NOTE: This document incorporates Codex Circular Letter CL 1988/29-FJ
SUMMARY OF CONTENTS

Introduction 1-3
Adoption of the Agenda 4
Matters of Interest 5-13
Progress Report on Acceptances 14
Consideration of Draft General Standard for Fruit Nectars Preserved Exclusively by Physical Means, at Step 7 15-36
Consideration of the Draft General Standard for Fruit Juices Preserved Exclusively by Physical Means 37-50
Consideration of Definition of Fruit Juices 51-59
Consideration of Draft Guidelines on Mixed Fruit Juices 60-67
Consideration of Draft Guidelines on Mixed Fruit Nectars 68-69
Consideration of Lactic Acid in Fruit Juices 70-72
Revision of Methods of Analysis 73-76
Consideration of Draft General Standard for Vegetable Juices and Vegetable Nectars, at Step 4 77-93
Revision of Labelling Provisions in Codex Standards 94-95
Future Work Programme 96-98
Election of Officers 99
Other Business 100
Adoption of the Report 101
Summary Status of Work

APPENDICES

I List of Participants 15-18
II Draft General Standard for Fruit Nectars Preserved Exclusively by Physical Means Not Covered by Individual Standards 19-22
III Draft General Standard for Fruit Juices Preserved Exclusively by Physical Means Not Covered by Individual Standards 22-25
V Draft Guidelines on Mixed Fruit Nectars 26-29
VI Draft Guidelines on Mixed Fruit Juices 29-32
VII Proposed Draft General Standard for Vegetable Juices 33-36
VIII Report of the Working Group on the Revision of Methods of Analysis for Fruit Juices 36-37
IX Methods of Analysis and Sampling for Fruit Juices 37-40
X Proposed Consequential Amendments to Codex Standards 40-41
TO:  
- Codex Contact Points  
- Participants at the 18th Session of the Joint ECE/Codex Alimentarius  
  Group of Experts on Standardization of Fruit Juices  
- Interested International Organizations  

FROM:  
Chief, Joint FAO/WHO Food Standards Programme, FAO, 00100 Rome,  
Italy  

SUBJECT:  
Distribution of the Report of the 18th Session of the Joint ECE/Codex  
Alimentarius Group of Experts on Standardization of Fruit Juices (ALINORM  
89/14; AGRI/WP.1/GE.4/17)  

The report of the 18th Session of the Joint ECE/Codex Group will be considered  
y by the 18th Session of the Codex Alimentarius Commission to be held in Geneva from 3- 

PART A  
MATTERS OF INTEREST TO THE 18TH SESSION OF THE CODEX  
ALIMENTARIUS COMMISSION  

(1)  
Draft Standards at Step 8 of the Procedure  
The following draft standards have been submitted to the 18th Session of the  
Commission at Step 8 of the Procedure:  

(a)  
Draft General Standard for Fruit Nectars preserved exclusively by physical  
means, not covered by individual standards  
(paras. 15-36 and Appendix II, ALINORM 89/14)  

(b)  
Draft General Standard for Fruit Juices preserved exclusively by physical means,  
not covered by individual standards  
(paras 37-50 and Appendix III, ALINORM 89/14)  

Governments wishing to propose amendments to the above two Draft Standards  
should do so in writing, in conformity with the Guide to the Consideration of Standards at  
Step 8 (see 6th Edition of the Procedural Manual of the Codex Alimentarius  
Commission) to the Chief, Joint FAO/WHO Food Standards Programme, FAO, Via delle  
Terme di Caracalla, 00100 Rome, Italy not later than the end of February 1989.  

(2)  
Proposed Draft Standard at Step 5  
- Proposed Draft General Standard for Vegetable Juices preserved exclusively  
by physical means (paras 77-93 and Appendix VII, ALINORM 89/14)

(3) Revision of Codex Methods of Analysis for Fruit Juices and Fruit Nectars

Recommendations for amendments to Part IV of Volume X of the Codex Alimentarius containing methods of analysis for fruit juices and fruit nectars are given in Appendix IX to ALINORM 89/14 (see also paras 73-76 and Appendix VIII, ALINORM 89/14). The Commission is requested to adopt these recommendations.

(4) Proposed Amendments to Codex Standards for Fruit Juices and Fruit Nectars

The amendments included in Appendix X to ALINORM 89/14 refer mainly to the labelling sections of Codex standards for fruit juices and fruit nectars. The amendments are intended to bring these standards into line with the revised Codex General Standard for the Labelling of Prepackaged Foods and the General Standards for Fruit Juices and Fruit Nectars, at Step 8 (see (1) above). The Commission is requested to regard the proposed amendments as being consequential and adopt them in accordance with para 2 of the "Guide to the Procedure for the Revision and Amendment of Codex Standards" (Procedural Manual of the Codex Alimentarius Commission, 6th Ed.), following adoption of the General Standards for Fruit Juices and Fruit Nectars mentioned above.

(5) Draft Guidelines on Mixed Fruit Juices and Mixed Fruit Nectars

The Commission is requested to note that these Guidelines (see part B(1) below) are being developed by the Joint ECE/Codex Group of Experts and to decide what procedure should be followed in their further elaboration (paras 67, 69, ALINORM 89/14).

PART B REQUEST FOR COMMENTS AND INFORMATION FROM GOVERNMENTS

(1) Draft Guidelines on Mixed Fruit Juices
(paras 60-67 and Appendices IV and VI, ALINORM 89/14)

(2) Draft Guidelines on Mixed Fruit Nectars
(paras 68-69 and Appendices IV and V, ALINORM 89/14)

Governments and Interested International Organizations are invited to send their comments on the above two Guidelines to Mr. M. Canon, Joint Secretary of the Joint ECE/Codex Alimentarius Group of Experts on Standardization of Fruit Juices, Joint ECE/FAO Agriculture and Timber Division (JEUR), Palais des Nations, CH-1211 Geneva 10, Switzerland with a copy to the Chief, Joint FAO/WHO Food Standards Programme, Via delle Terme di Caracalla, 00100 Rome, Italy not later than the end of July 1989.

(3) New Technological Processes used in the Preparation of Fruit Juices
(paras 51-597 ALINORM 89/14)

Governments and Interested International Organizations are requested to send information on new processes used by the fruit juice industry to the secretariat (see address under Part B (1) and (2) above).
(4) **Lactic Acid in Fruit Juices**  
(paras 70-72, ALINORM 89/14)  
Governments interested in the establishment of limits for lactic acid in fruit juices are invited to provide information to the Secretariat (see address under Part B (1) and (2) above.)
INTRODUCTION

1. The Joint ECE/Codex Alimentarius Group of Experts on Standardization of Fruit Juices held its 18th Session in the Palais des Nations, Geneva, Switzerland, from 16 to 20 May 1988 under the Chairmanship of Professor Dr. W. Pilnik (Netherlands).

2. The Session was attended by 55 participants, including delegations from Argentina, Australia, Austria, Belgium, China, Cuba, Denmark, Finland, France, Germany, Federal Republic of, Greece, Hungary, Ireland, Israel, Italy, Japan, Madagascar, The Netherlands, Poland, Portugal, Spain, Sweden, Switzerland, Turkey, United Kingdom, United States of America and Yugoslavia. Observers were present from the European Economic Community (EEC), the International Federation of Fruit Juice Producers (IFJU) and the Confédération des Industries Agroalimentaires de la CEE (CIAA). The list of participants, including officers from FAO and the UNECE is attached as Appendix I to this report.

3. The Group of Experts was informed of the passing away of Dr. Robert Weik (USA) who had been associated with the work of the Group for many years and who had made a significant contribution towards the standardization of fruit juices. Dr. Weik had been well liked by all and his untimely death was received with deep regret by the Group of Experts. The delegation of the USA was requested to convey the Group's sincere sympathy to Dr. Weik's family.

ADOPTION OF THE AGENDA

4. The provisional agenda was adopted without change. The Group of Experts decided to set up an ad hoc working group on methods of analysis under the chairmanship of Professor H. Woidich (Austria) with the participation of delegations from Australia, France, Germany, Federal Republic of, Israel, Spain, Switzerland, United Kingdom and the United States of America.

MATTERS OF INTEREST

5. The Group of Experts had before it matters of interest arising from reports of the Codex Alimentarius Commission and of Codex Committees. It also received a report on the progress on acceptances. The working paper before the Group of Experts was: CX/FJ 88/2 (AGRI/WP.1/GE.4/R.85).

Matters arising from the Seventeenth Session of the Codex Alimentarius Commission

6. The Group of Experts noted that the Commission, at its last session, had returned the Draft General Standard for Fruit Nectars (ALINORM 87/14, App.II) to Step 6 of the Procedure. The main issue which had been discussed by the Commission was the proposal by the Group of Experts that the addition of sugars in the preparation of fruit nectars should be optional. The Group of Experts also noted that the Draft General Standard for Fruit Juices (ALINORM 87/14, App.III) had been advanced to Step 6 of the Procedure and that the provision for hydroxymethylfurfural and related methodology had been deleted from the Codex standards on fruit nectars.

7. The Commission had assigned the task of elaborating a general standard for vegetable juices and vegetable nectars to the Group of Experts and had requested government comments on the text included in Appendix V, ALINORM 87/14. Following discussion of a working paper on the subject of fruit-based drinks with a high fruit content, the Commission had concluded that the elaboration of a standard for such products did not meet the criteria for the establishment of work priorities and that work on such a standard should not be proceeded with (paras. 398-404, ALINORM 87/39).
8. The Group of Experts noted that the Commission had clarified the obligations falling on Governments accepting Codex Standards with respect of methods of analysis included in such standards (para. 139, ALINORM 87/39 and App.IV, ALINORM 87/33). The Group of Experts agreed that this matter should be considered by the Working Group on Methods of Analysis (see para. 73).

Matters arising from the Codex Committees on Food Additives and Contaminants and Pesticide Residues

9. The Group of Experts was informed of action taken by the Codex Committee on Food Additives and Contaminants concerning the endorsement of provisions for contaminants and food additives in the Draft General Standards for Fruit Juices and Fruit Nectars. It was noted that this matter would be considered when discussing the draft standards concerned.

10. The Group of Experts recalled that it had referred the question of arsenic in fruit juices arising possibly from the use of arsenical pesticides to the Codex Committee on Pesticide Residues (para. 126, ALINORM 87/14). It was informed that the question of the use of arsenicals on fruits had been referred to governments by the Codex Committee on Pesticide Residues with a view to determining to what extent fruit juices might be a possible source of intake of arsenicals. The secretariat indicated that, as a general rule, the Codex Committee on Pesticide Residues established maximum limits for pesticide residues on raw agricultural commodities rather than in processed foods such as fruit juices. It was agreed to await developments.

Matters arising from the Codex Committee on General Principles

11. The Group of Experts was informed that the Codex Committee on General Principles had concluded that the national Codex secretariat of host countries, in consultation with the Codex secretariat, should be invited to undertake regular reviews of Codex standards and to report from time to time to the Commission. In this connection, food additives and labelling were specifically mentioned (paras. 19 to 26, ALINORM 87/33). This view had been endorsed by the Commission. It was noted that, in the case of the Group of Experts on Fruit Juices, this review process would involve the joint ECE/CODEX secretariat.

12. The Group of Experts noted that the Codex Committee on General Principles had discussed the question of trade barriers created by the existence of national labeling requirements additional to those in the Codex General Standard for the Labelling of Prepackaged Foods (CODEX STAN 1-1985) and had recommended that a footnote be included in the General Standard requiring governments to indicate these additional labeling provisions when notifying acceptance of Codex commodity standards.

Matters of interest arising from the UN/ECE

13. The secretariat informed the Group of Experts that the Working Party on Standardization of Perishable Produce had endorsed the development of a general standard for vegetable juices and nectars (AGRI/WP.1/43, para. 24).

