FOOD AND AGRICULTURE ORGANIZATION OF THE UNITED NATIONS
ORGANISATION DES NATIONS UNIES POUR L'ALIMENTATION ET L'AGRICULTURE
ORGANIZACION DE LAS NACIONES UNIDAS PARA LA AGRICULTURA Y LA ALIMENTACION
00100 Rome, Via delle Terme di Caracalla. Cables: FOODAGRI, Rome. Tel. 5797

WORLD HEALTH ORGANIZATION
ORGANISATION MONDIALE DE LA SANTÉ
1211 Genève, 27 Avenue Appia. Câbles: UNISANTÉ, Genève. Tél. 34 60 61

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CODEX ALIMENTARIUS COMMISSION
Eighth Session

REPORT OF THE SEVENTH SESSION OF THE CODEX COMMITTEE ON PROCESSED FRUITS AND VEGETABLES

Washington, D.C.
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JOINT FAO/WHO FOOD STANDARDS PROGRAM

CODEX ALIMENTARIUS COMMISSION

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WASHINGTON, D.C., U.S.A.

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Introduction.

1. The Seventh Session of the Codex Committee on Processed Fruits and Vegetables was held at the Pan American Health Organization Building, under the chairmanship of the United States, with Dr. Floyd F. Hedlund in the chair, in the absence, owing to illness, of Mr. Fitzhugh L. Southerland. The Committee expressed its regret at the inability of Mr. Southerland to be present at the meeting, and conveyed to him its best wishes for his speedy recovery. Representatives and observers from 21 countries and observers from two international organizations attended the session. The list of participants appears as Appendix I to this report. The participants were welcomed by the Chairman and by Mr. George Grange, U.S. Codex Coordinator and Vice-Chairman of the Commission.

Adoption of Agenda.

2. The provisional agenda was adopted with a slight rearrangement in the order of items to be discussed.

Matters Arising from the Report of the Seventh Session of the Commission.

3. The Committee was informed by Mr. George Grange and by the FAO representative of matters dealt with by the Commission at its Seventh Session which were relevant to the work of the Committee. The matters reported on were as follows:

(a) The Commission had decided to advance the standard for canned pineapple to Step 9 and to advance the standards for canned pears, canned mandarin oranges, processed tomato concentrates and raisins to Step 6.

(b) The Commission had agreed that a Step 8 amendment, which had been proposed by the U.S. Delegation to the standard for canned pineapple and which concerned the definition of "excessive trim," should be brought to the attention of the Committee, so that the Committee could consider whether an amendment of the standard

would be necessary. The Committee agreed to consider the proposed U.S. amendment under the agenda item "Other Business."

(c) The Commission had recommended that the Committee should consider, in addition to tin, the subject of other contaminants in the standards for processed fruits and vegetables, including those which had been advanced to Step 9. A considerable number of delegations at the Commission had thought that the level of 250 mg/kg for tin, which the Commission had decided to retain in the standard for canned pineapple on a provisional basis and subject to review in two years' time, was too high and should be reduced. The Commission had retained the figure for tin provisionally, bearing in mind that it would be necessary to carry out a further study of the problem of tin in containers before any final conclusion could be reached. The Codex Committee on Food Additives had asked the Committee to consider reducing the figure to 150 mg/kg.

(d) The Commission had agreed with a proposal of the Codex Committee on Methods of Analysis and Sampling that there was a need for a precise method of determining the water capacity of containers and had requested the Codex Committee on Processed Fruits and Vegetables to elaborate a suitable method for submission to the Codex Committee on Methods of Analysis and Sampling for endorsement as a referee method.

(e) The Commission had had a very full discussion on the subject of Sampling Plans. The Codex Committee on Methods of Analysis and Sampling at its Fifth Session had not endorsed the proposed use of the Sampling Plans for Processed Fruits and Vegetables, which had been renamed to read "Sampling Plans for Prepackaged Foods" by the Commission at its Sixth Session, in the standards which had been before the Commission at Step 8, including the standard for canned pineapple. However, the Commission had noted that the Codex Committee on Methods of Analysis and Sampling had previously endorsed the Sampling Plans in a number of the standards for processed fruits and vegetables which had been advanced to Step 9. The Codex Committee on Methods of Analysis and Sampling had expressed the opinion that the Sampling Plans appeared to be more suitable for production quality control than for enforcement

purposes. The Delegation of the U.S.A. had informed the Commission that Sampling Plans, such as those under discussion had been used satisfactorily for many years for enforcement purposes in the U.S.A. In particular, the Sampling Plans had been found to be quite appropriate for the checking of quality control and quality defects in products, such as processed fruits and vegetables, fruit juices and other similar canned foods. Several delegations at the Commission had considered that it would be essential for Codex Commodity Committees to examine the Sampling Plans with particular reference to determining appropriate AQL's for quality criteria and quality defects in individual foods. The Danish Delegation at the Commission had prepared a paper on the subject of Sampling Plans which would be referred to the Codex Committee on Methods of Analysis and Sampling, with copies to ISO for information. The paper dealt in considerable detail with the Sampling Plans for Processed Fruits and Vegetables and had posed a number of queries concerning these Plans. The Commission had decided that the whole subject of Sampling Plans should be considered by the Executive Committee at its next session, which would consider whether or not a special session of the Codex Committee on Methods of Analysis and Sampling should be convened to deal with sampling plans, or whether any other action should be taken in the light of comments from Codex Commodity Committees and of their recommendations concerning appropriate AQL's. As regards the standard for canned pineapple, which was the only standard for processed fruits and vegetables before the Commission at Step 8, the Commission had decided that it was appropriate to retain in the standard the reference to the Sampling Plans for Processed Fruits and Vegetables.

(f) The Commission had adopted provisionally the amended General Principles for the Use of Food Additives. The General Principles for the Use of Food Additives would be annexed to the Report of the Seventh Session of the Commission and would be sent to Governments for comment. The comments would be studied by the Codex Committee on Food Additives with a view to submitting a final text to the Commission for adoption. It would then be the intention to publish the General Principles in the Codex Procedural Manual.

(g) A list of food colours for which ADI's or temporary ADI's had been established would be attached to the Report of the Seventh Session of the Commission.

(h) The Commission had directed that the Recommendations to Codex Commodity Committees as contained in Appendix III to document ALINORM 69/22 (Report of the Fourth Session of the Codex Committee on Food Labelling) should be circulated to all Chairmen of Codex Commodity Committees.

(i) The Commission had agreed upon a system of references for Codex documents in the various Codex Committees. The system of references would be annexed to the Report of the Seventh Session of the Commission.

(j) The Commission had agreed that an amendment which Austria had proposed to the Step 9 standard for canned peaches should be sent out to Governments for comment at Step 3 for consideration by the Committee at its current session. The Committee agreed to consider the proposed Austrian amendment, which was designed to provide for a fourth colour type in the standard under the agenda item "Other Business."

(k) The six Step 9 standards for processed fruits and vegetables previously adopted by the Commission, together with the Step 9 standard for canned pineapple, would shortly be issued to Governments for acceptance.

(l) The Commission had considered the question of the use of Spanish as an additional working language in Codex Committees. While most Governments had, in general, indicated that they were sympathetic to the provision of facilities in Spanish, they had also indicated that there were certain practical difficulties in the way of making the facilities available. The Commission had requested the Directors-General of FAO and WHO to write to host Governments stressing the importance of at least providing simultaneous interpretation in the three languages of the Commission (English, French and Spanish) and other facilities as far as possible. The Executive Committee would be studying this matter further at its next session. At the current session of the Committee, documentation relating to table olives had been provided in Spanish, together with Spanish interpretation for the discussion on the draft standard for this commodity.

Matters Arising from the Reports of (a) Sixth Session of the Codex Committee on Food Additives, (b) Fifth Session of the Codex Committee on Methods of Analysis and Sampling, and (c) Fifth Session of the Codex Committee on Food Labelling.

4. The Committee agreed that it would be best to consider the comments in the above reports relating to the standards for processed fruits and vegetables when it came to discuss the standards individually.

Consideration of Written Comments of Governments not Represented at the Session.

5. The Committee took note of written comments from Governments not represented at the Session and gave their comments due consideration during discussion of the draft standards.

Standard for Canned Strawberries Considered at Step 7.

6. The Committee considered the standard for canned strawberries contained in document Codex/PFV 68/5-7 dated May 1968, in the light of Government comments received thereon. The standard, as revised by the Committee is contained in Appendix II to this Report. The following were the main points emerging from the Committee's deliberations:

(a) The Committee considered a proposal to include a scope section in the standard. The Committee was of the opinion that this was not necessary as it considered that the section "Product Definition" adequately indicated what varieties of strawberries were covered by the standard.

(b) The Committee considered the question of whether the standard ought to provide for a larger number of syrup strength categories than the two which appeared in the standard. A number of delegations thought that it was sufficient to provide for only two categories, as in the standard, and the delegations which took this position based their view on the consideration, that, in the case of canned strawberries, syrup strengths under 18° Brix would result in a less satisfactory product from the consumers point of view, since the quality and taste of the product would be adversely affected. This view, although it had some support, was not generally accepted by the majority of the Committee, which thought that it should be open to manufacturers to pack strawberries in lighter syrups in response to consumer preference which varied from country to country and from time to time. The Committee agreed to provide in the standard for four categories of syrups, namely, Extra Light Syrup--not less than 10° Brix, Light Syrup--not less than 14° Brix, Heavy Syrup--not less than 18° Brix, and Extra Heavy Syrup-- not less than

22° Brix. The Delegations of France, Poland and the Netherlands indicated their disagreement with this decision of the Committee.

(c) The Committee agreed on a number of amendments to section 2.2.4 of the standard entitled "Defects and Allowances." Amongst these amendments, the Committee agreed to delete subsection 2.2.4 (a) "extraneous material (such as insects)," as it considered that subsection 4.2 of the section on Hygiene adequately covered this matter.

(d) As regards section 2.2.5 of the standard, the Committee agreed to adopt the ISO method for determining mineral impurities (ISO Recommendation 1022) as a practical international referee method. A number of delegations considered that owing to climatic conditions in their countries, it would be necessary to increase the tolerance for mineral impurities to 500 mg/kg. Other delegations thought that a tolerance at this level would result in a product which would not be satisfactory to the consumer. The Committee decided that the acceptability of the product would not be unduly impaired by raising the tolerance from 200 to 300 mg/kg and it was agreed to insert the figure of 300 mg/kg in the standard. This figure related to the total contents and not to the drained weight of the product.

(e) The Committee noted that the use of citric acid, malic acid, L-tartaric acid, and lactic acid in canned strawberries had been endorsed by the Codex Committee on Food Additives. As regards malic and lactic acids, the Committee noted that the Joint FAO/WHO Expert Committee on Food Additives had removed the restriction on the D isomers for these acids at its thirteenth meeting and that both enantiomorphs were subject only to limitation by good manufacturing practice. The limitations imposed by good manufacturing practice were regarded therefore as being an adequate health safeguard. The Committee was informed that in the case of very young infants--as opposed to young children--the ADI for the D (-) form still stood. The Delegation of France reserved its position on the use of lactic acid. The Committee was informed by the Delegation of Canada that the use of acidifying agents in canned strawberries was not permitted in Canada.

(f) The Committee decided to retain the provision on colours in the standard, which it noted had been temporarily endorsed by the Codex Committee on Food Additives. The Delegation of Poland reserved its position on the use of colours and the Delegation of Canada indicated that the use of colours in canned strawberries was not permitted in Canada at the present time.

(g) The Committee agreed to introduce into the standard a provision permitting the use of calcium chloride, calcium lactate and calcium gluconate at the level indicated in the standard.

(h) As regards contaminants, the Committee, although it had included a figure of 250 mg/kg for tin in the standards that it had considered at its last session, thought it advisable not to repeat this figure in the standards under consideration at the present session. The Delegation of Poland suggested a level of 150 mg/kg. The Committee, on reconsideration of this subject, was of the opinion that a study of levels of tin actually found in practice in canned fruits and vegetables should be carried out and some research work should be done in this field before coming to a decision. Similarly, the Committee was unable at this stage to agree on meaningful figures for other contaminants. The Delegation of the United Kingdom undertook to collate data and to prepare a paper for the next session of the Committee on the subject of contaminants in canned strawberries. (See paragraph 32.) The Delegation of India agreed to make available to the Secretariat data on tin content in a number of canned fruits and vegetables which had been compiled by the Metal Box Company.

(i) The Committee considered a proposal to increase the figure of 35 percent drained weight of the product. After an exchange of views the Committee agreed not to increase the figure of 35 percent.

(j) The Committee agreed that subsection 5.1.3 "Classification of Defectives" and subsection 5.1.4 "Acceptance" should follow subsection 5.1.1 "Minimum Fill," since "Defectives" as defined related to minimum fill only and not to minimum drained weight.

(k) The Committee considered the Labelling Section of the standard in the light of the General Standard for

the Labelling of Prepackaged Foods. The Committee made no change in sections 6.2.1 and 6.2.2 of the standard, which would be set out under a subsection entitled 'Name of the Food." The Committee agreed to provide for the declaration of a full list of ingredients in accordance with section 3.2(c) of the General Labelling Standard and also agreed that water need not be declared in the list of ingredients. The Committee agreed to provide for a declaration of net contents by weight. The Canadian Delegation indicated that in Canada the net contents of canned strawberries and other products were required to be declared by volume. The Delegation of Canada requested, therefore, that the provision in the standard permit the declaration of net contents either by weight or by volume. As the Committee did not consider canned strawberries to be a semi-solid or viscous food, and since Canada appeared to be the only country amongst those represented at the session which required a declaration of net contents by volume for canned strawberries, the Committee decided to provide for declaration by weight only. The Committee noted that it would be open to Canada to indicate its position in this respect if and when the standard was sent to Governments for acceptance. The Committee agreed that the provision in the General Labelling Standard on the name and address of the manufacturer, packer, etc., should be introduced into the standard. As regards the provision in the General Standard on country of origin, the Committee considered the question of whether or not the declaration of country of origin should be mandatory. Some delegations thought that the declaration of country of origin should be mandatory. Other delegations did not think that the absence of a declaration of country of origin could be said to mislead or deceive the consumer. Following a further exchange of views, the general consensus was that the provision in the standard should be as it appeared in the General Labelling Standard. The Committee considered the question whether, in addition to providing for a declaration of colours in the list of ingredients, it was necessary to give a further indication on the label that colours had been used in the processing of the product, for example, a declaration forming part of the name of the product or in close proximity to the name of the product, such as, "artificially coloured." The general consensus in the Committee was that such an additional

indication was not necessary, since the class name "colours" could appear in the list of ingredients and since there appeared to be no good reason why a given kind of food additive, such as colours, should receive special emphasis for labelling purposes, while other additives which also required toxicological clearance received no such emphasis.

(l) As regards the section of the standard on Methods of Analysis and Sampling, the Committee noted that the Codex Committee on Methods of Analysis and Sampling at its 1968 session had endorsed methods for the determination of drained weight and syrup measurements for canned strawberries. The Committee agreed that these methods which appear in Appendix IV of ALINORM 69/23, should be the appropriate methods for this standard. The Committee agreed on the ISO Method (ISO Recommendation 1022) for the determination of mineral impurities. As regards the matter of a method for determining the water content of containers, the Committee agreed on a method for metal containers and glass containers and decided to include this method in all the standards being considered.

7. The Committee agreed to send the standard for canned strawberries forward to the next session of the Commission at Step 8.

Standard for Canned Plums Considered at Step 7.

8. The Committee considered the standard for canned plums contained in document Codex PFV 68/5-8, dated May 1968, in the light of Government comments received thereon. The standard as revised by the Committee is contained in Appendix III to this report. The following were the main points emerging from the Committee's deliberations:

(a) The Committee considered a proposal to include a scope section in the standard. The Committee was of the opinion that this was not necessary as it considered that the section "Product Definition" adequately indicated what varieties of plums were covered by the standard.

(b) The Committee amended the section of the standard entitled "Varietal Type" to make it clear that the colours of the plums mentioned under section 1.2 (a), (b) and (c) related to the skin of the plums.

(c) The Committee considered a proposal to provide for peeled plums under section 1.3 of the standard "Styles." The Committee did not think it necessary to amend this section of the standard to accommodate the proposal, but considered that the substance of the proposal would be met by amending the labelling section of the standard to require that where plums have been peeled this fact be indicated on the label.

(d) The Committee considered the question of whether the standard should provide for more than three categories of syrup strength. A number of delegations favored having only two categories, whilst others thought that it would be advisable to retain three categories, and still others were in favor of providing for four levels in the standard. After a full exchange of views, the Committee decided to provide for four categories of syrup strength, as it had done in the standard for canned strawberries, at levels which it considered to be appropriate for this product. The Delegations of France, Poland, and the Netherlands reserved their position regarding this decision of the Committee, as they considered that only two syrup strengths should be provided for, namely Light Syrup (not less than 16° Brix) and Heavy Syrup (not less than 20° Brix).

(e) The Committee considered a proposal to establish separate defect allowances for whole and half plum styles. The Committee considered that this proposal would introduce an unnecessary complication into the standard and decided on practical grounds not to make this distinction in the standard except that crushed and broken fruit defects would be defined separately for the whole style and half style.

(f) The Committee decided that subsection 2.3.1 (d) of the standard containing a definition of pitting defects was redundant, in view of the provision of subsection 1.3 "Styles" and subsections (d) and (e) of section 2.3.5 "Defect Allowances."

(g) The Committee agreed that in subsection 2.3.5 "Defect Allowances," the revised allowances for extraneous plant material and allowances for loose pits in "Whole" style and pits or parts of pits in "Whole Pitted" and "Halved" styles would be based on sample average.

(h) As regards the food additives section of the standard, the Committee agreed that there was a technological need to increase the level of use of the colours permitted in the standard to 300 mg/kg, recognizing that some countries had varieties of plums which required the use of these colours at a level higher than 150 mg/kg. The Delegation of Poland reserved its position on the use of colours in this and other standards. The Committee noted that a number of countries had stated in their comments that they were opposed to the use of colours in this product.

(i) As regards contaminants, the Committee agreed to follow the course it had adopted in the case of the standard on strawberries. The Delegation of the United Kingdom undertook to collate data and to prepare a paper on the subject of contaminants in canned plums and other canned fruits and vegetables. (See paragraph 32.)

(j) The Committee, after considerable discussion decided to retain the figure of not less than 50 percent for drained weight of plums in whole style and decided to increase the figure to not less than 55 percent for plums in "Halved" style. The Delegations of France, and the Netherlands reserved their positions regarding this decision, as they considered that in "Whole" style the minimum drained weight should be 53 percent. The Committee noted that the Federal Republic of Germany had also indicated in its written comments that the minimum drained weight figure for plums in "Whole" style should be 53 percent.

(k) On a proposal of the Delegation of the Netherlands, the Committee agreed to modify the Hygiene Section of the standard in the way indicated in the revised version of the standard. The same modification had been made by the Group of Experts on Fruit Juices in the fruit juice standard and had been endorsed by the Codex Committee on Food Hygiene. The Committee agreed that this modification did not constitute a change of substance and that from a microbiological point of view canned fruits could be considered as being in the same category as canned fruit juices.

(l) The Committee amended the Labelling Section of the standard in the way indicated in the revised version of the standard. In particular, the Committee decided to amend the subsection "Name of the Product" since it appeared that in some countries a number of the designations would not be generally understood.

(m) As regards the section of the standard on Methods of Analysis and Sampling, the Committee noted that the Codex Committee on Methods of Analysis and Sampling at its 1968 session had endorsed methods for the determination of drained weight and syrup measurement for canned plums. The Committee agreed that those methods which were in Appendix IV of document ALINORM 69/23 should be the referee methods for this standard.

9. The Committee agreed to send the standard for canned plums forward to the next session of the Commission at Step 8.

Standard No. PFV 68/5-9 Canned Raspberries Appendix IV.

10. The Committee considered the standard for canned raspberries contained in document Codex PFV 68/5-9, dated May 1968, in the light of Government comments received thereon. The standard as revised by the Committee is contained in Appendix IV to this report. The following were the main points emerging from the Committee's deliberations:

(a) The Committee considered a proposal which had been submitted by Yugoslavia that in section 1.1 (a) "Product Definition", genus Rubus should be changed to read Rubus idaeus L. species. The Committee noted, however, that this would exclude black raspberries Rubus occidentalis. As it was the intention of the Committee that the standard should also cover black raspberries, this section of the standard was amended in the way indicated in the revised text.

(b) After considerable discussion, the Committee agreed to provide for four densities of syrup, namely, Extra Light--not less than 11° Brix, Light Syrup--not less than 15° Brix, Heavy Syrup--not less than 19° Brix, and Extra Heavy Syrup-- not less than 25° Brix. The Delegations of France and the Netherlands were opposed to this decision, as they

considered that two syrup densities, namely, Light Syrup--not less than 16°, and Heavy Syrup--not less than 18° would be more in line with the requirements of a number of European countries.

(c) As regards the defect allowance for crushed or broken fruit the Delegation of Australia, which had requested that the allowance be increased to 50 percent, reserved its position on the decision of the Committee not to alter the allowance figure. The Delegations of France and the Netherlands, supported by the written comments of the Federal Republic of Germany had recommended more stringent allowances for blemished fruit and crushed or broken fruit, but the general consensus was to leave the figures unchanged.

(d) The Committee agreed to amend the provision on extraneous plant material in the way indicated in the revised text. The tolerance for extraneous plant material would be based on sample average.

(e) As regards the food additives section of the standard, the Delegation of France reserved its position on the use of lactic acid. The Committee agreed that there was a technological need to provide for Erythrosine, in addition to Ponceau 4 R, and considered that the level of use should be 300 mg/kg singly or in combination as in the standards for canned strawberries and canned plums. The Delegation of Poland reserved its position on the use of colours.

(f) As regards contaminants, the Committee agreed to follow the same course as in the other standards considered at this session. The Delegation of the United Kingdom undertook the same sort of assignment as it had undertaken for the other standards considered. (See paragraph 32.)

(g) The Committee agreed to reduce the figure for minimum drained weight from 40 percent to 37 percent.

(h) The Committee agreed that the format of the Labelling Section should be brought into line with the format agreed upon in the other standards considered at this Session.

