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AGRI/WP.1/GE.4/16

UN ECONOMIC COMMISSION FOR EUROPE

COMMUTEE ON AGRICULTURAL PROBLEMS

Working Party on Standardization of Perishable Produce

JOINT FAO/WHO FOOD STANDARDS PROGRAMME

CODEX ALIMENTARIUS COMMISSION

CODEX ALIMENTARIUS COMMISSION
Seventeenth Session
Rome, 29 June - 10 July 1987

REPORT OF THE SEVENTEENTH SESSION OF THE JOINT ECE/CODEX ALIMENTARIUS GROUP OF EXPERTS ON STANDARDIZATION OF FRUIT JUICES
Rome, 26 - 30 May 1986

INTRODUCTION

1. The Joint ECE/Codex Alimentarius Group of Experts on Standardization of Fruit Juices held its 17th Session in FAO Headquarters, Rome from 26-30 May 1986, under the chairmanship of Dr. W. Pilnik (Netherlands).

2. The Session was attended by 52 participants including the delegations of Argentina, Australia, Austria, Belgium, Brazil, Cuba, Denmark, Finland, France, Federal Republic of Germany, Ghana, Italy, Japan, Kuwait, Netherlands, Norway, Spain, Sweden, Switzerland, Thailand, United Kingdom and United States of America. Observers were present from the European Economic Community (EEC), the International Federation of Fruit Juice Producers (IFFJP), the Confederation des Industries agro-alimentaires de la CEE (CIAA) and the Office international de la vigne et du vin (OIV). A list of participants, including the Secretariat and Officers from FAO, is contained in Appendix I to this Report.

3. The Session was opened by Dr. R.K. Malik, Chief of the FAO/WHO Food Standards Programme, who welcomed the delegates and noted that during more recent sessions of the Group a larger number of delegates from developing countries were in attendance than at previous sessions of the Group of Experts. He stated that this reflected an increasing interest by developing countries in the Codex Standards for Fruit Juices, particularly in the work on standards for products from tropical areas of the world and the need to facilitate trade in them.

4. Dr. Malik considered the work of the Group of Experts on Fruit Juices which had, since its inception in October 1962, elaborated over 20 International Standards on Fruit Juices in addition to many guidelines as one of the best examples of fruitful cooperation between UN/ECE and the Codex Alimentarius Commission. He expressed the hope that there would be a greater degree of implementation by member countries of the Codex, of the standards which had been elaborated primarily to facilitate international trade.

5. Welcoming the delegates the Chairman was gratified at the presence of Dr. P. Lunven, Director, Food Policy and Nutrition Division of FAO at the opening session, which demonstrated his interest in the work of the Group of Experts. He referred to the recent deaths of Professor A. Bhumiratana of Thailand and Professor H.I. Bielig of the

Federal Republic of Germany, both of whom had taken an active interest in the work of the Group and assured the delegations of Thailand and the Federal Republic of Germany that these eminent men would not be forgotten.

ADOPTION OF THE AGENDA

6. The Group of Experts had before it the provisional agenda for the Session as set out in Document CX/FJ 86/1 - AGRI/WP1/GE.4/15. The Group was informed that Document CX/FJ 86/13 - AGRI/WPI/GE.4/R.84 for discussion of Agenda Item 14 - Future Work Programme, was not available.

7. To facilitate discussions of certain agenda items by the plenary the Group of Experts agreed to set up some Working Groups.

8. The Group of Experts agreed that the ad hoc Working Group on Methods of Analysis and Sampling should meet during the session to give consideration to the working paper on revision of Methods of Analysis (CX/FJ 86/11 - AGRI/WP1/GE.4/R.82) and other matters on Methods of Analysis and Sampling arising from the Committee on Methods of Analysis.

9. The Group of Experts was informed that a considerable number of replies had been received in response to Circular Letter 1985/48-FJ. In view of the complexity to analyse the replies received, the Group of Experts decided to establish an ad hoc Working Group which would make recommendations to the Plenary. The Working Group was asked to give consideration to the items set forth in working papers CX/FJ 86/6 and CX/FJ 86/6 Add.1 and Add.2 (AGRI/WP1/GE.4/R.77 and AGRI/WP1/GE .4/R.77-Add. 1 and 2) and Room Document (CX/FJ 86/6 Room Document) and also other items on Contaminants referred to this Group (CX/FJ 86/2-Part IV, AGRI/WP1/GE.4/R.73-Part IV).

10. The Group of Experts also agreed to set up a Working Group to examine all available material including document CX/FJ 86/12 - AGRI/WP1/GE.4/R.83, on the question of labelling and to advise the Group on what action to take concerning the revision of the labelling provisions in the existing standards elaborated by the Group. This item would then be discussed by the Plenary under Agenda Item 12.

11. It was also agreed to set up another Working Group to draft a standard for vegetable juice that could be discussed later by the Group under Agenda Item 11.

12. With the above slight changes the Group of Experts adopted the Provisional Agenda.

MATTERS OF INTEREST

13. The Group of Experts had before it Matters of Interest Arising from the Reports of the Codex Alimentarius Commission and Other Codex Committees as contained in Document CX/FJ 86/2 - Parts I and IV - AGRI/WPI/GE.4/R.73.

Codex Alimentarius Commission - Sixteenth Session (ALINORM 85/47)

a) Consideration of the Draft Standard for Guava Nectar Preserved Exclusively by Physical Means at Step 8 (Appendix II to ALINORM 85/14)

14. The Group of Experts noted that the Commission, while adopting the Standard for Guava Nectar at Step 8 had been informed that this was the first nectar standard which did not contain a minimum for total solids but a maximum requirement for total soluble solids; furthermore the use of lime juice as an acidifying agent had been permitted as an alternative to lemon juice. The Group noted that the adoption of the

Standard by the Commission led to consequential amendments to certain standards for fruit nectars (see para. 18).

b) Consideration of the Draft Standard for Liquid Pulpy Mango Products Preserved Exclusively by Physical Means at Step 8 (Appendix III to ALINORM 85/14)

15. The Group of Experts noted that the Commission, while adopting the above Standard at Step 8 observed that the Standard contained a labelling provision which permitted the use of the name mango juice for products of not less than 50 percent m/m fruit ingredient in countries where the product was traditionally known as such. This accommodated the markets of those countries where these products had been introduced as "mango juice" without actually complying with the definition of fruit juice approved by the Group of Experts.

(c) Discontinuation of Work on Proposed Draft Standard for Mango Juice

16. The Group of Experts noted that the Commission had agreed to its request to discontinue work on the proposed draft standard for mango juice, a product which was not produced in commercially significant amounts.

(d) Consideration of the Proposed General Standard for Fruit Nectars at Step 5 (Appendix IV to ALINORM 85/14)

17. The Group of Experts noted that the Commission had advanced the above Standard to step 6. The Standard was being elaborated with a view to providing for those nectars which had not been covered by individual Codex Standards.

(e) Consideration of Proposed Amendments to Certain Codex Standards for Fruit Nectars (Consequential Amendments) (paras. 49-50 of ALINORM 85/21)

18. The Group of Experts noted that the Commission had adopted at Step 8 amendments to the Codex Standards for:

(i) Apricot, Peach and Pear Nectars Preserved Exclusively by Physical Means

(ii) Non-Pulpy Blackcurrant Nectar Preserved Exclusively by Physical Means

(iii) Pulpy Nectars of Certain Small Fruits Preserved Exclusively by Physical Means

(iv) Nectars of Certain Citrus Fruits Preserved Exclusively by Physical Means

as consequential to the introduction of a maximum limit for total soluble solids content and of the use of lime juice in the Standard for Guava Nectar. The amendments are as below:

A. The following Sections in (i), (ii), (iii), and (iv) above should be amended to read as follows:

"Sugars

One or more sugars, as defined by the Codex Alimentarius Commission, shall be added."

"Soluble Solids

The soluble solids content of the product shall be not more than 20% m/m as determined by refractometer at 20ºC, uncorrected for acidity and read as ºBrix on the International Sucrose Scales."

B. The following Section in (i) and (iv) above should be amended to read as follows:

"Lemon Juice or Lime Juice

Lemon or lime juice may be added as an acidifying agent."

(f) Amendment of Codex Standard for Apricot, Peach and Pear Nectars (CODEX STAN 44-1981) - HMF

19. The Group of Experts deferred discussion of the subject to Agenda Item 10.

(g) Amendments to certain Codex Standards for Fruit Juices and Fruit Nectars proposed by the International Federation of Fruit Juice Producers (IFFJP)

20. The Group of Experts noted that the Commission at its 16th Session referred to it for consideration the proposals for the amendment of Certain Codex Standards for Fruit Juices and Fruit Nectars submitted by IFFJP;

i) Codex Standard for Apple Juice (CODEX STAN 48-1981) Section 1 - Description

21. The IFFJP proposed an amendment to provide for addition of 10% of pear juice to achieve a better balance.

22. Before inviting the Group to discuss the amendment proposed by IFFJP, the Chairman referred to the Codex Standard for Orange Juice which contained a provision for addition of 10% m/m of mandarin juice (citrus reticulata blanco) for achieving a better balance of colour. He however brought the attention of the Group to the fact that apples and pears are toxonomically far apart and belong to different genera.

23. Most of the delegations that took part in the discussion were not in favour of the amendment and expressed the view that better balance could be achieved by addition of different apple juices rather than by addition of pear juice. Hence the amendment was not agreed to by the Committee. The delegation of Switzerland, however favoured the amendment.

Section 2.1 - Soluble Solids

24. The IFFJP proposed that the soluble solids content should be 10.7% m/m which corresponds to 43º Oechslé.

25. The Group noted that Apple Juice was one of the earlier standards that it had elaborated and that the figure of 10% m/m for soluble solids was arrived at after prolonged discussions.

26. The delegation of the Netherlands informed the Group, that in its country the soluble solids for Apple Juice is set at a minimum of 11.2º Brix after correction. When the soluble solids for apple juice is lower than 11.2º Brix, the producer can however market the juice, only when certified or proved that the juice is authentic.

27. The delegations of Federal Republic of Germany, Switzerland and Italy favoured a higher figure of 10.9 - 11.2% m/m for soluble solids in apple juice. The delegations of

Brazil, Japan and Norway did not favour an increase in the existing figure of 10% m/m for soluble solids in Apple Juice.

28. The Group was informed that it was appropriate to retain a lower figure for soluble solids so as to cover all juices. If some governments would prefer to have a higher figure for soluble solids content in apple juice, acceptance of the standard would still be possible but with specified deviation.

29. The Group did not favour the amendment proposed by IFFJP and agreed to leave the figure of 10% m/m for the content of soluble solids in the Codex Standard for Apple Juice unchanged. The delegations of France and Switzerland however favoured a figure of 10.7% m/m.

Section 4.6 - Tin (Sn)

30. The IFFJP considered the maximum content of 150 mg/kg too high. The Group referred this amendment to the Working Group on contaminants for its consideration.

Section 4.8 - Sulphur dioxide

31. IFFJP proposed that Sulphur dioxide in apple juice should be listed as an additive and not as a contaminant; in some cases its addition to the product is justified to maintain the colour.

32. The Group noted that the Codex Standard for Apple Juice contains a provision for Sulphur dioxide at a level of 10 mg/kg as contaminant. This provision was included to provide for the slight action of yeast which reduces sulphates to sulphur dioxide. The Group noted that sulphur dioxide at a level of 10 mg/kg poses no problems and agreed to leave it as a provision for contaminant. It may not, however, always be possible to find the necessary technological Justification for use of sulphur dioxide as a food additive in apple juice.

ii) Codex Standard for Grape Juice (CODEX STAN 82-1981) - Lactic Acid

33. The Codex Standard does not mention the presence of lactic acid, which means that its addition is prohibited. However, since this acid can be present naturally in grape juice, IFFJP consider it desirable to set a maximum limit of 0.5 g/litre for reasons of quality.

34. The Group noted that lactic acid is not a natural constituent of grape juice and its presence in grape juice could only result from contamination with mould or bacteria. Hence lactic acid in grape juice should be considered as a contaminant.