PROGRESS REPORT ON ACCEPTANCES

14. The secretariat informed the Group of Experts of notifications of acceptance received since the last session of the Group of Experts. The details of these notifications are given in part B of document CX/FJ 88/2 (AGRI/WP.1/GE.4/R.85). While the number of replies during the last two years had been rather limited, the replies which had been received, were positive. The secretariat indicated that it was giving consideration to ways
of improving the situation with respect to the acceptance of Codex standards in general. The delegation of Switzerland informed the Group of Experts that Switzerland had notified its position with respect to the Codex Standards for Fruit Juices and Fruit Nectars, indicating specified deviations, under paragraph 4.B of the General Principles of the Codex Alimentarius rather than para. 4.A. The position of Switzerland should, therefore, not be regarded as "acceptance with specified deviations".

**CONSIDERATION OF MATT GENERAL STANDARD TOE FRUIT NECTARS PRESERVED EXCLUSIVELY BY PHYSICAL MEANS, AT STEP 7**

15. The Group of Experts had for its consideration Appendix II of ALINORM 87/14, the above general standard, and comments received from governments in response to Circular Letter CL 1987/47(FJ) in document CX/FJ 88/3 (AGRI/WP.1/GE.4/R.86) and Add. 1 and 2 (Cuba, Ireland, Switzerland, Thailand, United States of America and France).

16. The Chairman noted that the remaining question to be resolved in the draft standard concerned whether sugar "may" be added to nectars (Section 3.2.1) as agreed at the Seventeenth Session (ALINORM 87/14, paras. 68-73) or whether the original wording "shall" should remain. The Commission (ALINORM 87/39, paras. 382-388) had returned the **Draft General Standard for Fruit Nectars** to the Group of Experts for further discussion of this point.

**Section 1 - SCOPE**

17. The Group of Experts considered that further precision was needed concerning the scope of the General Standard and **agreed** to add "species" to the wording of this section as follows:

   **Scope**
   "This standard applies to pulpy and non-pulpy fruit nectars, made from fruit of a single species, as defined in Section 2. However, this standard does not apply to any nectar which is subject to a specific Codex Commodity Standard".

**Section 3.1 - Minimum Content of Fruit Ingredient**

18. It was noted by the Group of Experts that provisions had been made in Section 3.1 (Minimum Content of Fruit Ingredient) for those fruits, not covered by specific standards, having a high acidity or strong flavour which made a lower fruit content necessary. The delegation of Cuba was of the opinion that pulp content should also be a criterion for determining fruit content. The delegation of Cuba was supported by Yugoslavia on this point. The Group of Experts **decided** to add reference to "high pulp content" to address this point as follows:

   3.1. The product shall contain not less than 50% m/m of single strength fruit ingredient or the equivalent derived from any concentrated fruit ingredient, except in cases where high acidity, high pulp content or strong flavour make lower content necessary. In no case shall the content of the fruit ingredient be less than 25% m/m.

**Section 3.2 - Sugars**

19. Attention was drawn to certain nectars of very sweet fruit which would not benefit from sugars being added. The delegation of Switzerland pointed out that, as the addition of sugar was required in other standards for specific nectars, those not having sugar added should be regarded as "diluted fruit juices" rather than nectars, and labeled accordingly.
20. The delegation of the Federal Republic of Germany reported that discussions were taking place in the European Economic Community (EEC) concerning nectars not having sugars added and a list of such fruits had been considered as an Annex of exceptions to the Community Standard. The delegations of Yugoslavia and Sweden preferred to have the option of adding sugars to nectars for both nutritional and technological reasons, noting the possibility of special nectars without sugars added. However, other delegations (Switzerland and Belgium) considered that, as the addition of sugars was a particular criterion in differentiating nectar from diluted fruit juice, it would create considerable difficulties for trade should products be labelled as nectar "without sugars added".

21. The delegation of the Netherlands suggested that the "total sugar content" should be stated on the label along with the "total fruit content".

22. The Group of Experts reconsidered its earlier decision that the addition of sugars should be optional and agreed to replace "may" with "shall", making the addition of sugars to nectar mandatory and to reintroduce reference to sugars or honey in the Description (Section 2). It was further agreed that, in light of ongoing discussions in the Community, and the possibility of further developments concerning this point, the definition may need to be reconsidered in the future.

Section 3.3 - Lemon or Lime Juice

23. The Group of Experts discussed at length the comment of the delegation of France (Addendum 2) to include in the list of Ingredients the addition of lemon or lime juice, added as an acidifying agent (Section 3.3). The delegation of the United Kingdom, noting Section 3.6 - Organoleptic Properties, was of the opinion that the addition of such juices may affect the flavour and as such should be mentioned in the name of the product as well as in the list of ingredients. The delegation of the Netherlands recalled an earlier decision of an ad hoc working group on labelling set up during the 17th Session that lemon or lime juice used in small quantities could be considered as a technical ingredient not to be included in the list of ingredients.

24. The delegation of the United States of America considered that a small amount of lemon or lime juice would be a characterizing ingredient in accordance with the Codex General Standard for the Labelling of Pre-packaged Foods and, because of its strong flavouring characteristics should be mentioned in the name of the product. The delegations of Switzerland, France, Italy and Spain considered that lemon and lime juices would be used in very small amounts for the same purpose as the acids provided for in Section 4 and that, therefore, they should only appear in the list of ingredients.

25. The representative of the European Economic Community reported that, in regard to Community Standards for peach and pear nectars, lemon or lime juice did not appear in the name of the product, as the portion added to nectars was very small. She also reported that this provision might be extended to certain other nectars.

26. The Group of Experts agreed that, whenever lemon or lime juice affects the fruit flavour of the product, they should appear in the name of the product and revised Section 3.3 Lemon or lime juice to read as follows:

   "Lemon juice or lime juice may be added as an acidifying agent in quantities which would not impart a characterizing fruit flavour".

27. The Group of Experts agreed that this wording should also be added to individual standards for other nectars.
28. The delegation of the Federal Republic of Germany, supported by the representative of the European Economic Community, noted that Community Regulations only allowed the addition of malic acid or lactic acid to apple and pear nectars where there were national derogations. The Group of Experts noted that malic and citric acids were permitted in the Codex Standard as optional acidifying agents.

29. In further discussing the addition of lemon or lime juice to nectars, suggestions to refer to Good Manufacturing Practices (GMP) in Section 3.3 or to add a reference to Section 3.6 (Organoleptic Properties) were not considered to meet the intention of the Group of Experts in revising this section.

Section 5 - CONTAMINANTS

30. The delegations of Poland, supported by Switzerland, France, Sweden, the Federal Republic of Germany, Finland and the representative of the EEC, expressed their preference for a lower maximum level for tin (Sn), depending on the packaging and taking into account their national legislation. The delegation of Australia was strongly in favour of a maximum level of 250 mg/kg. The delegation of Poland also suggested the establishment of a lower maximum level for copper (Cu). As this point remains under review in the Codex Committee on Food Additives and Contaminants, the Group of Experts did not discuss this point further.

Section 8 - LABELLING

Section 8.2.1

31. The Group of Experts agreed that wording which had been accepted in the Draft General Standard for Fruit Juices \(^1\) should also be included in the Draft General Standard for Nectars and the Codex Standards for individual nectars as consequential amendments.

\(^1\) Note by the Secretariat: the wording referred to is reference to Section 4.2 of the Codex General Standard for the Labelling of Prepackaged Foods.

Section 8.2.2

32. The Group of Experts agreed with the request of the Codex Committee on Food Labelling (CCFL) as reported in CX/FJ 88/13 (AGRI/WP.1/GE.4/R.96) that this section could be deleted as the declaration of L-ascorbic acid was considered to be fully covered by Section 4.2 of the Draft General Standard for Labelling of Prepackaged Foods (para. 149, ALINORM 87/22).

33. The Group of Experts agreed that this change should also be made in the Codex Standards for individual fruit nectars.

Section 8.8

34. The Group of Experts accepted the request of the Codex Committee on Food Labelling to add a provision in the Draft General Standard for Fruit Nectars and, consequentially, in the Codex Standards for individual fruit nectars requiring that irradiated ingredients be labelled in accordance with Section 5.2.2 of the General Standard for the Labelling of Prepackaged Foods (para. 151, ALINORM 87/22).

Non-retail containers

35. The Group of Experts agreed to take into consideration the decisions of the Codex Committee on Food Labelling concerning non-retail containers (paras. 97-107, 159, ALINORM 87/22) and to also apply them in the Codex Standards for individual fruit nectars. The secretariat, assisted by the delegation of Switzerland, was requested to
arrive at an acceptable proposal during the session for the consideration of the Group of Experts (see para. 49).

Status of the Standard

36. The Group of Experts advanced the Draft General Standard for Fruit Nectars Preserved Exclusively by Physical Means to Step 8 of the Procedure. The revised document is contained in Appendix II of this Report.

CONSIDERATION OF THE DRAFT GENERAL STANDARD FOR FRUIT JUICES PRESERVED EXCLUSIVELY BY PHYSICAL MEANS

37. The Group of Experts had before it the above Draft Standard in App.III, ALINORM 87/14 and comments from Governments in working paper CX/FJ 88/4 (AGRI/WP.1/GE.4/R.87) and Addendum 1 and 2.

Section 1 - SCOPE

38. It was agreed to specify in the Scope section that the standard applied to fruit juices “from one single species of fruit” (see para. 17).

Section 3.2 - Sugars

39. The delegations of Sweden and Switzerland considered the maximum limit of 100 g/kg added sugars to be too high and preferred a limit of 50 g/kg. Thailand, in its written comments, and the delegation of Finland were of the opinion that, for some very acid juices more than 100 g/kg would be required. The delegation of Belgium also had reservations about the limit of 100 g/kg. The delegation of the Federal Republic of Germany, supported by some delegations as well as by the representative of the EEC, suggested that a maximum level of 200 g/kg could be permitted in some acid juices, reserving the limit of 100 g/kg for other juices. The Committee adopted the proposal of the Federal Republic of Germany.

40. Noting that the standard permitted the use of concentrates and added water in the preparation of the fruit juice, the Group of Experts agreed with the suggestion of the delegation of Belgium to permit the use of liquid sugars, it being understood that any water added with the sugar would be accounted for in the amount of added water required for reconstitution. The Group of Experts noted that the EEC also permitted the use of liquid sugars for reconstituted fruit juices. The text as adopted is as follows: "One or more of the solid sugars, and in the case of reconstituted juices, one or more of the sugars as defined by the Codex Alimentarius Commission may be added in amounts not exceeding 100 g/kg, except for very acid fruits, where 200 g/kg is permitted. The addition of sugars is not permitted when the juice has been acidified in accordance with Sections 4.1 and 4.2".

Section 3.3 - Ethanol content

41. The delegation of Switzerland drew the Group of Experts’ attention to a Customs and Tariffs agreement, supported by 88 countries, which defined as "non-alcoholic" products having an ethanol content of not more than 0.5% by volume. The Group of Experts discussed whether the limit for ethanol should not be reduced so as to prevent problems in trade. It noted that, with some juices, e.g. from certain berries, it would be difficult to comply with the limit set under the Customs and Tariffs agreement which was equivalent to approximately 0.38% by weight. The Group of Experts decided that the maximum levels for ethanol content included in the various standards should not be changed since they were based on technological considerations. Fruit juices containing
small quantities of ethanol should not be considered as alcoholic beverages. This matter should be brought to the attention of the Codex Alimentarius Commission.

Section 4 - FOOD ADDITIVES

42. The delegation of the Federal Republic of Germany reserved its position concerning the use of citric and malic acids. The delegations of Poland and Portugal indicated that a maximum level of 300 g/kg for L-ascorbic acid as an antioxidant would be preferred. The Group of Experts noted these remarks but decided not to make any change to this Section.