(i) The Committee noted that the Codex Committee on Methods of Analysis and Sampling had endorsed methods for the determination of drained weight and syrup measurements. These methods would be the international referee methods for the purposes of the standard.

11. The Committee agreed to send the standard for canned raspberries forward to the next session of the Commission at Step 8.

Standard for Canned Green Peas Considered at Step 7

12. The Committee considered the standard for canned green garden peas contained in document Codex PFV 68/5-14, dated May 1968, in the light of Government comments received thereon. The standard, as revised by the Committee, is contained in Appendix V to this report. The following were the main points emerging from the Committee's deliberations:

(a) It was agreed that the word "garden" should be deleted from the title of the standard and the product definition.

(b) As regards the section on varietal types, a number of delegations stated that there would be difficulties in attempting to distinguish between wrinkled-seeded and round-seeded peas. It was stated that such a distinction would not be valid on the basis of starch pattern. The Committee agreed to amend this section in such a way as to enable (i) any suitable variety of peas to be used, and (ii) the peas to be classified into the three categories mentioned in the standard.

(c) In considering the section on sizing of peas, the Delegation of France regretted that sizing was not made mandatory. The Committee noted that the sizes provided for in the standard were identical with the sizes prescribed in the standard for quick-frozen peas, which had been adopted by the Commission for issue to Governments at Step 9. A number of delegations, which were in favor of amending the sizing scale, did not think that the sizes for canned peas should necessarily be the same as those for quick-frozen peas, since the established system of sizing canned peas to which consumers had become accustomed would have to be taken into account. There was the further consideration that in some countries wrinkled peas were not canned to any considerable extent, the main production of canned peas in these countries being peas of the round-seeded category. The Committee was unable to reach complete agreement on sizing. The following figures represented the best compromise that could be reached in the circumstances:

(i) Round-Seeded or Smooth-Seeded

Very Small	7.5 mm and under
Small	8.2 mm and under
Medium	Over 8.2 mm and up to and including 9.5 mm
Large	Over 9.5 mm

(ii) Wrinkled-Seeded and Other Types

Small	8.75 mm and under
Medium	Over 8.75 mm up to and including 9.5 mm
Large	Over 9.5 mm

The above figures took into account, as far as possible, screens used throughout the world, some of which used the metric system and others the English system. These figures were such as would necessitate the minimum of adjustment of screens in the various countries concerned. It was agreed that Governments should be asked to comment further on the subject of sizing and to consider the above figures.

(d) The Committee agreed to amend Section 2.1(c) under "Other Ingredients" to provide, in addition to butter, for other edible animal or vegetable fats or oils. The Committee agreed to amend Section 2.1(d) in the light of the remarks which had been made by the Codex Committee on Food Additives at its last session. The Delegation of Poland reserved its position on Section 2.1 of the standard as it considered that other ingredients should be limited to water and salt. The Delegation of France stated that it was opposed to the inclusion of other types of vegetables in excess of three percent, as otherwise the product would constitute a vegetable mixture.

(e) As regards the alcohol insoluble solids content, the Committee failed to reach agreement on a figure. The maximum figures proposed included the following ranges:

(i) For round-seeded----------16-28 percent

(ii) For wrinkled-seeded---------16-21 percent

In view of the wide measure of disagreement on this issue, it was agreed that Governments should be invited to comment

specificically on this matter. In this connection, a number of delegations requested that it be mentioned in the report that the standard was designed to ensure that the consumer would get a good quality product, but that it was not the intention to lay down requirements that would be suitable for highest quality products only.

(f) As regards the section "Allowances for Defects," the Committee agreed to amend the provision on extraneous plant material and to provide for yellow peas.

(g) The Committee noted the remarks of the Codex Committee on Food Additives regarding the additives provided for in the standard. The Committee decided to list in this section all those chemically modified starches which had been listed in the report of the Food Additive Committee, including those which had been endorsed, temporarily endorsed, or were still subject to endorsement. The Committee also followed the recommendation of the Food Additive Committee regarding the listing of vegetable gums and alginates. The Committee agreed to provide also for the inclusion of tragacanth gum and Carob bean gum (Locust bean gum). As regards colours, it was decided to add Brilliant Blue and Carotene in the list, as some delegations indicated that in their countries there was a technological need for these colours. The Delegation of the U.S.A. undertook to send to the Secretariat specifications as to identity and purity for Carotene. The Delegations of Poland, France and the Netherlands were opposed to the use of colours in this product. The Delegation of Canada stated that it saw no need for the use of colours in canned peas intended for consumption in Canada. The Delegation of France reserved its position on the use of firming agents in this product. The Delegation of Japan reserved its position on the use of Green S. The Committee agreed that the provision on calcium salts should be amended in the way agreed upon for canned strawberries. The Committee decided to delete cupric sulphate from the standard.

(h) Although various proposals were put forward as to a figure for minimum drained weight, the Committee decided to retain the figure of 60 percent in the standard.

(i) It was agreed that a method to be prepared by the U.S. Delegation which would be an alternative method for determining a fill of canned peas in lieu of the drained weight could be attached to the standard as an Appendix for consideration by Governments.

(j) The Committee decided to deal with contaminants in the way it had dealt with them in the other standards considered.

(k) The Committee agreed that the format of the labelling section should be brought into line with the changes made in the labelling section of the other standards. The Committee made no changes of substance to this section of the standard. The French delegate suggested that sub-section 6.2.1 be amended to read as follows:

"6.2.1 The name of the product shall include:

(a) the following designations according to the type of varieties:

-- for smooth-seeded varieties the term 'early peas' or 'June peas' in English and 'petits pois' in French (the title of the standard must include the words 'petits pois' in French, not 'pois verts de jardin').

-- for wrinkled-seeded varieties the term 'sweet peas' in English and 'petits pois doux' in French.

The distinction at (a) above was necessary for the full information of the consumer in the view of the French Delegation.

Moreover, given the difficulties encountered in classifying hybrids unequivocally, crosses or hybrids would, in the opinion of the French delegation, have to be considered as wrinkled-seeded varieties or smooth-seeded varieties according to the starch pattern.

(b) a mention of any characteristic seasoning or flavour, i.e. 'with X' as the case may be."

13. In view of the fact that there were still a number of important issues in the standard yet to be resolved, the Committee decided to return the standard to Step 6 for a further round of Government comments.

Standard for Canned Fruit Cocktail Considered at Step 7.

14. The Committee considered the standard for canned fruit cocktail contained in document PFV 68/5-10, dated May 1968, in the light of

Government comments received thereon. The standard, as revised by the Committee, is contained in Appendix VI to this report. The following were the main points emerging from the Committee's deliberations:

(a) The Delegations of India and Japan stated that in their view the standard for canned fruit cocktail should provide for the inclusion of a number of fruits other than the five fruits specified in the standard. The Delegation of India suggested that papaya and mangos be permitted to be used in the manufacture of this product. The Delegation of Japan considered that mandarin oranges, apples, apricots and loquats be permitted to be used in the manufacture of this product. Both of these delegations stated that, in their countries, canned fruit cocktail contained a number of fruits other than those specifically mentioned in the standard. These delegations also drew the attention of the Committee to the fact that Austria and Hungary had stated in their written comments that canned fruit cocktail should not be confined solely to the fruits listed in the standard. It was the general consensus of the Committee, however, that canned fruit cocktail had been traded internationally for a long period of years and had become established in international markets as the product identified in the standard. The attention of the Delegations of India and Japan was drawn to the fact that the Committee had under consideration a standard at Step 2 for canned tropical fruit salad. In the circumstances, the Committee decided not to make any change in the standard insofar as the kinds of fruit permitted to be used in the manufacture of canned fruit cocktail were concerned.

(b) Under subsection 1.1.2 of the standard, the Committee agreed that peaches should include both clingstone and freestone.

(c) A number of amendments which were mainly of an editorial nature were made in the sections on "Packing Media" and "Other Ingredients."

(d) As regards the section 2.4 of the standard "Sizes and Shapes of Fruit" the Committee agreed to lower the figure of 80 percent in subsection 2.4.1 to 75 percent. The Committee agreed that it would be more appropriate to deal with cherries and grapes on a sample average in view of the fact that these fruits constituted a relatively small proportion of the fruits present in the smaller containers.

15. The Committee agreed to advance the standard for canned fruit cocktail to Step 8 of the Procedure.

Standard for Canned Mushrooms Considered at Step 7.

16. The Committee considered the standard for canned mushrooms contained in document Codex PFV 68/5-18, dated May 1968, in the light of Government comments received thereon. The standard, as revised by the Committee, is contained in Appendix VII to this report. The following were the main points emerging from the Committee's deliberations:

(a) The Committee considered the question of whether it was necessary to provide for a scope section in the standard. The Committee noted that the product covered by the provisions of this standard had been specifically excluded from the scope of the General Standard for Edible Fungi and Fungus Products which had been adopted by the Commission at its last session for issue to Governments at Step 9. After some discussion the Committee thought that there was no necessity to provide for a scope section in the standard.

(b) The Committee editorially amended the botanical nomenclature in the section of the standard on product definition in the way indicated in the revised standard.

(c) The Committee made a number of amendments to subsection 1.4, "Styles," as indicated in the revised draft and also provided for an additional style "grilling mushrooms." As regards the style "stems and pieces," the Delegation of Canada suggested that this be named "Cut Mushrooms" and reserved its position on the decision of the Committee to delete from the definition of this style the provision which required that not more than 20 percent (should be "not less than 20 percent") of the drained weight of the mushrooms be caps or portions of caps.

(d) The Committee amended section 2.1 of the standard, "Other Ingredients," to provide for the addition of soyabean sauce, olive oil, and flour. As regards vegetable oil, animal fat, and starch, the Committee agreed to make similar amendments in the standard as it had done in the standard for canned green peas.

(e) The Committee made a slight editorial amendment to section 2.2.1(b) of the standard and amended section 2.2.3, "Texture and Character," as follows: "In the styles of 'buttons' and 'whole'mushrooms, not more than 10 percent by count of the mushrooms may have caps which show total or complete breakage of the veil." The Delegation of Japan reserved its position on this amendment. As regards the food additives section of the

(e) The Committee amended subsection 2.5.2 "Colour and Flavour" to make it clear that a slight leaching of colour of cherries would not be regarded as a defect.

(f) In section 2.5.4 "Defect Allowances" the Committee decided to amend a number of the defect allowances as a consequence of its decision that the allowances should be calculated on drained weight rather than on total contents as originally provided in the standard.

(g) In the Food Additive Section of the standard the Committee decided to provide for the use of ascorbic acid as an anti-oxidant, the level of use to be limited by good manufacturing practice. The Committee also decided to provide for the addition of cherry laurel oil at a level of 10 miligrams per kilogram and bitter almond oil at a level of 40 miligrams per kilogram, calculated on the total contents, for the purpose of flavouring cherries only. The Delegation of Poland reserved its position on the use of colours.

(h) The Committee agreed that the Hygiene Section of the standard should be in line with that agreed upon in the case of the standard for canned strawberries.

(i) After considerable discussion the Committee decided to reduce the figure for minimum drained weight from 65 percent to 60 percent. The Delegations of Australia and the U.S. reserved their positions on this decision.

(j) The Committee agreed that the format of the labelling section of the standard should be brought into line with the revised format agreed upon in the other standards.

(k) In the Labelling Section of the standard the Committee considered the provision contained in subsection 6.2.2 requiring that the terms "5 fruits," or "with 5 fruits," or "4 fruits," or "with 4 fruits," should mandatorily be included as part of the name or in close proximity to the name of the product. Some delegations thought that this declaration should continue to be mandatory while others were of the view that it should be optional. The Committee agreed, by way of compromise, that this declaration should be mandatory unless in the country where the product was sold a true pictorial representation of the product, accompanied by a list of the fruits would suffice in accordance with the country's national legislation.

(l) As regards the section of the standard on Methods of Analysis and Sampling the Committee decided that size of sample units should be determined exclusively on the basis of drained weight. As a consequence of this decision the Committee agreed to delete subsection 7.1.1.1 (c) of the standard.

standard, the Committee agreed that the subsection on vegetable gums and alginates should be editorially revised to bring it into line with the layout agreed upon in the standard for canned green peas. The Delegation of Poland reserved its position on alginates. The Delegates of Poland, Japan, and France reserved their positions on the use of the colour Brilliant Black. The attention of the Committee was drawn to the remark in the report of the last session of the Food Additives Committee that iron lactate might be considered as a suitable alternative to Brilliant Black. The delegations which were in favor of providing for the use of Brilliant Black stated that they would prefer that the standard provide for Brilliant Black. The Committee agreed that it should be made clear in the standard that Caramel would be used only in sauce packs. The Delegations of Japan and France reserved their positions on the use of calcium disodium EDTA. As regards subsection 5.1.2 of the standard on "Minimum Drained Weight," the Committee agreed, after a full discussion, on a figure of 53 percent for all container sizes. The Delegations of China and the USA reserved their positions on this decision. As regards subsection 5.1.2(b) of the standard, "Sauce or Oil Packs," the Committee agreed to reduce the figure for the drained mushroom portion from 33 1/3 percent to 27½ percent of the total product weight in sauce packs.

(f) The Committee agreed that the format of the labeling section of the standard should be brought into line with that of the other standards it had considered. As regards packs other than sauce packs, the Delegation of Denmark reserved its position on the decision of the Committee not to require a declaration of the drained weight.

(g) As regards the methods of analysis section of the standard, the Committee agreed that the sieve sizes should also be shown in SI units. The Committee made an editorial amendment to subsection 7.1.2.2(c) as shown in the revised draft.

17. The Committee agreed to advance the standard for canned mushrooms to Step 8 of the procedure.

Standard for Canned Asparagus Considered at Step 7.

18. The Committee considered the standard for canned asparagus contained in document Codex PFV 69/6-11, dated May 1969, in the light of government comments received thereon. The standard as revised by the Committee is contained in Appendix VIII to this report. The following were the main points emerging from the Committee's deliberations:

(a) The Committee agreed that there was no need to introduce a scope section into the standard.

(b) The Committee agreed upon a considerable number of amendments of substance to the subsections of the standard on colour types, styles, and allowance for styles. These amendments will be seen in the revised version of the standard.

(c) The Delegation of France noted that the adjective "bleu" was not appropriate and asked that the word "violet" be substituted in the French text.

(d) As regards section 1.4 of the standard, "Designations in Accordance with Size," the Committee agreed to provide for separate sizes for unpeeled and peeled asparagus as shown in the revised version of the standard. The Delegation of the Netherlands reserved its position as regards the sizes for peeled asparagus. The Delegation of France stated that sizing should be mandatory for long shoots, shoots and tips, and that sizes should obligatorily be declared on the label. The Committee also amended section 1.4.1 "Definition of Diameter" to provide for the measurement at the thickest portion of the shoot rather than at the base.

(e) As regards section 2.1.1, "Other Permitted Ingredients," the Committee agreed that this section should be editorially revised, as appropriate, along the lines agreed upon in the case of the standard for canned green peas.

(f) The Committee agreed that the part of the provision in subsection 2.2.1, "Colour," dealing with the liquid packing medium should be a separate subsection of the standard.

(g) In section 2.2.4 of the standard dealing with "Definition of Defects," the Committee agreed to introduce a new defect definition into the standard "Units with Peel (only for peeled asparagus)." The Committee also agreed that the layout of subsection 2.2.4.2, "Allowances," be brought into line with the layout agreed upon in the case of the standard for canned green peas.

(h) In the Food Additive Section of the standard the Committee agreed to amend editorially the provisions on modified starches and alginates as it had done in the standard for canned green peas. The Delegation of Poland reserved its position on the use of alginates and stannous chloride.

(i) Although the Committee decided not to include a section on contaminants in any of the other standards considered at the session, it decided that in the case of the standard for canned asparagus the level of 250 mg/kg for tin should be retained in the standard. This tolerance was considered to be necessary in the case of canned asparagus in metal containers where the tin was exposed. The Delegation of Poland reserved its position on the figure of 250 mg/kg and considered the figure should be reduced to 150 mg/kg.

(j) The Committee agreed to amend the figures in the standard for minimum drained weight and to provide for separate figures for peeled and unpeeled asparagus as shown in the revised version of the standard.

(k) As regards the labeling section of the standard, the Committee agreed that the format of this section should be brought into line with that agreed upon in the other standards considered. The Committee agreed that in the case of the colour types "white," and "white and blue tipped," the declaration of the terms "peeled" or "unpeeled," as appropriate, should require to be declared on the label if national legislation so required. The Delegation of China expressed its disagreement with this decision. As regards packs other than sauce packs, the Delegation of Denmark reserved its position on the decision of the Committee not to require declaration of the drained weight. The Committee's decision not to require a declaration of water in this standard and in the standards for canned mushrooms and canned green peas was based on the consideration that consumers would normally expect these products to be packed in a liquid medium of which the main constituent was water; and therefore, in the absence of a labeling declaration on packing medium, consumers would normally assume this to be the case. It was only when the products were packed in other liquid media, such as sauces, that the consumer would need to be informed on the label.

19. The Committee agreed to advance the standard for canned asparagus to Step 8 of the procedure.

Standard for Jams (Fruit Preserves) and Jellies Considered at Step 2.

20. The Committee considered the above standard which was contained in document PFV 70/2-26. The Committee agreed to make no change in the scope section of the standard. The following amendments were agreed to in the sections of the standard referenced below:

1.1.1 Jam (Preserves, Conserves)

1) The Committee agreed to amend this subsection to make it clear that jam is the product prepared from a suitable fruit or vegetable ingredient.

4) Delete this provision.

1.1.2 Jelly

1) Insert the words "or aqueous extract of fruit" after the words "suitable fruit juice."

3) Substitute the word "processed" for "concentrated."

4) Delete this provision.

1.3 Prepared Fruit Ingredient (Jams, Preserves, Conserves)

The last sentence to be amended to read as follows: "The fruit ingredient may be prepared from fruit which is fresh, processed, or preserved. "

1.4 Prepared Fruit Juice (Jellies)

Title to read "Prepared Fruit Juice or Aqueous Extract (Jellies)." Text to be amended to read as follows:

"means the juice or aqueous extract obtained from fresh, processed, or preserved fruit which is clean, substantially sound and wholesome...."

1.8 Formulation

Delete this section.

1.9 Packaging

Amend to read as follows:

"The product shall be filled into clean containers in a manner which shall minimize subsequent contamination

and microbiological spoilage." This section should be included in the Product Definition as in the other standards for processed fruits and vegetables.

2.1.2 Other Ingredients

1) Pectin should be in the Food Additive Section of the standards.

2) Delete the words "acidifying agents such as."

3) Herbs and Spices

The Delegations of Canada and USA were in favor of providing for these substances in the standard. The Delegations of France and Poland reserved their positions on this as they considered that herbs and spices should not be permitted in jams.

4) Place natural fruit essences in the Additives Section of the standard.

6) Natural mint flavouring.
7) Natural cinnamon flavouring.

These substances should be included in the Food Additives Section of the standard.

8) Butter, margarine, and other edible vegetable or animal oils (as anti-foaming agents). The Delegations of France and Poland considered that these should not be permitted in the standard.

2.2.1 Fruit Content

The first sentence of this provision should be revised to read as follows:

'The product shall contain not less than 40 parts by weight of prepared fruit ingredient per 100 parts by weight of finished product." The Committee agreed that the attention of Governments should be drawn specifically to the difficulty of determining by existing analytical procedures the quantity of the fruit ingredient in the final product.

2.2.2 Mixtures of Fruits

1) To be amended to read as follows:

"When a jam or jelly contains a mixture of two fruits the first named fruit shall contribute not less than 50 percent, nor more than 75 percent of the total fruit content except when melon, pineapple, passionfruit, lemon, or ginger is one of the two fruits."(There were, however, differences of opinion in the Committee on the above figures.)"When melon is a constituent it may be present up to a level of 95 percent and where pineapple, passionfruit, lemon and ginger are present they shall be present at a level of not less than five percent with the major ingredient being permitted at a level greater than 75 percent."

2.3 Soluble Solids (Finished Product)

It was agreed that Government comments should be sought on the figure of 65 percent. The Delegations of Norway and Sweden reserved their position on this provision, as they did not consider it necessary to have such a provision in the standard.

2.4.4 Classification of "Defectives"

2.4.5 Acceptance

Amend as in the other standards.

3. Food Additives

3.2 Buffering Agents

Change to read pH Regulating agents.

3.3 Anti-Foaming Agents

Amend first line to read "Mono and diglycerides of fatty acids of edible oils." Government should be requested to indicate which silicones were intended and to suggest maximum levels of use both for the silicones and dimethyl-polysiloxane. The Delegation of France reserved its position on the use of anti-foaming agents. The Delegation of Poland indicated that it would reserve its position on anti-foaming agents if butter, margarine, etc. were permitted in the standard.

3.4 Thickening Agents

The Delegations of Australia, France and Japan were opposed to the use of thickening agents on the grounds that pectin should be sufficient to achieve the desired effect.

3.5 Colouring Matters

The Delegations of Norway and Poland reserved their positions on the use of colours. The limit of 200 mg/kg applied to all colours listed, used singly or in combination.

3.6 Preservatives

In addition to the preservatives sulphur dioxide and sodium benzoate, it was agreed to provide for the use of sorbic acid, potassium sorbate, and esters of p-hydroxy benzoic acid at a level of 1000 mg/kg. The Delegations of France and Poland reserved their position on the use of benzoate. Other Delegations indicated that their national regulations contained different provisions from those indicated above.

3.7 Firming Agents

It was also agreed to provide for the use of calcium chloride at a level of 1000 mg/kg.

4.2 Weight Control

Delete this section.

5. Hygiene

It was agreed that this section should provisionally read as in the standards for canned fruit and governments were requested to examine this provision carefully and comment on its practical application.

6. Labelling

This section should be brought into line with the revised format agreed upon for the other standards.

21. The Delegation of France drew attention to the fact that the standard permitted jellies to be manufactured from whole fruit ingredients as well as the juice. The Delegation of France indicated that in France and some other European countries the manufacture of jellies directly from the whole fruit was not permitted. The Delegation of the United Kingdom indicated that it was not the practice to manufacture jellies from juice in the United Kingdom because it was considered that a high quality jelly could be produced from the fruit ingredient.