35. The delegation of Switzerland informed the Group that 30% of grape juice, most of which it imports, contains lactic acid up to levels of 0.5 g/litre. In its view, lactic acid is present in many consignments of grape juice and a provision should be made for lactic acid in grape juice as a contaminant.

36. The Group did not take a decision on the amendment but referred it to the Working Group on Contaminants.

Sections 3.1 and 3.2 - Citric acid and Malic acid

37. IFFJP proposed that the addition of the above acids should be prohibited in order to prevent falsification of grape juice.

38. The Group recalled that it was mainly to meet the needs of certain developing countries in North Africa, where grape juice was exceptionally sweet, that provision was made for citric acid and malic acids in the Codex Standard for grape juice. Addition of

these acids to grape juice brought the Brix/acid ratio in grape juice to a level which imparted better organoleptic properties to it.

39. The Group did not agree to the amendment proposed by IFFJP to prohibit addition of citric and malic acids to grape juice.

Section 4.6 - Tin (Sn)

40. The IFFJP considered the maximum content of 150 mg/kg too high.

41. The Group referred the amendment to the Working Group on Contaminants for its consideration.

iii) Codex Standards for Fruit Nectars

Description

42. IFFJP believes that it should be possible to prepare a nectar with or without the addition of sugars.

43. The Group agreed to discuss the proposed amendment under Agenda Item 4, Consideration of General Standard for Fruit Nectars.

Ethanol Content

44. IFFJP proposed to increase the maximum ethanol content to 3 g/litre because of small red fruits which tend to contain naturally small amounts of alcohol.

45. The Group agreed to discuss the proposed amendment under Agenda Item 4, Consideration of General Standard for Fruit Nectars.

Tin Content

46. The IFFJP considered the maximum tin content of 250 mg/kg too high.

47. The Group referred the amendment to the Working Group on Contaminants for its consideration.

Units of Expressing Minimum and Maximum Levels

48. IFFJP proposed to express minimum and maximum levels in g/mg per litre instead of g/mg per kg.

49. The Group recalled the decision of the Codex Committee on Methods of Analysis and Sampling made several years ago that minimum and maximum values for provisions in all Codex Commodity Standards with the exception of mineral water should be expressed as g/mg per kg and agreed not to take any action to the amendment proposed by IFFJP.

50. The observer from IFFJP informed the Group that the Fruit Juice Producers whom he represents do not deal with kg of juice but with litres and hence the problem.

51. The Group however noted that conversion of g/mg per kg to g/mg per litre is not difficult and hence should not pose a real problem.

(h) Need for a Codex Standard for Fruit (based) Drinks with a high content of Fruit Juice (paras. 170-175) and Appendix VIII of ALINORM 85/14

52. The Group of Experts noted that the Commission agreed to discuss at its next session (17th) the need for a Codex Standard for Fruit (based) Drinks with a high content of Fruit Juice in the light of a paper on all aspects of the subject matter, having regard to the Commission's work priority criteria, to be prepared by a consultant(s), as

well as government comments on it. The Group noted that if the Commission agreed to the elaboration of a Codex Standard for Fruit (based) Drinks, it would represent new work for the Group.

(i) Vegetable Juices

53. The Group of Experts noted that consideration of a Standard for Vegetable Juice was on the agenda and would be considered under Item 11.

Matters Arising from Codex Committees

Aseptic Packaging

54. The Group of Experts noted that the CCFH had considered the subject of aseptic packaging of fruit juices and pulps and the potential problem of the contamination through the use of chlorine, hydrogen peroxide, iodophors or other sanitizers and agreed to elaborate a Code of Practice on "Aseptic packaging" (ALINORM 87/13, paras. 69-171). The CCFA had agreed to await the developments and discuss the subject at its 19th Session.

Tin in Canned Foods

55. The Group of Experts noted that the views of CCFA on the subject (ALINORM 85/12, paras. 25, 28) would be considered by the Working Group on Contaminants.

Methods of Analysis and Sampling (ALINORM 85/23)

56. The Group of Experts noted that the comments of CCMAS on the above subject as related to standards elaborated by it would be considered by the Working Group on Methods of Analysis.

Proposals by the Coordinating Committee for Asia to Amend Certain Codex Standards for Fruit Juices

57. The Group of Experts noted that the proposals by the Coordinating Committee for Asia to amend certain Codex Standards for fruit juices related to increasing the maximal level of tin in Apple Juice and Grape Juice from the existing level of 150 mg/kg to 250 mg/kg and referred it to the Working Group on Contaminants for its consideration.

Progress Report on Acceptances

58. The Group of Experts had before it Working Paper CX/FJ 86/2 - Part II (AGRI/WP.1/ GE.4/R.73-Add.1). The Group of Experts noted that the 16th Session of the Commission had again placed emphasis on obtaining more acceptances. The Commission had agreed that it was important for all members of the Commission to communicate to the Secretariat their position on acceptances. Every member country had been requested to submit a report in writing on this topic for the Seventeenth Session of the Commission. It would be useful if the Codex Committee on General Principles examined problems associated with acceptance of Codex standards and maximum limits for pesticide residues at its next session. The Commission had noted that there had been increased use of Codex standards by Member Countries of the CAC in trade, regulatory activities and food control systems and it had decided to place on record the desire of developing countries that developed countries should do more to accept or otherwise implement the Codex Standards in order to help the trade of developing countries (paras. 42-44, ALINORM 85/47).

59. The Group of Experts was informed of the following notifications from governments which had been received since May 1984.

60. Tanzania had given Full Acceptance to the Codex Standards for Orange Juice, Grape Juice and Lemon Juice preserved exclusively by physical means.

61. Cyprus had given Target Acceptance to all the Codex Standards for Fruit Juices, Concentrated Fruit Juices and Fruit Nectars as contained in Codex Alimentarius Volume X.

62. Hungary had given Full Acceptance to the Codex Standards for Apricot, Peach and Pear Nectar, Apple Juice, Tomato Juice, Concentrated Apple Juice, Grape Juice, Concentrated Grape Juice, Non-Pulpy Blackcurrant Nectar, Blackcurrant Juice, Concentrated Blackcurrant Juice and Pulpy Nectars of Certain Small Fruits.

63. USA had accepted with Specified Deviations the Codex Standards for Grape Fruit Juice preserved exclusively by physical means.

64. The delegation of Switzerland informed the Group that it had not formally accepted any Codex standards on fruit juices but had allowed free circulation of certain fruit juices which complied with the Codex Standards. Switzerland was going to make a general review of Codex Standards and would be in a position to provide more information on acceptances of Codex Standards at the next session of the Commission.

65. The observer of EEC stated that the EEC which comprised presently 12 countries had not yet formally accepted any Codex Standard on fruit juices, but had, at various occasions, stated the conditions under which products complying with the Codex Standards could be freely circulated. The observer of the EEC informed the Group of Experts that at present studies were undertaken on the possible form of acceptance.

66. The delegation of Brazil informed the Group that it was presently carrying out a comparative study of the national versus Codex standards for fruit juices.

CONSIDERATION OF DRAFT GENERAL STANDARD FOR FRUIT NECTARS PRESERVED EXCLUSIVELY BY PHYSICAL MEANS AT STEP 7

67. The Group of Experts had before it the above Standard as contained in Appendix IV to ALINORM 85/14 and comments received in response to Circular Letter 1985/43 - FJ in Working Paper CX/FJ 86/3 (AGRI/WP.1/GE.4/R.74) (Argentina, Canada, Chile, China, Denmark, Egypt, Iran, Ireland, Norway, Poland, Portugal, Spain, Sweden and Thailand).

Section 3.2 - Sugars

68. The delegation of the Netherlands proposed to amend Section 3.2 (Sugars) to replace "shall" with "may". In its view, the present wording did not cover the nectars which did not contain added sugars. It also proposed that reference to "sugar or honey" should be deleted from Section 2 (Description). The Group recalled that at its Fifteenth Session (ALINORM 84/14, paras. 86-87 and 123) it had considered that the addition of sugars to nectars was not essential.

69. The Secretariat further recalled that at the Fifteenth Session of the Group of Experts the discussion had centered on the Group's decision to determine total sugars (ALINORM 84/14, paras. 86-87). At the Sixteenth Session (ALINORM 85/14, paras. 68-69), the Group decided to introduce a maximum level of soluble solids of 20% m/m and to delete the minimum requirement for soluble solids which had, in fact, reflected the mandatory addition of sugar(s). At the Sixteenth Session the Group also amended Section 3.2 (Sugars) to retain the first sentence: "One or more of the sugars, as defined by the Codex Alimentarius Commission, shall be added."

70. Some delegations referred to their national legislation according to which sugar is considered as an essential ingredient of nectars and addition of sugars to nectars is mandatory.

71. The Group discussed the fact that excessive consumption of sugar is being discouraged by health authorities and the consumer trend also seems to be towards lower consumption and agreed that the addition of sugar to nectars should become optional. Accordingly reference to addition of sugars or honey in Section 2 Description was deleted. The work "shall" in Section 3.2.1 was changed to "may".

72. The delegation of Switzerland opposed this change noting that Switzerland had adopted legislation based on the Codex Standard and the Codex definition of "nectars". The Group's decision to make the addition of sugar optional would require changes in present national legislation. The Group noted that Switzerland opposed making the addition of sugar to nectars optional.

73. The Group of Experts noted that making the addition of sugars to nectars optional would necessitate consequential amendments to the existing Codex Standards for Fruit Nectars.

Section 3.1 - Minimum Content of Fruit Ingredient

74. The Group noted that in general a nectar should have a minimum of 50% fruit content. The draft standard however, makes a provision for a lower fruit content up to 25% m/m for nectars prepared from certain fruits of special character.

75. The delegation of Thailand explained that even the lower level of 25% m/m presented a problem for certain tropical fruits having strong flavour or high acidity. It suggested that it was premature to set a minimum fruit content for nectars of tropical fruit and suggested that this should be regulated by good manufacturing practices. This view was endorsed by the delegation of Brazil. The delegation of Cuba expressed a reservation for specifying minimum fruit content.

76. The delegation of France noted an error in the French text (15% m/m in place of 25% m/m). It also noted that "ground and sieved" had been omitted in Section 2 (Description) of the French text. The Secretariat was asked to make these corrections.

77. Some delegations enquired whether fruit ingredient referred to fruit juice or the pulp from the whole fruit. The Group noted that this was to a certain extent covered in the description (Section 2) of the Standard and held the view that minute details of technology cannot always be covered in a standard.

78. The Group of Experts expressed the view that the General Standard is applicable to all fruit nectars not covered by individual standards and decided to leave unchanged Section 3.1 - Minimum Content of Fruit Ingredient

Section 3.5 - Ethanol Content

79. The Group noted that in Codex Standards for Nectars so far adopted by the Commission the maximum ethanol content was 3.0 g/kg. Most of the comments from governments contained in CX/FJ 86/3 supported this figure. Egypt and Iran favoured a lower figure of 1.5 g/kg for ethanol content.

80. The Group agreed that the maximum ethanol content should be 3.0 g/kg.

Section 4 - Food Additives

81. The Group of Experts noted the proposal of Chile to include a food additive provision for natural fruit aromas to strengthen the flavour of nectars. The group however noted that a provision has been made in fruit juice standards for the addition of natural volatiles that were removed from the juice during processing.

82. The delegation of the Netherlands proposed that the maximum level of L-Ascorbic acid be determined by good manufacturing practice in place of the present maximum of 400 mg/kg. It stated that storage in warmer climates could cause this level to decrease rapidly and become insufficient to exert its optimum activity as an antioxidant. The Group of Experts noted that the level of 400 mg/kg of ascorbic acid was endorsed by CCFA and decided not to change the present level.

Section 5 - Contaminants

83. The Group of Experts reviewed the section on contaminants in the light of the report of the Working Group on Contaminants (appendix IV). It noted that the maximum levels for contaminants in the General Standard for Fruit Nectar had already been endorsed by the Codex Committee on Food Additives. However, in accordance with the recommendation of the Working Group, which the Group of Experts had endorsed, it lowered the maximum level of tin from the existing figure of 250 mg/kg to 200 mg/kg. The present footnote remains.