Section 5 - CONTAMINANTS

43. The delegations of Finland, France, Germany, Fed. Rep. of, Poland, Portugal, Sweden and Switzerland expressed the view that a maximum level of 150 mg/kg should be set for tin. The Group of Experts noted the written comments of Thailand and the statement of the delegation of Spain that, given the conditions under which fruit juices were marketed in many countries, a maximum level under 200 mg/kg would cause problems in trade. The delegation of Australia considered that the maximum level for tin (Sn) content should be 250 mg/kg. The Group of Experts also noted that the maximum level of 200 mg/kg had been endorsed by the Codex Committee on Food Additives and Contaminants but that both these maximum levels and the one for lead would remain under review and would be reconsidered in the light of further developments. This would possibly lead to a lowering of the maximum levels.

Section 8.1.2 - (concerning added sugars)

44. The Group of Experts discussed the various alternative versions which had been included under this section at the last session. It was informed that the EEC had a preference for a declaration of added sugars without specifying the sugar or sugars used. It also required the declaration that the fruit juice had been sweetened with "x" per cent sugars where "x" is the amount of sugars added in excess of 15 g/kg. This approach was supported by several delegations. The delegation of Switzerland, supported by the delegation of United States of America, stated that fruit juices should, in principle, not be sweetened. However, where this was required for the correction of organoleptic properties, any amount added should be declared in connection with the name of the juice. On the issue of whether the word "sweetened" should be used or reference be made to "added sugars", the delegation of the United Kingdom explained that the expression "sweetened" in English implied the use of any sugar or sweet substance. Regarding the term "sugar" it was noted that the Codex General Standard on Labelling defined "sugar" as various types of sucrose and did not include other mono and di-saccharides, for the purpose of declaration in a list of ingredients.

45. The Chairman of the Group of Experts suggested that the first version given in section 8.1.1 of the Draft Standard be adopted. This version corresponded to the declaration of added sugars in the name of the product in other Codex Standards for fruit juices. Furthermore, this version allowed the use of the expression "sweetened" and it was always possible to include on the label any additional information such as that required under the EEC Regulation. The Chairman also suggested that the use of the word "sugar(s)" should also be permitted to indicate any sugar defined by the Codex Alimentarius Commission.

46. The Group of Experts agreed to adopt the first version included under section 8.1.1 with the amendments suggested by the Chairman of the Group of Experts, as follows: "if the quantity of added sugar or sugars exceeds 15 g/kg the words "x added"
shall plainly and conspicuously accompany the name of the product where "x" represents the name or names of the sugar or sugars added, or the word sugar(s). Instead of the term "x added" the term "sweetened" may be used".

Section 8.2.2 - (Addition of L-Ascorbic Acid)

47. The Group of Experts deleted this section on the advice of the Codex Committee on Food Labelling.

New Section on Irradiation

48. The Group of Experts agreed to include a provision requiring that a declaration of the raw material having been irradiated be made on the label in accordance with Section 5.2.2 of the General Standard on Labelling.

49. The Group of Experts received a report from the secretariat and the delegation of Switzerland on the question of the labelling of non-retail containers (see para. 35). It agreed that the wording included in Section 8.10 of the Draft General Standards for Fruit Juices as well as in the Draft General Standards for Fruit Nectars was in conformity with the Guidelines on Labelling for Codex Committees and covered the essential information to be included with non-retail containers, except that information on irradiation should also be referred to in the section.

Status of the Standard


CONSIDERATION OF DEFINITION OF FRUIT JUICES

51. The Group of Experts considered a paper (App.I, ALINORM 85/14) prepared by the Chairman and the late Dr. H.J. Bielig which had served as the basis for discussions of this point in earlier sessions. In presenting the paper, the Chairman stressed the value of technological progress and pointed out the danger of limiting or blocking such progress in fruit juice manufacture by defining technical procedures in the mandatory Codex standards. He recalled past examples of technological advances which had improved previously unacceptable technologies, such as the concentration of tomato juice for reconstitution. Earlier preferences of delegations to base standards on the mechanical process were considered by the Chairman to limit industry accessibility to new technology and he questioned whether the mechanical process should be the only process to appear in the definition.

52. The delegation of Switzerland, while recognizing the scientific point of view put forward in the paper, declined to go along with the proposed definition as it was considered to open the door to any type of production when their main concern was the quality of fruit juices. Both the processes to be considered, and any affect or juice quality, remained to be determined. From the economic point of view, the delegation of Switzerland considered that the present serious situation of overproduction of fruit cast doubt on the need to increase yield by adopting new technology.

53. The delegation of Belgium considered that fruit juice processors would come forward should they consider the present standards as being restrictive and invited representatives of the fruit juice industry to express themselves. The representative of CIAA expressed concern for what new processes might be applied in place of the mechanical process and noted that the quality aspects of mechanical processing were important in the efforts of manufacturers' to improve quality.
54. The delegation of Yugoslavia expressed support for the proposed definition noting that the Group of Experts is the Committee where such changes which might influence industry should be considered. The delegation of the United Kingdom suggested that well-known methods be considered for certain fruits.

55. The delegation of Italy informed the Group of Experts that its national legislation did not provide for methods other than the mechanical process. The delegation of Spain, having discussed this point with processors, reported that its industry considered new processes could distort the market.

56. The delegations of the Federal Republic of Germany, France and China considered that they could agree to specific new methods such as the diffusion process (cold water) for certain fruits.

57. The delegation of Australia pointed out that new technologies were being used in various parts of the world which should be considered. He considered that should new processes be accepted, the Counter-Current Extraction Method (CCE) should be included and reported he would be prepared to consider preparation of a paper on the CCE Method. The secretariat, noting the broad make-up of countries participating in the Group of Experts, invited governments and industry to provide relevant information on any technological processes they considered of importance to provide experts with specific methods to consider. The Group of Experts expressed its agreement with this approach.

58. In response to a question by the delegation of Spain concerning whether progress had been made in determining the analytical make-up of juice, the Chairman reported advance methods of analysis (i.e. chemometry) which seemed to offer such possibilities.

59. The Chairman concluded that, while some delegations supported the proposed definition, and others a limited approach to new technological processes, the Group of Experts was not yet ready to move in that direction and closed the discussion on this item.

CONSIDERATION OF DRAFT GUIDELINES ON MIXED FRUIT JUICES

60. The Group of Experts had before it the above revised Draft Guidelines (CX/FJ 88/6 - AGRI/WP.1/GE.4/R.89) and government comments on them (CX/FJ 88/7 - AGRI/WP.1/GE.4/R.90 and Add.1). The following discussions took place.

Section 2 - DESCRIPTION

61. During the discussion of the purpose of the guidelines two approaches were considered, one suggested by the delegation of the Federal Republic of Germany supported by France and the representative of the EEC and another proposed by the delegation of Belgium. The delegation of the Federal Republic of Germany proposed that fruit juices, uncorrected for acidity without the addition of acids or sugars, should be used for preparing the fruit juice mix, which should then be adjusted for acidity or sugar content. The delegation of Belgium, on the other hand, held the view that mixing of fruit juices should involve only a blending of various fruit juices which were in conformity with either individual Codex standards or with the general standard. Both these approaches found support among the delegations.

62. The Group of Experts agreed that the fundamental issue of how the preparation of mixed fruit juices should be controlled had to be resolved before other questions such as those relating to compositional requirements and labelling could be discussed. It was
agreed that it would be preferable to discuss this highly technical question in a working group. The Group of Experts decided to set up such a group under the chairmanship of Dr. Pilnik and with the participation of the representatives of the EEC and CIAA and delegates from the following countries: Cuba, France, Germany, Fed. Rep. of, Hungary, Israel, the Netherlands, Poland, Portugal, Spain, Sweden, Switzerland, United Kingdom, United States of America and Yugoslavia.

63. Following the meeting of the Working Group (see Appendix IV), Dr. Pilnik reported that the Working Group had considered the draft guidelines on mixed fruit juices in detail and had concluded that the best way to approach the subject was to develop guidelines based on the Draft General Standard for Fruit Juices. The Working Group recommended that mixed fruit juices should be prepared starting with raw materials, as in the case with fruit juices. The addition of sugars would, therefore, be permitted only if the acidity of the fruit juice blend so required. However, a maximum of 100 g/kg only, would be needed in this type of product. The sections on food additives and contaminants would remain as in the General Standard for Fruit Juices, while the name of the product would be as in the Draft Guidelines under consideration. It would also be made clear on the label that the quantity of added sugars referred to the total in the finished product.

Section 4 - LABELLING

64. The Group of Experts, as well as the Working Group, discussed the question of whether it was reasonable to expect the label to refer to all fruit juice components in connection with the name. The point was made that this would make the name of the product unduly long especially since the various fruit juices in the product would also have to be included in the list of ingredients. Furthermore, certain minor components listed in connection with the name would give an erroneous impression to the consumer. It was also pointed out that some minor components had a strong flavour or aroma and that, therefore, listing fruits in descending order of their quantitative predominance would mislead the consumer. It was suggested that 5% should be set as a limit below which a fruit juice component should not appear in connection with the name of the product. This proposal did not find acceptance either by the Group of Experts or by the Working Group. It was recognized that the General Labelling Standard would protect the consumer from misleading claims on the label.

65. The Group of Experts agreed with the conclusions of the Working Group as stated in the above paragraph in relation to labelling and also agreed that the labelling section should be brought in line with that included in the General Standard on Fruit Juices.

66. The Group of Experts also agreed with the conclusions of the Working Group that the text of the General Standard for Fruit Juices be used as the basis of drawing up guidelines on mixed fruit juices which involved the inclusion of the various sections on food additives, contaminants, hygiene, weights and measures and analysis. The Chairman, with the assistance of the delegation of the United Kingdom, accepted to prepare the draft guidelines for inclusion in the report.
Status of the guidelines on mixed fruit juices

67. The Group of Experts agreed that the guidelines contained in Appendix VI should be submitted to governments for comments and that the Commission be informed that the Group of Experts was working on guidelines for mixed fruit juices. The secretariat was of the opinion that the guidelines should be elaborated in accordance with the Procedures for the Elaboration of Codex Standards in order to afford all member states, interested international organizations and the Commission the opportunity to contribute to the development of the guidelines. However, it was a matter for the Commission to decide what procedure should be followed in the development of Codex advisory texts.

CONSIDERATION OF DRAFT GUIDELINES ON MIXED FRUIT NECTARS

68. The Group of Experts received a report on the conclusions of the Working Group concerning the elaboration of guidelines for mixed fruit nectars (see Appendix IV). The Working Group had taken the General Standard for Nectars as the basis for developing the guidelines. In adapting the General Standard to mixed fruit nectars, the Working Group considered the question of minimum content of fruit ingredients but could not reach a firm conclusion on the percentages which might be appropriate. It decided to use the figures in the General Standard in the hope that comments from governments and the industry would be received justifying appropriate minimum fruit content to be included in the guidelines. The Working Group had deleted reference to the addition of lemon or lime juice as the use of these juices was already permitted in a mixed fruit nectar. As regards the section on Labelling, the Working Group had handled it in the same way as with the General Standard for Fruit Nectars and the Guidelines on Mixed Fruit Juices.

Status of the guidelines on mixed fruit nectars

69. The Group of Experts agreed with the conclusions of the Working Group and also agreed that the Guidelines on Mixed Fruit Nectars contained in Appendix V should be handled in the same way as the guidelines on mixed fruit juices (see para. 67).

