JOINT FAO/WHO FOOD STANDARDS PROGRAMME

CODEX ALIMENTARIUS COMMISSION

32nd Session
Rome, Italy, 29 June - 4 July 2009

REPORT OF THE 24th SESSION OF THE
CODEX COMMITTEE ON PROCESSED FRUITS AND VEGETABLES

Arlington, VA (Washington DC metro area), U.S.A.
15 – 20 September 2008

NOTE: This report contains Codex Circular Letter CL 2008/31-PFV.
TO: - Codex Contact Points  
    - Interested International Organizations in Observer Status with Codex

FROM: Secretary, Codex Alimentarius Commission,  
      Joint FAO/WHO Food Standards Programme,  
      Viale delle Terme di Caracalla 00153,  
      Rome, Italy

SUBJECT: Report of the 24th Session of the  
         Codex Committee on Processed Fruits and Vegetables (ALINORM 09/32/27)

PART A: Matters for Adoption by the 32nd Session of the Codex Alimentarius  
        Commission

Draft Standards at Step 8 of the Procedure

1. Draft Codex Standard for Jams, Jellies and Marmalades (para 34 and Appendix II).

Proposed draft Standards at Step 5/8 of the Procedure

3. Proposed draft provisions for packing media for certain canned vegetables: Section 3.1.3 (draft Codex Standard for Certain Canned Vegetables) (para 77 and Appendix IV).

Governments and interested international organizations in observer status with Codex wishing to submit comments on the above documents should do so in writing to the above address, PREFERABLY BY E-MAIL, before 15 March 2009.

PART B: Request for Comments and Information

6. Proposals for Amendments to the Priority List for the Standardization of Processed Fruits and Vegetables (para 111 and Appendix VIII).

Governments and interested international organizations in observer status with Codex wishing to submit comments on the above documents should do so in writing to the above address, PREFERABLY BY E-MAIL, before 15 December 2009.
SUMMARY AND CONCLUSIONS

The 24th Session of the Codex Committee on Processed Fruits and Vegetables reached the following conclusions:

**MATTERS FOR CONSIDERATION BY THE CODEX ALIMENTARIUS COMMISSION**

The Committee agreed to:

**Adoption of Codex standards and related texts**
- forward the *draft Codex Standards for Jams, Jellies and Marmalades* and *Certain Canned Vegetables* to the 32nd Session of the Commission for final adoption at Step 8 (paras 34 & 77 and Appendices II & III).
- forward the *proposed draft provisions for Packing Media for Certain Canned Vegetables* (section 3.1.3) and *proposed draft Annexes specific to Certain Canned Vegetables* to the 32nd Session of the Commission for final adoption at Step 5/8 with omission of Steps 6/7 (para 77 and Appendices IV & V).

**Approval of new work**
- submit proposals for the revision of the *Codex Standards for Canned Bamboo Shoots* and *Canned Mushrooms* for inclusion as annexes to the *Codex Standard for Certain Canned Vegetables* as well as revision of the *Codex Standards for Table Olives* and *Grated Desiccated Coconut* (para 109).

**Discontinuation of work**
- discontinue work on the *proposed draft Guidelines for Packing Media for Canned Vegetables* and inform the Commission accordingly (para 77).

**MATTERS OF INTEREST TO THE CODEX ALIMENTARIUS COMMISSION**

The Committee agreed to:

- return the *proposed draft Codex Sampling Plans including Metrological Provisions for Controlling Minimum Drained Weight of Canned Fruits and Vegetables in Packing Media* to Step 2 for redrafting, subsequent circulation for comments and consideration at its next session (para 82).
- forward *methods of analysis for coconut cream and coconut milk* to the Committee on Methods of Analysis and Sampling for endorsement and inclusion in the *Codex Standard for Aqueous Coconut Products* and inform the Commission accordingly (para 84 and Appendix VI).
- continue to request comments on *food additive provisions for processed fruits and vegetables* (*pickled fruits and vegetables, canned tomatoes, processed tomato concentrates and certain canned citrus fruits*) for consideration at its next session (para 98 and Appendix VII).
- discontinue the consideration of a *proposed Layout for Codex Standard for Processed Fruits and Vegetables* (para 103).
- continue to request comments on proposals for amendments to the *Priority List for the Standardization of Processed Fruits and Vegetables* for consideration at its next session (para 111 and Appendix VIII).
# TABLE OF CONTENTS