22. The Committee agreed to send out the standard with the above changes to Governments for comment at Step 3.

Standard for Citrus Marmalade Considered at Step 2.

23. The Committee considered the above standard which was contained in document Codex PFV 70/2-33. The Committee agreed that the

applicable amendments of an editorial nature which were agreed to in the standard for Jams (Fruit Preserves) and Jellies should also be incorporated in this standard.

2.1.2 Other Ingredients

The Delegation of the United Kingdom was requested to supply to the Codex Secretariat specifications of Identity and Purity for Caramel color.

2.3 Soluble Solids (Finished Product)

The Delegations of Norway and Sweden reserved their position on this provision as they had done in the standard for Jams.

3. Food Additives

3.3 Colors. The Delegations of Norway and Poland reserved their positions.

3.5 It was agreed to provide for the use of sorbic acid, acid, sodium benzoate and benzoic acid at a level of 1000 mg/kg. It was agreed to delete Diphenyl and ortho phenyl phenol from the standard as these matters fell within the competence of the Pesticides Committee.

4. Weight Control

It was agreed to delete this provision.

24. The Committee agreed that the standard with the above changes should be sent out to Governments at Step 3.

Standard for Table Olives Considered at Step 4.

25. The Committee had before it for consideration the Standard for Table Olives contained in Document PFV 69/3-15 dated May 1969. The Committee also had before it the comments of Governments and the International Olive Oil Council. The Committee noted that there was a considerable number of provisions in the standard setting out methods of processing, which the Committee considered were not appropriate to Codex Standards, except to the extent necessary to achieve the purposes of the standard. The Committee thought that the standard ought to concentrate on laying down requirements for the product as it reached the consumer. In this connection, however, the Committee recognized that olives were sold from bulk containers in many countries. Furthermore it was recognized that imports into many countries were mainly in bulk containers, such as barrels. The Committee thought that the standard should concern itself with bulk containers to the extent necessary to protect the consumer. The Committee thought that the standard would need to be brought more into harmony with the Codex format and requested the Delegation of the U.S.A. to revise the standard in collaboration with the International Olive Oil Council, bearing in mind the above general comments of the Committee, as well as the amendments which had been agreed upon in

those sections of the standard which it had been possible for the Committee to consider. The Committee considered that its future deliberations on the Table Olive Standard would be greatly facilitated by the attendance at the meeting of experts on table olives from the IOOC and from olive producing countries. The amendments agreed upon by the Committee are set out in Appendix IX of this Report.

26. In view of the Committee's decision to have the draft standard revised, the Committee decided that it would be best to return the standard to Step 2 for consideration by the Committee at its next Session.

Other Business.

Consideration at Step 4 of the Proposed Austrian Amendment to the Step 9 Standard for Canned Peaches.

27. The Committee considered, in the light of Government comments, the proposed Austrian amendment to the Step 9 Standard for Canned Peaches as set out in document ALINORM 70/42. The Committee did not think it necessary to mention specifically the variety Mamie Ross in the product definition section of the standard as had been proposed by Austria since this variety was included in the botanical description Prunus persica L. The Committee agreed that the standard should be amended by adding an additional colour type Green in section 1.3 of the standard on "Colour Types." The new section (d) would read as follows:

> "(d) Green - Varietal types in which the predominant colour ranges from pale green to green when fully ripe."

The Committee also agreed to amend the labeling section of the standard, dealing with the name of the food, by amending subsection 6.1.2(a) to read as follows:

> "(a) The colour type 'Yellow,' 'White,' 'Red,' or 'Green,' as appropriate."

The Committee took note of the procedure for the amendment of recommended Codex standards and noted that the proposed amendments to the canned peach standard would be submitted to the next session of the Commission for consideration at Step 5. The Committee recommended to the Commission that Steps 6, 7, and 8 of the procedure be omitted.

Consideration of Amendment to the Step 9 Standard for Canned Pineapple.

28. The Committee noted that the Commission had had before it at its last session a Step 8 comment of the Delegation of the U.S.A. proposing that the definition of "Excessive Trim" in the standard for Canned Pineapple be amended in order to introduce some objective measurement criteria. The Committee also noted that the Commission had decided not to adopt the proposed U.S. amendment but had considered that the reasons for the amendment should be considered by this Committee. The Committee agreed to recommend to the next session of the Commission that the definition of "Excessive Trim" in the standard be amended to read as follows:

> "Excessive Trim - (Considered a defect only in the styles of Whole, Sliced including Spiral Sliced, Half Sliced, Quarter Sliced, and Spear.) A unit trimmed to the extent that its normal shape and conformation is destroyed and detracts from the appearance of such unit. Trim will be considered 'excessive' if the portion trimmed away exceeds five percent of the apparent physical bulk of the perfectly formed unit and if such trimming destroys the normal circular shape of the outer or inner edge of the unit."

The Committee noted that if the Commission agreed that it was necessary to amend the standard in this way, it would be open to the Commission to decide that the amendment be sent out to Governments for comment at Step 3. In submitting this proposed amendment of the standard to the Commission, the Committee wished to draw attention to the fact that the figure of five percent was not firm at this stage and that it would be necessary to request Governments to comment particularly on this figure at Step 3.

Step 9 Standard for Canned Green Beans and Canned Wax Beans.

29. The Delegation of the Netherlands referred to the drained weight provision in the Standard for Canned Green Beans and Canned Wax Beans and indicated that in the Netherlands a higher figure for minimum drained weight was required than that laid down in the standard. The Netherlands Delegation asked for the views of the Committee on whether a difference of this kind could be regarded as being in the nature of a minor deviation in connection with the acceptance of the standard. The Committee agreed that the question would depend to some degree on the extent to which the Netherlands requirements in this respect differed from those laid down in the standard. It would also be necessary to consider the economic and possibly other consequences of the Netherlands position in terms of the movement of the product in international trade. The Committee

noted that in time the Commission would have to consider various problems of this kind and that it would be up to the Commission to decide how best to deal with these matters. The Commission might decide that the Executive Committee should consider these matters or might set up some other subsidiary body to consider them. It would also be open to the Commission to consider the merits of having matters of this kind considered by the Committee which originated the standards. In view of the fact that it was only in very recent times that standards had been sent out to governments for acceptance, the Committee agreed that it would be premature to offer any further comment at this stage. The Delegation of the Netherlands indicated that it had a number of other amendments which it would wish to propose in the standard and a copy of these proposed amendments was circulated to delegations during the course of the session. It was agreed that the proposed Netherlands amendment to the Standard for Canned Green Beans and Canned Wax Beans be considered by the Committee at its next session.

Further Amendment Proposed to Step 9 Standard for Canned Peaches

30. The Committee agreed that there was a technological need to provide for the use of ascorbic acid as an anti-oxidant in the Standard for Canned Peaches, the level to be limited by good manufacturing practice. The Committee agreed to recommend to the Commission at its next session that the standard be amended accordingly.

Proposed Amendment to the Step 9 Standard for Canned Tomatoes

31. The Committee noted that the Step 9 Standard for Canned Tomatoes contained a provision providing for the use of calcium chloride or other calcium salts at a level of use of 0.035% calcium, derived from the added calcium salts, in the final product. This figure represented the amount of calcium added and did not include the amount of calcium naturally present in the product. The Committee agreed, on the proposal of the Delegation of the US, that there was a technological need to increase the level of added calcium salts in the case of the styles "diced," "sliced," and "wedges." The U.S. Delegation proposed, and the Committee agreed, that in respect of calcium salts a maximum limit for total calcium ion content in the canned tomato standard should be 0.080 percent for these styles and 0.045 percent in the other styles. In view of the comments of the Food Additive Committee, the Committee agreed that it would be desirable to specify the calcium salts to be permitted for use. The Delegation of the United States indicated that in the U.S. the following calcium salts were permitted to be used in this product: calcium chloride, calcium sulphate, calcium citrate, mono-calcium phosphate, or any

two or more of these calcium salts. The Committee agreed to recommend to the Commission at its next Session that the standard be amended in the way indicated above listing the calcium salts mentioned. The Committee noted that if the Commission agreed that this amendment should be made to the standard information as to calcium salts other than those listed could be obtained from Governments at Step 3.

Contaminants.

32. As indicated earlier in the report, the Delegation of the U.K. undertook to collate data on levels of tin, arsenic, copper, lead and zinc in canned strawberries, canned plums and canned raspberries. The Delegation of the U.S.A. undertook to collate similar data in respect of canned peas, canned fruit cocktail, canned mushrooms and canned asparagus. The Committee stressed the need for participating countries to make data as to actual levels found in practice in their countries available to the delegations of the U.K. and the U.S.A. It was also agreed that these two delegations might consider whether the figures could cover a wider range of canned products than those mentioned above.

Draft Standard for Processed Tomato Concentrates

33. The Delegation of the U.S.A. drew the attention of the Committee to the remarks of the Codex Committee on Methods of Analysis and Sampling regarding the methods for determining natural soluble tomato solids in this product. The Committee wished to bring to the attention of the Methods of Analysis Committee that total tomato solids was not meant but natural soluble tomato solids. The Committee was informed that there was an official AOAC method (first action) " DETERMINATION OF SOLUBLE SOLIDS IN TOMATO PRODUCTS EXPRESSED AS PERCENTAGE SUCROSE BY REFRACTIVE INDEX." This method was published in the Journal of AOAC, volume 52, No. 5, September 1969, pages 1050-1054 (11th edition 1970, sections 32.008-32.010).

Draft Standard for Canned Mandarin Oranges

34. The Committee was informed that the Delegation of Japan had already made available the paper which it had been requested to provide at the last session of the Committee regarding the question of the need for the use of methyl cellulose in canned Mandarin oranges. The Committee agreed that Governments should consider this paper since this standard would be considered by the Committee at its next session at Step 6.

Future Work.

35. The Committee noted that it would have before it for consideration at its next session standards for the following products:

(a) Raisins, Tomato Concentrates, Pears, Mandarin Oranges, and Green Peas--all five standards to be considered at Step 6.

(b) Jams and Jellies and Marmalade--both standards to be considered at Step 4.

(c) Table Olives Standard to be considered at Step 2.

(d) The Committee agreed that if it were intended to include other standards at Step 2 for consideration at the next session of the Committee, priority might be given to Cucumber Pickles, Tropical Fruit Salad, Fruit Salad (Other than Tropical Fruit Salad) and Carrots.

Status of Standards being Elaborated by the Committee.

36. (a) Standards considered at the Seventh Session of the Commission

(i) Standard considered at Step 8 and advanced to Step 9
Canned Pineapple

(ii) Standards considered at Step 5 and advanced to Step 6
Canned Mandarin Oranges
Canned Pears
Raisins
Processed Tomato Concentrates

(b) Standards considered at the Seventh Session of the Committee

(i) Standards considered at Step 7 and advanced to Step 8
Canned Asparagus
Canned Fruit Cocktail
Canned Mushrooms
Canned Plums
Canned Raspberries
Canned Strawberries

(ii) Standard considered at Step 7 and returned to Step 6
Canned Green Peas

(iii) Standards considered at Step 2 and advanced to Step 3
General Standard for Jams (Fruit Preserves) and Jellies
General Standard for Citrus Marmalade

(iv) Standard considered at Step 4 and returned to Step 2
Table Olives

(c) Standards, the consideration of which has been postponed or which are held in abeyance (exclusive of those under Future Work)

These standards are to be considered as soon as the Committee workload permits:

Texts not before the Seventh Session of the Committee

Canned Beans in Tomato Sauce	Step 2
Canned Peas, Mature, Processed	Step 2
Canned Two Fruit Salad	Step 2
Dried Figs	Step 2
Dried Apricots	Step 2
Dates	Step 2
Pistachios	Step 2

(d) Possible Future Standards

Walnuts) See para. 35 of Report of Fifth Session
Almonds) of the Committee ALINORM 69/20

(e) New Standards proposed at the Seventh Session of the Committee for consideration

None

Date and Place of Next Session.

37. The Committee noted that the next session of the Commission would be held in May or June 1971 and that therefore if the normal practice was followed, the Committee would meet before the next session of the Commission. The Committee noted that the meeting would probably be held in Washington, D.C. and that the date would be fixed by the United States authorities in consultation with the Codex Secretariat.

List of Appendices to this Report

38.

Appendix I	List of Participants	
Appendix II	Canned Strawberries	PFV 70/8-7
Appendix III	Canned Plums	PFV 70/8-8
Appendix IV	Canned Raspberries	PFV 70/8-9
Appendix V	Canned Green Peas	PFV 70/6-14
Appendix VI	Canned Fruit Cocktail	PFV 70/8-10
Appendix VII	Canned Mushrooms	PFV 70/8-18
Appendix VIII	Canned Asparagus	PFV 70/8-11
Appendix IX	Table Olives Amendments to	PFV 69/3-15
Appendix X	General Standard for Jams (Preserves) and Jellies	PFV 70/3-26
Appendix XI	General Standard for Citrus Marmalade	PFV 70/3-33

APPENDIX I
June 1970

JOINT FAO/WHO FOOD STANDARDS PROGRAM

CODEX ALIMENTARIUS COMMISSION

SEVENTH SESSION

CODEX COMMITTEE ON PROCESSED FRUITS AND VEGETABLES

Washington, D. C., 1-5 June 1970

LIST OF PARTICIPANTS

Acting Chairman

Dr. Floyd F. Hedlund
Director
Fruit and Vegetable Division
Consumer and Marketing Service
U.S. Department of Agriculture
Washington, D.C. 20250

Rapporteurs

Mr. Edwin C. Williams
Assistant Chief
Processed Products Standardization and Inspection Branch
Fruit and Vegetable Division
Consumer and Marketing Service
U.S. Department of Agriculture
Washington, D.C. 20250

Mrs. Elinore T. Greeley
Head, Standardization Section
Processed Products Standardization and Inspection Branch
Fruit and Vegetable Division
Consumer and Marketing Service
U.S. Department of Agriculture
Washington, D.C. 20250

FOOD AND AGRICULTURE ORGANIZATION

Representatives

Mr. Henry J. McNally
Liaison Officer
Joint FAO/WHO Food Standards Program
Food and Agriculture Organization of the United Nations
Via delle Terme di Caracalla
Rome, Italy

Dr. H. Barrera-Benitez
Food Standards Officer
Joint FAO/WHO Food Standards Program
Food and Agriculture Organization of the United Nations
Via delle Terme di Caracalla
Rome, Italy

COUNTRIES

AUSTRALIA

Head of Delegation

Mr. Ivan H. Smith
Assistant Secretary
Department of Primary Industry
Canberra

Delegate

Mr. W. J. Bettenay
Chief Fruit Officer, Exports
Department of Primary Industry
11 William Street
Melbourne, Victoria

CANADA

Delegates

Mr. K. H. Dean
Chief, Processed Products Section
Fruit and Vegetable Division
Department of Agriculture
Sir John Carling Building
Ottawa

Mr. C. J. Ross
Manager, Scientific Research
Canadian Canners Limited,
Research Centre
1101 Walker's Line - Box 5032
Burlington, Ontario

CHINA, REPUBLIC OF

Head of Delegation

Mr. J. T. Tseng
Managing Director
Food Industry Research and
Development Institute
P.O. Box 246
Hsinchu, Taiwan

CHINA, REPUBLIC OF (Continued)

Delegates

Mr. Z. K. Chang
Senior Food Technologist
Bureau of Commodity Inspection
and Quarantine
39 Chung Jin Street
Taichung, Taiwan

Mr. Lee Shiu
Senior Food Technologist
Joint Commission on Rural
Reconstruction
37 Nan-Hai Road
Taipei, Taiwan

CONGO, DEMOCRATIC REPUBLIC OF THE

Delegate

Mr. Mushobekwa
First Secretary and Economic Attache
Embassy of the Democratic Republic
of the Congo
1800 New Hampshire Avenue, NW.
Washington, D.C. 20009

DENMARK

Delegate

Mr. O. Høybye
Technical Director
Danish Canners Association
c/o A/S Beauvais
4520 Svinninge

DOMINICAN REPUBLIC

Delegate

Mr. Dario Suro
Counselor
Embassy of the Dominican Republic
1715 - 22nd Street, NW.
Washington, D.C. 20008

FRANCE

Delegate

Mr. Georges Jumel
Secretaire Général
Confédération Nationale des
Industries de la Conserve
3 Rue de Logelbach
Paris

HUNGARY

Delegate

Dr. Balint Szaloczy
Second Secretary (Agriculture)
Embassy of Hungary
2437 - 15th Street, NW.
Washington, D.C. 20009

INDIA

Delegate

Mr. Daya Nand
Ministry of Food and Agriculture
Department of Food
Krishi Bhavan
New Delhi

ISRAEL

Delegate

Mr. H. Brisker
Agricultural Attache
Embassy of Israel
1621 - 22nd Street, NW.
Washington, D.C. 20008

JAPAN

Head of Delegation

Mr. Hiroya Sano
First Secretary
Embassy of Japan
2520 Massachusetts Avenue, NW.
Washington, D.C. 20008

JAPAN (Continued)

Delegates

Mr. Yoshihiro Mitsui
Ministry of Agriculture and Forestry
Vegetables and Flowers Division
Raw Silk and Horticulture Bureau
2-1. 1-Chome,
Kasumigaseki,
Chiyoda-Ku
Tokyo

Mr. Masao Yamauchi
Japan Canned Fruits and Vegetables
Packers Association
No. 4. 4-Chome,
Hongokucho,
Chuo-Ku
Tokyo

NETHERLANDS

Delegate

Dr. L. J. Schuddeboom
Officer of Public Health
Ministry of Social Affairs and
Public Health
Dokter Reijersstraat 10,
Leidschendam

NORWAY

Delegate

Mr. Odvar Mosnesset
First Secretary
Embassy of Norway
3401 Massachusetts Avenue, NW.
Washington, D.C. 20007

POLAND

Delegate

Mr. W. Orlowski
Quality Inspection Office
Ministry of Foreign Trade
Stepinska 9, Warszawa

SPAIN

Delegates

Mr. Gomez Manzanares
Agricultural Attache
Embassy of Spain
2558 Massachusetts Avenue, NW.
Washington, D.C. 20008

Mr. Juan Arencibia
Commercial Attache
Embassy of Spain
2558 Massachusetts Avenue, NW.
Washington, D.C. 20008

Mr. Jose F. Trelles
Commercial Attache
Embassy of Spain
2558 Massachusetts Avenue, NW.
Washington, D.C. 20008

SWEDEN

Delegate

Mr. Gunnar Holmen
Works Manager
Bla Band produkter A.B.
302 45 Halmstad

TURKEY

Delegate

Mr. Guzay Guldere
Assistant Commercial Attache
Embassy of Turkey
2523 Massachusetts Avenue, NW.
Washington, D.C. 20008

UNITED KINGDOM

Head of Delegation

Mr. H. M. Goodall
Senior Executive Officer
Ministry of Agriculture,
Fisheries and Food
Food Standards Division
Great Westminster House
Horseferry Road
London S.W.1

UNITED KINGDOM (Continued)

Delegates

Mr. R. B. Beedham
Fruit and Vegetable Canners'
Association
4 Lygon Place
London, S.W.1

Mr. J. D. Croker
Fruit and Vegetable Canners'
Association
4 Lygon Place
London, S.W.1

Mr. H. R. Hinton
Director of Research
Fruit and Vegetable Preservation
Research Association
Chipping Campden
Gloucestershire

Dr. Z. Hybs
Food Manufacturers' Federation, Inc.
4 Lygon Place
London, S.W.1

UNITED STATES

Head of Delegation

Mr. Fred Dunn
Chief, Processed Products
Standardization and Inspection Branch
Fruit and Vegetable Division
Consumer and Marketing Service
U.S. Department of Agriculture
Washington, D.C. 20250

Delegates

Mr. Lowrie M. Beacham
Acting Director
Division of Food Chemistry and
Technology
Food and Drug Administration
Department of Health, Education,
and Welfare
Washington, D.C. 20204

UNITED STATES (Continued)

*Mr. Victor Blomquist
Food Technology Branch
Division of Food Chemistry
and Technology
Food and Drug Administration
Department of Health, Education,
and Welfare
Washington, D.C. 20204

Mrs. Elinore T. Greeley
Head, Standardization Section
Processed Products Standardization
and Inspection Branch
Fruit and Vegetable Division
Consumer and Marketing Service
U.S. Department of Agriculture
Washington, D.C. 20250

Mr. Arthur W. Hansen
Manager, Food Regulations and
Standards
Del Monte Corporation
215 Fremont Street
San Francisco, California 94119

Dr. Ira I. Somers
Director, Research Laboratories
National Canners Association
1133 - 20th Street, NW.
Washington, D.C. 20036

Mr. C. B. Way
Director, Quality Assurance
Green Giant Company
Le Sueur, Minnesota 36058

OBSERVERS

CHILE

Mr. G. Rafael Torres
Embassy of Chile
1736 Massachusetts Avenue, NW.
Washington, D.C. 20008

SOUTH AFRICA

Mr. Louis G. R. Hyman
Agricultural Counselor
Embassy of South Africa
3051 Massachusetts Avenue, NW.
Washington, D.C. 20008

Mr. P. J. Marais
Consul (Agricultural Produce
Inspectorate)
Division of Commodity Services
Department of Agricultural
Economics and Marketing,
South Africa
South Africa House
Trafalgar Square
London, W.C.2, England

UNITED STATES

Mr. Robert C. Gross
Manager
Olive Administrative Committee
516 North Fulton Street
Fresno, California 93728

Mr. Robert Kellen
Executive Vice President
National Preservers Association
25 East Chestnut Street
Chicago, Illinois 60611

*Also representing ASSOCIATION OF OFFICIAL ANALYTICAL CHEMISTS

INTERNATIONAL ORGANIZATIONS

EUROPEAN FEDERATION OF IMPORTERS OF DRIED FRUITS, PRESERVES, SPICES, AND HONEY (FRUCOM)

Mr. Jan J. Mertens
Vice President, FRUCOM
Ste Amelbergalei 30
B-2120 Schoten, Belgium

INTERNATIONAL FEDERATION OF GLUCOSE INDUSTRIES

Dr. C. Nieman
International Federation of Glucose Industries
172 Joh. Verhulststraat
Amsterdam (Oud-Zuid) Netherlands

Mr. P. M. Karl
International Federation of Glucose Industries
246 Meadowbrook Road
Wyckoff, New Jersey 07481

APPENDIX II
June 1970

JOINT FAO/WHO CODEX ALIMENTARIUS COMMISSION

Committee on Processed Fruits and Vegetables

CANNED STRAWBERRIES -- STEP 8

Standard No. PFV 70/8-7

to be submitted to the Eighth Session of the
Codex Alimentarius Commission

for adoption as a

Recommended Standard

DRAFT STANDARD

FOR

CANNED STRAWBERRIES

Advanced to Step 8

1. DESCRIPTION

1.1 Product Definition

Canned strawberries is the product (a) prepared from strawberries of varieties (cultivars) conforming to the characteristics of the Genus Fragaria which are whole, clean, reasonably sound, of proper maturity and from which extraneous matter including calices and stems have been removed; (b) packed with water or other suitable liquid packing medium; and (c) processed by heat in an appropriate manner before or after being sealed in a container so as to prevent spoilage.