CONSIDERATION OF LACTIC ACID IN FRUIT JUICES

70. The Group of Experts had before it working paper CX/FJ 88/10 (wrongly numbered as CX/FJ 88/14) (AGRI/WP.1/GE.4/R.97) and two written submissions from delegations providing information on levels of lactic acid in grape juice. The information from the Federal Republic of Germany and Switzerland indicated that less than 100 mg/kg would be present in grape juice. The representative of the International Federation of Fruit Juice Producers informed the Group of Experts that, with good manufacturing practice, it was practically impossible to avoid the presence of small quantities of lactic acid in some fruit juices.

71. The delegation of Switzerland, supported by the delegations of France and the Federal Republic of Germany, suggested that a maximum level of 0.5 g/kg should be included for lactic acid in the standard for grape juice in order to ensure that good manufacturing and good hygienic practices are followed. The point was made that lactic acid was not a contaminant but an indicator, like ethanol, of quality. The delegations of the United States of America, the Netherlands and Spain were not in favour of establishing a maximum level at this stage. The representative of the EEC informed the Group of Experts that lactic acid was not allowed to be added to fruit juices.

72. The Group of Experts agreed that data available to the meeting were not sufficient to justify the establishment of a maximum level for lactic acid and the selection
of an appropriate figure. It was, therefore, agreed not to pursue this matter further. It was understood that governments interested in the establishment of a limit for lactic acid could provide information to the Group of Experts for consideration at a future session.

REVISION OF METHODS OF ANALYSIS

73. The Group of Experts had before it a working paper CX/FJ 88/12 (AGRI/WP.1/GE.4/R.95) containing information on methods of analysis for fruit juices prepared by the Secretariat and the report of the ad hoc Working Group on Analysis (Ref. AGRI/WP.1/GE.4/CRP.21) (see para. 4).

74. The Chairman of the Working Group, Dr. H. Woidich (Austria), introduced the report of the Working Group. He outlined briefly the classification of Codex methods of analysis and the obligation falling on governments in accepting Codex Standards containing the various types of Codex methods. He informed the Group of Experts that the review of methods of analysis for fruit juices and nectars had now been completed. The Working Group had been able to recommend appropriate methods for most of the parameters which had remained from the previous review.

75. The representative of the CIAA expressed concern that no method of analysis existed for the determination of an important provision such as minimum fruit content. The delegation of Austria indicated that possibly in the next two years a chemometric method would be available to determine fruit content. The IFJU had not been able to propose a method for fruit content.

76. The Group of Experts adopted the report of the Working Group (see Appendix VIII) and agreed that the recommended methods of analysis be submitted to the Commission for adoption and inclusion in the relevant Codex Standards following endorsement by the Codex Committee on Methods of Analysis and Sampling. The Group of Experts thanked Dr. Woidich and the Working Group for their contribution.

CONSIDERATION OF DRAFT GENERAL STANDARD FOR VEGETABLE JUICES AMP VEGETABLE NECTARS, AT STEP 4

77. The Group of Experts had before it the Proposed Draft General Standard (Appendix V, ALINORM 87/14) and government comments as presented in document CX/FJ 88/11 and Add. 1 and 2. Introducing the document for discussion, the Chairman reminded the Group of Experts that vegetable juices addressed by individual Codex standards were not included in the Draft General Standard.

78. The delegation of the Netherlands, supported by Switzerland, noted the absence of trade figures on vegetable nectars and questioned whether the small production warranted including nectars in the General Standard. The delegation of Belgium agreed that production was scant and noted that these might in fact be "diluted juices" considering the fact that fruit nectars require sweetening. The Group of Experts decided to delete references to vegetable nectar of the Draft General Standard. The delegation of the USA did not consider that there was a need for a standard for vegetable juices or nectars. The delegation of France requested that lactic acid fermented juices should not be included in the standard.
Section 2 - DESCRIPTION

79. The delegation of Cuba suggested that there should be reference to pulp content in the definition of vegetable juices. It was noted by the Group of Experts that in the Spanish text the following sentence had been omitted: "It may be clear, turbid or pulpy".

80. The delegation of Switzerland, supported by France, proposed to have the standard apply only to vegetable juices obtained by a mechanical process. However, delegations accepted the view of the Chairman that the mechanical process should not be decisive for vegetable juices.

81. Group of Experts accepted the suggestion of the delegation of the United Kingdom to define "vegetables" as follows:

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

The delegation of the United Kingdom also suggested that fruits be exempted from this definition.

Section 3.4 - Ingredients

82. The delegation of Belgium considered that the amount of salt added to vegetable juice should be limited in a manner similar to that for sugar in the fruit juice standards (e.g. 10 g/litre of table grade salt). The delegation of Switzerland, supported by France, considered that salt would be a self-limiting ingredient. It was agreed that Section 3.4(a) should refer to Food Grade Salt.

83. The Group of Experts accepted the suggestion of Poland that the same provision should apply for honey added to vegetable juice as for fruit juice, namely that it should be mentioned in close proximity to the name of the product.

84. In Section 3.4 (b) Vinegar, the Group of Experts deleted the exception concerning lactic acid fermentation and accepted the proposal of the delegation of Switzerland to add an additional sub-section (f) whey (petit lait), as follows:

(f) whey or lactoserum having undergone lactic fermentation, not more than 100 g/kg.

Section 4 - FOOD ADDITIVES

85. The Group of Experts accepted the proposal of the delegation of Switzerland to add the following list of thickening agents (0.5 g/kg to this section and placed these in square brackets to indicate that discussion was invited.

Agar
Alginic acid and their salts
Carrageenan
Guar gum
Gum Arabic
Locust bean gum
Karaya gum
Pectins
Gelatine
Tara gum

0.5 g/kg singly or in any combination
The Group of Experts also decided to place Section 4.3 Lactic acid in square brackets.

Section 5 - CONTAMINANTS

86. The Group of Experts agreed with the delegation of Yugoslavia that the 25 g/kg for mineral impurities should be increased to 100 mg/kg considering that some vegetables were difficult to completely clean before processing. Delegations also agreed that this figure should be placed in square brackets.

87. The delegation of Sweden considered that the maximum level for tin should be lowered from 250 mg/kg to 200 mg/kg as in the General Standard for Fruit Juices. The delegations of Poland, the Federal Republic of Germany, France, Switzerland and Japan expressed their preference for a maximum of 150 mg/kg. The delegation of Australia considered that the maximum should remain at 250 mg/kg. The delegation of Poland was of the opinion that the maximum level for copper (Cu) should be lowered.

88. The delegation of the United States recalled an earlier general recommendation by the Codex Committee on Food Additives and Contaminants of a maximum tin level of 200 mg/kg and the Group of Experts agreed to lower the maximum level for tin to 200 mg/kg while awaiting the recommendations of the Codex Committee on Food Additives and Contaminants and the Joint FAO/WHO Expert Committee on Food Additives. Asterisks were placed after Section 5.6 Lead and Section 5.6 Tin to indicate these figures remained under consideration.

Section 7.1 - Name of the Food

89. The Group of Experts accepted the proposal of the delegation of Switzerland to place "sweetened x juice" in square brackets and agreed with the delegation of France to insert "juice" in "vegetable cocktail".

Section 7.10.3

90. The Group of Experts, having agreed that the proposed draft standard should be aligned with the General Draft Standard on Labelling, deleted this section.

Irradiated Ingredients

91. The Group of Experts agreed that the proposed draft standard should be aligned with the General Standard for the Labelling of Prepackaged Foods as requested by the Codex Committee on Food Labelling.

Section 8 - METHODS OF ANALYSIS

92. The Group of Experts requested that the Working Group on Methods of Analysis prepare recommendations on methods of analysis for vegetable juices for the next session.

Status of the Standard

93. The Group of Experts advanced the Proposed Draft General Standard for Vegetable Juices to Step 5 of the Procedure. The revised document is contained in Appendix VII of this Report.
REVISION OF LABELLING PROVISIONS IN CODEX STANDARDS

94. The Group of Experts had before it document CX/FJ 88/13 (AGRI/WP.1/GE.4/R.96) which indicated action taken by the secretariat following the review of the labeling sections of Codex Standards for Fruit Juices and Nectars at the Seventeenth Session. The secretariat indicated that, as requested, the labelling sections of all Codex Standards had been reviewed on the basis of the revised Codex General Standard for the Labelling of Prepacked Foods and that a paper had been submitted to the Codex Committee on Food Labelling (CX/FL 87/3-Add.l). The Codex Committee on Food Labelling had considered the proposed amendments and had endorsed them. The secretariat had also reviewed the Codex Standards for Fruit Juices and Fruit Nectars, as requested by the Group of Experts, in the light of Section 4.1.2 of the General Labelling Standard. The secretariat had identified a number of non-mandatory provisions which required additional information on the label in proximity with the name of the product and had suggested that the Group of Experts might wish to consider these with a view to making them mandatory as required by Section 4.1.2 of the General Standard on Labelling.

95. The Group of Experts was of the opinion that the provisions identified by the secretariat in connection with Section 4.1.2 of the General Labelling Standard should not be made mandatory. It also agreed that the secretariat should summarize for inclusion in this report the various amendments which should be made to the labelling sections of Codex Standards for Fruit Juices and Nectars for submission to the Commission and, where appropriate, to the Codex Committee on Food Labelling. This summary should include not only the consequential amendments resulting from the revision, by the Commission, of the General Standard on Labelling, but also other consequential amendments resulting from the adoption of the General Standards for Fruit Juices and Fruit Nectars. The Commission was requested to regard all these proposed amendments as being consequential to the adoption of the two General Standards mentioned above (see Appendix X to this report).

FUTURE WORK PROGRAMME

96. The Group of Experts noted that a number of matters still remained to be considered as follows:

a) Guidelines on Mixed Fruit Juices
b) Guidelines on Mixed Fruit Nectars
c) Draft General Standard for Vegetable Juices (advanced to Step 5)

97. It was also noted that the revision of methods of analysis represented an ongoing activity and that new chemometric methods could be examined in the future. The question of sampling plans for fruit juices was a question which possibly required consideration. Progress in fruit juice technology might also call for a reconsideration of some of the fruit juice standards. The delegation of Switzerland also pointed to the rather low number of acceptances received which could call for a revision of the Codex Standards for Fruit Juices and Nectars with a view to possibly simplifying them. There were also other fruit juice products such as fruit based syrup and fruit powder which could be considered. The secretariat was of the opinion that, if another session were to be held, the Group of Experts could review the various standards editorially.

98. The Group of Experts agreed that another session should be held approximately one year prior to the nineteenth session of the Commission.
ELECTION OF OFFICERS

99. The Group of Experts re-elected Prof. Dr. W. Pilnik (Netherlands) as Chairman and Prof. Dr. H. Woidich (Austria) as Vice-Chairman. Prof. Dr. (Ms) G. Niketic-Aleksic (Yugoslavia) was also elected Vice-chairman.

OTHER BUSINESS

100. The delegation of Spain drew the Group of Experts' attention to the great divergence in national regulations on fruit juices and nectars. He was of the opinion that there was a need to compile national regulations on these products for the information of governments and the trade and in order to be able to determine the differences between Codex and national standards.

ADOPTION OF REPORT

101. The Group of Experts adopted this report. It expressed its appreciation to Dr. Pilnik for his close involvement with the work of the UNECE/Codex in the field of standardization of fruit juices and for having accepted the responsibilities of chairmanship for another period until the end of the next meeting of the Group of Experts. The Group of Experts also thanked the outgoing Vice-Chairman Mr. T. Satasuk (Thailand) for his collaboration.