<table>
<thead>
<tr>
<th>Section</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>SUMMARY AND CONCLUSIONS</td>
<td>iv</td>
</tr>
<tr>
<td>REPORT OF THE 24TH SESSION OF THE CODEX COMMITTEE ON PROCESSED FRUITS AND VEGETABLES</td>
<td>1</td>
</tr>
<tr>
<td>STATUS OF WORK</td>
<td>14</td>
</tr>
<tr>
<td>CONSIDERATION OF DRAFT CODEX STANDARDS AT STEP 7</td>
<td></td>
</tr>
<tr>
<td>DRAFT CODEX STANDARD FOR JAMS, JELLIES AND MARMALADES</td>
<td>15</td>
</tr>
<tr>
<td>DRAFT CODEX STANDARD FOR CERTAIN CANNED VEGETABLES (general provisions)</td>
<td>35</td>
</tr>
<tr>
<td>CONSIDERATION OF PROPOSED DRAFT CODEX STANDARDS AT STEP 4</td>
<td></td>
</tr>
<tr>
<td>PROPOSED DRAFT ANNEXES SPECIFIC TO CERTAIN CANNED VEGETABLES (draft Codex Standard for Certain Canned Vegetables)</td>
<td>35</td>
</tr>
<tr>
<td>PROPOSED DRAFT CODEX GUIDELINES FOR PACKING MEDIA FOR CANNED VEGETABLES</td>
<td>35</td>
</tr>
<tr>
<td>PROPOSED DRAFT CODEX SAMPLING PLANS INCLUDING METROLOGICAL PROVISIONS FOR CONTROLLING MINIMUM DRAINED WEIGHT OF CANNED FRUITS AND VEGETABLES IN PACKING MEDIA</td>
<td>78</td>
</tr>
<tr>
<td>METHODS OF ANALYSIS FOR PROCESSED FRUITS AND VEGETABLES – CODEX STANDARD FOR AQUEOUS COCONUT PRODUCTS: COCONUT CREAM AND COCONUT MILK (CODEX STAN 240-2003)</td>
<td>83</td>
</tr>
<tr>
<td>FOOD ADDITIVE PROVISIONS FOR PROCESSED FRUITS AND VEGETABLES (Agenda item 7)</td>
<td>85</td>
</tr>
<tr>
<td>PROPOSED LAYOUT FOR CODEX STANDARDS FOR PROCESSED FRUITS AND VEGETABLES</td>
<td>99</td>
</tr>
<tr>
<td>PROPOSALS FOR AMENDMENTS TO THE PRIORITY LIST FOR THE STANDARDIZATION OF PROCESSED FRUITS AND VEGETABLES (Agenda item 9)</td>
<td>104</td>
</tr>
<tr>
<td>OTHER BUSINESS (Agenda item 10)</td>
<td>114</td>
</tr>
<tr>
<td>DATE AND PLACE OF THE NEXT SESSION (Agenda item 11)</td>
<td>115</td>
</tr>
</tbody>
</table>