1.2 Varietal type

Canned strawberries may be of any suitable variety (cultivar) of cultivated strawberry.

2. ESSENTIAL COMPOSITION AND QUALITY FACTORS

2.1 Packing Media

Canned strawberries may be packed in:

(a) Water -- in which water or any mixture of water and strawberry juice is the sole liquid packing medium; or

(b) Syrup -- in which water and/or strawberry juice is combined with one or more of the following sugars -- sucrose, invert sugar, dextrose, dried glucose syrup, glucose syrup -- and classified on the basis of cut-out strength as:

Extra Light Syrup -- not less than 10° Brix.
Light Syrup -------- not less than 14° Brix.
Heavy Syrup -------- not less than 18° Brix.
Extra Heavy Syrup -- not less than 22° Brix.

2.1.1 Cut-out strength to be determined on sample average, but no container may have a Brix value lower than that of the minimum of the next category below, if such there be.

2.2 Quality Criteria

2.2.1 Colour

The colour of the product shall be normal, taking into consideration any added artificial colour.

2.2.2 Flavour

Canned strawberries shall have a normal flavour and odour free from flavours or odours foreign to the product.

2.2.3 Texture

The strawberries shall have a reasonably uniform texture and shall not be excessively firm nor unreasonably soft.

2.2.4 Defects and Allowances

Canned strawberries shall be reasonably free from common defects within the limits set forth as follows:

		Maximum Limits
(a)	Berries with parts of, or with complete, calices	15%, by count.
(aa)	Berries with complete calices, limited within the foregoing allowance to	5%, by count.
(b)	Blemished berries (consisting of berries with spots caused by mould damage or bird pecks more than 5 mm in diameter and deformed berries)	15%, by count.
(c)	Broken berries (where the major part is broken or entirely disintegrated)	20%, by count.
Total of all the foregoing defects -- (a) and/or (aa), (b), and (c)		30%, by count.

-- continued on next page --

2.2.4 Defects and Allowances -- continuation

	Maximum Limits
(d) Extraneous plant material (based on averages)	
(1) Stalks (stems) or parts thereof, each longer than 3 mm	1 piece per 100 grams of drained strawberries
(2) Leaves, unattached calices, or portions of any of these, or other similar harmless extraneous plant material	1 sq. cm per 100 grams of drained strawberries

2.2.5 Mineral Impurities

Not more than 300 mg/kg of total contents.

2.2.6 Classification of "Defectives"

A container that fails to meet one or more of the applicable quality requirements, as set out in sub-sections 2.2.1 through 2.2.4 (except extraneous plant material which is based on averages), shall be considered a "defective".

2.2.7 Acceptance

A lot will be considered as meeting the applicable quality requirements referred to in sub-section 2.2.6 when:

(a) for those requirements which are not based on averages -- the number of "defectives", as defined in sub-section 2.2.6, does not exceed the acceptance number (c) of the appropriate sampling plan (AQL-6.5) in the Sampling Plans for Processed Fruits and Vegetables; and

(b) the requirements which are based on sample averages are complied with.

APPENDIX II
PFV 70/8-7
June 1970

3. FOOD ADDITIVES

The following provisions in respect of food additives and their specifications as contained in section . . . of the Codex Alimentarius have been endorsed or temporarily endorsed or are subject to endorsement by the Codex Committee on Food Additives as indicated:

	Maximum level of use
Acidifying agents	
Citric acid Malic acid L-Tartaric acid Lactic acid	Limited by Good Manufacturing Practice (Endorsed)
Colouring matters	
Ponceau 4 R Erythrosine	Singly, or in combination -- 300 mg/kg (Temporarily endorsed)
Firming agents	
Calcium chloride Calcium lactate Calcium gluconate	The total amount of calcium in the final product shall not exceed 350 mg/kg, as Ca ion (Subject to endorsement)

4. HYGIENE

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

4.2 To the extent possible in good manufacturing practice the product shall be free from objectionable matter.

4.3 Microorganisms capable of development under normal conditions of storage shall not be present.

4.4 The product shall not contain any toxic substances originating from microorganisms.

5. WEIGHTS AND MEASURES

5.1 Fill of Container

5.1.1 Minimum Fill

The container shall be well filled with strawberries, and the product (including packing medium) shall occupy not less than 90% of the water capacity of the container. The water capacity of the container is the volume of distilled water at 20° C which the sealed container will hold when completely filled.

5.1.2 Classification of "Defective"

A container that fails to meet the requirement for minimum fill (90 percent container capacity) of sub-section 5.1.1 shall be considered a "defective".

5.1.3 Acceptance

A lot will be considered as meeting the requirements of sub-section 5.1.1 when the number of "defectives" does not exceed the acceptance number (c) of the appropriate sampling plan (AQL-6.5) in the Sampling Plans for Processed Fruits and Vegetables.

5.1.4 Minimum Drained Weight

5.1.4.1 The drained weight of the product shall be not less than 35% of the weight of distilled water at 20° C which the sealed container will hold when completely filled.

5.1.4.2 The requirement for minimum drained weight shall be deemed to be complied with when the average drained weight of all containers examined is not less than the minimum required, provided that there is no unreasonable shortage in individual containers.

6. LABELLING

In addition to Sections 1, 2, 4, and 6 of the Recommended International General Standard for the Labelling of Prepackaged Foods (Ref. No. CAC/RS 1-1969), the following specific provisions apply:

6.1 The name of the food

6.1.1 The name of the product shall be "strawberries".

6.1.2 The packing medium shall be declared as part of the name or in close proximity to the name: "Water", "Extra Light Syrup", "Light Syrup", "Heavy Syrup", or "Extra Heavy Syrup", as appropriate.

6.2 List of ingredients

A complete list of ingredients shall be declared on the label in descending order of proportion in accordance with sub-section 3.2 (c) of the General Standard for the Labelling of Prepackaged Foods, except that water need not be declared.

6.3 Net contents

The net contents shall be declared by weight in either the metric ("Système International" units) or avoirdupois or both systems of measurement as required by the country in which the product is sold.

6.4 Name and address

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

6.5 Country of origin

(a) The country of origin of the product shall be declared if its omission would mislead or deceive the consumer.

(b) When the product 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. METHODS OF ANALYSIS AND SAMPLING

The methods of analysis and sampling described or referred to hereunder are international referee methods. The methods referred to in 7.1, 7.2, and 7.3 have been endorsed, and those in 7.4, 7.5, and 7.6 are subject to endorsement, by the Codex Committee on Methods of Analysis and Sampling.

7.1 Sampling

Sampling shall be in accordance with the Sampling Plans for Processed Fruits and Vegetables.

7.2 Determination of Drained Weight *

7.2.1 Definition *

7.2.2 Materials *

7.2.2.1 Specifications for circular sieves *

(a)
(b)
(c)

7.2.3 Procedure *

7.2.4 Calculation and Expression of Results *

(Correct AOAC reference to "30.001")

(Delete ALINORM reference)

7.3 Syrup measurements **

7.3.1 Procedure **

7.3.2 Calculation and Expression of Results **

7.3.3 Literature References **

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* Text as given for "Determination of Drained Weight - Method I" in Appendix IV of ALINORM 69/23.

** Text as given for "Syrup Measurements (Refractometric method)" in Appendix IV of ALINORM 69/23.

7.4 Method for Determination of Mineral Impurities

7.4.1 Procedure

As described by the International Standards Organization, ISO method 423 E, Recommendation 1022.

7.5 Determination of Calcium

Based on AOAC method, for Canned Fruits (1965, 20.028).

7.6 Method for Determination of Water Capacity of Containers

7.6.1 Metal containers

7.6.1.1 Procedure

(1) Select a container which is undamaged in all respects.

(2) Wash, dry, and weigh the empty container after cutting out the lid without removing or altering the height of the double seam.

(3) Fill the container with distilled water at 20° C to 4.76 mm vertical distance below the top level of the container, and weigh the container thus filled.

(4) Subtract the weight found in (2) from the weight found in (3). The difference shall be considered to be the weight of water required to fill the container.

7.6.2 Glass containers

7.6.2.1 Procedure

(1) Select a container which is undamaged in all respects.

(2) Wash, dry, and weigh the empty container.

(3) Fill the container with distilled water at 20° C to the level of the top thereof, and weigh the container thus filled.

(4) Subtract the weight found in (2) from the weight found in (3). The difference shall be considered to be the weight of water required to fill the container.

APPENDIX III
June 1970

JOINT FAO/WHO CODEX ALIMENTARIUS COMMISSION

Committee on Processed Fruits and Vegetables

CANNED PLUMS -- STEP 8

Standard No. PFV 70/8-8

to be submitted to the Eighth Session of the Codex Alimentarius Commission

for adoption as a

Recommended Standard

APPENDIX III
PFV 70/8-8
June 1970

DRAFT STANDARD

FOR

CANNED PLUMS

Advanced to Step 8

1. DESCRIPTION

1.1 Product Definition

Canned plums is the product (a) prepared from clean, substantially sound, whole or halved fruit of plum varieties (cultivars) conforming to the characteristics of Prunus domestica L., greengage varieties (cultivars) conforming to the characteristics of Prunus italica L, mirabelle or damson varieties (cultivars) conforming to the characteristics of Prunus insititia L, or cherry plum varieties (cultivars) conforming to the characteristics of Prunus cerasifera Ehrh, which plums may be peeled and which have extraneous matter, including stalks (stems), removed; (b) packed with water or other suitable liquid packing medium and may be packed with flavouring ingredients; and (c) processed by heat in an appropriate manner before or after being sealed in a container so as to prevent spoilage.

1.2 Varietal Type

Plums of distinct varietal type will be designated:

(a) Yellow Plums
(b) Red Plums
(c) Purple Plums
(d) Greengages
(e) Damsons
(f) Cherry Plums
(g) Mirabelles

The color referred to in (a), (b), and (c) refer to skin colour.

1.3 Styles

(a) Whole (pitted) --- pitted plums that are substantially whole.
(b) Whole (unpitted) - unpitted whole plums.
(c) Halves ---------- pitted and cut into two approximately equal parts.

2. ESSENTIAL COMPOSITION AND QUALITY FACTORS

2.1 Packing Media

Canned plums may be packed in --

(a) Water -- in which water or any mixture of water and plum juice is the sole liquid packing medium; or

(b) Syrup -- in which water and/or plum juice is combined with one or more of the following sugars -- sucrose, invert sugar, dextrose, dried glucose syrup, glucose syrup -- and classified on the basis of cut-out strength as:

Extra Light Syrup -- not less than 11° Brix.

Light Syrup ------- not less than 15° Brix.

Heavy Syrup ------- not less than 19° Brix.

Extra Heavy Syrup -- not less than 25° Brix.

2.1.1 Cut-out strength to be determined on sample average, but no container may have a Brix value lower than that of the minimum of the next category below, if such there be.

2.2 Quality Criteria

2.2.1 Colour

The colour of the product shall be normal, taking into consideration any added artificial colour.

2.2.2 Flavour

Canned plums shall have a normal flavour and odour free from flavours or odours foreign to the product.

Canned plums with special flavourings shall have the flavour characteristic of that imparted by the plums and the other substances used.

2.2.3 Texture

The plums shall have a reasonably uniform texture and shall not be excessively firm nor unreasonably soft.

2.2.4 Defects and allowances

Canned plums shall be substantially free from defects within the limits set forth as follows:

	Maximum Limits
(a) Blemished plums (consisting of plums damaged by insects, friction or disease, or affected by stone gum, or discoloured to the extent that the appearance or eating quality is materially affected)	30% by weight of drained plums
(b) Crushed or Broken fruit (consisting of, as applicable to the style: Whole style — plums which are deformed or broken to an extent that the normal shape of the fruit is seriously affected. Halves style — halves of plums which are damaged or torn to such an extent that they are smaller than 50% of a plum half.	25% by weight of drained plums
Total of the foregoing defects (a) and (b)	35% by weight of drained plums
(c) Extraneous plant material (consisting of stalk (or stem) from the plum tree or any other harmless plant material)	1 piece per 200 grams of drained plums (based on averages)
(d) Loose pits in Whole style	3 per 500 grams of drained plums (based on averages)
(e) Pits or pieces of pits in the styles of Whole Pitted and Halves	2 per 500 grams of drained plums (based on averages)

2.2.5 Classification of "Defectives"

A container that fails to meet one or more of the applicable quality requirements, as set out in sub-section 2.2.1 through 2.2.4 (except extraneous plant material and pit material which are based on averages), shall be considered a "defective".

2.2.6 Acceptance

A lot will be considered as meeting the applicable quality requirements referred to in sub-section 2.2.5 when:

(a) for those requirements which are not based on averages -- the number of "defectives", as defined in sub-section 2.2.5, does not exceed the acceptance number (c) of the appropriate sampling plan (AQL-6.5) in the Sampling Plans for Processed Fruits and Vegetables; and

(b) the requirements which are based on sample averages are complied with.

3. FOOD ADDITIVES

The following provisions in respect of food additives and their specifications as contained in section . . . of the Codex Alimentarius have been temporarily endorsed or are subject to endorsement by the Codex Committee on Food Additives as indicated:

	Maximum level of use
Colouring matter	
In "Red" or "Purple" Plums only -----	
Ponceau 4 R Erythrosine	singly, or in combination -- 300 mg/kg (subject to endorsement)
Natural flavours	
Natural flavours and their identical synthetic equivalents, except those which are known to represent a toxic hazard.	Limited by Good Manufacturing Practice (temporarily endorsed)

4. HYGIENE

4.1 It is recommended that the product covered by the provisions of this standard be prepared in accordance with the International Code of Hygienic Practice for Canned Fruit and Vegetable Products recommended by the Codex Alimentarius Commission (Ref. No. CAC/RCP 2-1969).

4.2 To the extent possible in good manufacturing practice the product shall be free from objectionable matter.

4.3 Microorganisms capable of development under normal conditions of storage shall not be present.

4.4 The product shall not contain any toxic substances originating from microorganisms.

5. WEIGHTS AND MEASURES

5.1 Fill of Container

5.1.1 Minimum Fill

The container shall be well filled with plums and the product (including packing medium) shall occupy not less than 90% of the water capacity of the container. The water capacity of the container is the volume of distilled water at 20° C. which the sealed container will hold when completely filled.

5.1.2 Classification of "Defectives"

A container that fails to meet the requirement for minimum fill (90 percent container capacity) of 5.1.1 shall be considered a "defective".

5.1.3 Acceptance

A lot will be considered as meeting the requirement of 5.1.1 when the number of "defectives" does not exceed the acceptance number (c) of the appropriate sampling plan (AQL-6.5) in the Sampling Plans for Processed Fruits and Vegetables.

5.1.4 Minimum Drained Weight

5.1.4.1 The drained weight of the product shall be not less than the following percentages, calculated on the basis of the weight of distilled water at 20° C. which the sealed container will hold when completely filled:

Whole styles ---------- 50%

Halves style ---------- 55%

5.1.4.2 The requirements for minimum drained weight shall be deemed to be complied with when the average drained weight of all containers examined is not less than the minimum required, provided that there is no unreasonable shortage in individual containers.

6. LABELLING

In addition to Sections 1, 2, 4, and 6 of the Recommended International General Standard for the Labelling of Prepackaged Foods (Ref. No. CAC/RS 1-1969), the following specific provisions apply:

6.1 The name of the food

6.1.1 The name of the product shall be "Plums", accompanied by "Greengages", or "Damsons", or "Mirabelles", or "Cherry", as appropriate, provided that "Plums" may be omitted when sold in the countries where its omission would not confuse nor deceive the consumer.

6.1.2 The name of the product shall include a declaration of any special flavouring which characterizes the product, e.g. "With X", when appropriate.

6.1.3 The following shall be included as part of the name or in close proximity to the name:

(a) either the colour of the plum: "Yellow", "Red", or "Purple", or the varietal name, as appropriate;

(b) the packing medium: "Water", "Extra Light Syrup", "Light Syrup", "Heavy Syrup", or "Extra Heavy Syrup", as appropriate;

(c) the style "Whole (Pitted)", "Whole", or "Halved", as appropriate;

(d) the word "Peeled", in the case of plums that are peeled.

6.2 List of ingredients

A complete list of ingredients shall be declared on the label in descending order of proportion in accordance with sub-section 3.2 (c) of the General Standard for the Labelling of Prepackaged Foods, except that water need not be declared.

6.3 Net Contents

The net contents shall be declared by weight in either the metric ("Système International" units) or avoirdupois or both systems of measurement as required by the country in which the product is sold.

6.4 Name and address

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

6.5 Country of origin

(a) The country of origin of the product shall be delcared if its omission would mislead or deceive the consumer.

(b) When the product 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 purpose of labelling.

7. METHODS OF ANALYSIS AND SAMPLING

The methods of analysis and sampling described or referred to hereunder are international referee methods. The methods referred to in 7.1, 7.2, and 7.3 have been endorsed, and the method in 7.4 is subject to endorsement, by the Codex Committee on Methods of Analysis and Sampling.

7.1 Sampling

Sampling shall be in accordance with the Sampling Plans for Processed Fruits and Vegetables.

7.2 Determination of Drained Weight*

7.2.1 Definition*

7.2.2 Materials*

7.2.2.1 Specifications for circular sieves*

(a)
(b)
(c)

7.2.3 Procedure*

7.2.4 Calculation and Expression of Results*

(Correct AOAC reference to "30.001")

(Delete ALINORM reference)

7.3 Syrup measurements**

7.3.1 Procedure**

7.3.2 Calculation and Expression of Results**

7.3.3 Literature References**

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* Text as given for "Determination of Drained Weight - Method I" in Appendix IV of ALINORM 69/23.

** Text as given for "Syrup Measurements (Refractometric method)" in Appendix IV of ALINORM 69/23.

7.4 Method for Determination of Water Capacity of Containers

7.4.1 Metal containers

7.4.1.1 Procedure

(1) Select a container which is undamaged in all respects.

(2) Wash, dry, and weigh the empty container after cutting out the lid without removing or altering the height of the double seam.

(3) Fill the container with distilled water at 20° C to 4.76 mm vertical distance below the top level of the container, and weigh the container thus filled.

(4) Subtract the weight found in (2) from the weight found in (3). The difference shall be considered to be the weight of water required to fill the container.

7.4.2 Glass containers

7.4.2.1 Procedure

(1) Select a container which is undamaged in all respects.

(2) Wash, dry, and weigh the empty container.

(3) Fill the container with distilled water at 20° C to the level of the top thereof, and weigh the container thus filled.

(4) Subtract the weight found in (2) from the weight found in (3). The difference shall be considered to be the weight of water required to fill the container.

APPENDIX IV
June 1970

JOINT FAO/WHO CODEX ALIMENTARIUS COMMISSION

Committee on Processed Fruits and Vegetables

CANNED RASPBERRIES -- STEP 8

Standard No. PFV 70/8-9

to be submitted to the Eighth Session of the
Codex Alimentarius Commission

for adoption as a

Recommended Standard

DRAFT STANDARD

FOR

CANNED RASPBERRIES

Advanced to Step 8

1. DESCRIPTION

1.1 Product definition

Canned raspberries is the product (a) prepared from raspberry varieties conforming to the characteristics of Rubus idaeus L. or Rubus occidentalis L. which are reasonably whole, reasonably sound ripe fruit, and from which extraneous matter including calices and stems have been removed; (b) packed with water or other suitable liquid packing medium; and (c) processed by heat in an appropriate manner before or after being sealed in a container so as to prevent spoilage.

1.2 Varietal type

Any suitable variety of raspberry may be used.

2. ESSENTIAL COMPOSITION AND QUALITY FACTORS

2.1 Packing Media

Canned raspberries may be packed in:

(a) Water -- in which water or any mixture of water and raspberry juice is the sole liquid packing medium; or

(b) Syrup -- in which water and/or raspberry juice is combined with one or more of the following sugars -- sucrose, invert sugar, dextrose, dried glucose syrup, glucose syrup -- and classified on the basis of cut-out strength as:

Extra Light Syrup -- not less than 11° Brix.

Light Syrup -------- not less than 15° Brix.

Heavy Syrup -------- not less than 19° Brix.

Extra Heavy Syrup -- not less than 25° Brix.

2.1.1 Cut-out strength to be determined on sample average, but no container may have a Brix value lower than that of the minimum of the next category below, if such there be.

2.2 Quality Criteria

2.2.1 Colour

The colour of the product shall be normal for the varietal type, taking into consideration any added artificial colour.

2.2.2 Flavour

Canned raspberries shall have a normal flavour and odour free from flavours or odours foreign to the product.

2.2.3 Texture

The raspberries shall have a reasonably uniform texture and shall not be excessively firm nor unreasonably soft.