84. The delegation of Australia supported by Thailand and Cuba expressed concern that by reducing tin level, the Committee may to some extent be preempting any recommendations that may follow from JECFA's reevaluation. A suggestion was made that it may be preferable to leave levels at 250 mg/kg for the time being at least. The delegation of Australia emphasised the international nature of Codex Standards which, by definition, must take into account a wide range of different global situations and practices (see also para. 124) .

85 The Group did not reopen the debate, and agreed to abide by its earlier decision.

Section 8.2 - List of Ingredients

86. Though nectars, unlike fruit juices, were manufactured products, a majority of delegations who participated in the debate held the view that if nectars were made from concentrated fruit juices that fact should be conveyed to the consumer by proper labelling. They held the view that the use of concentrates in making nectars should be mentioned on the label in close proximity to the name of the product as in EEC regulations for fruit juice.

87. The delegation of Netherlands held the view that if a manufacturer takes the trouble to prepare nectars from single strength juice, it should be possible to distinguish this product from other products, since in general products which have not been concentrated are of better quality. The delegation of U.S.A. noted that manufacturers of such a product could have on the label "Not from concentrates".

88. The Chairman informed the Group that products such as Florida orange juice sold to the public as frozen concentrated juice was of excellent quality. He considered it sufficient to include concentrated juice, if used in nectar, in the list of ingredients and in his view it was not essential to include it on the label in close proximity to the name.

89. Views were divided among the delegations whether the fact that concentrates that had been used in the preparation of nectars should be included in (i) the name, (ii)

the list of ingredients or (iii) both. The delegations of Netherlands, Norway, Federal Republic of Germany, Switzerland, Italy and France expressed the view that, in labelling of nectars, the fact that concentrates have been used should appear in close proximity of the name. After a lengthy debate there was an agreement in the Group for this information to appear in the list of ingredients.

90. The Group considered that whenever concentrates were used this fact should appear in the list of ingredients and they should be calculated to single strength. The Group agreed to amend Section 8.2.1 as follows:

Section 8.2.1

8.2.1 A complete list of ingredients including added water shall be declared on the label in descending order of proportion. 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.

Other Provisions of Labelling

91. The Group of Experts agreed that the wording of all other provisions of labeling should be changed in accordance with its decision on the recommendations of the Working Group on Labelling (paragraphs 180-186).

92. The Group of Experts noted that if the General Standard for Fruit Nectars preserved exclusively by physical means was adopted by the Commission at Step 8, that would necessitate consequential amendments in the existing Codex Standards for Nectars. These consequential amendments related to:

i) Making sugar an optional ingredient in Nectars;

ii) Provision for the declaration of use of concentrated fruit ingredient in the list of ingredients; and

iii) Revision of the definition of Nectars in Codex Alimentarius Volume X.

Status of the Standard

93. The Group of Experts advanced the Draft 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 DRAFT GENERAL STANDARD FOR FRUIT JUICES PRESERVED EXCLUSIVELY BY PHYSICAL MEANS AT STEP 4

94. The Group of Experts had before it the above Draft General Standard as contained in Appendix V of ALINORM 85/14 and comments received in response to Circular Letter 1984/47 (FJ). Comments received from Egypt, Ireland, Norway, Poland, Sweden and Thailand were contained in Working Paper CX/FJ 86/4 (AGRI/WP.1/GE.4/R.75).

Section 3.1 - Soluble Solids

95. The delegation of the United Kingdom expressed the view that the reference made to the soluble solids content of the ripe fruit did not take into account the variations in the soluble solids content and hence the precise application of section 3.1.1 was impossible. The delegation of The Netherlands informed the Group that the definition of fruit juice as contained in Codex Alimentarius Vol. X clarified Section 3.1.1 and the Group did not take action on this item.

Section 3.2 - Sugars

96. The delegation of Thailand pointed out that in its view it would be difficult to specify the maximum level of sugar to be added since it depended on the type of fruit. The delegation of Switzerland considered 100 g/kg too high and suggested that the amount of sugars added be limited to 50 g/kg. The delegation of the Netherlands drew the attention of the Group to an EEC directive which for most uses permits the addition of sugars up to a maximum of 100 g/kg and 200 g/kg for fruit juices from acid fruits and asked in this respect that an exception be made in the Codex Standard for Lime, bergamot, red and white currant juice in which sugars should be accepted to a level of 200 g/kg. The Chairman agreed that Codex Standards for specific fruit juices permitted addition of sugars at different levels but called attention to the fact that the Group was considering a General Standard which must address a variety of juices. The Group agreed not to make any change in the existing text.

Section 3.3 - Ethanol Content

97. The Group of Experts noted that Egypt objected to the presence of ethanol in any concentration in the final product on religious grounds. Ethanol is an unavoidable constituent of fruit juice and countries needing fruit juice without ethanol should resort to other technology, e.g. use of concentrates. The delegation of Switzerland stated its preference for 5 g/kg and received the support of the Group. The delegation of the Federal Republic of Germany expressed a preference for 3 g/kg.

98. The Group agreed that the maximum content should be 5 g/kg and removed the square brackets in Section 3.3 Ethanol Content.

Section 5 - Contaminants

99. The Group recalled its earlier decision to accept a figure of 200 g/kg for the level of tin in fruit nectars and agreed that such a decision should be applicable to fruit juices also (Para 83).

Processing Aids

100. The Group of Experts considered whether processing aids which had been included in certain individual standards (e.g. CODEX STAN 48-1981) should be included in the General Standard for Fruit Juices.

101. The Group noted that CCFA was at present developing an inventory of processing aids, the status of which is not yet clear. The Group noted that it is not a positive list and agreed not to include at present a list of processing aids in the Standard.

Section 8.1 - Name of the Food (Declaration of Sugars)

102. The Group of Experts considered the text of Section 8.1.2 in square brackets in Appendix V and the alternative versions in paragraph 142 of ALINORM 85/14 which had also been included in Working Paper CX/FJ 86/4.

103. Delegations were divided on whether the specific name of the sugar(s) should appear in close proximity to the name of the food on the label. There were mixed opinions whether to use "sugar" or "sugars" since some delegates stated "sugar" referred only to sucrose.

104. Some delegations were in favour of the original version of Section 8.1.2 as it appeared in Appendix V of ALINORM 85/14 presently in square brackets.

> 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. Instead of the statement ""x" added" the term "sweetened" may be used.

A majority of the delegations were in favour of the version given in paragraph 142 of ALINORM 85/14 given below.

> 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 food where "x" represents the total quantity of added sugars in percent and the name or names of the sugar or sugars added. In addition thereto the term "sweetened" may be used.

104 a. The Group of Experts could not reach agreement for the text for Section 8.1.2. It decided to include in the Draft General Standard for Fruit Juices now at Step 5, the above texts as well as other texts given in paragraph 142 of ALINORM 85/14 and also the one proposed by the delegation of Netherlands in square brackets and ask for Government Comments.

105. The Group, however, decided to include the name of the sugar in the list of ingredients.

Section 8.2.2 - List of Ingredients

105 a. Delegates were widely split on whether and where to place information that would appear on the label concerning the use of concentrates and whether a juice had been reconstituted. Some held the view that such information should appear in the list of ingredients. Others considered that this information should be placed in close proximity to the name of the food on the label. The Group accepted the following version of Section 8.2.2:

> 8.2.2 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.

The Group agreed to place the revised Section 8.2.2 under Section Name of the Food and will become Subsection 8.1.3.

Other Provisions of Labelling

106. The Group of Experts agreed that the wording of all other provisions of labeling should be changed in accordance with its decision on the recommendations of the Working Group on Labelling (Paragraphs 180-186).

Status of the Standard

107. The Group of Experts decided to advance the proposed Draft General Standards for Fruit Juices to Step 5 of the Procedure. The revised text is contained in Appendix III to the Report.

CONSIDERATION OF DEFINITIONS OF FRUIT JUICES

108. The Group of Experts had before it a paper on the definitions of fruit juices as contained in Appendix I to ALINORM 85/14 and comments thereon in document CX/FJ 86/5 - AGRI/WP1/GE.4/R.76 (Ireland, Norway, Poland and Thailand).

109. The Group of Experts recalled that it had briefly discussed the paper at its previous session. At that time the Group had not been able to reach a decision on a possible amendment of the definitions and had agreed to request further governments comments on the principles set forth in the paper (Paras 42-49 of ALINORM 85/14).

110. The Chairman reminded the Group of Experts of the rationale of the paper: the standards elaborated by the Group of Experts contained requirements of technological nature, and since technology developed rapidly it was considered dangerous to specify he technology used in the preparation of juices. Otherwise the standards would become obsolete, could hinder technological progress and would not be useful to Member Countries. he present definitions for fruit juices permitted the use of mechanical processes only.

111. The Chairman presented some examples where new processes were already used which could not be covered by a narrow interpretation of processing techniques in Codex standards. In the case of apple juice the extraction process was already widely used and had been permitted by e.g. Fed. Rep. of Germany. He also referred to the Standard or Tomato Juice which, according to the Standard, could be prepared from concentrated juice. At the time when the standard had been elaborated, no appropriate concentration process had been available, however, in the meantime concentration by reversed osmosis resulted in a concentrate suitable for dilution to single strength juice.

112. The actual amendments proposed in the paper were as follows:

"Standards for Fruit Juices

- In the Description Section, delete the words "by mechanical process".
- In the Section Organoleptic Properties, change the title to "Organoleptic and Analytical Properties" and replace the first sentence to read: "The product shall have the colour, aroma, flavour and analytical composition of x juice obtained by a mechanical process."

Standards for Concentrated Fruit Juices

- In the Section Process Definition change the second paragraph to read:

  "The raw material from which this_ product is obtained is [unfermented but fermentable x juice obtained from] sound ripe x fruit." "

113. The Groups of Experts noted that in their written comments Ireland had been in favour of the above amendments, and Argentina and Poland had preferred to retain the present wording. The delegation of Brazil also supported the amendments.

114. All delegations speaking on this item were in principle in agreement with the views expressed in the paper but felt that more detailed information was needed on the new processing techniques and their effect on the final product. The following comments were made:

115. The delegation of Switzerland indicated that it had reviewed the paper again and felt that a study should be prepared on the possible differences in the composition of the products obtained by different processes. It appeared that, at present, no parameters for

a comparison between the products had been established. The delegation therefore thought that it was too early to introduce the changes in the Codex Standards. This was supported by the delegation of Italy which stated that in Italy mechanical processes only were permitted.

116. With regard to new processes the delegation of France could agree only to the diffusion process with cold water for certain fruits. No adequate informations existed on other techniques and on hot water diffusion.

117. The Observer of CIAA informed the Group of Experts that in some cases the new techniques produced a yield of over 100% and needed to be carefully considered. The new enzymatic processes were also expensive and it appeared to be premature to include them in Codex Standards.

118. The delegation of Netherlands was not opposed to the proposed changes but enquired whether "mechanical process" for comparison purposes (See Appendix I of ALINORM 85/14) included treatment with enzymes. The Group of Experts was informed that the juices for comparison purposes should be made in accordance with the existing Codex Standards.

119. The delegation of U.K. was of the opinion that more information was needed on the details of the new processes and to the extent of their actual use. The delegation agreed in principle with the paper but felt that it was too early to amend the standards. This view was shared by the delegation of Belgium who also was of the opinion that as a first step the definition for concentrated juice could be amended.

120. The Chairman of the Group of Experts and coauthor of the paper concluded that the discussions of the proposed amendments (see paras 114-119) had indicated the interest of Member Countries in updating the definitions of fruit juices and concentrated fruit juices taking into account the development of new technologies. However, the time was not yet ripe to come to a decision to actually amend the standards and the definitions adopted by the Group of Experts. The Committee agreed with these conclusions and decided to give further consideration to this matter at a future session.