## Appendices

<table>
<thead>
<tr>
<th>Appendix I - LIST OF PARTICIPANTS</th>
<th>page 15</th>
</tr>
</thead>
<tbody>
<tr>
<td>Appendix II - DRAFT CODEX STANDARD FOR JAMS, JELLIES AND MARMALADES</td>
<td>page 27</td>
</tr>
<tr>
<td>Appendix III - DRAFT CODEX STANDARD FOR CERTAIN CANNED VEGETABLES (general provisions)</td>
<td>page 37</td>
</tr>
<tr>
<td>Appendix IV – PROPOSED DRAFT PROVISIONS FOR PACKING MEDIA FOR CERTAIN CANNED VEGETABLES (SECTION 3.1.3)</td>
<td>page 46</td>
</tr>
<tr>
<td>Appendix V – PROPOSED DRAFT ANNEXES SPECIFIC TO CERTAIN CANNED VEGETABLES</td>
<td>page 47</td>
</tr>
<tr>
<td>Appendix VI - METHODS OF ANALYSIS FOR PROCESSED FRUITS AND VEGETABLES – CODEX STANDARD FOR AQUEOUS COCONUT PRODUCTS: COCONUT CREAM AND COCONUT MILK (CODEX STAN 240-2003)</td>
<td>page 63</td>
</tr>
<tr>
<td>Appendix VII - FOOD ADDITIVE PROVISIONS FOR PROCESSED FRUITS AND VEGETABLES</td>
<td>page 64</td>
</tr>
<tr>
<td>Appendix VIII - PRIORITY LIST FOR THE STANDARDIZATION OF PROCESSED FRUITS AND VEGETABLES</td>
<td>page 72</td>
</tr>
</tbody>
</table>
INTRODUCTION

1. The 24th Session of the Codex Committee on Processed Fruits and Vegetables was held in Arlington, Virginia, USA, from 15 to 20 September 2008 at the kind invitation of the Government of the United States of America. Mr Terry B. Bane, Chief of the Processed Products Branch, Fruit and Vegetable Programs, Agriculture Marketing Service of the United States Department of Agriculture, chaired the Session. The Session was attended by delegates from 42 Member countries, one Member Organization and Observers from 4 international organizations. The list of participants is attached to this report as Appendix I.

OPENING OF THE SESSION

2. The Session was opened by Mr David R. Shipman, Associate Administrator, Agricultural Marketing Service, of the United States Department of Agriculture.

Division of competence

3. The Committee noted the division of competence between the European Community and its Member States, according to paragraph 5, Rule II of the Procedure of the Codex Alimentarius Commission.

ADOPTION OF THE AGENDA (Agenda Item 1)

4. The Committee adopted the Provisional Agenda as its Agenda for the Session and agreed to postpone the discussion of Agenda Item 3 – draft Standard for Jams, Jellies and Marmalades and Agenda Item 4b – proposed draft Annexes specific to Certain Canned Vegetables (draft Standard for Certain Canned Vegetables), until the report of the pre-session working groups on these subjects were submitted to the Committee.

5. In order to expedite its work on the food additives sections in the standards under consideration, the Committee agreed to establish an in-session working group on food additives, chaired by the United States of America and working in English only, which would develop recommendations on food additive provisions related to Agenda Items 3, 4a, b and 7. The Committee therefore noted that sections on food additives in the draft standards would be discussed together under Agenda Item 7.

6. The Committee further agreed to establish an in-session working group on the priority list, chaired by the European Community and working in English only, which would consider, in addition to the proposals for amendments of the priority list, a strategic approach to its work, including the need for specific priority-setting criteria for the management of its work, taking into consideration the mandate of the Committee, intervals and duration of its meetings.

MATTERS ARISING FROM THE CODEX ALIMENTARIUS COMMISSION AND ITS SUBSIDIARY BODIES (Agenda Item 2)

7. The Committee noted the information presented in document CX/PFV 08/24/1 and, in particular, commented and/or made decisions as follows.

Strategic Plan 2008-2013

8. The Committee noted that Activities 1.2, 3.3, 4.1, 5.5 and 5.6 are particularly relevant to the work of the Committee and that Activity 1.2 (Review and develop Codex standards and related texts for food quality) and 4.1 (Track the activities of other international standard-setting bodies) were part of its ongoing activities and required no further action. The Committee further noted that Activity 3.3 (Develop committee-specific decision-making and priority-setting criteria) would be considered under Agenda Item 9 - Proposals for Amendments to the Priority List for the Standardization of Processed Fruits and Vegetables.