2.2.4 Defects and allowances

Canned raspberries shall be substantially free from defects within the limits set forth as follows:

	Maximum limits
(a) Blemished berries (consisting of berries which are affected by wind rub, insects, disease or which are deformed to the extent that the appearance or eating quality is materially affected)	12% by weight of drained raspberries
(b) Crushed or broken berries (consisting of berries in which more than 50% of the drupelets are crushed, broken, detached, or otherwise damaged to the extent that the original conformation is destroyed)	25% by weight of drained raspberries
Total of the foregoing defects (a) and (b)	25% by weight of drained raspberries
(c) Extraneous plant material, (based on averages)	
(1) Stalks (stems) or parts thereof, each longer than 3 mm	2 pieces per 100 grams of drained raspberries
(2) Leaves, calices, or portions of any of these, or other similar harmless extraneous plant material	2 sq. cm per 100 grams of drained raspberries

2.2.5 Classification of "Defectives"

A container that fails to meet one or more of the applicable quality requirements, as set out in subsections 2.2.1 through 2.2.4 (except extraneous plant material which is based on an average), shall be considered a "defective".

2.2.6 Acceptance

A lot will be considered as meeting the applicable quality requirements referred to in sub-section 2.2.5 when:

(a) for those requirements which are not based on averages -- the number of "defectives", as defined in sub-section 2.2.5, does not exceed the acceptance number (c) of the appropriate sampling plan (AQL-6.5) in the Sampling Plans for Processed Fruits and Vegetables; and

(b) the requirements which are based on sample averages are complied with.

3. FOOD ADDITIVES

The following provisions in respect of food additives and their specifications as contained in section ... . of the Codex Alimentarius have been endorsed or are subject to endorsement by the Codex Committee on Food Additives as indicated:

	Maximum level of use
Acidifying agents	
Citric acid Malic acid L-Tartaric acid Lactic acid	Limited by Good Manufacturing Practice (Endorsed)
Colouring matters	
Ponceau 4 R Erythrosine	Singly, or in combination -- 300 mg/kg (subject to endorsement)

4. HYGIENE

4.1 It is recommended that the product covered by the provisions of this standard be prepared in accordance with the International Code of Hygienic Practice for Canned Fruit and Vegetable Products recommended by the Codex Alimentarius Commission (Ref. No. CAC/RCP 2-1969).

4.2 To the extent possible in good manufacturing practice the product shall be free from objectionable matter.

4.3 Microorganisms capable of development under normal conditions of storage shall not be present.

4.4 The product shall not contain any toxic substances originating from microorganisms.

5. WEIGHTS AND MEASURES

5.1 Fill of Container

5.1.1 Minimum Fill

The container shall be well filled with raspberries, and the product (including packing medium) shall occupy not less than 90% of the water capacity of the container. The water capacity of the container is the volume of distilled water at 20° C which the sealed container will hold when completely filled.

5.1.2 Classification of "Defective"

A container that fails to meet the requirement for minimum fill (90 percent container capacity) of sub-section 5.1.1 shall be considered a "defective".

5.1.3 Acceptance

A lot will be considered as meeting the requirements of sub-section 5.1.1 when the number of "defectives" does not exceed the acceptance number (c) of the appropriate sampling plan (AQL-6.5) in the Sampling Plans for Processed Fruits and Vegetables.

5.1.4 Minimum Drained Weight

5.1.4.1 The drained weight of the product shall be not less than 37% of the weight of distilled water at 20° C which the sealed container will hold when completely filled.

5.1.4.2 The requirement for minimum drained weight shall be deemed to be complied with when the average drained weight of all containers examined is not less than the minimum required, provided that there is no unreasonable shortage in individual containers.

6. LABELLING

In addition to Sections 1, 2, 4, and 6 of the Recommended International General Standard for the Labelling of Prepackaged Foods (Ref. No. CAC/RS 1-1969), the following specific provisions apply:

6.1 The name of the food

6.1.1 The name of the product shall be "Raspberries".

6.1.2 The following shall be included as part of the name or in close proximity to the name:

(a) in the case of raspberries other than red raspberries, the colour of the fruit;

(b) the packing medium: "Water", "Extra Light Syrup", "Light Syrup", "Heavy Syrup", or "Extra Heavy Syrup", as appropriate.

6.2 List of ingredients

A complete list of ingredients shall be declared on the label in descending order of proportion in accordance with sub-section 3.2 (c) of the General Standard for the Labelling of Prepackaged Foods, except that water need not be declared.

6.3 Net contents

The net contents shall be declared by weight in either the metric ("Système International" units) or avoirdupois or both systems of measurement as required by the country in which the product is sold.

6.4 Name and address

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

6.5 Country of origin

(a) The country of origin of the product shall be declared if its omission would mislead or deceive the consumer.

(b) When the product 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. METHODS OF ANALYSIS AND SAMPLING

The methods of analysis and sampling described or referred to hereunder are international referee methods. The methods referred to in 7.1, 7.2, and 7.3 have been endorsed, and the method in 7.4 is subject to endorsement, by the Codex Committee on Methods of Analysis and Sampling.

7.1 Sampling

Sampling shall be in accordance with the Sampling Plans for Processed Fruits and Vegetables.

7.2 Determination of Drained Weight *

7.2.1 Definition *

7.2.2 Materials *

7.2.2.1 Specifications for circular sieves *

(a)
(b)
(c)

7.2.3 Procedure *

7.2.4 Calculation and Expression of Results *

(Correct AOAC reference to "30.001")

(Delete ALINORM reference)

7.3 Syrup measurements **

7.3.1 Procedure **

7.3.2 Calculation and Expression of Results **

7.3.3 Literature References **

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* Text as given for "Determination of Drained Weight - Method I" in Appendix IV of ALINORM 69/23.

** Text as given for "Syrup Measurements (Refractometric method)" in Appendix IV of ALINORM 69/23.

7.4 Method for Determination of Water Capacity of Containers

7.4.1 Metal containers

7.4.1.1 Procedure

(1) Select a container which is undamaged in all respects.

(2) Wash, dry, and weigh the empty container after cutting out the lid without removing or altering the height of the double seam.

(3) Fill the container with distilled water at 20° C. to 4.76 mm vertical distance below the top level of the container, and weigh the container thus filled.

(4) Subtract the weight found in (2) from the weight found in (3). The difference shall be considered to be the weight of water required to fill the container.

7.4.2 Glass containers

7.4.2.1 Procedure

(1) Select a container which is undamaged in all respects.

(2) Wash, dry, and weigh the empty container.

(3) Fill the container with distilled water at 20° C. to the level of the top thereof, and weigh the container thus filled.

(4) Subtract the weight found in (2) from the weight found in (3). The difference shall be considered to be the weight of water required to fill the container.

APPENDIX V
JUNE 1970

JOINT FAO/WHO CODEX ALIMENTARIUS COMMISSION

Committee on Processed Fruits and Vegetables

Standard No. PFV 70/6-14

CANNED GREEN PEAS

Returned to STEP 6

APPENDIX V
PFV 70/6-14
June 1970

DRAFT STANDARD

FOR

CANNED GREEN PEAS

Returned to STEP 6

1. DESCRIPTION

1.1 Product Definition

Canned green peas is the product (a) prepared from clean, substantially sound, whole, shelled immature (green) seeds of garden pea varieties (cultivars) conforming with the characteristics of the species Pisum sativum L. but excludes the subspecies macrocarpum; (b) packed with water or other suitable liquid medium, sugars, seasoning, and other ingredients, appropriate to the product; and (c) processed by heat in an appropriate manner before or after being sealed in a container so as to prevent spoilage.

1.2 Varietal types

Canned peas may be of any suitable variety (cultivar) and may be further classified as:

(a) Wrinkled-seeded;

(b) Round-seeded or smooth-seeded;

(c) Other types (crosses or hybrids of the types in (a) and (b)).

1.3 Size Classes

If size grading is applied, canned peas shall conform to the applicable specifications for the size name:

(a) Wrinkle-seeded; other types except Round-seeded

Small ------	up to, and including,	8.75 mm	(11/32 inch)
Medium -----	over 8.75 mm and up to, and including,	9.5 mm	(12/32 inch)
Large ------ ----------	over	9.5 mm	

(b) Round-seeded or smooth-seeded

Very small -	up to, and including,	7.5 mm	(19/64 inch)
Small ------	up to, and including,	8.2 mm	(21/64 inch)
Medium -----	over 8.2 mm and up to, and including,	9.5 mm	(12/32 inch)
Large ------ ----------	over	9.5 mm	

1.3.1 Tolerances for size classes

If size graded, not more than 15% by count or m/m belonging to the adjacent larger size group and not more than 5% by count or m/m of the second larger size group are permitted.

1.4 Types of Pack

(a) "Liquid Pack" when a liquid medium is used; or

(b) "Vacuum pack" or "Vacuum packed" if the liquid packing medium does not exceed 20 percent of the total net weight of the product and the container is closed under conditions creating a high vacuum in the container.

2. ESSENTIAL COMPOSITION AND QUALITY FACTORS

2.1 Basic ingredients

Peas and liquid packing medium appropriate to the product and other optional ingredients as follows:

2.1.1 Other permitted ingredients

(a) Salt, sucrose, invert sugar, dextrose, glucose syrup, dried glucose syrup.

(b) Aromatic herbs and spices; stock or juice of vegetables and aromatic herbs (lettuce, onions, carrots, etc.); garnishes composed of one or more vegetables (lettuce, onions, carrots; pieces of green or red peppers, or mixtures of both) up to a maximum of 15% of the total drained vegetable ingredient; mint essence.

(Butter or other edible animal or vegetable fats or oils. If butter is added, it must amount to not less than 3% of the final product.

(Starches -- natural (native), physically or enzymatically modified -- only when butter or other edible animal or vegetable fats or oils are ingredients.

2.2 Quality Criteria

2.2.1 Colour

Except for artifically coloured canned peas, the drained peas shall have normal colour characteristics for canned peas and typical of the variety used. Canned peas containing other permitted ingredients or additives shall be considered of characteristic colour when there is no abnormal discoloration for the respective substances used.

2.2.2 Packing Medium

Except for peas packed with special sauces, the packing medium shall not be so viscous that the liquid will not separate from the peas at 20° C. It shall not have a colour nor an appearance which is foreign to the product.

2.2.3 Flavour

Canned peas shall have a normal flavour and odour free from flavours or odours foreign to the product.

Canned peas with special ingredients shall have the flavour characteristic of that imparted by the peas and the other substances used.

2.2.4 Texture and Maturity

The peas shall be reasonably tender and reasonably uniform in texture and maturity.

The alcohol insoluble solids content shall not exceed 21% in all types.

2.2.5 Defects and allowances

Canned peas may contain a slight amount of sediment and shall be reasonably free from defects within the limits set forth as follows:

	Maximum Limits (based on the weight of drained peas)
(a) Blemished peas (consisting of peas which are slightly stained or spotted)	5% m/m
(b) Seriously blemished peas (consisting of peas which are spotted, discoloured, or otherwise blemished (including worm-eaten peas) to the extent that the appearance or eating quality is seriously affected)	1% m/m
(c) Pea fragments (consisting of portions of peas: separated or individual cotyledons; crushed, partial, or broken cotyledons; and loose skins; but not including entire intact peas with skins detached)	10% m/m
(d) Yellow peas	2% m/m
(e) Extraneous plant material (consisting of any vine or leaf or pod material from the pea plant, or other harmless plant material not purposely added as an ingredient)	0.5% m/m
Total of the foregoing defects (a), (b), (c), (d), (e)	12% m/m

2.2.6 Classification of "defectives"

A container that fails to meet one or more of the applicable quality requirements, as set out in sub-sections 2.2.1 through 2.2.5, shall be considered a "defective".

2.2.7 Acceptance

A lot will be considered as meeting the applicable quality requirements referred to in sub-section 2.2.6, when the number of "defectives", as defined in sub-section 2.2.6, does not exceed the acceptance number (c) of the appropriate sampling plan (AQL-6.5) in the Sampling Plans for Processed Fruits and Vegetables.

3. FOOD ADDITIVES

The following provisions in respect of food additives and their specifications as contained in section .... of the Codex Alimentarius are subject to endorsement or have been endorsed or temporarily endorsed or acted upon by the Codex Committee on Food Additives, as indicated:

		Maximum level of use	
(a)	Monosodium Glutamate	Not limited	(decision postponed)
(b)	Colouring matters		
	Green S	Individually or in combination--	(temporarily endorsed)
	Tartrazine		(temporarily endorsed)
	Brilliant Blue	100 mg/kg	(subject to endorsement)
	Carotene		(subject to endorsement)
(c)	Firming agents		
	Calcium chloride Calcium lactate Calcium gluconate	The total amount of Calcium in the final product shall not exceed 350 mg/kg, as Ca ion	(subject to endorsement

--continued on next page --

3. FOOD ADDITIVES -- continuation

(d) Modified starches, Vegetable gums, Alginates, Propylene glycol alginate -- to be used only when butter or other edible animal or vegetable fats or oils are used as ingredients -- as follows:

Maximum level of use -- 1% m/m singly or in combination

Modified Starches -- (Endorsed)

Acid-treated starches
Alkali-treated starches)
Bleached starches
Distarch, phosphate (sodium trimetaphosphate treated)
Distarch phosphate, phosphated
Monostarch phosphate

Modified Starches -- (Not endorsed)

Starch sodium succinate
Distarch phosphate (phosphorus oxychloride treated)
Distarch phosphate, acetylated
Distarch phosphate, hydroxypropyl
Distarch glycerol, acetylated
Distarch glycerol

Modified Starches -- (Temporarily endorsed)

Starch acetate
Starch, hydroxypropyl
Distarch, adipate, acetylated
Distarch glycerol, hydroxypropyl
Oxidized starches

Vegetable gums ------(Temporarily endorsed)

Arabic gum
Carrageenan
Furcellaran
Guar gum

Vegetable gums -- (Subject to endorsement)

Gum tragacanth
Carob bean (Locust bean) gum

Alginates ----------(Temporarily endorsed)

(Ca, K, Na NH_4)

Propylene glycol alginate --------(Temporarily endorsed)

4. HYGIENE

4.1 It is recommended that the product covered by the provisions of this standard be prepared in accordance with the International Code of Hygienic Practice for Canned Fruit and Vegetable Products recommended by the Codex Alimentarius Commission (Ref. No. CAC/RCP 2-1969).

4.2 To the extent possible in good manufacturing practice the product shall be free from objectionable matter.

4.3 The product shall not contain any pathogenic microorganisms or any toxic substances originating from microorganisms.

4.4 The product shall have received a processing treatment sufficient to destroy all spores of *Clostridium botulinum*.

5. WEIGHTS AND MEASURES

5.1 Fill of Container

5.1.1 Minimum Fill

The container shall be well filled with peas; and, except for "vacuum pack" peas, the product (including packing medium) shall occupy not less than 90% of the water capacity of the container. The water capacity of the container is the volume of distilled water at 20° C which the sealed container will hold when completely filled.

5.1.2 Classification of "Defective"

A container that fails to meet the requirement for minimum fill (90 percent container capacity) of 5.1.1 shall be considered a "defective".

5.1.3 Acceptance

A lot will be considered as meeting the requirements of 5.1.1 when the number of "defectives" does not exceed the acceptance number (c) of the appropriate sampling plan (AQL-6.5) in the Sampling Plans for Processed Fruits and Vegetables.

5.1.4 Minimum Drained Weight (See also 5.1.5)

5.1.4.1 The drained weight of the product shall be not less than 60% m/m of distilled water at 20° C which the sealed container will hold when completely filled.

5.1.4.2 The requirements for minimum drained weight shall be deemed to be complied with when the average drained weight of all containers examined is not less than the minimum required, provided that there is no unreasonable shortage in individual containers.

5.1.5 Proper fill in lieu of Drained Weight requirement

Canned peas shall be considered to be of proper fill, irrespective of compliance with the requirements of sub-section 5.1.4, if they conform to the procedure outlined in Attachment 1 of this Draft Standard.

6. LABELLING

In addition to Sections 1, 2, 4, and 6 of the Recommended International General Standard for the Labelling of Prepackaged Foods (Ref. No. CAC/RS 1-1969), the following specific provisions apply:

6.1 The name of the food

6.1.1 The name of the product shall be "Peas", "Green Peas", "Garden Peas", "Green Garden Peas", "Early Peas", "Sweet Peas", "Petit Pois", or the equivalent description used in the country in which the product is intended to be sold.

6.1.2 As part of the name or in close proximity to the name, any special sauce and/or seasoning or flavouring which characterizes the product shall be declared, e. g. "With X" or "In X" when appropriate. If the declaration is "With (or "In") Butter Sauce", the fat used shall only be butter.

6.1.3 The name of the product may include the type of peas: "round seeded", "smooth seeded", or "wrinkled seeded", as appropriate.

6.2 List of ingredients

A complete list of ingredients shall be declared on the label in descending order of proportion in accordance with sub-section 3.2 (c) of the General Standard for the Labelling of Prepackaged Foods, except that water need not be declared.

6.3 Net contents

The net contents shall be declared by weight in either the metric ("Système International" units) or avoirdupois or both systems of measurement as required by the country in which the product is sold.

6.4 Name and address

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

6.5 Country of origin

(a) The country of origin of the product shall be declared if its omission would mislead or deceive the consumer.

(b) When the product 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.

6.6 Other declarations

6.6.1 Size representation

The size name may be stated on the label, and if the size names in 1.3 are used, the product shall comply with the tolerances of 1.3.1.

6.6.2 Type of pack

If canned peas are "vacuum pack", this fact shall be stated on the label so as to be easily discernible.

7. METHODS OF ANALYSIS AND SAMPLING

The methods of analysis and sampling described or referred to hereunder are international referee methods. The methods referred to in 7.1, 7.2, and 7.3 have been endorsed, and those in 7.4, 7.5, and 7.6 are subject to endorsement, by the Codex Committee on Methods of Analysis and Sampling.

7.1 Sampling

Sampling shall be in accordance with the Sampling Plans for Processed Fruits and Vegetables.

7.2 Determination of Drained Weight *

7.2.1 Definition *

7.2.2 Materials *

7.2.2.1 Specifications for circular sieves *

(a)
(b)
(c)

7.2.3 Procedure *

7.2.4 Calculation and Expression of Results *

(Correct AOAC reference to "30.001")

(Delete ALINORM reference)

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* Text as given for "Determination of Drained Weight - Method I" in Appendix IV of ALINORM 69/23.

7.3 Determination of Alcohol Insoluble Solids **

7.3.1 Materials **

7.3.1.1 Specifications for circular sieves **

7.3.2 Procedure **

7.3.3 Calculation and Expression of Results **

7.3.4 Literature References **

7.4 Determination of Calcium in Canned Vegetables ***

7.4.1 Principle of the Method -- Complexometric titration ***

7.4.2 Reagents ***

7.4.3 Apparatus ***

7.4.4 Preparation of Sample ***

7.4.5 Determination ***

7.4.6 Expression of Results ***

7.4.7 Literature References ***

** Text as given for Determination of Alcohol Insoluble Solids -- APPENDIX IV of ALINORM 69/23

*** Text as given for Determination of Calcium in Canned Vegetables -- APPENDIX IV of ALINORM 69/23

7.5 Method for Determination of Water Capacity of Containers

7.5.1 Metal containers

7.5.1.1 Procedure

(1) Select a container which is undamaged in all respects.

(2) Wash, dry, and weigh the empty container after cutting out the lid without removing or altering the height of the double seam.

(3) Fill the container with distilled water at 20° C. to 4.76 mm vertical distance below the top level of the container, and weigh the container thus filled.

(4) Subtract the weight found in (2) from the weight found in (3). The difference shall be considered to be the weight of water required to fill the container.

7.5.2 Glass containers

7.5.2.1 Procedure

(1) Select a container which is undamaged in all respects.

(2) Wash, dry, and weigh the empty container.

(3) Fill the container with distilled water at 20° C. to the level of the top thereof, and weigh the container thus filled.

(4) Subtract the weight found in (2) from the weight found in (3). The difference shall be considered to be the weight of water required to fill the container.

7.6. Method for Distinguishing Type of Peas ****

7.6.1 Reagents and materials

7.6.1.1 Compound microscope - 100 to 250 magnifications
- Phase contrast

7.6.1.2 Microscope slide and cover glass

7.6.1.3 Spatula

7.6.1.4 Ethanol - 95% (v/v)

7.6.1.5 Glycerin

7.6.2 Procedure

7.6.2.1 Preparing mount

7.6.2.1.1 Remove a small portion of the endosperm and place on glass slide;

7.6.2.1.2 Using a spatula grind the material with 95% (v/v) ethanol;

7.6.2.1.3 Add a drop of glycerin, place cover glass on material and examine under microscope.

7.6.2.2 Identification

Starch granules of the wrinkled-seeded types (garden peas, sweet) show up as clear cut, well defined, generally spherical particles.

Starch granules of the smooth-seeded types (round, Earlys, Continental) show up as an amorphous mass with no well defined geometric shape.

**** Text as given for Method for Distinguishing Type of Peas -- APPENDIX IV of ALINORM 69/23.

Attachment No. 1

APPENDIX V
PFV 70/6-14
June 1970

Method for Determination of Proper Fill in Lieu of Drained Weight for Canned Peas

(1) Pour the contents of one container into an empty container of the same kind and size and return the contents completely to its original container.

(2) Level off the contents thus returned irrespective of the quantity of liquid 15 seconds after the contents are so returned.

(3) (a) A container with lid attached by double seam shall be considered to be completely filled when it is filled to the level 4.76 mm vertical distance below the top of the double seam.

(3) (b) A glass container shall be considered to be completely filled when it is filled to the level 12.7 mm vertical distance below the top of the container.

APPENDIX VI
June 1970

JOINT FAO/WHO CODEX ALIMENTARIUS COMMISSION

Committee on Processed Fruits and Vegetables

CANNED FRUIT COCKTAIL -- STEP 8

Standard No. PFV 70/8-10

To be submitted to the Eighth Session of the
Codex Alimentarius Commission

for adoption as a

Recommended Standard

APPENDIX VI
PFV 70/8-10
June 1970

DRAFT STANDARD

FOR

CANNED FRUIT COCKTAIL

Advanced to STEP 8

1. DESCRIPTION

1.1 Product Definition

1.1.1 Canned Fruit Cocktail is the product (a) prepared from a mixture of small fruits and small pieces of fruits (as further discribed in this standard) and is prepared from fresh or frozen or canned fruits; (b) packed with water or other suitable liquid packing medium, and may be packed with seasonings or flavourings appropriate for the product; and (c) processed by heat in an appropriate manner before or after being sealed in a container so as to prevent spoilage.