CONTAMINANTS IN STANDARDS FOR FRUIT JUICES AND FRUIT NECTARS PRESERVED EXCLUSIVELY BY PHYSICAL MEANS

121. The group of Experts had before it the report of the Ad hoc Working Group which was introduced by its Chairman, Mr. R.J. Ronk (U.S.A.). The Working Group had been asked to analyse the replies received from governments in response to Circular Letter 1985/48 (FJ) concerning a survey of levels of tin, arsenic and lead in fruit juices and nectars. The Working Group was also requested to consider other items on contaminants referred to the Group (see para 9 for detailed terms of reference of the working Group).

Levels of Tin

122. The Group of Experts noted that the Working Group considered that a level of tin below 200 mg/kg would not benefit consumers but could restrict trade from areas of the world having warmer climates and longer storage and shipment of canned products. The Working Group proposed that 200 mg/kg would be a realistic level for tin in canned fruit juices and nectars preserved exclusively by physical means.

123. Some delegations considered the level of 200 mg/kg for tin in fruit juices on the high side and favoured a figure of 150 mg/kg.

123 a. The delegation of the Federal Republic of Germany pointed out that in the view of the Consumer Countries, the tin level should be even lower and proposed 100 mg/kg as a compromise. The delegation of France favoured a level of 150 mg/kg for tin content in fruit juices and fruit nectars.

124. The delegation of Australia proposed that the maximum level for tin be retained at 250 mg/kg. This was on the basis that a reduction of the level at this time would unduly disadvantage developing countries in particular. In this regard the delegate of Australia noted that the Codex Coordinating Committee for Asia had specifically asked that maximum tin levels be held at 250 mg/kg. The views of Australia were supported by the delegations of Cuba and Thailand, both of which held the view that with the present state of technology prevailing in many developing countries, it would be rather difficult to achieve the low level of 150 mg/kg for tin in fruit juices favoured by many developed countries.

125. The Group of Experts agreed with the recommendation of the Working Group that the maximum level of tin in canned fruit juices and nectars should be 200 mg/kg.

Level of Arsenic

126. The Group of Experts noted that the levels of arsenic found in fruit juices and nectars was very low and did not appear to present a problem. The Group also noted that arsenic in fruit juices could result from use of arsenical sprays and expressed the view that the level should remain unchanged and the matter should be referred to the Codex Committee on Pesticide Residues. The Group noted that deleting the present tolerance level could be interpreted as setting a zero tolerance and no data are available on naturally occurring levels of arsenic in fruit juices and nectars.

Level of Lead

127. The Group of Experts agreed with the recommendation of the Working Group that the present level of 0.3 mg/kg for lead in fruit juice should remain unchanged till such a time a decision was taken by JECFA concerning the health aspects of lead contamination.

Lactic Acid in Fruit Juice

128. The Group of Experts noted that the Working Group did not have adequate data on the subject to make a recommendation concerning lactic acid. The Group agreed to conduct a survey taking into consideration the levels of occurrence of lactic acid in fruit juices, storage conditions and related factors to determine whether a relationship existed between the presence of lactic acid and manufacturing processes. Information would be sought from governments by a Circular Letter.

Proposals by the Coordinating Committee for Asia to amend Certain Codex Standards for Fruit Juices.

129. In considering the proposals of the Coordinating Committee to amend the Codex Standards for Apple Juice and Grape Juice to increase the maximum level of tin content from 150 mg/kg to 250 mg/kg, the Group of Experts agreed with the recommendation of the Working Group to a level of 200 mg/kg, which would be attainable by producers and would be of benefit to consumers.

130. The Group of Experts adopted the Report of the Working Group, which appears as Appendix IV to this Report. It expressed its warm appreciation to the Working Group and its Chairman, Mr. R.J. Ronk (U.S.A.) for their comprehensive and detailed work.

CONSIDERATION OF GUIDELINES ON MIXED FRUIT JUICES

131. The Group of Experts had before it the above Guidelines in Appendix VI to ALINORM 85/14 and comments received thereon in CX/FJ 86/7 (AGRI/WP.1/GE.4/R.78) from Ireland, Norway, Poland, Sweden and Thailand.

132. No changes were made to Sections 1 - Scope and 2 - Description.

Section 3 - Compositional Requirements

133. The Group of Experts agreed that Section 3.1 which required that a mixed fruit juice be prepared in accordance with the description, i.e. in accordance with the requirements of the standards applicable to the individual fruit juices, was satisfactory and that it was not necessary to repeat in this standard detailed compositional requirements.

134. The Group of Experts examined in detail Section 3.2 on Sugars and agreed that the maximum of 100 g/kg covered all added sugars. It was agreed, in principle, that the maximum amount of sugars should be the maxima stipulated in the individual standards related to the juices used in the mixed product. The delegation of Switzerland stated that, as in the General Standard for Fruit Juices, it would prefer to lower the maximum level for added sugars. The Group of Experts also agreed that Section 3.2 on Sugars should be amended by taking over the provisions from the General Standard for Fruit Juices.

135. The Group of Experts noted a proposal by the delegation of Cuba to include a provision on a maximum limit for the soluble solids content. This was not agreed to, since adequate provisions were already included in the individual standards for fruit juices.

Section 4.1 - The Name of the Food

136. The delegation of Switzerland was in favour of an alternative proposal made at the 16th Session of the Group of Experts (see para 149 of ALINORM 85/14), which permitted only the listing of juices constituting more than 5% of the product. It pointed out that such a limit was important to avoid deceiving the consumer.

137. The Chairman stated that two matters had to be resolved (a) the question of a minimum content of juice in the mixed product to permit inclusion in the name of the food and (b) the number of juices present in a product to be called "mixed fruit juice".

138. The delegation of the United States was not in favour of establishing a minimum percentage since some juices had an overwhelming flavour and the prescription of a minimum for labelling purposes might unbalance the organoleptic characteristics of the mixture. Furthermore, national preferences existed for certain flavour combinations.

139. The written comments and the proposals made by the delegations present covered a range of two to four juices in order to denominate the product "mixed fruit juice".

140. The delegation of the United Kingdom pointed out that the term "enumeration" should be replaced by the term "name".

141. The Group of Experts accepted the offer of the Chairman to redraft Section 4.1.1 to reflect the present discussions and considered the following text:

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

It was noted that under the above provision the term "mixed fruit juices" would always have to be accompanied by a full list of all juices either in close proximity to the name or separate on the label.

141 a. The delegation of the Netherlands felt that the term "mixed fruit juices" needed to be accompanied by the name of the individual juices in products with more than four juices.

142. The Group of Experts also decided that the label should contain an appropriate statement if the fruit juices had been prepared from concentrates. In the General Fruit Juice Standard this declaration was to be made in close proximity to the name of the food.

143. Several delegations felt that there was no need for such a declaration. Others were of the opinion that the declaration should be made for the whole product irrespective of whether one or more of the juice components had been made from concentrate. A third proposal was to declare that the product had been made partially or wholly from concentrate.

144. The Group of Experts decided that Section 4.1.2 on declaration of sugars should be the same as in the General Standard for Fruit Juices.

145. The Group of Experts concluded that the provisions for the name of the food were extremely complex and decided to first discuss Section 4.2 - List of Ingredients, before deciding on a definitive text.

Section 4.2 - List of Ingredients

146. Several delegations expressed concern that the list of ingredients as required by Section 4.2 of the General Labelling Standard and presently contained in the Standard in Section 4.2.1 was an unnecessary repetition of the information already in the name of the food.

147. The Chairman proposed to replace in the list of ingredients the full declaration of the fruit juices by a declaration of the total fruit content only. He acknowledged that this was not in accordance with the General Labelling Standard; however such a deviation could be justified by the desirability to avoid double declaration.

148. The Group of Experts noted the following proposal for Section 4.2.1: (a) retain the present provision, amended to cover also natural volatile and (b) add the following sentence:

> "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 would be sufficient to refer to fruit juices with an indication, as necessary, of whether these have been prepared wholly or partially from concentrates."

149. The Group of Experts agreed at this point, that it had extensively discussed the principles which should be followed for Sections 4.1 and 4.2. However, in view of the complexity of the matter, it would be more appropriate to request the Secretariat to prepare different options of Section 4.1 and 4.2 for further consideration. To facilitate a decision at the next Session, each proposal should be accompanied by a sample specimen. This was agreed.

150. The Group of Experts decided also that the other labelling provisions should be revised in accordance with the decisions taken under Item 13, as applicable.

151. It was agreed that the redraft prepared by the Secretariat should be sent to governments for comments prior to the next Session of the Committee.

CONSIDERATION OF GUIDELINES ON MIXED FRUIT NECTARS

152. The Group of Experts had before it the above guidelines in Appendix VII to ALINORM 85/14 and comments thereon in CX/FJ 86/8 (AGRI/WP.1/GE 4/R.79) from Ireland, Norway, Poland, Sweden and Thailand.

153. No changes were made to Section 1 - Scope and Section 2 - Description.

Section 3 - Compositional Requirements

154. The delegation of Cuba proposed to introduce a provision for ethanol as in the General Standard for Fruit Nectars. This was agreed (new Section 3.3). The Group of Experts also agreed that in view of the labelling requirements in Section 4.1.2 it was necessary to introduce in this section a provision for minimum fruit ingredient as follows (new Section 3.4):

> "Minimum content of Fruit Ingredient:
>
> The minimum content of fruit ingredient of a mixed fruit nectar shall not be less than the total in accordance with Section 2.1. The single fruit ingredient must correspond to the relevant percentage in the mixture, calculated in accordance with Section 2.1."

Section 4.1 - The Name of the Food

155. The Group of Experts agreed that the amendments made to the General Standard for Fruit Nectars should also be incorporated in these guidelines.

156. The Group of Experts noted the following proposals for Section 4.1.1 and 4.1.2. "

4.1.1 The name of a mixed fruit nectar 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 should be "mixed fruit nectar".

4.1.2 The words "minimum fruit content x%" shall appear in close proximity to the name of the product, where "x" is the actual minimum percentage of fruit ingredient calculated to single strength."

Section 4.2 - List of Ingredients

157. The Chairman proposed to include in Section 4.2.2 provisions requiring the declaration of use of concentrates, where applicable. There was a lengthy discussion on

whether this should be declared in connection with the name of the food or in the list of ingredients.

158. The delegation of Belgium pointed out that in fruit nectars prepared from many types of fruits (nectars from 10 fruits were on the market) and with a total maximum of 40% of fruit ingredient, it would be practically impossible, from the food control point of view, to control individual fruit ingredient contents of about 4-6%. Moreover, such information would be of comparatively little interest to the consumer. The above proposed revised text was, therefore, too complex in a guideline and included measures which were not envisaged for fruit juices.

159. The Group of Experts agreed that many of the problems encountered with Sections 4.1 and 4.2 were similar to those outlined in the Guidelines on Mixed Fruit Juices and decided, therefore, that the same course of action should be followed as for the guidelines on mixed fruit juices.

160. The Group of Experts also agreed that the sections on "Additional Requirements" in both guidelines should be identical to those included in the General Standards for Fruit Juices and Fruit Nectars and instructed the Secretariat to amend those sections accordingly.

160 a. The Group noted that the redraft prepared by the Secretariat would be sent to governments for comments prior to the next session of the Committee.

PROPOSED AMENDMENT TO THE CODEX STANDARD FOR APRICOT, PEACH AND PEAR NECTARS TO DELETE THE PROVISION FOR HYDROXYMETHYLFURFURAL (HMF)

161. The Group of Experts had before it the replies of governments on the proposed amendment of the Codex Standard for Apricot, Peach and Pear Nectars for deletion of provision for HMF as contained in Document CX/FJ 86/9, AGRI/WP1/GE.4/R.80 and also the views of the Working Group on Methods of Analysis on the subject.

162. The Group of Experts recalled the action it had initiated at its last session to amend the standard for Apricot, Peach and Pear Nectars by deletion of Section 2.8 Hydroxymethylfurfural, since such a provision in the standard was considered superfluous (para 167, ALINORM 85/14). The Group noted that the report of the working Group on Methods of Analysis (Appendix VI) provided sufficient justification to support the amendment.