9. The Committee noted the following views of the Delegation of France, speaking on behalf of the EC Member States present at the Session:

- In pursuing Activities 1.1 and 1.2 (review and develop Codex standards and related texts for food safety and quality), the Committee should take a horizontal approach for the elaboration of standards for processed fruits and vegetables, which should not be overly prescriptive while ensuring fair trade, having minimum requirements that can serve as international references;
- Activity 3.3 (Develop committee-specific decision-making and priority-setting criteria) would be particularly important for the Committee, which is already burdened with a heavy workload;
- Activity 4.1 (Track the activities of other international standard-setting bodies) should be further encouraged, for example, by following up on the recent work of the IOC on table olives and the ongoing work by the UNECE;
- Participation of international non-governmental organizations in Codex meetings should be further encouraged as stated in Activity 5.5; and
- With regard to Activity 5.6 (Enhance communication about Codex work at international and national levels), a new way for communicating the work accomplished by Codex should be explored, in order to raise the awareness of its importance and the participation of developing countries should be further encouraged.

Review of Codex Committee Structure and Mandates of Codex Committees and Task Forces

10. The Committee noted that proposals 3 (interval of meetings) and 4 (duration of meetings) would be discussed under Agenda Item 9 - Proposals for Amendments to the Priority List for the Standardization of Processed Fruits and Vegetables, because this should be considered in conjunction with the Committee's strategic approach to its work in future.

New work on chili sauce by the Coordinating Committee for Asia (CCASIA)

11. The Committee noted that the 59th Executive Committee (June 2007), in recommending to the Commission the approval of a regional standard for chili sauce by the CCASIA as new work, had invited the CCPFV to provide its view on the potential need for an international standard for chili sauce.

12. The Committee noted that a new procedure for the conversion of regional standards into international standards had been adopted by the 31st Session of the Commission (July 2008) and that in accordance with this new procedure, the need for an international standard for chili sauce would be considered against the Criteria for the Establishment of Work Priorities and its workload at the time, if such a proposal was brought to the Committee after the completion of the regional standard.

13. The Committee noted the view of the European Community Member States that products called chili sauce varied significantly in nature among regions and that it was not in favour of its conversion into an international standard.

26th Session of the Committee on Methods of Analysis and Sampling (CCMAS)

14. The Committee could not identify the correct ISO reference number for the ISO/UNIUN method for the determination of drained weight for crushed style tomatoes in the Standard for Preserved Tomatoes (CODEX STAN 13-1981) and agreed to request the CCMAS to delete this method and to endorse AOAC 968.30 as a method for “crushed style” preserved tomato only, with the following footnote: “Use a No. 14 screen instead of ‘7/16’ or No. 8.”

DRAFT CODEX STANDARD FOR JAMS, JELLIES AND MARMALADES (Agenda Item 3)†

15. The Committee considered a revised proposed draft based on the report provided by the Working Group on Jams, Jellies and Marmalades that met prior to the Plenary. The Committee endorsed the changes proposed by the Working Group, and in addition to editorial changes, made the following comments and decisions:

Scope

16. In Section 1.1, the Committee agreed to amend point (d) by replacing “sweeteners” with “food additive sweeteners” to make it clear that the term “sweetener” in this standard referred to non-sugar substances identified as food additives. It was noted that this term also applied to other Codex standards such as the General Standard for Fruit Juices and Nectars (CODEX STAN 247-2005).

17. In Section 1.2, the Committee agreed to introduce the term “fruit spread” as an additional term to designate jams and jellies and to make consequential amendments to the labelling section to apply this term to those jams and jellies defined under Section 3.1.2(b).

18. A delegation expressed concern about those non citrus marmalades that might currently be marketed at international level and that might not be covered by the scope of the standard. The delegation urged the Committee to carefully consider the way in which non citrus marmalades was provided for in this standard.

