salt

The addition of salt is permitted.

2.4 Organoleptic Properties

The product shall have the characteristic colour, aroma and flavour of tomato juice.

2.5 Use of Concentrate

The addition of concentrate to juice is permitted.

3. CONTAMINANTS

3.1 Pesticide Residues

The product shall comply with such requirements as may be specified by the Codex Committee on Pesticide Residues.

3.2 Other contaminants

3.2.1 The following provisions in respect of contaminants other than pesticide residues have been endorsed by the Codex Committee on Food Additives:

3.2.1.1	<u>Contaminant</u>		<u>Maximum level</u>
	Arsenic	(As)	0.2 mg/kg
	Lead	(Pb)	0.3 mg/kg

Copper	(Cu)	5 mg/kg (to be endorsed)
Zinc	(Zn)	5 mg/kg (to be endorsed)
Iron	(Fe)	15 mg/kg
[Cadmium	(Cd)]	to be considered
Tin	(Sn)	[250 mg/kg](not endorsed)

3.2.1.2 Total metal content precipitable by potassium hexacyano-ferrate (II) 17 mg/kg expressed as Fe

3.2.2 Mineral impurities insoluble in 10% hydrochloric acid shall not exceed 25 mg/kg.

4. HYGIENE

4.1 The following provisions in respect of the food hygiene of this product are subject to endorsement by the Codex Committee on Food Hygiene:

- 4.1.1 Micro-organisms capable of development - None under normal conditions of storage
- 4.1.2 The product shall be free from any pathogen infectious to man and from any toxic substance originating from micro-organisms. (This requirement is subject to review after information is received from the WHO Expert Committee on Hygiene (Food Microbiology)).
- 4.1.3 Mould filaments - The maximum percentage of positive fields shall be 30% using the Howard Mould Count Method.

4.2 It is recommended that the products covered by the provisions of this standard be prepared in accordance with the Code of Hygienic Practice for Canned Fruit and Vegetable Products.

5. LABELLING

- 5.1 The provisions of Section 2.1 to 2.5, 2.7 to 2.9 and 2.11 to 2.12 of the General Standard for the Labelling of Prepackaged Foods shall apply.
- 5.2 The following specific provisions in respect of the labelling of the product are subject to endorsement by the Codex Committee on Food Labelling:
 - 5.2.1 The name of the product shall be "tomato juice".
 - 5.2.2 The addition of sugars shall be declared on the label.
 - 5.2.3 The words "Salt added" shall be declared on the label when salt has been added.
 - 5.2.4 For the representation of fruit and fruit juices, only tomatoes and tomato juice may be represented on the label.

6. METHODS OF ANALYSIS AND SAMPLING

The methods of analysis and sampling described hereunder are international referee methods which are to be endorsed by the Codex Committee on Methods of Analysis and Sampling. (Methods to be established.)

PROPOSED DRAFT PROVISIONAL STANDARD FOR LEMON JUICE, READY FOR CONSUMPTION. PRESERVED EXCLUSIVELY BY PHYSICAL MEANS^a

(To be submitted to the Codex Alimentarius Commission
at Step 5 of the Procedure)

^a The Group of Experts does not take preservation by physical means to include ionizing radiation. This matter is being examined by other international bodies, including FAO/IAEA, and will then be re-examined by the Group of Experts when advice becomes available.

1. DESCRIPTION

Unfermented but fermentable juice, ready for direct consumption, obtained by a mechanical process from sound, ripe lemons (Citrus limon, Burm.f.) preserved exclusively by physical means. The juice may be concentrated and later diluted.

2. ESSENTIAL COMPOSITION AND QUALITY FACTORS

2.1 Soluble Solids

The soluble solids content of lemon juice shall be not less than 7.5°Brix determined by refractometer at 20°C, uncorrected.

2.2 Essential oils

The essential oils content shall not exceed 0.5 ml/kg]

2.3 Ethanol Content

The ethanol content shall not exceed 3 g/kg.

2.4 Organoleptic Properties

The product shall have the characteristic colour, aroma and flavour of lemon juice. The restitution of natural lemon juice flavour to lemon juice from which the flavour has been removed is allowed,

2.5 Use of Concentrate

The addition of concentrate to juice is permitted. Only concentrate from Citrus limon Burm.f. may be used.

3. CONTAMINANTS

3.1 Pesticide Residues

The product shall comply with such requirements as may be specified by the Codex Committee on Pesticide Residues.