SUMMARY STATUS OF WORK

<table>
<thead>
<tr>
<th>Recommendation</th>
<th>Step</th>
<th>For Action by:</th>
<th>Document Reference</th>
</tr>
</thead>
<tbody>
<tr>
<td>Draft General Standard for - Fruit Nectars</td>
<td>8</td>
<td>Commission</td>
<td>para 36, App.II</td>
</tr>
<tr>
<td>- Fruit Juices</td>
<td>8</td>
<td>Commission</td>
<td>para 50, App.III</td>
</tr>
<tr>
<td>Proposed Draft Standard for Vegetable Juices</td>
<td>5</td>
<td>Commission</td>
<td>para 93, App.VII</td>
</tr>
<tr>
<td>- Mixed Fruit Nectars</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Definition of fruit juices (new technological processes)</td>
<td>Governments</td>
<td>para 67, App.VI</td>
<td></td>
</tr>
<tr>
<td>Lactic acid in fruit juices</td>
<td>International Organizations</td>
<td>para 51-59</td>
<td></td>
</tr>
<tr>
<td>Revision of methods of analysis</td>
<td>Governments</td>
<td>paras 70-72</td>
<td></td>
</tr>
<tr>
<td>Revision of labelling provisions in Codex standards for fruit juices and fruit nectars</td>
<td>CCMAS</td>
<td>paras 73-76, App.VIII, IX</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Commission</td>
<td>paras 94-95, App.X</td>
<td></td>
</tr>
</tbody>
</table>
LIST OF PARTICIPANTS
LISTE DES PARTICIPANTS
LISTA DE PARTICIPANTES

Chairman: Mr. W. Pilnik (Netherlands)
Président: Mr. W. Pilnik (Netherlands)
Presidente: Mr. W. Pilnik (Netherlands)

Vice-Chairmen: Mr. T. Satasuk (Thailand) (not present)
Vice-Présidents: Mr. H. Woidich (Austria)
Vice-Presidentes: Mr. H. Woidich (Austria)

ARGENTINA
ARGENTINE
ARGENTINA
Mr. N. Stancanelli
Conseiller économique
Mission permanente à Genève

Mr. M. Gerschenfeld
Conseiller économique
Mission permanente à Genève

AUSTRALIA
AUSTRALIE
AUSTRALIA
Mr. M. Ryan
Principal Executive Officer
c/o Australian Embassy in Rome

CHINA, PEOPLE'S REP. OF
CHINE, REP. POPULAIRE DE
CHINA, REP. POPULAR DE
Mrs. J. Wang
Director of Fruit Processing Division
Non-Staple Food Bureau
Ministry of Commerce
45 Fuxingmennei St., Beijing

Mrs. G.Z. Yang
Engineer
Science and Technology Bureau
Ministry of Commerce
45 Fuxingmennei St., Beijing

CUBA
CUBA
CUBA
Mrs. A. Guerra
Especialista en Normalización
Ministerio Industria Alimenticia
Ave. 41 No. 4465 Playa
La Habana

AUSTRIA
AUTRICHE
AUSTRIA
Mr. H. Woidich
Lebensmittelversuchsanstalt
Blaasstrasse 29
1190 Wien

BELGIUM
BELGIQUE
BELGICA
Mr. T. Biebaut
Conseiller
Ministère des Affaires économiques
Rue du Commerce 44
1040 Bruxelles
DENMARK
DANEMARK
DINAMARCA
Mr. A. Munk Jensen
Secretary of Embassy
Permanent Mission in Geneva
FINLAND
FINLANDE
FINLANDIA
Mrs. A. Suojanen
Senior Adviser
National Board of Trade and Consumer Interests
P.O. Box 5
Helsinki 00531
Mrs. M. Hynonen
Ministry of Trade and Industry
Aleksanterinkatu 10
00170 Helsinki
FRANCE
FRANCE
FRANCIA
Mr. R. Degioanni
Inspecteur
Ministère de l'Economie et des Finances
13 rue Saint Georges
75009 Paris
Mrs. M-G. Duhau
AFNOR
Association française de normalization
Tour Europe Cedex 7
92080 Paris La Défense
Mr. B. Schaeffer
Directeur général
Vergers d'Alsace 13
67260 Sarre Union
GERMANY, FED. REP. OF
ALLEMAGNE, REP. FED. D'
ALEMANIA, REP. FED. DE
Mr. K. Trenkle
Regierungsdirektor
Bundesministerium für Ernährung, Landwirtschaft und Forsten
Rochusstrasse 1
5300 Bonn 1
Mr. G. Fuchs
Food Chemist
Firma Deutsche Granini
4800 Bielefeld
Mr. A. Korth
Hauptgeschäfts fuehrer
Verband der Deutschen Fruchtsaftindustrie
Mainzerstr. 253
5300 Bonn 2
GREECE
GRECE
GRECIA
Mr. M. Spinellis
Premier secrétaire
Mission permanente á Genève
HUNGARY
HONGRIE
HUNGRIA
Mrs. M. Sos
Manager of the Research Institute for Food Canning Industry
Foldvari ut 4
1097 Budapest
IRELAND
IRLANDE
IRLANDA
Mr. K. Cassidy
Premier secrétaire
Mission permanente á Genève
ISRAEL
ISRAEL
ISRAEL
Mr. R. Knobil
Secretary
Israel Codex Committee
Ministry of Trade and Industry
P.O. Box 299
Jerusalem
Mr. P. Rossier
Chef de la Section Codex Alimentarius
Office fédéral de la santé publique
Haslerstrasse 16
3000 Berne 14
Mr. F. Ansermet
Vice-Directeur
Régie fédérale des Alcools
Längasstrasse 31
3012 Berne
Mr. U. Schobinger
Head of Section on Fruit Juice Technology
Station fédérale de recherches en arboriculture et viticulture
8820 Waedenswil
Mr. O. Bindschedler
Nestec SA.
Avenue Nestlé 55
1800 Vevey
Mr. F. Dagan
Conseiller (Affaires économiques et commerciales)
Mission permanente à Genève
Mr. K. Millar
Senior Executive Officer
Food Standards Division
Ministry of Agriculture, Fisheries and Food
Great Westminster House
Horseferry Road
London SW1
Mr. R. Harding
Principal Scientific Officer
Food Science Division
Ministry of Agriculture, Fisheries and Food
Great Westminster House
Horseferry Road
London SW1
Mr. R. Ronk
Acting Director
Center for Food Safety and Applied Nutrition
Food and Drug Administration
200 C Street S.W.
Washington D.C. 20204
Mrs. J. Howell
Manager
Regulatory Submissions
The Coca Cola Company
P.O. Drawer 34
Atlanta, GA 30301
Mr. A.W. Matthys
Director
Regulatory Affairs
National Food Processors Association
1401 New York Avenue, N.W.
Washington D.C. 20005
Mr. R.I. Mori
Director of Quality Assurance
Dole Packaged Foods
P.O. Box 7330
San Francisco, CA 94120-7330
Mrs. G. Niketic-Aleksic
Professor
Faculty of Agriculture
Beograd-Zemun 11080
INTERNATIONAL ORGANIZATIONS
ORGANISATIONS INTERNATIONALES
ORGANIZACIONES INTERNACIONALES

Confédération des industries agroalimentaires de la CEE (CIAA)
J-P. Roclore
Fruit and Vegetable Juice Association of the EEC
ETS VJF 895, 13 rue de la Liberté
Mâcon, France

European Economic Community (EEC)
Mrs. O. Demine
Administrateur principal
Direction générale du marché intérieur et des affaires industrielles
200 rue de la Loi
1040 Bruxelles

Federation Internationale des producteurs des jus de fruits (FIJU)
Mr. P. Dardonville
Secrétaire général
10, rue de Liège
75009 Paris, France

JOINT SECRETARIAT
SECRETARIAT MIXTE
SECRETARIA CONJUNTA

Mr. M. Canon
Food Standards Officer
Joint ECE/FAO Agriculture and Timber Division
Palais des Nations
CH-1211 Geneva 10, Switzerland

Mr. L.G. Ladomery
Food Standards Officer
Joint FAO/WHO Food Standards Programme
FAO, Via Terme de Caracalla
00100 Rome, Italy

Mr. E-L. Littman
Acting Director
Joint ECE/FAO Agriculture and Timber Division
Palais des Nations
CH-1211 Geneva 10
Switzerland
DRAFT GENERAL STANDARD FOR FRUIT NECTARS PRESERVED EXCLUSIVELY
BY PHYSICAL MEANS NOT COVERED BY INDIVIDUAL STANDARDS

(Advanced to Step 8 of the Procedure)

1. **SCOPE**
   
   This standard applies to pulpy and non-pulpy fruit nectars, made from fruit of a single species as defined in Section 2. However, this standard does not apply to any nectar which is subject to a specific Codex Commodity Standard.

2. **DESCRIPTION**
   
   Unfermented but fermentable pulpy or non-pulpy product, intended for direct consumption, obtained by blending the fruit juice and/or total edible part ground and/or sieved of sound ripe fruits, concentrated or unconcentrated, with water, sugar or honey, and preserved exclusively by physical means.  

   1 For the purpose of this Standard, and at this time, “preservation by physical means” does not include ionizing radiation.

3. **ESSENTIAL COMPOSITION AND QUALITY FACTORS**

   3.1 **Minimum Content of Fruit Ingredient**
   
   The product shall contain not less than 50% m/m of single strength fruit ingredient or the equivalent derived from any concentrated fruit ingredient, except in cases where high acidity, high pulp content, or strong flavour make lower content necessary. In no case shall the content of the fruit ingredient be less than 25% m/m.

   3.2 **Sugars**
   
   3.2.1 One or more of the sugars, as defined by the Codex Alimentarius Commission, shall be added.

   3.2.2 Honey, as defined by the Codex Alimentarius Commission, may be used if it is the sole added sweetening ingredient.

   3.3 **Lemon or Lime Juice**
   
   Lemon or Lime Juice may be added as an acidifying agent in quantities which would not impart a characterizing fruit flavour.

   3.4 **Soluble Solids**
   
   The soluble solids content of the product shall be not more than 20% m/m as determined by refractometer at 20°C, uncorrected for acidity and read as °Brix on the International Sucrose Scales.

   3.5 **Ethanol Content**
   
   The ethanol content shall not exceed 3.0 g/kg.

   3.6 **Organoleptic Properties**
   
   The product shall have the characteristic colour, aroma and flavour of the fruit from which it is made, taking into consideration the addition of honey in substitution of sugars.
4. **FOOD ADDITIVES**

4.1 Citric acid
4.2 Malic acid  Limited by GMP
4.3 L-Ascorbic acid  400 mg/kg in the final product
4.4 Carbon dioxide  Limited by GMP

5. **CONTAMINANTS**

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

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

6. **HYGIENE**

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

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

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

7. **WEIGHTS AND MEASURES**

7.1 Fill of container

7.1.1 Minimum Fill

The nectar shall occupy not less than 90% v/v of the water capacity of the container. The water capacity of the container is the volume of distilled water at 20 C which the sealed container will hold when completely filled.

8. **LABELLING**

In addition to Sections 2, 3, 7 and 8 of the Codex General Standard for the Labelling of Prepackaged Foods 2 (Ref. No. CODEX STAN 1-1985) the following provisions apply:

2 Hereafter referred to as the "General Standard".

8.1 The Name of the Food

8.1.1 The name of the food to be declared on the label shall be "x nectar" or "pulpy x nectar" or "nectar of x" or "pulpy nectar of x" where "x" is the common name of the fruit.
8.1.2 The words "Minimum fruit content x%" shall appear in close proximity to the name of the food where "x" is the actual minimum percentage of fruit ingredient calculated in single strength in the final product.

8.2 List of Ingredients
A complete list of ingredients, including added water, shall be declared on the label in accordance with Section 4.2 of the General Standard. For this purpose concentrated fruit ingredients shall be calculated to single strength. The fact of reconstitution shall be declared as follows: "x" made from concentrate or "x" made from concentrated "x" where "x" is the name of the single strength juice ingredient. Water and volatiles added for reconstitution of the ingredients need not be declared.