Section 2.2 Other Definitions

19. The Committee agreed to refer to “other processes” in addition to “sieving and similar processes” in the definition of fruit puree as the use of processes other than sieving and similar processes might be used for example for the removal of certain parts the fruits e.g. seeds, peels, etc.

20. The Committee also agreed to refer to “fruit juices and concentrates” as the latter was also used in the preparation of jams and was also covered by the General Standard for Fruit Juices and Nectars.

† ALINORM 07/30/27-Appendix VI; comments from Australia, Brazil, European Community, France, Kenya and OEITFL (CX/PFV 08/24/3); Report of the Working Group on Jams, Jellies and Marmalades (CRD 3); United Stated of America (CRD 5); India (CRD 7); OEITFL (CRD 9); Philippines (CRD 12) and Thailand (CRD 13).
Section 3.1.2 Fruit Content

21. The Committee agreed to retain a range of 11 to 15% of fruit content for ginger jam (Section 3.1.2b) in order to accommodate different industry and trade practices.

22. A delegation requested that fruit content for products defined under Section 3.1.2(a) be reduced to 40% in general to accommodate most tropical fruits and to allocate 32% for strawberry and 23% for pineapple in the list of exceptions for products under this category. The Committee acknowledged that the products covered by Section 3.1.2(a) were high quality products and that jams, jellies and marmalades covered under Section 3.1.2(b) already provided for a lower minimum fruit content.

23. In addition, the Committee considered the need to clarify those strong flavour or high acidity fruits for which exceptions have been set in Section 3.1.2(a) and (b) or to delete reference to these fruits. It was explained that many new products were being made from fruits which when used at percentages above those set out in the standard usually rendered the product unpalatable. In view of this, the Committee agreed to include a footnote to establish that the level of unpalatability was subject to consumer preferences in the country of retail sale.

Section 3.1.3 Other Permitted Ingredients

24. The Committee agreed with the text as proposed by the Working Group as more inclusive and flexible to allow future innovation in the production of jams, jellies and marmalades. The Committee agreed to limit the ingredients to those of plant origin and to delete “condiments” as these were already covered by the terms herbs, spices and their mixtures.

25. The Committee agreed to include edible vegetable oils and fats for use as antifoaming agents noting that they should be considered as ingredients rather than additives. The Committee did not agree to refer to other uses of these substances for example, frying, coating, etc. since the definition of fruit covered in Section 2.2 already provided for the processing of fruits used in the preparation of jams, jellies and marmalades.

Section 3.2 Soluble Solids

Jams, Jellies and Citrus Marmalades

26. The Committee considered whether the range of 60 to 65% or greater soluble solids was appropriate for these products. It was clarified that soluble solids content was an important criterion to ensure product safety and stability and if it were to be lower than this range it would have an effect on the shelf life that might require considerable use of preservatives. The Committee therefore agreed to retain the current range of 60 to 65% or greater for soluble solids while noting that this represented a compromise agreed upon at previous sessions to allow for inclusiveness and flexibility in the application of the standard. It was further noted that the footnote attached to this range allow for food regulators to set a higher percentage in accordance with the legislation of the country of retail sale.

Non-Citrus Marmalades

27. Some delegations expressed the view that the soluble solids range of 40-60% did not take account of all non-citrus marmalades produced worldwide and suggested an upper limit of 65% in order to provide for inclusiveness and flexibility in the application of the standard. In view of this, the Committee agreed to change the upper limit to 65% soluble solids.