3.2 Other Contaminants

3.2.1 The following provisions in respect of contaminants other than pesticide residues have been endorsed by the Codex Committee on Food Additives:

3.2.1.1	<u>Contaminant</u>	<u>Maximum level</u>
	Arsenic (As)	0.2 mg/kg
	Lead (Pb)	0.3 mg/kg
	Copper (Cu)	5 mg/kg
	Zinc (Zn)	5 mg/kg
	Iron (Fe)	15 mg/kg
	[Cadmium (Cd)]	to be considered
	Tin (Sn)	[250 mg/kg](not endorsed)
3.2.1.2	Total metal content precipitable by potassium hexacyano-ferrate (II)	20 mg/kg expressed as Fe

4. HYGIENE

4.1 The following provisions in respect of the food hygiene of this product are subject to endorsement by the Codex Committee on Food Hygiene :

- 4.1.1 Micro-organisms capable of development - None under normal conditions of storage
- 4.1.2 The product shall be free from any pathogen infectious to man and from any toxic substance originating from micro-organisms. (This requirement is subject to review after information is received from the WHO Expert Committee on Food Hygiene (Food Microbiology)).
- 4.1.3 Mould filaments - Technologically unavoidable traces. The maximum percentage of positive fields to be specified later using the Howard Mould Count Method.

4.2 It is recommended that the products covered by the provisions of this standard be prepared in accordance with the Code of Hygienic Practice for Canned Fruit and Vegetable Products.

5. LABELLING

5.1 The provisions of Section 2.1 to 2.5, 2.7 to 2.9 and 2.11 to 2.12 of the General Standard for the Labelling of Prepackaged Foods shall apply.

5.2 The following specific provisions in respect of the labelling of the product are subject to endorsement by the Codex Committee on Food Labelling:

- 5.2.1 The name of the product shall be "lemon juice".
- 5.2.2 For the representation of fruit and fruit juices, only lemons and lemon juice may be represented on the label.

6. METHODS OF ANALYSIS AND SAMPLING

The methods of analysis and sampling described hereunder are international referee methods which are to be endorsed by the Codex Committee on Methods of Analysis and Sampling. (Methods to be established).

PROPOSED DRIFT PROVISIONAL STANDARD FOR GRAPEFRUIT JUICE. READY FOR CONSUMPTION, PRESERVED EXCLUSIVELY BY PHYSICAL MEANS^a

(To be submitted to the Codex Alimentarius Commission
at Step 5 of the Procedure)

^a The Group of Experts does not take preservation by physical means to include ionizing radiation. This matter is being examined by other international bodies, including FAO/IAEA, and will then be re-examined by the Group of Experts when advice becomes available.

1. **DESCRIPTION**

Unfermented but fermentable juice, ready for direct consumption, obtained by a mechanical process from the endocarp of sound, ripe grapefruit (Citrus paradi Macfadyen), preserved exclusively by physical means. The juice may be concentrated and later diluted.

2. **ESSENTIAL COMPOSITION AND QUALITY FACTORS**

2.1 **Soluble Grapefruit Solids**

The soluble grapefruit solids content of grapefruit juice shall be not less than 9°Brix determined by refractometer at 20°C, uncorrected.

2.2 **Sugars**

The following sugars may be added: sucrose, dextrose and dried glucose syrup, as defined by the Codex Alimentarius Commission. The quantity added shall not exceed 50 g/kg.

2.3 **Ethanol Content**

The ethanol content shall not exceed 3 g/kg.

2.4 **Essential Oils**

The essential oils content shall not exceed 0.3 ml/kg.

2.5 **Organoleptic Properties**

The product shall have the characteristic colour, aroma and flavour of grapefruit juice. The restitution of natural grapefruit juice flavour to grapefruit juice from which the flavour has been removed is allowed.

2.6 **Use of Concentrate**

The addition of concentrate to juice is permitted. Only concentrate from Citrus paradisi Macfadyen may be used.

3. **CONTAMINANTS**

3.1 **Pesticide Residues**

The product shall comply with such requirements as may be specified by the Codex Committee on Pesticide Residues;

3.2 Other Contaminants

3.2.1 The following provisions in respect of contaminants other than pesticide residues have been endorsed by the Codex Committee on Food Additives:

3.2.1.1	<u>Contaminant</u>	<u>Maximum level</u>
	Arsenic (As)	0.2 mg/kg
	Lead (Pb)	0.3 mg/kg
	Copper (Cu)	5 mg/kg
	Zinc (Zn)	5 mg/kg
	Iron (Fe)	15 mg/kg.
	[Cadmium (Cd)]	to be considered
	Tin (Sn)	[250 mg/kg](not endorsed)
3.2.1.2	Total metal content precipitable by potassium hexacyano-ferrate (II)	20 mg/kg, expressed as Fe

4. HYGIENE

4.1 The following provisions in respect of the food hygiene of this . product are subject to endorsement by the Codex Committee on Food Hygiene

4.1.1 Micro-organisms capable of development under normal conditions of storage - None

4.1.2 The product shall be free from any pathogen infectious to man and from any toxic substance originating from microorganisms. (This requirement is subject to review after information is received from the WHO Expert Committee on Food Hygiene (Food Microbiology)).

4.1.3 Mould filaments - Technologically unavoidable traces. The maximum percentage of positive fields to be specified later using the Howard Mould Count Method.

4.2 It is recommended that the products covered by the provisions of this standard be prepared in accordance with the Code of Hygienic Practice for Canned Fruit and Vegetable Products.