163. Comments were sought on the proposed amendment at Step 3 by CL 1985/43 (FJ) from Governments and International Organizations. Out of the eight Governments which commented, six supported the amendment.

164. The Group of Experts unanimously supported the amendment and advanced the amendment to Step 5 with a recommendation for omission of Steps 6 and 7. The amendment would be before the 17th Session of the Commission for adoption at both Steps 5 and 8.

STANDARDS FOR VEGETABLE JUICES

165. The Group of Experts had before it document CX/FJ 86/10 - AGRI/WP.1/GE.4/R.81 and the report of the ad hoc Working Group which had been set up to draft a standard for Vegetable Juices (see para 11), and which was reproduced as Appendix V to this Report.

166. The Group of Experts noted that the Document CX/FJ 86/10 contained a justification for developing a standard or standards for Vegetable Juices and Vegetable Nectars. Appended to the Document were figures on the production of Vegetable Juices in certain countries in Europe.

167. The Working Group's report was introduced by its Chairman Dr W. Pilnik (Netherlands). Introducing the report, the Chairman informed the Group of Experts that the Working Group agreed that there was a need to embark on the standardization of Vegetable Juice products. It also agreed that it would be desirable to develop a general standard for vegetable juices and vegetable nectars, rather than individual standards for these products. On the basis of background material on Standards for Vegetable Juices from the Fruit and Vegetable Juice Association of the EEC, Federal Republic of Germany, Switzerland and FAO, the Working Group prepared a Draft General Standard for Vegetable Juices and Vegetable Nectars, and recommended its inclusion as an Appendix to the report of the Session. Following the Commission's agreement that such a general standard be elaborated, it should be sent to governments for comments at Step 3 of the procedure.

167 a. The observer of CIAA stated that the Group of Experts had to face a number of problems in order to arrive at an agreement with legislation of fruit juices, which it had to formulate, after standardization work on fruit juices had almost been completed. As regards Vegetable Juices, important developments can occur to provide legislation before trade developed. National Legislation on Vegetable Juices presently does not exist. In his view, time is ripe for the Codex to draft legislation for Vegetable Juices.

168. Out of ten delegations which participated in the discussion, the delegations of Switzerland, Belgium, Netherlands, Italy, France, Federal Republic of Germany and Cuba supported the elaboration of a Standard for Vegetable Juices while delegations of U.S.A., U.K. and Thailand opposed the Group of Experts undertaking such an activity.

169. The delegations which supported the elaboration of the standard agreed fully with the justification given in the Document CX/FJ 86/10 for the Group to undertake such an activity. The fact that statistics on the production and consumption of Vegetable Juices are beginning to show, indicate their growing importance nationally and international trade.

170. Some of the delegations which supported the elaboration of the Standard expressed the view that time was ripe for the Group to undertake such an activity which could provide the needed legislation before trade in the commodity grew nationally and internationally.

171. The delegations which opposed the elaboration of a standard for vegetable juice expressed the view that the Codex work priority criteria had not been fulfilled. Fraudulent practices had not been reported and consumer protection from the point of view of health was also not involved.

172. The Group agreed that, if it was to undertake the elaboration of the standard the activity might be restricted to Vegetable juices and should exclude vegetable nectars. It also agreed that such a standard should not contain any provision for processing aids and that the text and definition contained in the standard should be similar to those contained in Codex Standards for Fruit Juices. Some detailed questions on limits for incorporation of salt and maximum levels of carbon dioxide were raised but not discussed by the Group.

173. The Group of Experts agreed with the recommendation of the Working Group to append the Draft Standard on Vegetable Juices as formulated by the Working Group (see Appendix V) to the report and send it to governments for comments at Step 3 of the procedure, if and when the Commission approved that such a General Standard be elaborated.

173 a. The Secretariat informed the Group that the Draft Standard on Vegetable Juices as formulated by the Working Group will not be appended to the Report as a separate Appendix but will be attached to the Report of the Working Group (Appendix V).

REVISION OF METHODS OF ANALYSIS

174. The Group of Experts had before it the Report of the ad hoc Working Group on Methods of Analysis (Appendix VI) which was introduced by the Chairman of the Working Group, Dr H. Woidich (Austria).

175. Prof. Woidich noted that the Working Group had reviewed all of the methods that were required in the standards elaborated by the Group. Methods for which there was not a quantitative limit prescribed in any standard had been deleted.

176. The Group was informed that all the methods of analysis would be submitted to the Codex Committee on Methods of Analysis and Sampling for endorsement, after which they should be applied retrospectively to all of the standards replacing the existing methods and references given.

177. It was noted that for some of the traditional methods it was unlikely that suitable data on collaborative studies would be available nor was it likely that they would be generated.

178. The delegation of the Netherlands enquired whether HPLC method could be recommended for estimation of sugars in preference to the Luff-Schoorl Method. The Group noted that Codex Standards so far elaborated by it contained provisions only for total sugars and not for individual sugars. Total sugars could be determined with ease by the Luff-Schoorl Method with fair accuracy. HPLC Method would only be needed if individual sugars are to be estimated.

179. The Group of Experts adopted the report of the ad hoc Working Group, which appears as Appendix VI to this report and expressed its warm appreciation to the Working Group and its Chairman, Dr H. Woidich for their comprehensive and detailed work.

REVIEW OF LABELLING PROVISIONS

180. The Chairman of the ad hoc Working Group on the Review of Labelling Provisions, Mr. R. Top of the Netherlands introduced the Report of the Working Group (Appendix VII). He pointed out that under the terms of reference the Working Group had limited its work to the review of labelling provisions in existing standards and those under elaboration only with a view to aligning them with the revised General Standard for the Labelling of Prepackaged Foods.

181. The Group of Experts accepted the Report of the Working Group. It noted that the Working Group had identified several matters which required a decision by the Plenary including the following matters:

(a) List of Ingredients

182. The Working Group had pointed out that the standards for concentrated juices exempted the declaration of natural volatiles (Section 1.1 of the standards) from the List

of Ingredients. This was presently not the case for single strength fruit juices. The Group of Experts agreed that in standards for fruit juices the list of ingredients shall be declared in accordance with Section 4.2 of the General Standard, except that added water and the natural volatile juice components (as in Section 3.4 of the General Standard for Fruit Juices) need not be declared.

(b) Date Marking and Storage Instructions

183. The Chairman of the working Group reminded the Group of Experts that it has developed a provision for date marking (date of minimum durability) which differed from Section 4.7 of the General Labelling Standard. The Working Group had recommended to accept the text of the General Labelling Standard (See Para 14 Appendix VII). The Working Group had concluded that, in practice, manufacturers applying the provisions of the General Standard would continue to use the same type of date marking as presently required by the standards. The Group of Experts agreed to include date marking provisions in its standards by reference to Section 4.7 of the General Labelling Standard.

(c) Labelling of Irradiated Foods

184. The Group of Experts agreed with the conclusions of the Working Group that inclusion of labelling provisions for the final products did not need to be considered since the Standard excluded irradiation in this regard. However the Group was in principle in favour of introducing labelling provisions for irradiated ingredients in accordance with Section 5.2.2 of the General Labelling Standard, but had recommended to await further consideration of this matter by CCFL, before actually amending the Standards.

185. The Group of Experts agreed with the recommendations and conclusions of the Working Group:

(a) to request the Secretariat to prepare a brief review paper on mandatory and optional provisions in connection with the name of the food (see para 7 of the WG report);

(b) to amend the labelling provisions in the standards presently under elaboration in accordance with the recommendations of the Working Group;

(c) to request the Secretariat to prepare revised sections of the labelling sections in existing standards for inclusion in the final report, and to take action on the proposed amendments by submitting them to CCFL and to the Commission as appropriate.

186. The Chairman of the Group of Experts thanked the Working Group and its Chairman Mr R. Top (Netherlands) for their excellent work. The Report of the ad hoc Working Group is contained in Appendix VII to this Report.

FUTURE WORK

187. The Group of Experts noted that its current work programme included:

i) General Standard for Fruit Nectars Preserved Exclusively by Physical Means at Step 8;

ii) General Standard for Fruit Juices Preserved Exclusively by Physical Means at Step 5;

iii) Guidelines on Mixed Fruit Nectars;

iv) Guidelines on Mixed Fruit Juices;

v) Contaminants in Standards for Fruit Juices, Concentrated Fruit Juices and Fruit Nectars;

vi) Revision and Further Elaboration of Methods of Analysis;

vii) Definition of Fruit Juice;

viii) Review of Labelling Provisions.

187 a. Depending on the decisions of the 17th Session of the Commission, the Group of experts may have for its discussion at its next session:

i) Standard for Fruit-Based Drinks with a High Content of Fruit Ingredient; ii)

ii) General Standard on Vegetable Juices.

188. Some delegations expressed the view that the level of current work programme should be taken into consideration, before convening its future sessions regularly at two year intervals.

ELECTION OF OFFICERS

189. The Group of Experts reelected Dr W. Pilnik (Netherlands) as its Chairman from the end of the present session to the end of the Eighteenth Session of the Group of Experts. The Group also elected Mr T. Satasuk (Thailand) and Professor Dr H. Woidich (Austria) to serve as its Vice-Chairman for the same period.

OTHER BUSINESS

190. The delegation of Japan informed the Group that Section 2.2 Sugars contained in Codex Standards on Fruit Juices permitted the use in Fruit Juice only of Solid Sugars, as defined by the Codex Alimentarius Commission and sought the opinion of the Group whether High Fructose Syrup could be used.

191. The Group expressed the view that High Fructose Syrup cannot be added to fruit juices in place of solid sugars, since the addition of syrup would result indirectly in addition of water to fruit juice, which was not permitted. High Fructose Syrup after dehydration could however be used. High Fructose Syrups belong to the class of Glucose Syrups and can be used as such in the preparation of nectars.

DATE AND PLACE OF THE NEXT SESSION

192. The Group of Experts was informed that the next session would be held in Geneva in about two years' time, the exact date to be decided after taking into account the programmes of the Codex Alimentarius Commission and the Working Party on Standardization of Perishable Produce of the United Nations Economic Commission for Europe.

Appendix I

LIST OF PARTICIPANTS
LISTE DES PARTICIPANTS
LISTA DE PARTICIPANTES

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Président: W. Pilnik (Netherlands)
Presidente:

Vice-Chairman:
Vice-Président: H. Woidich (Austria)
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PROPOSED DRAFT GENERAL STANDARD FOR FRUIT NECTARS PRESERVED EXCLUSIVELY BY PHYSICAL MEANS NOT COVERED BY INDIVIDUAL STANDARDS 1/

(At Step 8 of the Procedure)

1. SCOPE

This standard applies to pulpy and non-pulpy fruit nectars as defined in Section 2.

This Standard does not apply to any nectar which is subject of 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 and preserved exclusively by physical means. [1]/

[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 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, maybe 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 Juice or lime juice may be added as an acidifying agent.

3.4 Soluble Solids

The soluble solids content of the product shall be not more than 20% m/m as determined by refractometer at 20ºCm/m, uncorrected for acidity and read as ºBrix 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

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

5. CONTAMINANTS

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

[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 20ºC 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] Thereafter referred to as "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 to single strength in the final product.

8.2 List of Ingredients

8.2.1 A complete list of ingredients including added water shall be declared on the label in descending order of proportion. 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.

8.2.2 The addition of L-ascorbic acid shall be declared in the list of ingredients as:

(a) "L-ascorbic acid as antioxidant" or
(b) "Antioxidant".

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 there from.

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.

8.9 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 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 Part IV of Volume X of the Codex Alimentarius .

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Appendix III

PROPOSED DRAFT GENERAL STANDARD FOR FRUIT JUICES PRESERVED EXCLUSIVELY BY PHYSICAL MEANS NOT COVERED BY INDIVIDUAL STANDARDS [1]

(Advanced to Step 5 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 as defined in Section 2.

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 20ºC, uncorrected for acidity and read as ºBrix on the International Sucrose Scales.