1.1.2 The fruits shall be of the following kinds and styles:

Peaches ---- Any firm yellow variety; peeled; pitted; diced, including clingstone and freestone types.

Pears ------- Any variety; peeled; cored; diced.

Pineapple --- Any variety; peeled; cored; sectors or diced.

Grapes ----- Any seedless variety; whole.

Cherries --- Approximate halves or whole pitted or unpitted cherries --

(a) any light, sweet variety; or
(b) artificially coloured red; or
(c) artificially coloured red and flavoured, whether natural or artificial.

1.2 Product Designation

1.2.1 5 Fruits — Fruit Cocktail

A mixture of the five fruits of the kinds and styles described in this standard.

1.2.2 4 Fruits - Fruit Cocktail

A mixture of the same kinds and styles described in this standard, except that:

(a) Cherries may be omitted;

or

(b) Grapes may be omitted.

2. ESSENTIAL COMPOSITION AND QUALITY FACTORS

2.1 Proportions of Fruits (basic ingredients)

Fruits shall be in the following proportions, based on the individual drained fruit weights in relation to the drained weights of all the fruits:

	5 Fruits Fruit Cocktail	4 Fruits Fruit Cocktail
Peaches	30% to 50%	30% to 50%
Pears	25% to 45%	25% to 45%
Pineapple	6% to 16%	6% to 25%
Grapes	6% to 20%	6% to 20%
		-- or --
Cherries	2% to 6%	2% to 15%

2.1.1 A lot will be considered as meeting the requirements for Proportions of Fruits when:

(1) The average of the individual fruit proportions from all containers in the sample is within the range required for the individual fruits; and

(2) The number of individual containers which are not within the range for any one or more fruits do not exceed the acceptance number (c) of the appropriate sampling plan (AQL-6.5) in the Sampling Plans for Processed Fruits and Vegetables.

2.2 Packing Media

Canned Fruit Cocktail may be packed in any one of the following:

(a) Water - - - - - - - - in which water, or any mixture of water and fruit juice(s) from any of the specified fruits, is the sole liquid packing medium.

(b) Fruit Juice - - - - fresh, canned, or reconstituted fruit juices from any of the specified fruits which may be strained or filtered.

(c) Syrup - - - - - - - - in which water and/or juices from any of the specified fruits is combined with one or more of the following sugars -- sucrose, invert sugar, dextrose, dried glucose syrup, glucose syrup -- and classified on the basis of cut-out strength as:

Extra Light Syrup - not less than 10° Brix.
Light Syrup - - - - not less than 14° Brix.
Heavy Syrup - - - - not less than 18° Brix.
Extra Heavy Syrup - not less than 22° Brix.

2.2.1 Cut-out strength to be determined on sample average, but no container may have a Brix value lower than that of the minimum of the next category below, if such there be.

2.3 Other ingredients

Spices and mint.

2.4 Sizes and Shapes of Fruits

2.4.1 Diced peaches, pears, or pineapple --

75% or more of all such drained fruits are of approximate cube-shapes which:

(a) are not over 20 mm in greatest edge dimension; and

(b) will not pass through square meshes of 8 mm.

2.4.2 Sectors of pineapple --

80% or more of all drained pineapple portion approximate wedge-shapes of these dimensions:

(a) outside arc - - - - - - - - 10 mm to 25 mm; and

(b) thickness - - - - - - - - - 10 mm to 15 mm; and

(c) radius (from inside to outside arc) - - 20 mm to 40 mm.

2.4.3 Whole grapes or cherries --

90% or more by count (based on sample average) of whole grapes, or of whole cherries, approximate normal shape except for proper preparation (such as removing pits or stems) and:

(a) are not broken into two or more parts;

(b) are not seriously crushed, mutilated, or torn.

2.4.4 Halved cherries --

80% or more by count (based on sample average) of the cherry units are approximate halves which are not broken into two or more parts.

2.5 Quality Criteria

2.5.1 Colour -- Canned Fruit Cocktail shall have normal colour except that a slight leaching of color from the coloured cherries is acceptable.

2.5.2 Flavour -- Canned Fruit Cocktail shall have a normal flavour characteristic for each fruit and for the entire mixture.

Canned Fruit Cocktail with special ingredients shall have the flavour characteristic of that imparted by the fruits in the product and the other substances used.

2.5.3 Texture

The fruit ingredients shall not be excessively firm nor excessively soft, as is appropriate for the respective fruit.

2.5.4 Defects and Allowances

Canned Fruit Cocktail shall be substantially free from defects within the limits set forth as follows:

	Maximum Limits (based on the weight of drained fruit)
(a) Blemished fruit pieces (consisting of pieces of fruit with dark surface areas, spots penetrating the fruit, and other abnormalities)	20% m/m Total of all fruit units so affected
(b) Peel -- (based on averages) (considered a defect only when occurring on, or from, those fruits which are peeled)	25 sq. cm aggregate area per kg
(c) Pit material -- (based on averages) (consisting of pieces of pit or of fruit stones and hard and sharp pit points; very small pit fragments of less than 5 mm in greatest dimension which do not have sharp points or edges are disregarded)	1 piece, of any size, per 2 kg
(d) Small stems -- (based on averages) (such as capstems from grapes)	5 per kg
(e) Large stems -- (based on averages) (such as from peaches, pears, or cherries	1 large stem, or piece thereof, per kg

2.5.5 Classification of "Defectives"

A container shall be considered a "defective" that fails to meet one or more of:

(1) the applicable requirements in 2.4.1 through 2.4.4 (except proportions for grapes and cherries which are based on averages); and

(2) The applicable quality requirements in 2.5.1 through 2.5.4 (except for peel, pit material, and stems which are based on averages).

2.5.6 Acceptance

A lot will be considered as meeting the applicable quality and other requirements referred to in sub-section 2.5.5 when:

(a) for those requirements which are not based on averages -- the number of "defectives", as defined in sub-section 2.5.5, does not exceed the acceptance number (c) of the appropriate sampling plan (AQL-6.5) in the Sampling Plans for Processed Fruits and Vegetables; and

(b) the requirements which are based on sample averages are complied with.

3. FOOD ADDITIVES

The following provisions in respect of food additives and their specifications as contained in section . . . of the Codex Alimentarius have been temporarily endorsed or are subject to endorsement by the Codex Committee on Food Additives as indicated:

	Maximum Level of use
Colouring matter	
Erythrosine (To colour cherries only when artificially coloured cherries are used)	Limited by Good Manufacturing Practice (Temporarily endorsed)
Natural flavours	
Natural fruit essence	Limited by Good Manufacturing practice (Endorsed)
Natural flavours and their identical synthetic equivalents except those which are know to represent a toxic hazard	Limited by Good Manufacturing practice (Temporarily endorsed)
Artificial flavours	
(to flavour artificially coloured cherries only)	
Cherry Laurel Oil	10 mg/kg in the total product (Subject to endorsement)
and/or	
Bitter Almond Oil	40 mg/kg in the total product (Subject to endorsement)
Anti-oxidant	
Ascorbic acid	Limited by good manufacturing practice (Subject to endorsement)

4. HYGIENE

4.1 It is recommended that the product covered by the provisions of this standard be prepared in accordance with the International Code of Hygienic Practice for Canned Fruit and Vegetable Products recommended by the Codex Alimentarius Commission (Ref. No. CAC/RCP 2-1969).

4.2 To the extent possible in good manufacturing practice the product shall be free from objectionable matter.

4.3 Microorganisms capable of development under normal conditions of storage shall not be present.

4.4 The product shall not contain any toxic substances originating from microorganisms.

5. WEIGHTS AND MEASURES

5.1 Fill of Container

5.1.1 Minimum Fill

The container shall be well filled with fruit and the product (including packing medium) shall occupy not less than 90% of the water capacity of the container. The water capacity of the container is the volume of distilled water at 20° C. which the sealed container will hold when completely filled.

5.1.2 Classification of "Defective"

A container that fails to meet the requirement for minimum fill (90 percent container capacity) of 5.1.1 shall be considered a "defective".

5.1.3 Acceptance

A lot will be considered as meeting the requirement of 5.1.1 when the number of "defectives" does not exceed the acceptance number (c) of the appropriate sampling plan (AQL-6.5) in the Sampling Plans for Processed Fruits and Vegetables.

5.1.4 Minimum Drained Weight

5.1.4.1 The drained weight of the product shall be not less than 60% of the weight of distilled water at 20° C. which the sealed container will hold when completely filled.

5.1.4.2 The requirement for minimum drained weight shall be deemed to be complied with when the average drained weight of all containers examined is not less than the minimum required, provided that there is no unreasonable shortage in individual containers.

6. LABELLING

In addition to Sections 1, 2, 4, and 6 of the Recommended International General Standard for the Labelling of Prepackaged Foods (Ref. No. CAC/RS 1-1969), the following specific provisions apply:

6.1 The name of the food

6.1.1 The name of the product shall be "Fruit Cocktail".

6.1.2 The following, as applicable, shall be included as part of the name or in close proximity to the name, unless in the country where the product is sold a true pictorial representation of the product accompanied by a complete list of the fruits in the statement of ingredients would suffice in accordance with its national legislation:

"5 Fruits" or "With Five Fruits";
or
"4 Fruits" or "With Four Fruits".

6.1.3 The following, as applicable, shall be included as part of the name or in close proximity to the name:

(a) The packing medium "Water", "Fruit Juice", "Extra Light Syrup", "Light Syrup", "Heavy Syrup", or "Extra Heavy Syrup", as appropriate.

(b) A declaration of any seasoning which characterizes the product, e. g. "With X", when appropriate.

6.2 List of ingredients

6.2.1 A complete list of ingredients shall be declared on the label in descending order of proportion in accordance with sub-section 3.2 (c) of the General Standard for the Labelling of Prepackaged Foods, except that water and fruit juice need not be declared and except as provided in 6.2.2.

6.2.2 When cherries are artificially coloured and/or artificially flavoured, the following declarations are permitted in the list of ingredients or elsewhere in lieu of naming the additive:

"Cherries artificially coloured red";
or
"Cherries artificially coloured red and artificially flavoured."

6.2.3 If ascorbic acid is added to preserve color, its presence shall be declared in the list of ingredients or elsewhere on the label in this manner --

"Ascorbic acid added to preserve color."

6.3 Net contents

The net contents shall be declared by weight in either the metric ("Système International" units) or avoirdupois or both systems of measurement as required by the country in which the product is sold.

6.4 Name and address

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

6.5 Country of origin

(a) The country of origin of the product shall be declared if its omission would mislead or deceive the consumer.

(b) When the product 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. METHODS OF ANALYSIS AND SAMPLING

The methods of analysis and sampling described or referred to hereunder are international referee methods. The methods referred to in 7.1, 7.2, 7.3, and 7.4 have been endorsed, and the method in 7.5 is subject to endorsement, by the Codex Committee on Methods of Analysis and Sampling.

7.1 Sampling

Sampling shall be in accordance with the Sampling Plans for Processed Fruits and Vegetables.

7.1.1 Size of Sample Unit *

7.1.1.1 For ascertaining proportions of fruits and fill of container (including drained weight) the entire container shall be the sample unit.

7.1.1.2 For ascertaining compliance with percentage requirements for Sizes and Shapes of fruits and Defects, the sample unit shall be:

(1) the entire container when it holds 1 litre or less; or

(2) 500 g of drained fruit (of a representative mixture) when the container holds more than 1 litre.

7.2 Ascertaining Proportions of Fruit **

7.2.1 Procedure

7.2.1.1 Determine drained weight and keep liquid and fruit separate;

7.2.1.2 Separate individual fruit ingredients, removing those fruits present in lesser amounts (such as cherries, pineapple, grapes);

7.2.1.3 Weigh the individual fruit ingredients to the nearest gram;

7.2.1.4 Record each fruit's weight and add all of these weights.

7.2.2 Calculation and Expressions of Results

Calculate the percentage of fruit proportions:

(a) $\frac{\text{each fruit's weight}}{\text{sum of all fruit weights}} \times 100 = \%$ of the fruit weight

---

* Text as given for "Size of Sample Unit -- Method II" in Appendix IV of ALINORM 69/23, except that paragraphs 3, 3.1, and 3.2 have hereby been purposely omitted for this Draft Standard.

** Text as given for "Ascertaining Proportions of Fruit" in Appendix IV of ALINORM 69/23.

(a) Do not use the original drained weight of the product before separation of the fruits.

7.3 Determination of Drained Weight ***

7.3.1 Definition ***

7.3.2 Materials ***

7.3.2.1 Specifications for circular sieves ***

(a)
(b)
(c)

7.3.3 Procedure ***

7.3.4 Calculation and Expression of Results ***

(Correct AOAC reference to "30.001")

(Delete ALINORM reference)

7.4 Syrup measurements ****

7.4.1 Procedure ****

7.4.2 Calculation and Expression of Results ****

7.4.3 Literature References ****

*** Text as given for "Determination of Drained Weight - Method I" in Appendix IV of ALINORM 69/23.

**** Text as given for "Syrup Measurements (Refractometric method)" in Appendix IV of ALINORM 69/23.

7.5 Method for Determination of Water Capacity of Containers

7.5.1 Metal containers

7.5.1.1 Procedure

(1) Select a container which is undamaged in all respects.

(2) Wash, dry, and weigh the empty container after cutting out the lid without removing or altering the height of the double seam.

(3) Fill the container with distilled water at 20° C. to 4.76 mm vertical distance below the top level of the container, and weigh the container thus filled.

(4) Subtract the weight found in (2) from the weight found in (3). The difference shall be considered to be the weight of water required to fill the container.

7.5.2 Glass containers

7.5.2.1 Procedure

(1) Select a container which is undamaged in all respects.

(2) Wash, dry, and weigh the empty container.

(3) Fill the container with distilled water at 20° C. to the level of the top thereof, and weigh the container thus filled.

(4) Subtract the weight found in (2) from the weight found in (3). The difference shall be considered to be the weight of water required to fill the container.

APPENDIX VII
June 1970

JOINT FAO/WHO CODEX ALIMENTARIUS COMMISSION

Committee on Processed Fruits and Vegetables

CANNED MUSHROOMS -- STEP 8

Standard No. PFV 70/8-18

To be submitted to the Eighth Session of the
Codex Alimentarius Commission

for adoption as a

Recommended Standard

APPENDIX VII
PFV 70/8-18
June 1970

DRAFT STANDARD

FOR

CANNED MUSHROOMS

Advanced to STEP 8

1. DESCRIPTION

1.1 Product definition

Canned mushrooms is the product (a) prepared from fresh mushrooms conforming with the characteristics of cultivated varieties (cultivars) of the genus Agaricus (Psalliota), including A. bisporus, which mushrooms shall be in good condition and after cleaning and trimming shall be sound; (b) packed with water and/or juice exuding from the mushrooms or other suitable liquid medium, seasonings, and other ingredients, appropriate to the product; and (c) processed by heat in an appropriate manner before or after being sealed in a container so as to prevent spoilage.

1.2 Varietal Type

Any suitable variety (cultivar) of the genus Agaricus (Psalliota), including A. bisporus, may be used.

1.3 Colour Type

(a) White or cream.

(b) Brown.

1.4 Styles

(a) Buttons -- Whole mushrooms, with attached stems not exceeding 5 mm in length, measured from the bottom of the veil.

(b) Sliced Buttons -- Buttons cut into slices 2 mm to 6 mm thick, of which not less than 50% are cut parallel to the axis of the mushroom.

(c) Whole -- Whole mushrooms, with attached stems cut to a length not exceeding the diameter of the cap, measured from the bottom of the veil.

(d) Sliced or Sliced Whole -- Mushrooms cut into slices 2 mm to 8 mm thick, of which not less than 50% are cut parallel to the axis of the mushroom.

(e) Random Sliced -- Mushrooms cut into slices of varying thickness and in which the slices may deviate materially from cuts approximately parallel to the axis of the mushroom.

(f) Quarters -- Mushrooms cut into four approximately even parts.

(g) Stems and Pieces -- Pieces of caps and stems of irregular sizes and shapes.

(h) Grilling -- Selected open-veiled mushrooms not exceeding 40 mm in diameter, with attached stems not exceeding the diameter of the cap, measured from the bottom of the veil scar.

1.5 Designations in Accordance with Size -- If a term designating size is used in the style of "Buttons" or "Whole", it must be supported by an exact graphic representation of the size of the mushroom caps or by a statement of the maximum diameter of mushroom caps in millimeters.

1.6 Types of Pack

(a) Regular or natural pack -- in water, brine, and/or juice exuding from the mushrooms.

(b) In butter or butter sauce.

(c) In cream sauce.

(d) In sauce other than a butter or cream sauce.

(e) In vinegar.

(f) In oil.

(g) In wine.

2. ESSENTIAL COMPOSITION AND QUALITY FACTORS

2.1 Other ingredients

As appropriate for the respective type of pack:

(a) Water, salt, spices, seasonings, soyabean sauce, vinegar, wine.

(b) Sucrose, invert sugar, dextrose, glucose sirup, dried glucose sirup.

(c) Butter or other edible animal or vegetable fats or oils, including olive oil; milk, milk powder, or cream.

If butter is added, it must amount to not less than 3% of the final product.

(d) Starches -- natural (native), physically or enzymatically modified -- only when butter or other edible animal or vegetable fats or oils are ingredients.

(e) Wheat or corn flour.

2.2 Quality Criteria

2.2.1 Colour

(a) The mushroom portion of the product shall have normal colour characteristics of the variety of the canned mushrooms. Canned mushrooms of special types and containing special permitted ingredients shall be considered of characteristic colour when there is no abnormal discoloration for the respective ingredients used.

(b) The liquid medium in "Regular or Natural pack" shall be either clear or slightly turbid and yellow to light brown in colour.

2.2.2 Flavour

The mushrooms shall have a normal flavour and odour free from flavours or odours foreign to the product.

Canned mushrooms with special ingredients or sauces shall have the flavour characteristic of that imparted by the mushrooms and the other substances used.

2.2.3 Texture and Character

The mushrooms in the "Regular or Natural pack" shall be firm and substantially intact.

In the styles of "Buttons" and "Whole" mushrooms, not more than 10% by count of the mushrooms may have caps which show total or complete breakage of the veil.

2.2.4 Defects

The canned mushrooms (a) may contain no more than a trace of soil, sand, grit, or any other extraneous matter, whether of mineral or organic origin; and (b) shall be reasonably free from spotted or otherwise damaged mushrooms.

2.2.5 Classification of "defectives"

A container that fails to meet one or more of the applicable quality requirements, as set out in sub-sections 2.2.1 through 2.2.4 shall be considered a "defective".

2.2.6 Acceptance

A lot will be considered as meeting the applicable quality requirements referred to in sub-section 2.2.5, when the number of "defectives", as defined in sub-section 2.2.5, does not exceed the acceptance number (c) of the appropriate sampling plan (AQL 6.5) in the Sampling Plans for Processed Fruits and Vegetables.

3. FOOD ADDITIVES

The following provisions in respect of food additives and their specifications as contained in section . . . of the Codex Alimentarius are subject to endorsement or have been endorsed or temporarily endorsed or acted upon by the Codex Committee on Food Additives, as indicated:

		Maximum Level of use	
(a)	Ascorbic acid	Limited by Good Manufacturing Practice	(Endorsed)
(b)	Citric acid	Limited by Good Manufacturing Practice	(Endorsed)
(c)	Monosodium Glutamate	Not limited	(decision postponed)
(d)	Colouring Matter		
	Brilliant Black -- for use only in sauces other than butter or cream sauce	100 mg/kg	(Subject to endorsement)
	Caramel -- for use in sauces	Limited by Good Manufacturing Practice	(Subject to endorsement)
(e)	Calcium disodium EDTA (Calcium disodium ethylenediaminetetraacetate)	200 mg/kg	(endorsed)

-- continued on next page --

3. FOOD ADDITIVES -- continuation

(f) Modified starches, Vegetable gums, Alginates, Propylene glycol alginate -- to be used only when butter or other edible animal or vegetable fats or oils are used as ingredients -- as follows:

Maximum level of use -- 1% m/m singly or in combination

Modified Starches -- (Subject to endorsement)

Acid-treated starches
Alkali-treated starches)
Bleached starches
Distarch, phosphate (sodium trimetaphosphate treated)
Distarch phosphate, phosphated
Monostarch phosphate

Starch acetate
Starch, hydroxypropyl
Distarch, adipate, acetylated
Distarch glycerol, hydroxypropyl
Oxidized starches

Starch sodium succinate
Distarch phosphate (phosphorus oxychloride treated)
Distarch phosphate, acetylated
Distarch phosphate, hydroxypropyl
Distarch glycerol, acetylated
Distarch glycerol

Vegetable gums ------(Temporarily endorsed)

Arabic gum
Carrageenan
Furcellaran
Guar gum

Vegetable gums -- (Subject to endorsement)

Gum tragacanth
Carob bean (Locust bean) gum

Alginates ----------(Temporarily endorsed)

(Ca, K, Na NH_4)

Propylene glycol alginate --------(Temporarily endorsed)

4. HYGIENE

4.1 It is recommended that the product covered by the provisions of this standard be prepared in accordance with the International Code of Hygienic Practice for Canned Fruit and Vegetable Products recommended by the Codex Alimentarius Commission (Ref. No. CAC/RCP 2-1969).

4.2 To the extent possible in good manufacturing practice the product shall be free from objectionable matter.

4.3 The product shall not contain any pathogenic microorganisms or any toxic substances originating from microorganisms.

4.4 The product shall have received a processing treatment sufficient to destroy all spores of *Clostridium botulinum*.

5. WEIGHTS AND MEASURES

5.1 Fill of Container

5.1.1 Minimum Fill

The container shall be well filled with mushrooms and the product (including packing medium) shall occupy not less than 90% of the water capacity of the container. The water capacity of the container is the volume of distilled water at 20° C. which the sealed container will hold when completely filled.

5.1.2 Classification of "Defectives"

A container that fails to meet the requirement for minimum fill (90 percent container capacity) of 5.1.1 shall be considered a "defective".

5.1.3 Acceptance

A lot will be considered as meeting the requirements of 5.1.1 when the number of "defectives" does not exceed the acceptance number (c) of the appropriate sampling plan (AQL 6.5) in the Sampling Plans for Processed Fruits and Vegetables.