8.3 Net Contents
The net contents shall be declared by volume in the Metric ("Système International") units in accordance with Section 4.3 of the General Standard.

8.4 Name and Address
The name and address shall be declared in accordance with Section 4.4 of the General Standard.

8.5 Country of Origin
8.5.1 The country of origin of the food shall be declared in accordance with Section 4.5 of the General Standard.

8.6 Lot Identification
Lot Identification shall be declared in accordance with Section 4.6 of the General Standard.

8.7 Date Marking and Storage Instructions
The date of minimum durability and Storage instructions shall be declared in accordance with Section 4.7 of the General Standard.

8.8 Additional Requirements
8.8.1 No fruit or nectar may be represented pictorially on the label except the species of fruit present or the nectar therefrom.

8.8.2 When the food contains honey the declaration "contains honey" shall appear in close proximity to the name of the food.

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

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

8.8.5 Where fruit nectars require to be kept under conditions of refrigeration, there shall be information for keeping and, if necessary, thawing of the food.

8.8.6 Where the fruit nectar has been prepared from raw materials treated with ionizing radiation, it shall be labelled in accordance with Section 5.2.2 of the General Standard.
8.9 Exemptions from Mandatory Labelling Requirements

Exemptions from Mandatory Labelling Requirements shall be made in accordance with Section 6 of the General Standard.

8.10 Non-Retail Containers

In addition to Sections 2 and 3 of the General Standard (CODEX STAN 1-1985) the following specific provisions apply to fruit nectars in non-retail containers as defined by the Codex Alimentarius Commission (see page 123 of the Procedural Manual, 6th Edition).

8.10.1 Information required in Sections 8.1 to 8.6 and 8.8, as appropriate, shall be given either on the container or in accompanying documents except that the name of the food, lot identification and the name and address shall appear on the container.

8.10.2 However, lot identification and the name and address may be replaced by an identification mark provided that such a mark is clearly identifiable with the accompanying documents.

9. METHODS OF ANALYSIS AND SAMPLING

See Appendix IX.

Appendix III
ALINORM 89/14

DRAFT GENERAL STANDARD FOR FRUIT JUICES PRESERVED EXCLUSIVELY BY PHYSICAL MEANS NOT COVERED BY INDIVIDUAL STANDARDS

(Advanced to Step 8 of the Procedure)

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

1. SCOPE

This standard applies to fruit juices, made from fruit of a single species, as defined in Section 2. However, this standard does not apply to any fruit juice which is subject to a specific Codex Commodity Standard.

2. DESCRIPTION

Unfermented but fermentable juice, pulpy, turbid or clear, intended for direct consumption, obtained by a mechanical process, from sound ripe fruit or the flesh thereof, preserved exclusively by physical means. The juice may have been concentrated and later reconstituted with water suitable for the purpose of maintaining the essential composition and quality factors of the juice.

3. ESSENTIAL COMPOSITION AND QUALITY FACTORS

3.1 Soluble Solids

3.1.1 The soluble fruit solids content of the fruit juice (exclusive of added sugars) shall not be less than a value which corresponds to the soluble solids content of the ripe fruit as determined by refractometer at 20°C, uncorrected for acidity and read as °Brix on the International Sucrose Scales.

3.2 Sugars

One or more of the solid sugars, and in the case of reconstituted juices, one or more of the sugars as defined by the Codex Alimentarius Commission may be added in
amounts not exceeding 100 g/kg, except for very acid fruits, where 200 g/kg is permitted. The addition of sugars is not permitted when the juice has been acidified in accordance with Sections 4.1 and 4.2.

3.3 Ethanol Content

The ethanol content shall not exceed 5 g/kg.

3.4 Organoleptic Properties

The product shall have the characteristic colour, aroma and flavour of the fruit juice. Natural volatile juice components may be restored to any juice obtained from the same type of fruits from which natural volatile juice components have been removed.

3.5 Use of concentrates

The addition of concentrate to juice is permitted. Only concentrate obtained from the same type of fruit may be used.

4. FOOD ADDITIVES

4.1 Citric acid

4.2 Malic acid Limited by GMP

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

4.4 L-Ascorbic acid Limited by GMP

4.5 Carbon dioxide

5. CONTAMINANTS

5.1 Arsenic (As) 0.2mg/kg
5.2 Lead (Pb) 0.3mg/kg ¹
5.3 Copper (Cu) 5.0mg/kg
5.4 Zinc (Zn) 5.0mg/kg
5.5 Iron (Fe) 15.0mg/kg
5.6 Tin (Sn) 200.0mg/kg ¹
5.7 Sum of copper, zinc and iron 20.0mg/kg
5.8 Sulphur dioxide 10.0mg/kg

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

6. HYGIENE

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

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

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

7. **WEIGHTS AND MEASURES**

7.1 **Fill of Container**

7.1.1 **Minimum Fill**

The juice shall occupy not less than 90% v/v of the water capacity of the container. The water capacity of the container is the volume of distilled water at 20°C which the sealed container will hold when completely filled.

8. **LABELLING**

In addition to Sections 2, 3, 7 and 8 of the Codex General Standard for the Labelling of Prepackaged Foods ¹ (Ref. No. CODEX STAN 1-1985) the following provisions apply:

¹ Hereafter referred to as the "General Standard".

8.1 **The Name of the Food**

8.1.1 The name of the food to be declared on the label shall be "x juice" or "pulpy x juice" where "x" is the common name of the fruit.

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

8.1.3 In the case of a fruit juice made from concentrate, the fact of reconstitution shall be declared as follows: "x juice made from concentrate" or "x" juice made from concentrated "x" juice, where "x" represents the name of the fruit from which the juice has been obtained. This information shall be given in close proximity to the name of the food or in another prominent position on the label.

8.2 **List of Ingredients**

A complete list of ingredients shall be declared on the label in accordance with Section 4.2 of the General Standard, except that water and volatiles added for reconstitution of the juice, in accordance with Section 2 need not be declared.

8.3 **Net Contents**

The net contents shall be declared by volume in the Metric ("Système International") units in accordance with Section 4.3 of the General Standard.

8.4 **Name and Address**

The name and address shall be declared in accordance with Section 4.4 of the General Standard.

8.5 **Country of Origin**

8.5.1 The country of origin of the food shall be declared in accordance with Section 4.5 of the General Standard.

8.6 **Lot Identification**

Lot Identification shall be declared in accordance with Section 4.6 of the General Standard.
8.7 Date Marking and Storage Instructions
The date of minimum durability and storage instructions shall be declared in accordance with Section 4.7 of the General Standard.

8.8 Additional Requirements
The following additional specific provisions shall apply:

8.8.1 No fruit or fruit juice may be represented pictorially on the label except the species of fruit present or the juices therefrom.

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

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

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

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

8.9 Exemptions from Mandatory Labelling Requirements
Exemptions from Mandatory Labelling Requirements shall be made in accordance with Section 6 of the General Standard.

8.10 Non-retail Containers
In addition to Sections 2 and 3 of the General Standard (CODEX STAN 1-1985) the following specific provisions apply to fruit nectars in non-retail containers as defined by the Codex Alimentarius Commission (see page 123 of Procedural Manual, 6th Edition).

8.10.1 Information required in Sections 8.1 to 8.6 and 8.8, as appropriate, shall be given either on the container or in accompanying documents except that the name of the food, lot identification and the name and address shall appear on the container.

8.10.2 However, lot identification and the name and address may be replaced by an identification mark provided that such a mark is clearly identifiable with the accompanying documents.

9. METHODS OF ANALYSIS AMD SAMPLING
See Appendix IX.

Appendix IV
ALINORM 89/14

REPORT OF THE WORKING GROUP ON THE DRAFT GUIDELINES ON MIXED FRUIT JUICES AND THE DRAFT GUIDELINES ON MIXED FRUIT NECTARS

1 See paras. 60-69, and Appendices V and VI of this report.

1. A Working Group comprising delegates from Cuba, France, Federal Republic of Germany, Hungary, Israel, the Netherlands, Poland, Portugal, Spain, Sweden,
Switzerland, United Kingdom, United States of America, Yugoslavia, the European Economic Community, CIAA and the joint secretariat, under the chairmanship of Prof. Pilnik, met to redraft these two sets of guidelines.

2. Some participants thought that fruit ingredients characterizing the flavour of the products should be permitted to be given prominence in relation to the name of the food in both sets of guidelines. Others thought that this might be possible within the provisions of the Codex General Standard for the Labelling of Prepackaged Foods.

3. In the absence of a consensus view on the levels of minimum fruit ingredients in the Draft Guidelines on Mixed Fruit Nectars, it was recommended to adopt the existing provisions in the Draft General Standard for Nectars. Comments should be particularly invited on this point.

Appendix V
ALINORM 89/14

DRAFT GUIDELINES ON MIXED FRUIT NECTARS
(Revised text)

1. **SCOPE**

   These guidelines apply to mixed fruit nectars as defined in Section 2 below, for direct human consumption, preserved exclusively by physical means.

2. **DESCRIPTION**

   A mixed fruit nectar is the unfermented but fermentable pulpy or non-pulpy product, intended for direct consumption, obtained by blending the fruit juice and/or total edible part ground and/or sieved of two or more species of sound ripe fruits, concentrated or unconcentrated, with water and sugars or honey, and preserved exclusively by physical means.

3. **ESSENTIAL COMPOSITION AND QUALITY FACTORS**

   3.1 **Minimum Content of Fruit Ingredients**

      The product should contain not less than 50% m/m of single strength fruit ingredient or the equivalent derived from any concentrated fruit ingredient, except in cases where high acidity, strong flavour or high pulp content make lower content necessary. In no case should the content of fruit ingredient be less than 25% m/m.

   3.2 **Sugars**

      3.2.1 One or more of the sugars, as defined by the Codex Alimentarius Commission, should be added.

      3.2.2 Honey, as defined by the Codex Alimentarius Commission, may be used if it is the sole added sweetening ingredient.

   3.3 **Soluble Solids**

      The soluble solid content of the product should be not more than 20% m/m as determined by refractometer at 20°C, uncorrected for acidity and read as °Brix on the International Sucrose Scale.

   3.5 **Ethanol Content**

      The ethanol content should not exceed 3 g/kg.
4. **FOOD ADDITIVES**

<table>
<thead>
<tr>
<th>Additive</th>
<th>Maximum Level</th>
</tr>
</thead>
<tbody>
<tr>
<td>4.1 Citric acid</td>
<td></td>
</tr>
<tr>
<td>4.2 Malic acid</td>
<td>Limited by GMP</td>
</tr>
<tr>
<td>4.3 L-Ascorbic acid</td>
<td>400 mg/kg in the final product</td>
</tr>
<tr>
<td>4.4 Carbon dioxide</td>
<td>Limited by GMP</td>
</tr>
</tbody>
</table>

5. **CONTAMINANTS**

<table>
<thead>
<tr>
<th>Contaminant</th>
<th>Maximum Level</th>
</tr>
</thead>
<tbody>
<tr>
<td>5.1 Arsenic (As)</td>
<td>0.2 mg/kg</td>
</tr>
<tr>
<td>5.2 Lead (Pb)</td>
<td>0.3 mg/kg</td>
</tr>
<tr>
<td>5.3 Copper (Cu)</td>
<td>5.0 mg/kg</td>
</tr>
<tr>
<td>5.4 Zinc (Zn)</td>
<td>5.0 mg/kg</td>
</tr>
<tr>
<td>5.5 Iron (Fe)</td>
<td>15.0 mg/kg</td>
</tr>
<tr>
<td>5.6 Tin (Sn)</td>
<td>200.0 mg/kg</td>
</tr>
<tr>
<td>5.7 Sum of copper, zinc and iron</td>
<td>20.0 mg/kg</td>
</tr>
<tr>
<td>5.8 Sulphur dioxide</td>
<td>10.0 mg/kg</td>
</tr>
</tbody>
</table>

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

6. **HYGIENE**

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

6.2 When tested by appropriate methods of sampling and examination, the products (a) should be free from microorganisms capable of development under normal conditions of storage; and (b) should not contain any substances originating from microorganisms in amounts which may represent a hazard to health.