3.2 Sugars

One or more of the solid sugars, as defined by the Codex Alimentarius Commission may be added. The quantity of sugars added shall not exceed 100 g/kg. 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 Organoleptlc 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

		Maximul Level
4.1	Citric acid	Limited by GMP
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	L-Ascorbic acid	400 mg in the final product
4.5	Carbon dioxide	Limited by GMP

5. CONTAMINANTS

		Maximum Level
5.1	Arsenic (As)	0.2 mg/kg
5.2	Lead (Pb)	0.3 mg/kg [1]
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 mg/kg [1]
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 (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 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 20ºC 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] Thereafter referred to as "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 of the sugar or sugars added. Instead of the Term "x added" the term "sweetened" may be used.

or

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 total quantity of added sugars in percent and the name or names of the sugar or sugars added. In addition thereto the term "sweetened" may be used.

or

If the quantity of added sugar or sugars exceeds 15 g but does not exceed 50 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. If the quantity of added sugar or sugars exceeds 50 g/kg the words "'x' added" shall plainly and conspicuously accompany the name of the product, where "x" represents the total quantity of added sugars in percent and the name or names of the sugar or sugars added. In addition thereto the term "sweetened" may be used.

or

If the quantity of added sugar or sugars exceeds 15 g/kg, the words "V added" shall plainly and conspicuously accompany the name of the food where "x" represents the total quantity of added sugars in percent. In addition thereto 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

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

8.2.2 The addition of L-Ascorbic acid shall be declared in the list of ingredients as:

(a) "L-Ascorbic acid as antioxidant" or
(b) "Antioxidant"

8.3 Net Contents

The net contents shall be declared by volume in the Metric ("Système International") 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 juice there from.

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 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.

8.9 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 juices 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 shall be given either on the container or in accompanying document's 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 Part IV of Volume X of the Codex Alimentarius.

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APPENDIX IV

REPORT OF AN AD-HOC WORKING GROUP ON CONTAMINANTS

1. A Working Group on Contaminants met under the chairmanship of Mr R.J. Ronk (U.S.A.) and consisted of members of the following delegations: Australia; Brazil; Cuba; Germany, Federal Fepublic of ; Netherlands; Spain; Switzerland; Thailand; United Kingdom; and the United States of America. Mr M. Canon of UNECE Secretariat assisted the Working Group in its deliberations.

2. The Working Group had been asked to analyse the replies received from governments in response to Circular Letter 1985/48 (FJ) concerning a survey on levels of tin, arsenic and lead which occur in fruit juices and fruit nectars preserved exclusively by physical means. These replies were presented in Working Papers CX/FJ 86/6, CX/FJ 86/6-Add.1 and Add.2, and three Room Documents.

3. The Working Group was also requested to consider other items on contaminants referred to the committee in CX/FJ 86/2 - Part IV. Following a discussion of lactic acid occurring in grape juice, the chairman of the Group also requested that the Working Group consider making a recommendation concerning this point.

The Working Group considered the following topics:

Level of tin

4. The Working Group noted that the tin content in fruit juices and nectars represented a consistently occurring contaminant that could be considered a normal

constituent when these products are packed in cans. Excessively high levels of tin could be considered an indication of poor manufacturing practice.

5. The Working Group noted that juices and nectars in unlacquered tin cans will remain a light color while in lacquered cans they darken without the addition of an antioxidant. It was considered that a level of tin below 200 mg/kg would not benefit consumers but could restrict trade from areas of the world having warmer climates and longer storage and shipment of canned products. While some delegations favoured lowering the maximum level of tin to 150 mg/kg the delegate of Australia pointed out that as these are international standards, the capabilities of all areas of production should be considered. He proposed a level of 250 mg/kg. It was pointed out during the discussion that JECFA has not identified a health reason for dropping the level of tin below 200 mg/kg and the Chairman noted that the presence of tin in fruit juice or nectar has a functional effect concerning colour.

6. After considerable discussion, the Chairman proposed and delegates agreed that 200 mg/kg would be a realistic level for tin in fruit juices and nectars preserved exclusively by physical means.

Level of arsenic

7. The Working Group reviewed the data submitted concerning the levels of arsenic found in fruit juices and nectars and agreed the very low levels reported do not appear to resent a problem. Some countries responding to the Circular Letter reported they no longer use arsenical sprays on fruit for processing. The Working Group noted that arsenic might also be considered by the Committee on Pesticide Residues since lead arsenate would be a component of some pesticides.

8. The Working Group recommended that the data collected in response to CL 1985/48 (FJ) be forwarded to the Committee on Food Additives for consideration.

Level of Lead

9. The Working Group noted that the data presented seemed in most cases to be within levels considered indicative of good manufacturing practices, however, they lacked information on the history of the products. The Working Group recommended that the present limit of 0.3 mg/kg remain unchanged pending a decision by JECFA concerning the health aspects of lead contamination.

Lactic Acid

10. The Working Group recalled the earlier discussion of the Group of Experts concerning the occurrence of lactic acid in grape juice. The delegate of Switzerland reported that 30 percent of the shipments tested contained lactic acid and that they, like the Federal Republic of Germany and the Netherlands had established national limits. The presence of lactic acid was attributed to mouldy grapes included in processing.

11. The Working Group did not consider that adequate data were available to make a recommendation concerning lactic acid. The secretariat was requested to conduct a survey taking into consideration the levels of occurrence, storage conditions, and related factors to determine whether a relationship exists between the presence of lactic acid and manufacturing practices. Information could be sought from governments by a Circular Letter.

CX/FJ 86/2 - Part IV - Amendments to Codex Standards as Proposed by the International Federation of Fruit Juice Producers (IFFJP)

12. The Working Group considered the IFFJP proposal that the level of tin content (150 mg/kg) was too high in the Codex Standards for Apple Juice, Grape Juice and Fruit Nectars. The Working Group, taking into account data considered in paragraphs 4, 5 and 6 of this Report and the comments of delegates, considered its recommendation of 200 mg/kg a reasonable level.

CX/FJ 86/2 - Part IV - Proposals by the Coordinating Committee for Asia to Amend Certain Codex Standards for Fuit Juices

13. In considering the proposals by the Coordinating Committee to amend the Codex Standards for Apple Juice and Grape Juice to increase the maximum level of tin content from 150 mg/kg to 250 mg/kg, the Working Group considered its recommendation of a maximum of 200 mg/kg to be attainable by producers and of benefit to consumers.

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Appendix V

REPORT OF THE AD HOC WORKING GROUP ON VEGETABLE JUICES

1. The ad hoc Working Group met under the Chairmanship of Dr. W. Pilnik (Netherlands). The following persons participated in the Working Group:

Mr. J.M. Artiges (France)

Ms. A. Ter Haar (Netherlands)

Mr. H.U. Daepp (Switzerland)

Mr A. Korth (Fed. Rep. of Germany)

Ms. J.C. Howell (USA)

Mr. J.P. Roclore (CIAA)

Mr. L.G. Ladomery (FAO)

2. The Working Group had before it documents CX/FJ 86/10 and Appendix to CX/FJ 86/10, as well as background material on standards for these products from the EEC, Federal Republic of Germany and FAO.

3. The Working Group agreed that there was a need to embark on the standardization of vegetable juice products. It also agreed that it would be desirable to develop a general standard for vegetable juices and vegetable nectars, rather than individual standards for these products.

4. A detailed discussion took place on the various provisions to be included in the standard. The Group agreed that a provision for soluble solids was not appropriate for vegetable juices and nectars, but that processing should be performed in such a way as to leave a minimum quantity of water in the product. It agreed that a provision should be made for minimum ingoing vegetable ingredient in the case of nectars. The food additives provided for in the standard were considered to be those technologically justified. As regards contaminants, the Group took the section from the Codex standard for tomato juice for the purpose of obtaining comments, but recognized that information should be generated in the future. In discussing the section on hygiene it was agreed that it would not be appropriate to require the absence of the technologically useful microorganisms present as a result of lactic acid fermentation. The Group discussed the section on labelling in detail but recognized that this section in the general standard for vegetable juices and vegetable nectars would have to be completed on the basis of the conclusions of the Working Group on Labelling.

5. The Working Group recommended that the proposed draft standard for Vegetable Juices and Vegetable Nectars included in the Appendix be adopted by the Group of Experts and editorially revised. It should then be sent to governments for comment at Step 3 of the Procedure, following the Commission's agreement that such a general standard be elaborated. In this respect it was noted that a Codex standard for a vegetable juice, viz tomato juice, had already been elaborated by the Group of Experts and adopted by the Commission.

W.G. First Draft

PROPOSED DRAFT GENERAL STANDARD FOR VEGETABLE JUICES AND VEGETABLE NECTARS [1]

[1] For the purpose of this standard 'preservation by physical means' does not include ionizing radiation

1. SCOPE

This Standard applies to all vegetable juices and nectars as defined below. It does not apply to vegetable juices and nectars for which Codex 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 "Vegetable nectars" are products obtained by diluting vegetable juices with water to contain at least 40 percent of ingoing vegetable ingredients.

2.3 "Vegetables" for the purpose of this standard are: 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 and 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 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) Salt as defined in the Codex Alimentarius,

(b) Vinegar, except for products having undergone lactic acid fermentation,

(c) Sugars and honey in dry form for juices and in dry form or as syrups for nectars,

(d) Seasoning, spices and herbs,

(e) Fruit or fruit based products from which the essential elements of the fruit have not been extracted,

4 FOOD ADDITIVES

			Maximum Level in the Final product
4.1	L-Ascorbic acid		400 mg/kg
4.2	Citric acid		GMP
4.3	Lactic acid		GMP
4.4	L-Tartaric acid	Not in products having having undergone acid fermentation	[1]/
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		

[1]/ Maximum level to be established.

5. CONTAMINANTS*

		Maximum Level
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)	250 mg/kg
5.7	Sum of copper, zinc and iron	20 mg/kg
5.8	Sulphur dioxide	10 mg/kg

* This list has been taken over from the Codex Standard for Tomato Juice 49-1981.

5.9 Mineral impurities insoluble in 10 percent hydrochloric acid shall not exceed 25 mg/kg.

6. HYGIENE

6.1 Revised General Provision

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

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

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

7. LABELLING

7.1 The Name of the Food

The name of the food shall be "x juice/nectar" or "juice/nectar 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 cocktail'. In the case of Nectars the minimum vegetable content "y percent" shall appear in close proximity to the name of the product where y is actual percentage of ingoing vegetable ingredient in the final product. 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 descending order of proportion except that water added for reconstitution of concentrates need not be declared. The water used as ingredient in the manufacture of nectars shall be declared.

7.2.2 If juices or nectars 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.

7.4 Name and Address

The name and address of the manufacturer, packer, distributor, importer, exporter or vendor of the food should be declared.

7.5 Country of Origin

7.5.1 The country of origin of the food shall be declared if its omission would mislead or deceive the consumer.

7.5.2 When a food undergoes processing in a second country which changes its nature, the country in which the processing is performed shall be considered to be the country of origin for the purposes of labelling.

7.6 Lot Identification

Each container shall be embossed or otherwise permanently marked, in code or in clear, to identify the producing factory and the lot.

7.7 Date Marking

The "date of minimum durability" (preceded by the words "best before") shall be declared by the month and year in uncoded numerical sequence for foods with a minimum durability of more than three months. If the month is "December" it is sufficient to indicate the year. The month may be indicated by letters in those countries where such use will not confuse the consumer. In the case of foods requiring a declaration of month and year, and the shelf-life of the food is valid to the end of a given year, the expression "end (stated year)" may be used as an alternative.

7.8 Storage Instructions

7.8.1 In addition to the date, any special conditions for the storage of the food shall be indicated if the validity of the date depends thereon.

7.8.2 Where practicable, storage instructions should be in close proximity to the date marking.

7.9 Exemption from Mandatory Labelling Requirements

With the exception of spices and herbs, small units where the largest surface area is less than 10 cm^2 may be exempted from the Paragraphs 8.2 and 8.6 to 8.8.

7.10 Additional Requirements

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

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

7.10.3 L-Ascorbic acid shall be declared as "antioxidant" or as "L-Ascorbic acid as antioxidant".

7.10.4 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.