5.1.4 Minimum Drained Weight

5.1.4.1 Regular packs, vinegar, wine, oil packs

The drained weight of the product shall be not less than 53% of the weight of distilled water at 20° C. which the sealed container will hold when completely filled.

5.1.4.2 Sauce packs

The drained mushroom portion, after washing off the sauce or liquid, shall be not less than 27-1/2% of the total product weight.

5.1.4.3 The requirements for minimum drained weight shall be deemed to be complied with when the average drained weight of all containers examined is not less than the minimum required, provided that there is no unreasonable shortage in individual containers.

6. LABELLING

In addition to Sections 1, 2, 4, and 6 of the Recommended International General Standard for the Labelling of Prepackaged Foods (Ref. No. CAC/RS 1-1969), the following specific provisions apply:

6.1 The name of the food

6.1.1 The name of the product shall be "Mushrooms".

6.1.2 The following shall be included as part of the name or in close proximity to the name:

6.1.2.1 The style --

"Buttons", "Sliced Buttons", "Whole", "Sliced" or "Sliced Whole", "Random Sliced", "Quarters", "Stems and Pieces", "Grilling", as appropriate.

6.1.2.2 A declaration of any special sauce and/or seasoning or flavouring which characterizes the product, e. g. "With X" or "In X" when appropriate. If the declaration is "With (or "In") Butter Sauce", the fat used shall only be butter.

6.2 List of ingredients

A complete list of ingredients shall be declared on the label in descending order of proportion in accordance with sub-section 3.2 (c) of the General Standard for the Labelling of Prepackaged Foods, except that water need not be declared.

6.3 Net contents

The net contents shall be declared by weight in either the metric ("Système International" units) or avoirdupois or both systems of measurement as required by the country in which the product is sold.

6.4 Name and address

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

6.5 Country of origin

(a) The country of origin of the product shall be declared if its omission would mislead or deceive the consumer.

(b) When the product 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.

6.6 Other declarations

6.6.1 Size Representations

If a term designating size in the style of "Buttons" or "Whole" is used it must be supported by an exact graphic representation of the size of mushroom caps or by a statement of the maximum diameter of mushroom caps in millimeters.

7. METHODS OF ANALYSIS AND SAMPLING

The methods of analysis and sampling described or referred to hereunder are international referee methods. The methods referred to in 7.1, 7.2, and 7.3 have been endorsed, and the method in 7.4 is subject to endorsement, by the Codex Committee on Methods of Analysis and Sampling.

7.1 Sampling

Sampling shall be in accordance with the Sampling Plans for Processed Fruits and Vegetables.

7.2 Determination of Drained Weight *

7.2.1 Definition *

7.2.2 Materials *

7.2.2.1 Specifications for circular sieves *

(a)
(b)
(c)

7.2.3 Procedure *

7.2.4 Calculation and Expression of Results *

(Correct AOAC reference to "30.001")

(Delete ALINORM reference)

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*Text as given for "Determination of Drained Weight -- Method I" in Appendix IV of ALINORM 69/23; and shall also apply to "Oil packs".

7.3 Determination of Washed Drained Weight **

7.3.1 Definition**

Washed drained weight expresses % solid contents after washing with hot water, as determined by the procedure described below.

7.3.2 Materials **

7.3.2.1 Specifications for circular sieves

/ Fine mesh U.S. sieve No. 50 / (a) 20 cm (8 inches) diameter.

7.3.3 Procedure **

7.3.3.1 Weigh the unopened can.

7.3.3.2 Open the can and wash the contents on to a tared fine mesh sieve.

7.3.3.3 Wash the contents of the sieve under the running cold water and then wash with running hot water until free of adhering *** substances.

7.3.3.4 Spread the mushrooms after washing over the bottom of the sieve and drain for 5 minutes and then weigh.

7.3.3.5 Weigh the empty dried can and determine the net contents (or total product weight).

7.3.4 Calculation and Expression of Results **

Calculate the % drained weight on the net contents (or total product weight).

(a) To be replaced by the corresponding ISO sieve.

** Text the same as given for "Determination of Washed Drained Weight" in Appendix IV of ALINORM 69/23, but no longer applies to "Oil packs"; and

*** except the word "soluble" is to be replaced by the word "adhering".

7.4 Method for Determination of Water Capacity of Containers

7.4.1 Metal containers

7.4.1.1 Procedure

(1) Select a container which is undamaged in all respects.

(2) Wash, dry, and weigh the empty container after cutting out the lid without removing or altering the height of the double seam.

(3) Fill the container with distilled water at 20° C. to 4.76 mm vertical distance below the top level of the container, and weigh the container thus filled.

(4) Subtract the weight found in (2) from the weight found in (3). The difference shall be considered to be the weight of water required to fill the container.

7.4.2 Glass containers

7.4.2.1 Procedure

(1) Select a container which is undamaged in all respects.

(2) Wash, dry, and weigh the empty container.

(3) Fill the container with distilled water at 20° C. to the level of the top thereof, and weigh the container thus filled.

(4) Subtract the weight found in (2) from the weight found in (3). The difference shall be considered to be the weight of water required to fill the container.

APPENDIX VIII
June 1970

JOINT FAO/WHO CODEX ALIMENTARIUS COMMISSION

Committee on Processed Fruits and Vegetables

CANNED ASPARAGUS -- STEP 8

Standard No. PFV 70/8-11

to be submitted to the Eighth Session of the
Codex Alimentarius Commission

for adoption as a

Recommended Standard

APPENDIX VIII
PFV 70/8-11
June 1970

DRAFT STANDARD

FOR

CANNED ASPARAGUS

Advanced to STEP 8

1. DESCRIPTION

1.1 Product Definition

Canned Asparagus is the product (a) prepared from the edible portion of stalks of varieties of the asparagus plant conforming to the characteristics of Asparagus officinalis L., and may be peeled or unpeeled; (b) packed with water or other suitable liquid medium and may contain other ingredients appropriate to the product; and (c) processed by heat in an appropriate manner before or after being sealed in a container, so as to prevent spoilage.

1.2 Styles

(a) Long Shoots or Long Spears -- consist of the head and adjoining portion of the stalk not more than 18 cm, but not less than 15 cm in length.

(b) Shoots or Spears -- consist of the head and adjoining portion of the stalk less than 15 cm, but not less than 10.5 cm in length.

(c) Tips or Points -- consist of the head and ajoining portion of the stalk less than 10.5 cm, but not less than 4 cm in length.

(d) Cuts and Heads or Cut Spears -- consist of stalks cut transversely into pieces with and without heads, not more than 6 cm, but not less than 2 cm in length. At least 20%,by count, of pieces with heads must be present, except that when the spears are cut into pieces of 3 cm or less in length, at least 10%, by count, of pieces with heads must be present.

(e) Cuts -- consist of portions of stalks cut transversely into pieces not more than 6 cm in length. Pieces with heads may be present.

1.2.1 Allowances for Styles

The length requirements for the styles listed in 1.2 will be considered to be met when:

(1) the predominant length of the units in the sample falls within the designated style classification; and

(2) the length of the units is reasonably uniform.

"Reasonably uniform", based on sample average, means for:

(a) Long Shoots; Shoots; Tips -- at least 75%, by count, of the units are within ± 1 cm of the predominant length; and at least 95%, by count, of the units are within ± 2 cm of the predominant length;

(b) Cuts and heads; Cuts -- at least 75%, by count of the units are within ± 1 cm of the predominant length; and at least 90%, by count, of the units are within ± 2 cm of the predominant length.

1.3 Colour Types

(a) White -- units are white, cream or yellowish white; not more than 20%, by count, of the units may possess blue, green, light green, or yellowish green tips.

(b) White and Blue Tipped; White and Green Tipped -- "Long Shoots", "Shoots" and "Tips" which are white, cream, or yellowish-white may have blue, green, light green or yellowish-green heads and adjacent areas but not more than 25%, by count, of the units may have such color that extends more than one-half the length of the unit.

(c) Green -- units are green, light green, or yellowish-green; not more than 20%, by count, of the units may possess a white, cream, or yellowish-white colour of the bottom portion of the stalk, but such colour shall not extend more than one-half the length of the unit.

(d) Mixed -- consists of a mixture of white, cream, yellowish-white, blue, green, light green, or yellowish-green units.

1.4 Designations in accordance with size

Long Shoots; Shoots; Tips -- may be designated according to size in any one or more of the following manners:

(1) An exact graphic representation of the average diameter (cross-section) of the units;

(2) A statement of the average diameter (in mm or fractional inches);

(3) Size names as follows:

Single sizes	Peeled Asparagus (diameter)	Unpeeled Asparagus (diameter)
"Small"	up to 8 mm, inclusive	-- up to 10 mm, inclusive
"Medium"	over 8 mm, and up to 13 mm, inclusive	-- over 10 mm, and up to 15 mm, inclusive
"Large"	over 13 mm, and up to 18 mm, inclusive	-- over 15 mm, and up to 20 mm, inclusive
"Extra Large"	over 18 mm	-- over 20 mm
"Blend of Sizes" or "Assorted Sizes"	a mixture of two or more single sizes	

1.4.1 Definition of "diameter"

The diameter of a long shoot, shoot, or tip is the maximum diameter at the thickest part of the unit, measured at right angles to the longitudinal axis of the unit.

1.4.2 Compliance with "single size" names

When the single size names in paragraph (3) of 1.4, other than "Blend of Sizes" or "Assorted Sizes", are used, the single size shall conform to the diameter specified, except that not more than 25%, by count, of all the units may belong to the adjacent size group(s).

2. ESSENTIAL COMPOSITION AND QUALITY FACTORS

2.1 Basic ingredients

Asparagus and liquid packing medium appropriate to the product and other optional ingredients as follows:

2.1.1 Other permitted ingredients

(a) Salt, sucrose, invert sugar, dextrose, glucose syrup, dried glucose syrup, vinegar;

(b) Butter or other edible animal or vegetable fats or oils. If butter is added, it must amount to not less than 3% of the final product.

(c) Starches -- natural (native), physically or enzymatically modified -- only when butter or other edible animal or vegetable fats or oils are ingredients.

2.2 Quality Criteria

2.2.1 Colour

The colour of the product shall be normal for the colour type.

2.2.2 Packing Medium

The liquid packing medium shall be practically clear except as it may be affected by other ingredients and only a small amount of sediment or parts of asparagus may be present.

2.2.3 Flavour

Canned asparagus shall have a normal flavour and odour free from flavours or odours foreign to the product.

Canned asparagus with special ingredients shall have the flavour characteristic of that imparted by the asparagus and the other substances used.

2.2.4 Texture

The asparagus units shall be reasonably free from units that are excessively fibrous or tough.

2.2.5 Defects and Allowances

	Limitations
(a) Shattered heads and other shattered asparagus material (consisting of broken or shattered pieces to the extent that the appearance of the product is seriously affected; and includes pieces less than 1 cm in length)	The product shall be reasonably free from such material
(b) Extraneous matter (such as sand, grit, or earthy material)	The product shall be practically free from such material
(c) Units with Peel (in Peeled Asparagus only) (those units with unpeeled areas which seriously affect the appearance or edibility of the unit)	10%, by count

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2.2.5 Defects and Allowances -- continuation

	Limitations
(d) Hollow units (consisting of units that are hollow to the extent the appearance of the unit is seriously affected)	10%, by count
(e) Misshapen units (includes shoots or heads badly crooked or any unit that is seriously affected in appearance by doubles or other malformations)	10%, by count
(f) Damaged units (includes discolouration, mechanical injury, disease, or damage by other means to the extent that the appearance or edibility of the unit is seriously affected)	10%, by count

Total, of all the defects in (d), (e), (f) for these styles:

Long Shoots	15%, by count
Shoots	15%, by count
Tips	15%, by count
Cuts and Heads	20%, by count
Cuts	25%, by count

2.2.6 Classification of "defectives"

A container that fails to meet one or more of the applicable quality requirements, as set out in sub-sections 2.2.1 through 2.2.5, shall be considered a "defective".

2.2.7 Acceptance

A lot will be considered as meeting the applicable quality requirements referred to in sub-section 2.2.6, when the number of "defectives", as defined in sub-section 2.2.6, does not exceed the acceptance number (c) of the appropriate sampling plan (AQL 6.5) in the Sampling Plans for Processed Fruits and Vegetables.

3. FOOD ADDITIVES

The following provisions in respect of food additives and their specifications as contained in section . . . of the Codex Alimentarius are subject to endorsement or have been endorsed or temporarily endorsed or acted upon by the Codex Committee on Food Additives, as indicated:

	Maximum level of use	
(a) Monosodium glutamate	Not limited	(decision postponed)
(b) Stannous Chloride -- only for asparagus in glass or in fully enamel-lined (lacquered) cans	25 mg/kg calculated as Sn	(decision postponed)
(c) Acidifying agents		
Acetic acid Ascorbic acid Citric acid Malic acid L-Tartaric acid	Limited by good Manufacturing Practice	((((Endorsed) ((

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3. FOOD ADDITIVES -- continuation

(d) Modified starches, Vegetable gums, Alginates, Propylene glycol alginate -- to be used only when butter or other edible animal or vegetable fats or oils are used as ingredients -- as follows:

Maximum level of use -- 1% m/m singly or in combination

Modified Starches -- (Endorsed)

Acid-treated starches
Alkali-treated starches)
Bleached starches
Distarch, phosphate (sodium trimetaphosphate treated)
Distarch phosphate, phosphated
Monostarch phosphate

Modified Starches -- (Not endorsed)

Starch sodium succinate
Distarch phosphate (phosphorus oxychloride treated)
Distarch phosphate, acetylated
Distarch phosphate, hydroxypropyl
Distarch glycerol, acetylated
Distarch glycerol

Modified Starches -- (Temporarily endorsed)

Starch acetate
Starch, hydroxypropyl
Distarch, adipate, acetylated
Distarch glycerol, hydroxypropyl
Oxidized starches

Vegetable gums ------(Temporarily endorsed)

Arabic gum
Carrageenan
Furcellaran
Guar gum

Vegetable gums -- (Subject to endorsement)

Gum tragacanth
Carob bean (Locust bean) gum

Alginates ----------(Temporarily endorsed)

(Ca, K, Na NH_4)

Propylene glycol alginate --------(Temporarily endorsed)

4. CONTAMINANTS

The following provision in respect of contaminants is subject to endorsement by the Codex Committee on Food Additives:

Total tin, in metal containers where tin is exposed:

Maximum level -- 250 mg/kg, calculated as Sn

5. HYGIENE

5.1 It is recommended that the product covered by the provisions of this this standard be prepared in accordance with the International Code of Hygienic Practice for Canned Fruit and Vegetable Products recommended by the Codex Alimentarius Commission (Ref. No. CAC/RCP 2-1969).

5.2 To the extent possible in good manufacturing practice the product shall be free from objectionable matter.

5.3 The product shall not contain any pathogenic microorganisms or any toxic substances originating from microorganisms.

5.4 The product shall have received a processing treatment sufficient to destroy all spores of Clostridium botulinum.

6. WEIGHTS AND MEASURES

6.1 Fill of Container

6.1.1 Minimum Fill

The container shall be well filled with asparagus and the product (including packing medium) shall occupy not less than 90% of the water capacity of the container. The water capacity of the container is the volume of distilled water at 20° C which the sealed container will hold when completely filled.

6.1.2 Classification of "Defective"

A container that fails to meet the requirements for minimum fill (90 percent container capacity) of 6.1.1 shall be considered a "defective".

6.1.3 Acceptance

A lot will be considered as meeting the requirements of 6.1.1 when the number of "defectives" does not exceed the acceptance number (c) of the appropriate sampling plan (AQL 6.5) in the Sampling Plans for Processed Fruits and Vegetables.

6.1.4 Minimum Drained Weight

6.1.4.1 The drained weight of the product shall be not less than the following percentages, calculated on the basis of the weight of distilled water at 20 degrees C which the sealed container will hold when completely filled:

	Peeled Asparagus
Long Shoots	60%
All other styles	58%

	Unpeeled Asparagus
Long Shoots and Shoots	57%
All other styles	55%

6.1.4.2 The requirements for minimum drained weight shall be deemed to be complied with when the average drained weight of all containers examined is not less than the minimum required, provided that there is no unreasonable shortage in individual containers.

7. LABELLING

In addition to Sections 1, 2, 4, and 6 of the Recommended International General Standard for the Labelling of Prepackaged Foods (Ref. No. CAC/RS 1-1969), the following specific provisions apply:

7.1 The name of the food

7.1.1 The name of the product shall be "Asparagus"; and the word "Peeled" or "Unpeeled", as appropriate, may be declared depending upon national legislation.

7.1.2 The following, as appropriate, shall be included as part of the name or in close proximity to the name:

7.1.2.1 The style --

"Long Shoots" or "Long Spears";
"Shoots" or "Spears";
"Tips" or "Points";
"Cuts and heads" or "Cut Spears";
"Cuts".

7.1.2.2 The colour --

"White";
"White and Blue Tipped";
"White and Green Tipped";
"Green";
"Mixed Colours".

7.1.2.3 A declaration of any special sauce and/or seasoning which characterizes the product, e.g. "With X" or "In X", when appropriate. If the declaration is "With(or "In") Butter Sauce", the fat used shall only be butter.

7.2 List of ingredients

A complete list of ingredients shall be declared on the label in descending order of proportion in accordance with sub-section 3.2 (c) of the General Standard for the Labelling of Prepackaged Foods, except that water need not be declared.

7.3 Net contents

The net contents shall be declared by weight in either the metric ("Système International" units) or avoirdupois or both systems of measurement as required by the country in which the product is sold.

7.4 Name and address

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

7.5 Country of origin

(a) The country of origin of the product shall be declared if its omission would mislead or deceive the consumer.

(b) When the product 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 Optional declarations

7.6.1 Size representation -- In styles of Long Shoots, Shoots, Tips

7.6.1.1 If these size names comply with the applicable requirements of this standard, they may be stated as; "Small", "Medium", "Large", "Extra Large", "Blend of Sizes", or "Assorted Sizes", as appropriate.

7.6.1.2 If a term other than the size names of this standard is used, it must be supported by:

(a) an exact graphic representation of the average diameter (cross-section) of the units; and/or

(b) a statement of the average diameter (in mm or fractional inches).

7.6.1.3 The number of units present in the container may be shown by a range of approximate count, e.g. "approximately ___ to ___ Spears".

8. METHODS OF ANALYSIS AND SAMPLING

The methods of analysis and sampling described or referred to hereunder are international referee methods. The methods referred to in 8.1 and 8.2 have been endorsed, and the method in 8.3 is subject to endorsement, by the Codex Committee on Methods of Analysis and Sampling.

8.1 Sampling

Sampling shall be in accordance with the Sampling Plans for Processed Fruits and Vegetables.

8.2 Determination of Drained Weight *

8.2.1 Definition *

8.2.2 Materials *

8.2.2.1 Specifications for circular sieves *

(a)
(b)
(c)

8.2.3 Procedure *

8.2.4 Calculation and Expression of Results *

(Correct AOAC reference to "30.001")

(Delete ALINORM reference)

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* Text as given for "Determination of Drained Weight - Method I" in Appendix IV of ALINORM 69/23.

8.3 Method for Determination of Water Capacity of Containers

8.3.1 Metal containers

8.3.1.1 Procedure

(1) Select a container which is undamaged in all respects.

(2) Wash, dry, and weigh the empty container after cutting out the lid without removing or altering the height of the double seam.

(3) Fill the container with distilled water at 20° C. to 4.76 mm vertical distance below the top level of the container, and weigh the container thus filled.

(4) Subtract the weight found in (2) from the weight found in (3). The difference shall be considered to be the weight of water required to fill the container.

8.3.2 Glass containers

8.3.2.1 Procedure

(1) Select a container which is undamaged in all respects.

(2) Wash, dry, and weigh the empty container.

(3) Fill the container with distilled water at 20° C. to the level of the top thereof, and weigh the container thus filled.

(4) Subtract the weight found in (2) from the weight found in (3). The difference shall be considered to be the weight of water required to fill the container.

APPENDIX IX
TABLE OLIVES
(Amendments)
June 1970

TABLE OLIVES

Amendments to the Proposed Draft Standards for Table Olives -- Step 3, Standard No. PFV 69/3-15, APPENDIX IX, May 1969, ALINORM 70/20.

1. SCOPE

Include the words "sativa Hoffg, Link)" in connection with the botanical classification to conform with that in 2.1.

In the last sentence, change the word "habitually" to "customarily".

2. DESCRIPTION

2.1 Change the words "delivery to the consumer" in the last part of the text to "consumption", so that portion will read:

"*** can be satisfactorily preserved as a trade article ready for consumption, * * *"

2.2.1 (1)(a) -- in the second line of footnote 1/ pertaining to the type, change the word "removed" to "has been eliminated", so the footnote will read:

"1/ In French "confites" and in Spanish "aderezadas" or "curadas". In English it means bitterness has been eliminated by treatment with an alkaline lye.

2.2.1 (5) -- Change the wording for (d) "California Style" Black Olives to read here, and wherever it appears throughout other places in the document, to read:

"(d) treated olives darkened by oxidation"

2.2.1.1 (1) (a) (ii) -- change the word "slight" to read "partial" so this paragraph will read:

"(ii) by partial natural fermentation, possibly followed by pasteurization;"

2.2.1.1 (1) (a) (iii) -- subdivide this subparagraph and add a new subparagraph (iv) to read as follows:

"(iii) -- by sterilization or pasteurization;"

"(iv) -- by the addition of preserving agents;"

"(v) -- by refrigeration."

2.2.1.1 (1) (b) - - - -- change the word "natural" in the heading to read "untreated"

2.2.1.1 (3) (a) - - - -- subdivide this subparagraph to read:

" (a) Treated black olives: These are obtained from firm and practically ripe fruit treated with lye and, after natural oxidation, are preserved by any one or combination of the following:

(i) in brine;

(ii) by sterilization or pasteurization;

(iii) by the addition of preserving agents."

2.2.1.1 (5) (a) - - - - -- In the second paragraph, revise to read:

"There are three types of bruised (purposely cracked) olives:

"(i) bruised (purposely cracked) fresh olives;

"(ii) bruised (purposely cracked) treated fermented green olives;

"(iii) bruised (purposely cracked) olives turning colour (green-ripe olives)."