7. **WEIGHTS AND MEASURES**

7.1 **Fill of container**

7.1.1 **Minimum Fill**

The nectar should occupy not less than 90% v/v of the water capacity of the container. The water capacity of the container is the volume of distilled water at 20 °C which the sealed container will hold when completely filled.

8. **LABELLING**

In addition to Sections 2, 3, 7 and 8 of the Codex General Standard for the Labelling of Prepackaged Foods 2 (Ref. No. CODEX STAN 1-1985) the following provisions should apply:

8.1 **The Name of the Food**

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

8.1.2 The words "Minimum fruit content x%" should appear in close proximity to the name of the product where "x" is the actual minimum percentage of fruit ingredient calculated to single strength in the final product.

8.2 List of Ingredients

8.2.1 A complete list of Ingredients, including added water, should be declared on the label in descending order of proportion in accordance with the relevant requirements applicable to the individual nectars. Where, however, information has been included in the name of the food (Section 8.1.1), it need not be repeated in the list of ingredients.

8.2.2 In the case of mixed fruit nectar, containing concentrated fruit ingredients, the fact of reconstitution should be declared in the list of ingredients as follows: "x made from concentrate" or "x made from concentrated x" where "x" is the name of the single strength fruit ingredient.

8.3 Net Contents

The net content should be declared by volume in the Metric ("Système International") units in accordance with Section 4.3 of the General Standard.

8.4 Name and Address

The name and address should be declared in accordance with Section 4.4 of the General Standard.

8.5 Country of Origin

The country of origin of the food should be declared in accordance with Section 4.5 of the General Standard.

8.6 Lot Identification

Lot Identification should be declared in accordance with Section 4.6 of the General Standard.

8.7 Date Marking and Storage Instructions

The date of minimum durability and storage instructions should be declared in accordance with Section 4.7 of the General Standard.

8.8 Additional Requirements

8.8.1 No fruit or nectar may be represented pictorially on the label except the species of fruits used in the product or the nectar therefrom.

8.8.2 When the food contains honey the declaration "contains honey" should appear in close proximity to the name of the food.

8.8.3 No claim should be made in respect of "Vitamin C" nor should the term "Vitamin C" appear on the label unless the food contains such quantity of "Vitamin C" as would be accepted by national authorities in the country in which the food is sold, as warranting such claim or the use of such term.
8.8.4 Where the food contains more than 2 g/kg of carbon dioxide the term "carbonated" should appear in close proximity to the name of the food and carbon dioxide should also be declared in the list of ingredients.

8.8.5 Where fruit nectars require to be kept under conditions of refrigeration, there should be information for keeping and, if necessary, thawing of the food.

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

8.9 **Exemptions from Mandatory Labelling Requirements**

Exemptions from Mandatory Labelling Requirements should be made in accordance with Section 6 of the General Standard.

8.10 **Non-Retail Containers**

In addition to Sections 2 and 3 of the General Standard (CODEX STAN 1-1985) the following specific provisions apply to fruit nectars in non-retail containers as defined by the Codex Alimentarius Commission (see page 123 of Procedural Manual, 6th Edition).

8.10.1 Information required in Sections 4.1 to 4.6 and 4.8, as appropriate, should be given either on the container or in accompanying documents except that the name of the food, lot identification and the name and address should appear on the container.

8.10.2 However, lot identification and the name and address may be replaced by an identification mark provided that such a mark is clearly identifiable with the accompanying documents.

9. **METHODS OF ANALYSIS AMD SAMPLING**

See Appendix IX.

---

**DRAFT GUIDELINES FOR MIXED FRUIT JUICES**

(Revised text)

1. **SCOPE**

   These guidelines apply to mixed fruit juices as defined in Section 2 below, for direct human consumption, preserved exclusively by physical means.

2. **DESCRIPTION**

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

3. **ESSENTIAL COMPOSITION AMP QUALITY FACTORS**

   3.1 Soluble Solids

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

3.2 **Sugars**

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

3.3 **Ethanol Content**

The ethanol content should not exceed 5 g/kg.

3.4 **Organoleptic Properties**

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

3.5 **Use of concentrates**

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

4. **FOOD ADDITIVES**

4.1 Citric acid
4.2 Malic acid
4.3 The addition of the acids mentioned in Sections 4.1 and 4.2 is not permitted when the juice contains sugars added in accordance with Section 3.2.
4.4 Carbon dioxide

5. **CONTAMINANTS**

5.1 Arsenic (As) 0.2 mg/kg
5.2 Lead (Pb) 0.3 mg/kg
5.3 Copper (Cu) 5.0 mg/kg
5.4 Zinc (Zn) 5.0 mg/kg
5.5 Iron (Fe) 15.0 mg/kg
5.6 Tin (Sn) 200.0 mg/kg
5.7 Sum of copper, zinc and iron 20.0 mg/kg
5.8 Sulphur dioxide 10.0 mg/kg

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

6. **HYGIENE**

6.1 It is recommended that the products covered by the provisions of this standard be prepared in accordance with the Recommended International Code of Hygienic Practice for Canned Fruit and Vegetable Products (Ref. No. CAC/RCP 2-1969) and the General Principles of Food Hygiene (Ref. No. CAC/RCP 1-1969, Rev.1) recommended by the Codex Alimentarius Commission.
6.2 When tested by appropriate methods of sampling and examination, the product:
(a) should be free from microorganisms capable of development under normal conditions of storage; and
(b) should not contain any substances originating from microorganisms in amounts which may represent a hazard to health.

7. **WEIGHTS AND MEASURES**

7.1 **Fill of Container**

7.1.1 **Minimum Fill**

The juice should occupy not less than 90% v/v of the water capacity of the container. The water capacity of the container is the volume of distilled water at 20°C which the sealed container will hold when completely filled.

8. **LABELLING**

In addition to Sections 2, 3, 7 and 8 of the Codex General Standard for the Labelling of Prepackaged Foods \(^1\) (Ref. No. CODEX STAN 1-1985), the following provisions should apply:

\(^1\) Hereafter referred to as the "General Standard"

8.1 **The Name of the Food**

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

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

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

8.1.4 In the case of mixed fruit juice made partially from concentrated juice the fact of reconstitution of the particular juice or juices should also be declared. This information should be given in close proximity to the name of the food or in another prominent position on the label by the expression "prepared partially from concentrated juices".

8.2 **List of Ingredients**

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

8.2.2 In the case of mixed fruit juice, containing juices obtained from concentrates the fact of reconstitution should be declared in the list of ingredients as follows: "x juice made from concentrate" or "reconstituted x juice" or: "x juice made from concentrated x juice" where "x" stands for the name of the relevant fruit.

8.3 Net Contents
The net contents should be declared by volume in the Metric ("Système International") units In accordance with Section 4.3 of the General Standard.

8.4 Name and Address
The name and address should be declared in accordance with Section 4.4 of the General Standard.

8.5 Country of Origin
8.5.1 The country of origin of the food should be declared in accordance with Section 4.5 of the General Standard.

8.6 Lot Identification
Lot identification shall be declared in accordance with Section 4.6 of the General Standard.

8.7 Date Marking and Storage Instructions
The date of minimum durability and storage instructions shall be declared in accordance with Section 4.7 of the General Standard.

8.8 Additional Requirements
The following additional specific provisions shall apply:

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

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

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

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

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

8.9 Exemptions from Mandatory Labelling Requirements
Exemptions from Mandatory Labelling Requirements shall be made in accordance with Section 6 of the General Standard.
8.10 Non-Retail Containers

In addition to Sections 2 and 3 of the General Standard (CODEX STAN 1-1985) the following specific provisions apply to fruit nectars in non-retail containers as defined by the Codex Alimentarius Commission (see page 123 of the Procedural Manual, 6th Edition).

8.10.1 Information required in Sections 8.1 to 8.6 and 8.8, as appropriate, shall be given either on the container or in accompanying documents except that the name of the food, lot identification and the name and address shall appear on the container.

8.10.2 However, lot identification and the name and address may be replaced by an identification mark provided that such a mark is clearly identifiable with the accompanying documents.

9. METHODS OF ANALYSIS AMD SAMPLING

See Appendix IX.

Appendix VII
ALINORM 89/14

PROPOSED DRAFT GENERAL STANDARD FOR VEGETABLE JUICES

(Advanced to Step 5)

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

1. SCOPE

This Standard applies to all vegetable juices as defined below. It does not apply to vegetable juices for which specific Codex commodity standards exist.

2. DESCRIPTION

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

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

3. ESSENTIAL COMPOSITION AND QUALITY FACTORS

3.1 Organoleptic Properties

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

3.3 Blanching and Washing
The vegetables shall retain no more water from these operations than
technologically unavoidable.

3.4 Ingredients
The following ingredients may be used:
(a) Food grade salt as defined in the Codex Alimentarius,
(b) Vinegar,
(c) Sugars and honey in dry form,
(d) Seasoning, spices and herbs,
(e) Fruit or fruit based products from which the essential elements of the fruit
have not been extracted,
(f) Whey or lactoserum having undergone lactic fermentation, not more than
100 g/kg.

4. FOOD ADDITIVES

4.1 L-ascorbic acid
Maximum Level
400 mg/kg in the final product

4.2 Citric acid
GMP

4.3 Lactic acid (not in products having
undergone lactic acid fermentation)]
GMP

4.4 L-Tartaric acid

4.5 Malic acid
GMP

4.6 Glutamic acid and its sodium or
potassium salt

1

4.7 Natural flavour obtained from
seasonings, spices, herbs and fruit
juices

4.8 Carbon dioxide

4.9 Agar

4.10 Alginic acid and their salts

4.11 Carrageenan

4.12 Guar Gum

4.13 Gum Arabic
0.5 g/kg singly or in any Combination]

4.14 Locust bean Gum

4.15 Karaya Gum

4.16 Pectins

4.17 Gelatin

4.18 Tara Gum

5. CONTAMINANTS

5.1 Arsenic (As)
Maximum Level
0.2mg/kg

5.2 Lead (Pb)
0.3mg/kg

5.3 Copper (Cu) 5.0 mg/kg
5.4 Zinc (Zn) 5.0 mg/kg
5.5 Iron (Fe) 15.0 mg/kg
5.6 Tin (Sn) 200.0 mg/kg
5.7 Sum of copper, zinc and iron 20.0 mg/kg
5.8 Sulphur dioxide 10.0 mg/kg
5.9 Mineral impurities Insoluble in 10 per cent hydrochloric acid shall not exceed [100] mg/kg.

1 Maximum level to be established.
2 These limits remain under review, taking into account a sampling plan.

6. HYGIENE

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

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

(a) shall be free from micro-organisms capable of development under normal conditions of storage, except that in products having undergone lactic acid fermentation, the micro-organisms technologically necessary for this fermentation may be present.

(b) shall not contain any substances originating from micro-organisms in amounts which may represent a hazard to health.

7. LABELLING

In addition to Sections 2, 3, 7 and 8 of the Codex General Standard for the Labelling of Prepackaged Food 1 (Ref. No. CODEX STAN 1-1985) the following provisions apply:

1 Hereafter referred to as the "General Standard".

7.1 The Name of the Food

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

7.2 List of Ingredients

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

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

The net contents shall be declared by volume in the Metric ("Système International") units in accordance with Section 4.3 of the General Standard.