5. LABELLING

5.1 The provisions of Section 2.1 to 2.5, 2.7 to 2.9 and 2.11 to 2,12 of the General Standard for the Labelling of Prepackaged Foods shall apply.

5.2 The following specific provisions in respect of the labelling of the product are subject to endorsement by the Codex Committee on Food Labelling:

5.2.1 The name of the product shall be "grapefruit juice".

5.2.2 The addition of sugars shall be declared on the label.

5.2.3 For the representation of fruit and fruit juices, only grapefruit and grapefruit juice may be represented on the label;

6. METHODS OF ANALYSIS AND SAMPLING

The methods of analysis and sampling described hereunder are international referee methods which are to be endorsed by the Codex Committee on Methods of Analysis and Sampling. (Methods to be established).

PROPOSED DRAFT PROVISIONAL STANDARD FOR
FERMENTABLE CONCENTRATED APPLE JUICE

(To be submitted to the Codex Alimentarius Commission
at Step 5 of the Procedure)

1. DESCRIPTION

Unfermented but fermentable Juice, clear or turbid, obtained by mechanical extraction from sound, ripe apples, reduced in volume to not less than 20°Brix by physical removal of water, preserved exclusively by physical means. When diluted with water to 10°Brix the reconstituted apple juice meets the requirements specified in the Codex Standard for Apple Juice ready for consumption, preserved exclusively by physical means.

2. LABELLING

- 2.1 The provisions of Section 2.1 to 2.5, 2.7 to 2.9 and 2.11 to 2.12 of the General Standard for the Labelling of Prepackaged Foods shall apply.
- 2.2 The following specific provisions in respect of the labelling of the product are subject to endorsement by the Codex Committee on Food Labelling:
 - 2.2.1 The name of the product shall be 'Concentrated Apple Juice'
 - 2.2.2 Degree of concentration, given as degrees Brix, determined by refractometer at 20°C, uncorrected, or, in the case of consumer packs, the number of parts by volume of water which have to be added to one part by volume of the concentrate to obtain single strength juice.
 - 2.2.3 For the representation of fruit and concentrated fruit juices only apple and apple juice may be represented on the label.

PROPOSED DRAFT PROVISIONAL STANDARD FOR
FERMENTABLE CONCENTRATED ORANGE JUICE

(To be submitted to the Codex Alimentarius Commission
at Step 5 of the Procedure)

1. DESCRIPTION

Unfermented but fermentable juice, clear or turbid, obtained by mechanical extraction from sound, ripe oranges, reduced in volume to not less than 21°Brix by physical removal of water, preserved exclusively by physical means. When diluted with water to 10.5°Brix, the reconstituted orange juice meets the requirements specified in the Codex Standard for Orange Juice, ready for consumption, preserved exclusively by physical means.

2. LABELLING

- 2.1 The provisions of Section 2.1 to 2.5, 2.7 to 2.9 and 2.11 to 2.12 of the General Standard for the Labelling of Prepackaged Foods shall apply.
- 2.2 The following specific provisions in respect of the labelling of the product are subject to endorsement by the Codex Committee on Food Labelling:
 - 2.2.1 The name of the product shall be 'Concentrated Orange Juice'
 - 2.2.2 Degree of concentration, given as degrees Brix, determined by refractometer at 20°C, uncorrected, or, in the case of consumer packs, the number of parts by volume of water which have to be added to one part by volume of the concentrate to obtain single strength juice.
 - 2.2.3 For the representation of fruit and concentrated fruit juices only oranges and orange juice may be represented on the label.

PROPOSED DRAFT PROVISIONAL STANDARD FOR
FERMENTABLE CONCENTRATED GRAPE JUICE

(To be submitted to the Codex Alimentarius Commission
at Step 5 of the Procedure)

1. DESCRIPTION

Unfermented but fermentable juice, clear or turbid, obtained by mechanical extraction from sound, ripe grapes, reduced in volume to not less than 32°Brix by physical removal of water, preserved exclusively by physical means. When diluted with water to 16°Brix the reconstituted grape juice meets the requirements specified in the Codex Standard for Grape Juice ready for consumption, preserved exclusively by physical means.

2. LABELLING

- 2.1 The provisions of Section 2.1 to 2.5, 2.7 to 2.9 and 2.11 to 2.12 of the General Standard for the Labelling of Prepackaged Foods shall apply.
- 2.2 The following specific provisions in respect of the labelling of the product are subject to endorsement by the Codex Committee on Food Labelling:
 - 2.2.1 The name of the product shall be 'Concentrated Grape Juice'
 - 2.2.2 Degree of concentration, given as degrees Brix, determined by refractometer at 20°C, uncorrected, or, in the case of consumer packs, the number of parts by volume of water which have to be added to one part by volume of the concentrate to obtain single strength juice.
 - 2.2.3 For the representation of fruit and concentrated fruit juices only grapes and grape juice of the colour corresponding to the Juice may be represented on the label.