2.2.1.1 (5) (d) - - - - -- Change the sequence of this paragraph, including the new heading designation as follows:

"(d) <u>treated olives darkened by oxidation</u>

This style is obtained from olives which are not fully mature, from which the bitterness has been removed by an alkaline treatment, which have been darkened by oxidation, and which are packed in brine and preserved by heat sterilization."

[U.S.A. remark -- the purpose of this revision is to merely change the sequence of the steps of preparation to conform to industry practice]

APPENDIX X
June 1970

JOINT FAO/WHO CODEX ALIMENTARIUS COMMISSION

Committee on Processed Fruits and Vegetables

Proposed Draft Standard

GENERAL STANDARD FOR JAMS (FRUIT PRESERVES) AND JELLIES -- STEP 3

Standard No. PFV 70/3-26

APPENDIX X
PFV 70/3-26
June 1970

PROPOSED DRAFT STANDARD

GENERAL STANDARD FOR JAMS (FRUIT PRESERVES) AND JELLIES

Advanced to STEP 3

1. SCOPE

This standard covers general provisions as are applicable to a class of fruit spreads commonly known as jams and jellies. The distinguishing characteristics of this class of products is that a substantial amount of fruit ingredient is required in formulation and the end product has a relatively high soluble solids value. The terms "preserves" and "jam" are frequently used interchangeably. "Jellies" are differentiated from jams in that the fruit ingredient consists of the juice that has been extracted from whole fruits and clarified by filtration or other means. The proposed standard includes products prepared not only from single fruits but also those prepared from two or more fruits.

This standard does not cover products prepared with non-carbohydrate sweeteners and which are clearly intended or labelled as intended for diabetic or dietetic use; nor does this standard apply to those products prepared from citrus fruit, commonly referred to as marmalade, which products are covered by the "Codex Standard for Marmalade." Likewise, this standard does not cover products clearly intended and marked as for manufacturing use.

2. DESCRIPTION

2.1 Product Definition

2.1.1 Jam (Preserves, Conserves) is the product that --

a) is prepared from a suitable fruit ingredient which may be whole or pieces of fruit, fruit pulp (or puree), with or without fruit juice;

b) such prepared fruit ingredient is mixed with a carbohydrate sweetener, with or without water, and may contain added pectin, edible acids, and minor amounts of other approved ingredients and additives;

c) such mixture is processed by the application of heat to a suitable consistency; and

d) the product shall be filled into clean containers in a manner which shall minimize subsequent contamination and microbiological spoilage.

2.1.2 Jelly is the product that --

a) is prepared from a suitable fruit juice or aqueous extract of fruit that is practically free from suspended fruit particles;

b) such prepared fruit juice is mixed with a carbohydrate sweetener, may be adjusted with water, may contain added pectins and edible acids and may include minor amounts of other ingredients and additives;

c) such prepared mixture is processed by the application of heat to a tender, semi-solid consistency; and

d) the product shall be filled into clean containers in a manner which shall minimize subsequent contamination and microbiological spoilage.

2.2 Fruit means all of the commonly recognized fruits and vegetables, including ginger, rhubarb, tomato, melon -- but does not include chestnuts, pumpkin, squash, and cucumbers.

2.3 Prepared Fruit Ingredient (Jams, Preserves, Conserves) means substantially sound, wholesome, clean fruit of suitable ripeness, not deprived of any of its main constituents, except that it is trimmed, sorted and otherwise treated to remove objectionable bruises, stems, toppings, tailings, cores, pits (stones), and may or may not be peeled. In the case of ginger, rhubarb, and melon it means respectively peeled ginger root, stemmed and trimmed rhubarb, and melons with seeds, stem, and rind removed. The prepared fruit shall contain all natural soluble solids (extractives) except those inevitably lost during preparation under good manufacturing practices. The fruit ingredient may be prepared from fruit which is fresh, processed, or preserved.

2.4 Prepared Fruit Juice or Aqueous Extract (Jellies) means the juice or aqueous extract obtained from fresh, processed, or preserved fruit which is clean, substantially sound, and wholesome and which is trimmed, sorted, or otherwise treated to remove objectionable material. Such juice is further prepared by removal of all, or practically all, of the insoluble solids and may be concentrated by removal of water.

2.5 Fruit Pulp means the edible portions of the fruit, mashed, or cut into pieces, but not reduced to a puree.

2.6 Fruit Puree means fruit ingredient finely divided by sieving, screening, or other mechanical means.

2.7 Soluble Solids means percent by weight of soluble solids as determined by the Refractometric method at 20° C using the International Sucrose Scale but making no correction for insoluble solids or acids.

3. ESSENTIAL COMPOSITION AND QUALITY CRITERIA

3.1 Composition

3.1.1 Basic Ingredients

1) Prepared fruit ingredient.

2) Carbohydrate sweetener(s) or sugars as defined by the Codex Committee For Sugars, including sucrose, dextrose, invert sugar, glucose syrup, dried glucose syrup.

3) Honey.

3.1.2 Other Ingredients

1) Vinegar and citrus juice.
2) Herbs and Spices.

3) Essential oils.

4) Spiritous liquors.

5) Butter, margarine, other edible vegetable or animal oils (used as anti-foaming agents).

3.2 Formulation

3.2.1 Fruit Content

The product shall contain not less than 40 parts, by weight, of prepared fruit ingredient for each 100 parts, by weight, of finished product.

When concentrated or diluted fruit ingredient is used, the formulation is based upon the equivalent of single strength fruits as determined by the relationship between the soluble solids of the concentrate and the soluble solids of the natural (single-strength) fruit.

3.2.2 Mixtures of Fruits

3.2.2.1 Two fruits

When a jam or jelly contains a mixture of two fruits the first-named fruit shall contribute not less than 50 percent, nor more than 75 percent, of the total fruit content except when melon, pineapple, passionfruit, lemon, or ginger is one of the two fruits. When melon is a constituent it may be present up to a level of 95 percent and where pineapple, passionfruit, lemon, and ginger are present they shall be present at a level of not less than 5 percent with the major ingredient being permitted at a level greater than 75 percent.

3.2.2.2 Three fruits

When a jam or jelly contains a mixture of three fruits, the first-named fruit shall contribute not less than 33-1/3 percent, nor more than 75 percent, of the total fruit content.

3.2.2.3 Four or more fruits

When a jam or jelly contains a mixture of four or more fruits, the first-named fruit shall contribute not less than 25 percent, nor more than 75 percent, of the total fruit content.

3.3 Soluble Solids (Finished Product)

The soluble solids value of the finished product may not be less than 65 percent.

3.4 Quality Criteria

3.4.1 General Requirements

The end product shall be viscous or semi-solid, have a colour and flavour normal for the type or kind of fruit ingredient taking into consideration any flavour imparted by optional ingredients, and shall be reasonably free from defective materials normally associated with the fruits. In the case of jellies, the product shall be at least reasonably clear or transparent and shall contain no apparent defects.

Seeds, in the case of berries, are a natural fruit component and are not considered defects unless the product is presented as "Seedless".

3.4.2 Defects and allowances -- Jams (Preserves)

		Limitations
(a)	Harmless Extraneous Plant Material (consisting of plant material common to the specific fruit and includes leaves, full caps, stems over 10 mm in length and sepal bracts aggregating an area of 5 mm^2 or larger)	1 piece per 500 grams
(b)	Pit (Stone) (whole pit or stone in fruits such as cherries that are normally pitted; or a piece of pit of approximately one-half pit)	1 piece per 1000 grams
(c)	Pit Fragments (a piece of pit less than the equivalent of one-half pit and which weighs at least 5 milligrams)	1 piece per 500 grams
(d)	Damaged (a piece of fruit that is blemished, discoloured, or bruised by pathological or other means to the extent that it is materially affected)	1 piece per 100 grams

3.4.3 Classification of "defectives"

A container that fails to meet one or more of the applicable quality requirements, as set out in sub-sections 3.4.1 and 3.4.2 shall be considered a "defective".

3.4.4 Acceptance

A lot will be considered as meeting the applicable quality requirements referred to in sub-section 3.4.3 when the number of "defectives", as defined in sub-section 3.4.3, does not exceed the acceptance number (c) of the appropriate sampling plan (AQL-6.5) in the Sampling Plans for Processed Fruits and Vegetables.

4. FOOD ADDITIVES

The following provisions in respect of food additives and their specifications as contained in section . . . of the Codex Alimentarius are subject to endorsement by the Codex Committee on Food Additives:

4.1 Acidifying Agents		Maximum Level of Use
Citric acid Malic acid L-Tartaric acid Fumaric acid Lactic acid	singly or in combination	Limited by Good Manufacturing Practice
4.2 pH Regulating Agents		
Sodium, Potassium, or Calcium salts of any of the acids listed in 4.1		Limited by Good Manufacturing Practice
Sodium and Potassium Carbonates and Bicarbonates		Limited by Good Manufacturing Practice
Sodium Hydroxide		Limited by Good Manufacturing Practice

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4. FOOD ADDITIVES -- continuation

4.3 Anti-Foaming Agents	Maximum Level of Use
Mono and diglycerides of fatty acids of edible oils	No more than necessary to inhibit foaming
Silicones	To be determined
Dimethylpolysiloxane	To be determined

4.4 Thickening Agents	
Alginates, Agar Agar, Gums, Methyl-cellulose, Carrageenan, Pectin	Limited by Good Manufacturing Practice

4.5 Colouring Matters	
Erythrosine, Amaranth, Fast Green FCF, Ponceau 4R, Carmoisine, C.I.14720, Tartrazine (FD+C Yellow No. 5), Green 'S', C.I.44090, Sunset Yellow	200 mg/kg (singly or in combination)

4.6 Preservatives	
Sulphur Dioxide	100 mg/kg
Sodium Benzoate	1000 mg/kg
Sorbic Acid	1000 mg/kg
Potassium Sorbate	1000 mg/kg
Esters of p-hydroxy benzoic acid	1000 mg/kg

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4. FOOD ADDITIVES -- continuation

4.7 Natural flavours	Maximum Level of Use
Natural fruit essences	Limited by Good Manufacturing Practice
Natural Mint Flavouring Natural Cinnamon Flavouring	Limited by Good Manufacturing Practice

4.8 Firming Agents	
Calcium Chloride	1000 mg/kg

5. HYGIENE

5.1 It is recommended that the product covered by the provisions of this standard be prepared in accordance with the International Code of Hygienic Practice for Canned Fruit and Vegetable Products recommended by the Codex Alimentarius Commission (Ref. No. CAC/RCP 2-1969).

5.2 To the extent possible in good manufacturing practice the product shall be free from objectionable matter.

5.3 The product shall not contain any toxic substances originating from microorganisms.

6. WEIGHTS AND MEASURES

6.1 Fill of Container

The container shall be well filled with the product and the product shall occupy not less than 90% of the water capacity of the container. The water capacity of the container is the volume of distilled water at 20° C which the sealed container will hold when completely filled.

6.2 Classification of "Defective"

A container that fails to meet the requirement for minimum fill (90 percent container capacity) of 6.1 shall be considered a "defective".

6.3 Acceptance

A lot will be considered as meeting the requirement of 6.1 when the number of "defectives" does not exceed the acceptance number (c) of the appropriate sampling plan (AQL-6.5) in the Sampling Plans for Processed Fruits and Vegetables.

7. LABELLING

In addition to Sections 1, 2, 4, and 6 of the Recommended International General Standard for the Labelling of Prepackaged Foods (Ref. No. CAC/RS 1-1969), the following specific provisions apply:

7.1 The name of the food

7.1.1 The name of the product shall be "Jam", "Preserves", "Conserves", or "Jelly", as appropriate.

7.1.2 The name of the product shall be preceded by the name of the fruit, or fruits, used in order of proportion by weight.

7.1.3 The name of the product may include the name of the variety of fruit (e.g. Victoria Plum Jam) or type descriptions (e.g. Yellow Plum Jam).

7.1.4 The name of the product or fruit may include an adjective description of character (e.g. Seedless Blackberry Jam).

7.1.5 Jam made from ginger, with or without the addition of citrus fruit, may be designated "Ginger Marmalade" if such product is customarily so described in the country in which it is sold.

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7. LABELLING -- continuation

7.2 List of ingredients

A complete list of ingredients shall be declared on the label in descending order of proportion in accordance with sub-section 3.2 (c) of the General Standard for the Labelling of Prepackaged Foods.

7.3 Net contents

The net contents shall be declared by weight in either the metric ("Système International" units) or avoirdupois or both systems of measurement as required by the country in which the product is sold.

7.4 Name and address

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

7.5 Country of origin

(a) The country of origin of the product shall be declared if its omission would mislead or deceive the consumer.

(b) When the product 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.

8. METHODS OF ANALYSIS AND SAMPLING

The methods of analysis and sampling described or referred to in 8.1, 8.2, and 8.3 are international referee methods and are subject to endorsement by the Codex Committee on Methods of Analysis and Sampling.

8.1 Sampling

Sampling shall be in accordance with the Sampling Plans for Processed Fruits and Vegetables.

8.2 Test Procedures

8.2.1 Soluble Solids

Soluble Solids shall be determined by the Refractometric method, disregarding any adjustment for insoluble solids and acids, in accordance with the AOAC Method (1965, 20.016)

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8.3 Method for Determination of Water Capacity of Containers

8.3.1 Metal containers

8.3.1.1 Procedure

(1) Select a container which is undamaged in all respects.

(2) Wash, dry, and weigh the empty container after cutting out the lid without removing or altering the height of the double seam.

(3) Fill the container with distilled water at 20° C to 4.76 mm vertical distance below the top level of the container, and weigh the container thus filled.

(4) Subtract the weight found in (2) from the weight found in (3). The difference shall be considered to be the weight of water required to fill the container.

8.3.2 Glass containers

8.3.2.1 Procedure

(1) Select a container which is undamaged in all respects.

(2) Wash, dry, and weigh the empty container.

(3) Fill the container with distilled water at 20° C to the level of the top thereof, and weigh the container thus filled.

(4) Subtract the weight found in (2) from the weight found in (3). The difference shall be considered to be the weight of water required to fill the container.

APPENDIX XI
June 1970

JOINT FAO/WHO CODEX ALIMENTARIUS COMMISSION

Committee on Processed Fruits and Vegetables

Proposed Draft Standard

GENERAL STANDARD FOR CITRUS MARMALADE -- STEP 3

Standard No. PFV 70/3-33

APPENDIX XI
PFV 70/3-33
June 1970

PROPOSED DRAFT STANDARD

GENERAL STANDARD FOR CITRUS MARMALADE Advanced to STEP 3

1. SCOPE

This standard covers gneral and specific provisions for the product prepared from citrus fruit and commonly referred to as "Marmalade".

It does not apply to products prepared from fruits other than citrus nor does it apply to those products prepared from non-carbohydrate sweeteners and designated as "diabetic" or "dietetic". Nor does it apply to the product intended or clearly marked for manufacturing use only.

2. DESCRIPTION

2.1 Product Definition

2.1.1 Marmalade is the product obtained by processing prepared citrus fruit in the form of whole fruit, pulp or puree, with or without citrus juice, with or without the extraction of peel.

The prepared fruit ingredient is mixed with a suitable carbohydrate sweetener and may include the addition of water, pectin, edible acids, and other minor ingredients.

The prepared mixture is processed by the application of heat to a suitable consistency; and the product shall be filled into clean containers in a manner which shall minimize subsequent contamination and microbiological spoilage.

2.1.2 Jelly Marmalade is marmalade as described in sub-section 2.1.1 from which all of the insoluble solids, or all of the insoluble solids except for a small proportion of thinly cut peel, has been removed.

2.2 Prepared Fruit means substantially sound, clean citrus fruit, including pulps, concentrated juices, extractives, and preserved peels from which stems, calyces, and seeds have been removed. The fruit and juice shall contain all natural soluble solids (extractives) except for those inevitably lost during preparation under good manufacturing practices. The fruit ingredient may be prepared from fruit which is fresh, processed, or preserved.

3. ESSENTIAL COMPOSITION AND QUALITY CRITERIA

3.1 Composition

3.1.1 Basic Ingredients

1) Prepared citrus fruits.

2) Carbohydrate sweetener(s) or sugars as defined by the Codex Committee for Sugars, including sucrose, dextrose, invert sugar, glucose syrup, dried glucose syrup.

3) Honey.

3.1.2 Other Ingredients

1) Vinegar and citrus juice

2) Essential oils.

3) Spiritous liquors.

4) Butter, margarine, other edible vegetable or animal oils (as anti-foaming agents).

3.2 Formulation

The product shall contain not less than 20 parts, by weight, of prepared fruit for each 100 parts, by weight, of finished marmalade. Peel in excess of amounts normally associated with the fruits is not considered a part of the fruit ingredient for purposes of compliance with minimum fruit content.

When concentrated or diluted fruit ingredient is used, the formulation is based upon the equivalent of single strength fruits as determined by the relationship between the soluble solids of the concentrate and the soluble solids of the natural (single strength) fruit.

3.3 Soluble Solids (Finished Product)

The soluble solids value of the finished product may not be less than 65 percent.

3.4 Quality Criteria

3.4.1 General

The end product shall be viscous or semi-solid, have a colour and flavour normal for the type of citrus fruit used taking into consideration flavour imparted by optional ingredients. The product shall be practically free from extraneous plant material, seeds, or seed particles, and shall be reasonably free from other defects normally associated with the fruit.

3.4.2 Classification of "defectives"

A container that fails to meet one or more of the applicable quality requirements, as set out in sub-section 3.4.1 shall be considered a "defective".

3.4.3 Acceptance

A lot will be considered as meeting the applicable quality requirements referred to in sub-section 3.4.2 when the number of "defectives", as defined in sub-section 3.4.2, does not exceed the acceptance number (c) of the appropriate sampling plan (AQL-6.5) in the Sampling Plans for Processed Fruits and Vegetables.

4. FOOD ADDITIVES

The following provisions in respect of food additives and their specifications as contained in section . . . of the Codex Alimentarius are subject to endorsement by the Codex Committee on Food Additives:

4.1 Acidifying Agents	Maximum Level of Use
Citric acid, Malic acid, L-Tartaric acid, Fumaric acid, Lactic acid — singly or in combination	Limited by Good Manufacturing Practice

4.2 pH Regulating Agents

Sodium, Potassium, or Calcium salts of any of the acids listed in 4.1	Limited by Good Manufacturing Practice
Sodium and Potassium Carbonates and Bicarbonates	Limited by Good Manufacturing Practice
Sodium Hydroxide	Limited by Good Manufacturing Practice

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4. FOOD ADDITIVES -- continuation

	Maximum Level of Use
4.3 Anti-Foaming Agents	
Mono and Diglycerides of fatty acids of edible oils	No more than necessary to inhibit foaming
Silicones	To be Determined
Dimethylpolysiloxane	To be Determined
4.4 Thickening Agent	
Pectin	Limited by Good Manufacturing Practice
4.5 Colouring Matters	
Caramel	Limited by Good Manufacturing Practice
In Lime Marmalade only	
Tartrazine (Singly or in combination	200 mg/kg
Green S (Singly or in combination	200 mg/kg
4.6 Preservatives	
Sulphur Dioxide	100 mg/kg
Sodium Benzoate	1000 mg/kg
Sorbic Acid	1000 mg/kg
Potassium Sorbate	1000 mg/kg
Esters of p-hydroxy benzoic acid	1000 mg/kg

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4. FOOD ADDITIVES -- continuation

4.7 Natural flavours	Maximum Level of Use
Natural fruit essences - - - - - - - -	Limited by Good Manufacturing Practice

4.8 Firming Agents	
Calcium Chloride	1000 mg/kg

5. HYGIENE

5.1 It is recommended that the product covered by the provisions of this standard be prepared in accordance with the International Code of Hygienic Practice for Canned Fruit and Vegetable Products recommended by the Codex Alimentarius Commission (Ref. No. CAC/RCP 2-1969).

5.2 To the extent possible in good manufacturing practice the product shall be free from objectionable matter.

5.3 The product shall not contain any toxic substances originating from microorganisms.

6. WEIGHTS AND MEASURES

6.1 Fill of Container

The container shall be well filled with the product and the product shall occupy not less than 90% of the water capacity of the container. The water capacity of the container is the volume of distilled water at 20° C which the sealed container will hold when completely filled.

6.2 Classification of "Defective"

A container that fails to meet the requirement for minimum fill fill (90 percent container capacity) of 6.1 shall be considered a "defective".

6.3 Acceptance

A lot will be considered as meeting the requirements of 6.1 when the number of "defectives" does not exceed the acceptance number (c) of the appropriate sampling plan (AQL-6.5) in the Sampling Plans for Processed Fruits and Vegetables.

7. LABELLING

In addition to Sections 1, 2, 4, and 6 of the Recommended International General Standard for the Labelling of Prepackaged Foods (Ref. No. CAC/RS 1-1969), the following specific provisions apply:

7.1 The name of the food

7.1.1 The name of the product shall be "Marmalade".

7.1.2 Where the product is not made exclusively from oranges, the designation shall include the citrus fruits from which the product was prepared, save however that this shall not be necessary where the proportion of citrus fruit other than orange does not exceed 10% by weight of the fruit content.

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7. LABELLING -- continuation

7.1.3 Where the product is prepared from two or more citrus fruits, the designation shall include each citrus fruit present, with the fruits listed in the order of predominance.

7.1.4 The name of the product may contain the name of the variety of citrus fruit (e.g. "Valencia Orange Marmalade").

7.1.5 The product may be designated according to the amount and type of peel present, depending upon the practice in the country in which it is sold.

7.2 List of ingredients

A complete list of ingredients shall be declared on the label in descending order of proportion in accordance with sub-section 3.2 (c) of the General Standard for the Labelling of Prepackaged Foods.

7.3. Net contents

The net contents shall be declared by weight in either the metric ("Système International" units) or avoirdupois or both systems of measurement as required by the country in which the product is sold.

7.4 Name and address

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

7.5 Country of origin

(a) The country of origin of the product shall be declared if its omission would mislead or deceive the consumer.

(b) When the product 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.

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