Tolerance for soluble solids

28. The Committee had an exchange of views on whether to apply ±3 or ±0.5 refractometric degrees as a tolerance in the measurement of soluble solids in the final product. Some delegations supported the upper tolerance as less restrictive taking into account natural variations of soluble solids in natural products such as fruits and vegetables due to seasonal variations, soil conditions, etc. These delegations indicated that such a limiting tolerance might imply the addition of increased quantities of sugars in order to meet the required soluble solids content which in turn was against current trends in limiting sugar consumption. Other delegations felt that a lower tolerance would ensure compliance with the current ranges in particular the lower level of 60% and 40% and thus ensure product safety and quality. These delegations were of the opinion that in the case of natural variations in the raw material this could be compensated with increased quantities of the fruit content as opposed to sugars.
29. The Committee noted that the current provision for tolerances of the refractometer were more linked to the sensitivity of the instrument and that this should be covered by the method of analysis selected to perform the measure. The Committee further noted that the section on methods of analysis and sampling already provided for a Codex general method for processed fruits and vegetables for the determination of soluble solids. In addition, the labelling section provided for fruit quantity and sugar declaration in accordance with the legislation of the country of retail sale which should take care of the tolerances applied at national level for the measurement of soluble solids to ensure compliance with the minimum soluble content established by the standard. In view of this, the Committee agreed to delete in its entirety the sentence regarding refractometric tolerances.

Section 4 Food Additives

30. The Committee did not consider food additive provisions under this item since an in-session working group established under Agenda Item 1 would consider all food additives and make necessary proposals for discussion under Agenda Item 7.

Section 5 Contaminants

31. The Committee agreed to insert the new standard wording on contaminants as agreed to by the Commission (July 2008).

Section 8 Labelling

32. The Committee agreed to have a separate entry for “Extra” jams to differentiate these products from those defined as “High Fruit” jams taking into account that additional different specifications may apply to these products in certain parts of the world. The Committee also agreed to introduce provisions for declaration of the use of alcoholic drinks in the preparation of the products covered by the standard in view of religious and cultural practices in the country of retail sale.

Section 9 Methods of Analysis and Sampling

33. The Committee agreed that the methods to determine calcium and mineral impurities were no longer applicable since no provisions for their determination existed in the current standard.

STATUS OF THE DRAFT CODEX STANDARD FOR JAMS, JELLIES AND MARMALADES

34. The Committee agreed to forward the draft Codex Standard for Jams, Jellies and Marmalades to Step 8 for final adoption by the 32nd Session of the Commission (Appendix II).

DRAFT CODEX STANDARD FOR CERTAIN CANNED VEGETABLES (Agenda Item 4a)\(^5\)

PROPOSED DRAFT ANNEXES SPECIFIC TO CERTAIN CANNED VEGETABLES (Agenda Item 4b)\(^6\)

PROPOSED DRAFT CODEX GUIDELINES FOR PACKING MEDIA FOR CANNED VEGETABLES (Agenda Item 4c)\(^7\)

35. The Committee considered a revised document based on the report provided by the Working Group on Canned Vegetables that met prior to the Plenary. The Committee endorsed the changes proposed by the Working Group, and in addition to editorial changes, made the following comments and decisions:

GENERAL COMMENTS AND APPROACH

36. The Committee agreed to the general approach as recommended by the Working Group on Canned Vegetables as follows:

- To consider the addition of two annexes on canned bamboo shoots and canned mushrooms based on the outcome of the discussions at this Session (see para 109);
- Not to include a specific annex on dried beans, since there was currently no standard for this commodity and as such should be considered as new work recalling that the aim of the current work was the revision and simplification of the existing individual standards for canned vegetables;

\(^5\) ALINORM 07/30/27-Appendix VII; comments from Australia and the European Community (CX/PFV 08/24/4); Argentina (CRD 4), the United States of America (CRD 5); Malaysia (CRD 8); Philippines (CRD 12) and Thailand (CRD 13).

\(^6\) CX/PFV 08/24/5; comments from Brazil, Costa Rica, Cuba and Kenya (CX/PFV 08/24/5-Add.1); Report of the Working Group on Canned Vegetables (CRD 2); the United States of America (CRD 5); Malaysia (CRD 8); Philippines (CRD 12); Brazil, Costa Rica and Ecuador (CRD 16).