7.11 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 CAC (page of the Procedural Manual 6th Edition). Information required in Sections C to G and any additional requirements needed shall either be given on the container or in accompanying documents, except that the name of the product, lot identification, and name and address of the manufacturer or packer shall appear on the container. However, lot identification and the name and address of the manufacturer or packer may be replaced by an identification mark, provided that such mark is clearly identifiable with the accompanying documents.

8. Methods of Analysis and Sampling

(To be developed)

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Appendix VI

REVISION OF METHODS OF ANALYSIS AND SAMPLING FOR FRUIT JUICES

(Report of ad hoc Working Group)

The Working Group on Methods of Analysis met under the Chairmanship of Dr H. Woidich (Austria). It consisted of members of the delegations of Federal Republic of Germany, France, Spain, Switzerland and representative of O.I.V. with Dr. N. Rao Maturu of FAO acting as rapporteur.

The Working Group had the following tasks to perform:

(i) to consider the Working Paper on Revision of Methods of Analysis (CX/FJ 86/11 -- AGRI/WP.1/GE 4/R.82) with a view to updating the information,

(ii) to consider other matters on Methods of Analysis and Sampling arising from the Report of CCMAS and contained in document CX/FJ 86/2 - Part I (AGRI/WP.1/GE.4/R.73),

(iii) to analyse the comments received from governments on the proposed amendment of the Codex Standard for Apricot, Peach and Pear Nectars (CODEX STAN 44-1981) at Step 4 (CX/FJ 86/9, AGRI/WP.1/GE.4/R.80).

The Working Group reviewed all the methods of analysis given in or required by Codex Fruit Juice and Nectar Standards. The Group therefore considered that all the methods given below should apply retrospectively to all the Fruit Juice and Nectar Standards. While reviewing the methods of analysis the Working Group took notice of the advice given by CCMAS with regard to Type I and Type IV methods.

(i) Only One Type I (Defining method) is needed since in determining compliance with the provision in the Codex Standard by the defining method, governments should undertake to use only the Codex method. Type I or Defining Methods are subject to acceptance as integral part of Codex Standards.

(ii) In the view of the Commission, the reliability of Type IV methods has not yet been demonstrated and hence such methods recommended by the Commodity Committee will not be endorsed by CCMAS. Type IV methods do not have any status in the Codex.

The Working Group noted that the Committee, had proposed a number of methods for which there was not a quantitative limit prescribed in any standard. The Working Group recommended that such methods should be deleted.

Comments on the individual methods are given below.

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1. Taking of the Sample and Expression of Results as m/m

According to the IFJU method No.1, 19 68, Determination of relative density and the IFJU General Sheet, 1971, Conversion of analytical results m/v (g/1, mg/1) to m/m (g/kg, mg/kg) and the reverse.

Status of endorsement; E (1984) as Type 1 method

Comments of CCMAS; the method provides a system for calculation

Comments of the Working Group: Conversion factors are still in use.

No other references are available.

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2. Test of Fermentability

According to IFJU Method No. 18, 1974, Fermentation Test. Results are expressed as "positive" or "negative".

Status of endorsement: E (Type 1) (1984)

Comments of CCMAS;

The Codex Commodity Committee should identify those small fruits for which this test is not valid. The method is also not suitable for citrus juices because of the presence of ethereal oils which inhibit fermentation (ALINORM 85/13).

Comments of the Working Group: Out of the different berries, cranberry is known to contain benzoic acid at low levels ranging from 0.5 - 2.0 mg/kg. It is not known whether such low levels of benzoic acid will influence the test. Information as to the presence of benzoic and sorbic acid in other berries should be sought by a Circular Letter. Essential oils at levels normally present in citrus juice concentrates (0.1 ml/kg)

may not stop but only retard the action. There is a special procedure for determination of fermentability in Citrus Juices by IFJU Method No. 18.

3. Determination of Apparent Viscosity

According to AOAC Official Methods of Analysis - 14th Ed., 1984, Apparent viscosity (consistency) (6) (Official Final Action: 22.009, 22.010, 22.011. Results are expressed in seconds.

Status of endorsement: E (1984), Type I method.

Comments of CCMAS:

Comments of the Working Group: Reference updated.

4. Determination of L-Ascorbic Acid

Determination of L-Ascorbic Acid, according to AOAC Official Methods of Analysis - 13th Ed., 1980, Microfluorometric Method (13) 43.061 - 43.064 or according to the IFJU Method No. 17, 1964. Results are expressed as mg L-ascorbic acid/kg.

Status of endorsement: AOAC method endorsed temporarily as Type II method. IFJU method not endorsed since it was considered as Type IV method.

Comments of CCMAS: results of collaborative testing of AOAC method not yet available. The reliability of the IFJU method has not been demonstrated.

Comments of the Working Group: The Working Group is aware of an ISO method (ISO 6557/1) similar to the AOAC microfluorimetric method. Collaborative tests have been carried out in France but results of the tests are not yet available. IFJU carried out collaborative tests comparing enzymatic and HPLC methods. The results obtained by HPLC method were found more reliable. The results of the study will be shortly published by IFJU.

5. Determination of Carbon Dioxide

According to IFJU Method N 42, 1966, Determination of Carbon Dioxide. Results are expressed as g CO_2/kg, with one decimal.

Status of endorsement: Temporarily endorsed as Type II method (1984).

Comments of CCMAS: Results of collaborative studies not available.

Comments of the Working Group; IFJU Method N 42 has not been collaboratively tested. However, it was reported that IFJU Method No 42 as modified and simplified by Tanner (H.R. Brunner, H. Tanner and R. Schappi. Schweiz Z. Obst und Weinbau 113,523 (1977) worked fairly well for determination of CO_2 up to 2 g/litre in Fruit Juice.

6. Determination of Essential Oils

According to AOAC Official Methods of Analysis - 13th Ed., 1980, Essential. Oils (41) - Official First Action: 22.088, 22.089 and 19.127. Results are expressed as ml essential oils/kg.

Status of endorsement: Endorsed as Type I method (1984).

Comments of CCMAS: Only one "Type I" method should be adopted. If the Committee prefers another method it should identify the defining method to be included in the Standard.

Comments of the Working Group: Working Group noted that IFJU method No. 45A, 1972 is exactly the same as AOAC method (steam distillation method of Clevenger) -•

7. Determination of Ethanol

According to IFJU Method No 2, 1968, Determination of Alcohol (ethyl alcohol). Results are expressed in g ethanol/kg.

Status of endorsement: Identified as Type II method but Not endorsed (1984).

Comments of CCMAS: CCMAS noted that this method is being amended presently. The CCMAS awaits developments before endorsing.

Comments of the Working Group; The IFJU Method No 2 1968 is obsolete. The GLC method has been proposed for collaborative testing in comparison with the enzymatic method (IFJU No 52). IFJU Method No 51 is a modified Rebelein method which is still in use even for estimation of low levels of ethanol. Working Group proposes this as Type IV Method.

8. Determination of Hydroxymethylfurfural (HMF)

According to the IFJU Method No 12, 1968, Determination of Hydroxymethylfurfural (HMF) as amended according to Postel (Deutsch. Lebensm. Rundsch., 1968,64, 318). Results are expressed as mg HMF/kg, rounded off to the nearest whole number.

Status of endorsement: E (1969)

Comments of CCMAS:

Comments of the Working Group: In view of action being taken to amend the Codex Standard for Apricot, Peach and Pear nectar to delete the provision for HMF, the Working Group expressed the view that a method for determination of HMF in Fruit Juices is not needed.

9. Determination of Minimum Content of Fruit Ingredient

Method to be elaborated.

Comments of the Working Group: Determination of Fruit ingredient by one single method is not possible. Extensive multiple analysis is required. The authenticity of Fruit Juice can also be assessed.

10. Determination of Soluble Solids

According to the IFJU Method No 8B, 1968, Estimation of Soluble Solids (indirect determination). Results are expressed in weight percent to two decimals and "Refractometric determination" is to be quoted in brackets.

Status of endorsement: E (Type 1) (1984).

Comments of CCMAS:

Comments of the Working Group: The Working Group agreed not to recommend ISO 2173, since it is not a specific method for Fruit Juices.

11. Determination of Sugars

According to IFJU Method No 4, 1968, Determination of Sugar (Luff-Schoorl Method) Results are expressed , as % m/m.

Status of endorsement: E. (Type 1) (1984).

Comments of CCMAS: Attention i s drawn to the fact that the method determines "total sugars" and not "added sugars".

Comments of the Working Group: The Working Group reconfirms IFJU Method No. 4.

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12. Determination of Honey

Method to be elaborated.

Comments of the Working Group: There is no available method for determination of honey which can be recommended.

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13. Determination of Total Titratable Acids

According to IFJU Method No 3, 1968, Determination of Titratable Acid (total acid). Results are expressed in g anhydrous citric acid/kg.

Status of endorsement: E (1984), Type I method.

Comments of CCMAS:

Comments of the Working Group: Existing reference is the most up to date.

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14. Determination of Volatile Acids

According to IFJU Method No 5, 1968, Determination of Volatile Acids. Results are expressed as g acetic acid/kg.

Status of endorsement: E (1984), Type 1 Method.

Comments of CCMAS:

Comments of the Working Group; Existing reference is the most up to date.

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15. Determination of Water Capacity and Fill of Containers

According to the method published in the Almanac of the Canning, Freezing, Preserving Industries, 55th ed., 1970, pp. 131-132, E.E. Judge and Sons, West minster MD, USA (Reproduced in ALINORM 71/23, Appendix V).

Status of endorsement: The method given in CAC/RM 46-1972 was endorsed in preference to the above method as Type I method in 1984.

Comments of CCMAS: The Commodity Committee may include as Type I method, the method published in the Almanac of the Canning, Freezing and Preserving Industries 55th Edition 1970, pp. 131-132 if that method is identical to CAC/RM 46-1972.

Comments of the Working Group: The Working Group has no information about the method published in the Almanac of the Canning, Freezing and Preserving Industries, 55th Ed., 1970, pp.131-132. It recommends therefore method CAC/RM 46-1972.

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16. Determination of Arsenic

According to AOAC Official Methods of Analysis - 13th Ed., 1980, Arsenic: Silver Diethyldithiocarbamate Method i) Official Final Action: 25.012, 25.013. (Type II). Results are expressed as mg As/kg. ii) Official Final Action: 25.010, 25.011 (Type III) and iii) Official Final Action: 25 A01 - 25 A05 (Type III).

The IFJU Method N2 47, 1973, Determination of Arsenic (Method No A34/f of the Office International de la Vigne et du Vin) (Type IV).

Status of endorsement: AOAC Official Final Action 25.012, 25.013 endorsed as Type II method. Other AOAC methods endorsed temporarily as Type III. IFJU method not endorsed since it is Type IV and the reliability of the method has not been demonstrated.

Comments of CCMAS: AOAC Official Final Action 25.012 - 25.013 was endorsed even in the absence of results of collaborative studies since this method is a well tested method.

Comments of the Working Group: Atomic absorption method (Hydride system AOAC, 14th Ed., 1984, 25.001 recommended.

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17. Determination of Lead

According to AOAC Official Methods of Analysis - 13th Ed., 1980. Lead: 25.016 - 25.067 (Type II). Results are expressed as mg Pb/kg.

According to the IFJU Method N2 14, 1964, Determination of Lead (photometric method) (Type III) Results are expressed as mg Pb/kg.

Status of endorsement: AOAC method fully endorsed as Type II method (1984) IFJU method Temporarily endorsed as Type III method (1984).

Comments of CCMAS: AOAC method fully endorsed as Type II method even in the absence of results of collaborative studies since this method is a well tested method. If methods are required for determining very low levels of lead, methods recommended for condensed milks should be tried. The delegation of USSR suggested that polarographic methods should be considered.

Comments of the Working Group: Codex General Method is acceptable for determination of lead in fruit juices. For lower levels of lead ISO 6633, Flameless atomic absorption method is recommended.