7.4 **Name and Address**

The name and address shall be declared in accordance with Section 4.4 of the General Standard.

7.5 **Country of Origin**

7.5.1 The country of origin of the food shall be declared in accordance with Section 4.5 of the General Standard.

7.6 **Lot Identification**

Lot identification shall be declared in accordance with Section 4.6 of the General Standard.

7.7 **Date Marking and Storage Instructions**

The date of minimum durability and storage instructions shall be declared in accordance with Section 4.7 of the General Standard.

7.8 **Additional Requirements**

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

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

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

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

7.9 **Exemptions from Mandatory Labelling Requirements**

Exemptions from mandatory labelling requirements shall be made in accordance with Section 6 of the General Standard.

7.10 **Non-retail Containers**

In addition to Sections 2 and 3 of the General Standard (CODEX STAN 1-1985) the following specific provisions apply to fruit nectars in non-retail containers as defined by the Codex Alimentarius Commission (see page 123 of the Procedural Manual, 6th Edition).

7.10.1 Information required in Sections 7.1 to 7.6 and 7.8 shall be given either on the containers or in accompanying documents except that the name of the food, lot identification and the name and address shall appear on the container.

7.10.2 However, lot identification and the name and address may be replaced by an identification mark provided that such a mark is clearly identifiable with the accompanying documents.
8. METHODS OF ANALYSIS AND SAMPLING

See Appendix IX.
REPORT OF THE AD HOC WORKING GROUP ON ANALYSIS

Revision of Methods of Analysis for Fruit Juices

The Working Group on Methods of Analysis met under the chairmanship of Dr. H. Woidich (Austria). Participants included members of the delegations of Austria, France, Federal Republic of Germany, Israel, Spain, Switzerland, United Kingdom, United States of America and the joint secretariat.

The Working Group reviewed document CX/FJ 88/12 (AGRI/WP.1/GE.4/R.95) which presented the methods of analysis still requiring further discussion and Appendix I summarizing the methods of analysis for fruit juices and their status of endorsements. The Working Group took into account the definitions of methods of analysis as presented in Part A, Section 1(f) of CX/FJ 88/2 (AGRI/WP.1/GE.4/R.85) Matters of Interest. The following recommendations were made by the Working Group:

1. **Test for fermentability**
   Delegations reported that their experience with IFJU Method No. 18, 1974, Fermentation Test, had indicated no problems with this Type I method.

2. **Determination of carbon dioxide**
   The Working Group considered that IFJU Method, 42.1966, had not yet been accepted and recommended that a new method should be found which would work with levels of carbon dioxide higher than 2 g/litre. The existing IFJU Method 42-1976 was considered too complicated and will be replaced by an easier method. It was recommended to request that IFJU look into this possibility of a new method of analysis.

3. **Determination of ethanol**
   The Working Group proposed IFJU 52-1983 (enzymatic method) as a type II reference method. It was considered that IFJU Method No. 2-1968, was not useful for determining small amounts of ethanol.

4. **Determination of hydroxymethylfurfural (HMF)**
   As the Commission had agreed to delete the maximum level of HMF and corresponding methods of analysis for the standards for apricot, peach and pear nectars, this item was considered no longer necessary.

5. **Determination of minimum content of fruit ingredient**
   The Working Group considered that no single method could be recommended under this point.

6. **Determination of Honey**
   The Working Group did not consider that any single method could be recommended but noted that methods were being developed for determining fruit content (5) and honey.

7. **Determination of added salt**
   The Working Group recommended adoption of the General Codex Method (JAOAC 58, 399-400 (1975)) as a Type II method. It also considered that IFJU Method No. 37-1968 could be accepted as a Type III method.
8. **Determination of lead**
   The Working Group considered the need for a method of analysis capable of determining lower levels of lead (below 0.3 mg/kg) and recommended that ISO Method 6633 be accepted as a Type III Method. The AOAC Method 25.061-067, already adopted as a Type II Method, was updated in line with the 1985 method.

9. **Determination of tin**
   The Working Group considered that reference to AOAC (1980) XIII, Tin: AAS Method should be updated.

10. **Essential oils**
    It was agreed that the AOAC should be consulted concerning updating this method (AOAC 13th Ed., 1980, 22.008, 22.089, 19.127). It was noted that the IFJU Method No. 45A-1972 was exactly the same as the AOAC method (steam distillation method of Clevenger) and should, therefore, also be reported.

---

**METHODS OF ANALYSIS AND SAMPLING FOR FRUIT JUICES**

Proposed revised Part IV of Volume X of the Codex Alimentarius.

1. **Taking of the Sample and Expression of Results as m/m (Type I Method endorsed)**
   No proposal for amendment (Ref. para. 1, Appendix VI, ALINORM 87/14)

2. **Test of Fermentability (Type I Method, endorsed)**
   Method confirmed. No proposal for amendment. (Ref. para. 1, Appendix VIII, ALINORM 89/14).

3. **Determination of Apparent Viscosity (Type I Method, endorsed)**

4. **Determination of L-ascorbic acid (Type II Method, endorsed)**

5. **Determination of Carbon Dioxide (Type II Method, temporarily endorsed)**
   Proposal to replace IFJU Method No. 42, 1966 with a new method to be developed by IFJU. (Ref. para. 5, Appendix VI, ALINORM 87/14 and para. 2, Appendix VIII, ALINORM 89/14).

6. **Determination of Essential Oils (Type I Method, endorsed)**

* Reference to be up-dated in consultation with the AOAC.
7. **Determination of Ethanol (Type II Method, to be endorsed)**
   (Ref. para. 3, Appendix VIII, ALINORM 89/14)

8. **Determination of Honey**
   No single method available. Method is being developed.
   (Ref. para. 6, Appendix VIII, ALINORM 89/14).

9. **Determination of Hydroxymethyl Furfural (HMF)**
   Method and provision deleted by the 17th Session of the Commission (para. 393, ALINORM 87/39).

10. **Determination of Minimum Content of Fruit Juices**
    No single method available. Method is being developed.
    (Ref. para. 9, Appendix VI, ALINORM 87/14 and paras. 5-6, Appendix VIII, ALINORM 89/14).

11. **Determination of Added Salt**
    Proposal to amend as follows:
    - Codex General Method for Chloride (JAOAC, 58, 399-400, 1975 or Appendix IV, ALINORM 79/23) (Type II Method, to be endorsed)
    - IFJU method No. 37, 1968 (Type III Method, endorsed previously as Codex referee method)

12. **Determination of Soluble Solids (Type I Method, endorsed)**
    No proposal for amendment. (Ref. para. 10, Appendix VI, ALINORM 87/14).

13. **Determination of Total Sugars (Type I Method, endorsed)**
    No proposal for amendment (Method determines total sugars not added sugars)
    (Ref. para. 11, Appendix VI, ALINORM 87/14).

14. **Determination of Total Titrable Acids (Type I Method, endorsed)**
    No proposal for amendment. (Ref. para. 13, Appendix VI, ALINORM 87/14)

15. **Determination of Volatile Acids**
    No proposal for amendment (Ref. para. 14, Appendix VI, ALINORM 87/14)

16. **Determination of Water Capacity and Fill of Containers**
    The situation regarding the endorsement of methods for the determination of "water capacity" and "fill of containers" is as follows:
    (a) Codex method CAC/RM 46-1972 defines water capacity of container and has been endorsed as a Type I Method to replace the method included in Part IV, Volume X of the Codex Alimentarius.
    (b) The method published in the Almanac of the Canning, Freezing, Preserving Industries, 55 Ed., 1970, pp. 131-132 (reproduced in Appendix V, ALINORM 71/23) included in Part IV, Volume X of the Codex Alimentarius consists of two parts:
(i) determination of "water-capacity" of containers (identical in substance with Codex method CAC/RM 46-1972); and

(ii) determination of "fill of container" (not covered by Codex method CAC/RM 46-1972)

The method in the above Almanac has been previously endorsed as a Codex "referee" method.

The Secretariat is of the opinion that the determination of water capacity can be done either with Codex method CAC/RM 46-1972 or with the method described in the Almanac actually included in Vol.X of the Codex Alimentarius. However, for the determination of fill of containers part (b) of the method published in the almanac referred to above is required. The Codex Committee on Methods of Analysis and Sampling should consider this matter.

17. **Determination of Arsenic**

Proposal to adopt AOAC methods as shown below and to withdraw the IFJU method No. 47,1973 included at present in the standard.


18. **Determination of Copper (Type II Method, endorsed)**

No proposal for amendment. (Ref. para. 18, Appendix VI, ALINORM 87/14)

19. **Determination of Iron (Type II Method, endorsed)**

No proposal for amendment (Ref. para. 20, Appendix VI, ALINORM 87/14)

20. **Determination of Lead**

Proposal to withdraw the IFJU method No- 14, 1964 and inclusion of AOAC and ISO methods as follows:

- ISO Method 6633 (Type III Method, to be endorsed)

(*) to be updated with the latest reference
(Ref. para. 8, Appendix VIII, ALINORM 89/14)

21. **Determination of Mineral Impurities Insoluble in Hydrochloric Acid (Type I Method, endorsed)**


22. **Determination of Sulphur Dioxide (Type II Method, endorsed)**

No proposal for amendment. (Ref. para. 22, Appendix VI, ALINORM 87/14)
23. **Determination of Tin (Type II Method, endorsed)**

The AOAC method, following up-dating of reference to AOAC (1980) XIII, Tin, to be included in Part IV of Vol. X of the Codex Alimentarius

(Ref. para. 9, Appendix VIII, ALINORM 89/14)

24. **Determination of Zinc**

Proposal to withdraw the AOAC (1975) colorimetric method included in Part IV of Vol. X of the Codex Alimentarius and to replace by:


(Ref. para. 19, Appendix VI, ALINORM 87/14)

**PROPOSED CONSEQUENTIAL AMENDMENTS TO CODEX STANDARDS**

(submitted to the Commission)

The Group of Experts agreed that certain changes made in the Draft General Standards for Fruit Nectars (Appendix II) and Fruit Juices (Appendix III) should also be made in the various individual Codex standards for fruit juices and fruit nectars. The Commission was requested to treat such changes as consequential amendments in accordance with para. 2 of the Guide to the Procedure for the Revision and Amendment of Codex Standards (Procedural Manual of the Codex Alimentarius Commission, 6th Edition).

The proposed consequential amendments are as follows:

1. "Lemon or Lime juice may be added as an acidifying agent in quantities not influencing the original fruit flavour" (all individual standards for nectars) (paras. 26 and 27, ALINORM 89/14).

2. "The addition of L-ascorbic acid shall be declared in the list of ingredients as:
(a) "L-ascorbic acid as antioxidant", or
(b) "antioxidant"

(delete in all individual fruit juice and nectar standards paras 47)

3. Sections on: Preamble, List of Ingredients, Net Contents, Name and Address, Country of Origin, Lot Identification, Date Marking and Storage Instructions, Additional Requirements, Exemptions from Labelling Requirements, Non-retail containers (Ref. para 94, ALINORM 89/14; paras. 153 and 159, ALINORM 87/22).

   - all individual standards for nectars to be brought into line with the General Standard for Nectars (App.II, ALINORM 89/14);

   - all individual standards for fruit juice to be brought into line with the General Standard for Fruit Juices (App.III, ALINORM 89/14).

Appendix X

ALINORM 89/14
4. The methods of analysis adopted by the 17th and 18th Sessions of the Group of Experts and endorsed by the Codex Committee on Methods of Analysis and Sampling (to be included in Part IV, Volume X of the Codex Alimentarius, replacing the corresponding methods as appropriate) (Ref. paras. 73-76, ALINORM 89/14 and Appendix IX).