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18. Determination of Copper

According to AOAC Official Methods of Analysis - 13th Ed., 1980, Copper: Atomic Absorption Method (11) - Official Final Action: 25.044 - 25.048 (Type II). Results are expressed as mg of Cu/kg.

Status of endorsement: E (1984) as Type II Method.

Comments of CCMAS: The method was endorsed even in the absence of results of collaborative studies since this method is a well tested method.

Comments of the Working Group: Codex General Method is acceptable for determination of Copper in Fruit Juice.

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19. Determination of Zinc

According to AOAC Official Methods of Analysis - 13th Ed., 1980, Zinc: Atomic Absorption Method (31) Official Final Action: 25.150 - 25.153 (Type II)., Results are expressed as mg Zn/kg.

The Codex alternative (Type III) method which was adopted by the Commission at its 15th session: AOAC (1980) x 111 - 1 st supplement 25.A03 -25.A05 closed system digestion AA method.

Status of endorsement: AOAC Atomic Absorption method was endorsed as Type II (1984), AOAC closed system digestion AA method was temporarily endorsed as Type III method.

Comments of CCMAS: Though the Atomic Absorption method was not collaboratively tested, it was endorsed since this method is a well tested method.

Comments of the Working Group: Atomic absorption method is acceptable for determination of zinc in Fruit Juices.

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20. Determination of Iron

According to the IFJU Method N2 15, 1964, Determination of Iron (photometric method). The determination shall be made after dry ashing as described in Section 5b (Type II). Results are expressed as mg of Fe/kg.

Status of endorsement: E (Type II) 1984.

Comments of CCMAS: Endorsed in the absence of results of collaborative studies since this method is a well tested method.

Comments of the Working Group: No collaborative studies will be available even in near future.

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21. Determination of Tin

According to AOAC Official Methods of Analysis - 13th Ed., 1980, Tin: Atomic Absorption method (28) - Interim Official First Action: 25.136 - 25.183 (Type II). Results are expressed as mg Sn/kg.

Status of endorsement: E (1984) Type II

Comments of CCMAS: Endorsed in the absence of results of collaborative studies since this method is a well tested method.

Comments of the Working Group: Atomic absorption method is acceptable for determination of tin in fruit juices.

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22. Determination of Sulphur Dioxide

According to the IFJU method N2 7, 1968, Determination of Total Sulphur Dioxide (Type II). Results are expressed as mg so_2/kg.

Status of endorsement: E (1984) Type II.

Comments of CCMAS:

Comments of the Working Group: Results of collaborative studies are available. These will be published shortly.

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23. Determination of Mineral Impurities Insoluble in Hydrochloric Acid

According to AOAC Official Methods of Analysis - 13th Ed., 1980, Ash Insoluble in Acid - Official Final Action: 30.008. Results are expressed as mg mineral impurities insoluble in HCl/kg.

Status of endorsement: E (1984) Type I.

Comments of CCMAS:

Comments of the Working Group: AOAC method 30.008 is acceptable.

24. For determination of low levels of heavy metals and also arsenic, flameless atomic absorption is recommended.

The Working Group noted that there were no other matters for action arising from the Report of CCMAS and contained in Document CX/FJ 86/2 - Part I (AGRI/WP.1/GE.4/R.73)

Proposed Amendments to the Codex Standard for Apricot, Peach and Pear Nectars to delete the provision for Hydroxymethylfurfural

The Working Group noted that Hydroxymethylfurfural (HMF) is found in Fruit Juice Concentrates and related products which have been overheated. Modern Processing techniques avoid overheating thus bringing the levels of HMF in fruit juices to negligible quantities. HMF is found in measurable quantities also after long storage of fruit juices even at low temperatures. Hence HMF cannot be used as a criteria to assess the quality of fruit juice or related products. It is on this basic thinking that the Working' Group at the 16th Session of the Group of Experts on Fruit Juices recommended the deletion of the provision for HMF in the Codex Standard for Apricot, Peach and Pear Nectars.

The Working Group analysed the replies of governments on the proposed amendment of the Codex Standard for Apricot, Peach and Pear Nectars for deletion of provision for HMF as contained in document CX/FJ 86/9, AGRI/WP.1/GE 4/R.80.

Out of the eight governments which commented there was support from six for the amendment. The Working Group was in favour for the amendment but left it to the plenary for decision.

ALINORM 87/16
Appendix VII

REPORT OF AN AD-HOC WORKING GROUP ON LABELLING

1. The Working Group on Labelling met under the Chairmanship of Mr R. Top (Netherlands) and consisted of members of the following delegations: Belgium, France, Switzerland, Thailand, United Kingdom, United States of America and the observer of the EEC, and the Codex Secretariat.

2. The Terms of Reference of the Working Group were as follows: to examine all available material including document CX/FJ/86/12-AGRl/ WG1/GE4/R83 on the revision of labelling provisions and advise the Group of Experts on action concerning the revision of labeling provisions in existing standards and standards under elaboration by the Group of Experts.

3. The Working Group had before it the following additional documents: Alinorm 85/22A, The Report of the 18th Session of the Codex Committee on Food Labelling, Alinorm 85/14, The Report of the 16th Session of the Group of Experts and Volume X and Supplement I thereto of the Codex Alimentarius, containing the Codex standards on fruit juices, concentrated fruit juices and fruit nectars.

4. The Working Group noted that the 16th Session of the Commission had adopted the revised text of the General Standard for the Labelling of Prepackaged Foods and Guidelines on Labelling Provisions in Codex Standards. The Commission had requested all Codex Committees to review the labelling provisions in their standards with a view to aligning them with the General Standard, having regard to the above guidelines. The Working Group paid special attention to section 3 of the guidelines - instructions to Codex Committees - and section 4.2.3 which referred to possible deviations from the General Standard provided detailed justification for doing so was given.

5. The Working Group agreed that the revised preamble to the labeling section as contained in CX/FJ/86/12 was applicable to all standards as a consequential amendment.

The Name of the Food

6. The Working Group agreed that this section should include the phrase: "To be declared on the label", as an editorial amendment to the first provision of this section. The Working Group noted that in the French version the term "étiquetage" should be used.

7. The Working Group was informed that the general standard contained in section 4.1.2 a requirement for the mandatory use of descriptive terms in close proximity to the name. It was noted that the standards, as presently drafted, did contain mandatory as well as optional provisions to this effect. The Working Group was of the opinion that it was not possible to review these provisions in all standards in detail and recommended that the Secretariat be requested to prepare a paper indicating proposals for possible amendments for further consideration.

8. The Working Group was requested to consider the possibility of introducing a new provision, requiring that the fact of reconstitution of concentrated fruit juice in the standards for fruit juice be declared in close proximity to the name of the food. It was pointed out that a similar declaration was already foreseen in the list of ingredients. The Observer of the EEC stated that in the member countries the

declaration was mandatory in connection with the name of the food to inform the consumer adequately. The Working Group recognized that the proposed amendment might contribute to easier acceptance of the standards concerned and recommended therefore, to the Group of Experts, to give further consideration to this matter. It was also felt that section 4.1.2 of the General Standard would provide the justification for such an amendment.

List of ingredients

9. The Working Group agreed that the list of ingredients shall be declared in accordance with section 4.2 of the General Standard. However, in the case of fruit juices, the addition of water for reconstitution of the juice need not be declared. It was also proposed to exempt the declaration of natural volatiles from the list of ingredients. The Working Group noted that this had not been included in the present version of the standards and decided that it should be discussed in Plenary.

Concerning concentrated fruit juices, it was agreed to retain the exemptions presently contained in the standards.

With regard to fruit nectars, the Working Group agreed with the reference to section 4.2 and noted that the declaration of food additives as outlined in CX/FJ/86/12 was covered by the provisions of that section of the General Standard.

These amendments are substantive since section 4.2 of the General Standard is more comprehensive than the previous provisions.

The Working Group recommended to retain the additional provisions unchanged.

Net contents

10. The Working Group agreed that the net contents shall be declared in accordance with section 4.3 of the General Standard. It recommended that countries requiring declaration in units other than metric, could accept the standards with specified deviation. This amendment should be considered to be substantive.

Name and address

11. The Working Group agreed that the name and address shall be declared in accordance with section 4.4 of the General Standard and considered this as an editorial amendment.

Country of origin

12. The Working Group noted that section 4.5 of the General Standard consisted of two sections, the second one referring to "processing in a second country". Even if that provision had not been included in the present standards the Working Group recommended that the country of origin be declared in accordance with section 4.5 of the General Standard for the sake of uniformity of all Codex standards. This was considered to be a substantive amendment.

Lot identification

13. The Working Group agreed that lot identification be in accordance with section 4.6 of the General Standard which was identical to the provision presently included in the standards - editorial amendment.

Date marking and storage instructions

14. The Working Group noted that the provisions for date marking (minimum durability) differed from the ones in section 4.7 of the General Standard mainly with regard to the cutoff points which were 18 months in the case of fruit juices, etc. The Working Group recalled the lengthy discussions at previous sessions of the Group of Experts and the fact that CCFL had endorsed the specific date marking provisions pending a general consideration of shelf stable products. The subsequent session of CCFL had, however, included date marking provisions in the General Standard which it considered suitable for most foods. CCFL included in the preamble to section 4.7 the possibility to establish different provisions. It was noted that section 4.7 (ii) permitted in fact under certain conditions, the declaration of the year only. The Working Group recommended amending of the date marking provisions by reference to section 4.7 for the sake of uniformity. If the Plenary agrees with the Working Group proposals this would be a substantive amendment.

Instructions for use

15. The Working Group agreed that there was no need for instructions for use in standards for fruit juices and fruit nectars. Concerning concentrated fruit juices, very specific instructions for use (degree of concentration) had been elaborated which provided valuable information to the producer and they should therefore be retained unchanged.

Quantitative labelling of ingredients

16. The Working Group recommended that any provisions related to quantitative labelling and additional requirements elaborated by the Group of Experts should be retained unchanged.

Irradiated foods

17. The Working Group noted that section 5.2 of the General Standard contained labelling provisions for irradiated foods as well as for foods containing irradiated ingredients. It was noted that this section remained under review by CCFL mainly because of divergent opinions on the need to label second generation foods. The Working Group also noted that the standards elaborated by the Group of Experts referred to products preserved exclusively by physical means and from which irradiation was exluded at the present time. The Working Group also recognized that, in certain products, ingredients such as fruit ingredients or spices could well be irradiated since the standards allowed for such treatment. The Working Group was in favour of labelling provisions for products containing irradiated ingredients but felt that in view of the continuing discussions in CCFL it was premature to introduce such provisions in the standards. The delegation of Belgium was however doubting the need for labelling of second generation irradiated foods.

Exemptions for mandatory labelling requirements

18. The Working Group was of the opinion that even if most of the packages had larger surface areas than 10 square centimetres which entitled to the exemption from certain labelling requirements, it might be appropriate to include a provision on exemptions by reference to section 6 of the General Standard. This introduction of this new section is a substantive amendment.

Labelling of non-retail containers

19. The Working Group was informed that CCFL had included in its guidelines on labelling provisions recommendations on the specific labelling requirements for non-retail containers. CCFL had also elaborated a definition of non-retail containers. The Working Group noted that the provisions for bulk containers elaborated by the Group of Experts had been the basis for the new section 5.3 of the guidelines. The Working Group recommended that the following preamble be added to the existing provision for the labelling of bulk containers: in addition to sections 2 and 3 of the General Standard the following specific provisions apply to ... in non-retail containers as defined by the Codex Alimentarius Commission (see page ... of the procedural manual 6th edition):

    In addition a small editorial amendment was needed to the present provisions.

Conclusions

20. The Working Group agreed that the above recommendations and proposals should be submitted to the Plenary for further action:

    The proposed amendments to the labelling provisions of the existing standards will have to be drawn up in detail to be appended to the final report.

    The recommendations and proposals of the Working Group to standards under elaboration will have to be considered in conjunction with the standards.

    Arrangements have to be made for informing the commission of the revision carried out by the Group of Experts and for further action necessary for the amendment of the standards.

    The status of several of the proposed amendments might change to a consequential amendment following their inclusion in a standard being advanced to step 8.