\(^7\) CX/PFV 08/24/6; comments from Brazil, Costa Rica and Cuba (CX/PFV 08/24/6-Add.1); Argentina (CRD 4); the United States of America (CRD 5); Malaysia (CRD 8); Philippines (CRD 12) and Thailand (CRD 13).
• That food additives not be considered under this item since an in-session working group established under Agenda Item 1 would consider all food additives and make necessary proposals for discussion en bloc under Agenda Item 7;

• To retain in the standard quantitative limits for defects and allowances while ensuring certain flexibility, since canned vegetables traded internationally normally have various styles and quality levels; that styles were necessary to distinguish one product from another; and that allowances for defects were necessary to guarantee a minimum level of quality. The Delegation of Australia reiterated its position that quantitative limits for quality provisions were not necessary, should be driven by market forces and could be sufficiently dealt with through labelling to ensure that consumers were not mislead.

• To discontinue work on the Guidelines for Packing Media for Canned Vegetables and to introduce provisions relating to packing media into the general body of the standard. The Committee was reminded that this decision would have an impact on the Standards for Canned Bamboo Shoots (CODEX STAN 241-2003) and Pickled Fruits and Vegetables (CODEX STAN 260-2007), which currently refer to the aforementioned guidelines and that the Committee would need to provide guidance on how to proceed further with this matter.

37. The Committee considered the draft standard section by section and in addition to editorial changes, made several observations or amendments as follows:

SPECIFIC COMMENTS

Canned Vegetables – general provisions

Title

38. The Committee had an exchange of views on the need to clarify the term “canned” in the English version as not limited to metal containers in order to provide for flexibility in the application of other packing technologies for the preparation of the products covered by the standard. It was noted that provisions under different sections already provided for inclusion of other packing technologies, for instance, the description of the products in Section 2.1(3) when referring to products processed by heat without specifying the type of process or containers as long as they were appropriate for the elaboration of the product, the minimum fill of containers in Section 7.1.1 which already provided for rigid and flexible containers by introducing allowances in accordance to good manufacturing practices and the corresponding methods of analysis for determination of minimum fill in Section 8 which also provided for the determination of minimum fill in containers other than metal containers (see also para 50). In view of this, the Committee decided to leave the title unchanged.

Scope

39. The Committee had some discussion on whether to clarify that canned vegetables covered by the scope of the standard referred to “low acid” and “acidified low acid” canned vegetables rather than to explain what was excluded from the standard e.g. vegetables that are lacto-fermented, pickled or preserved in vinegar. The Committee however agreed to retain the scope unchanged since it was considered sufficiently clear and understandable.

2.1 Product Definition

40. The Committee did not agree with a proposal to refer to “food liquid packing media” in 2.1 (2) as “liquid packing media” was the standard wording used in standards for processed fruits and vegetables.

41. As a consequence of its decision on packing media (see paras 43-48), the Committee agreed to amend Section 2.1(2) to reflect that packing media used should be in accordance with Section 3.1.3 and to define the characteristics of vacuum packaged products.

42. The Committee did not agree with a proposal by the Delegation of Brazil, supported by some other delegations, to amend Section 2.1(3) to reflect that canned vegetables are processed by heat to ensure product safety and stability in addition to preventing spoilage. Many delegations were of the opinion that the current wording was common use for standards for processed fruits and vegetables and was enough to ensure the safety of the product.

Canned Vegetables - packing media

3.1.3 Packing Media

Basic ingredients

43. The Committee confirmed that the basic ingredients for canned vegetables were water, and if necessary, salt.

8 ALINORM 07/30/27, paras 41-42.
44. The Committee agreed to include a number of ingredients including oil and tomato puree in Section 3.1.3(b) Other Permitted Ingredients and to add an introductory paragraph to this section to indicate that these ingredients were subject to the labelling requirements in the standard and were not limited to those listed under this section.

45. It was agreed to delete the last sentence of this section referring to ingredients not altering the flavour characteristic of the product since it was contradictory to the labelling requirements in Section 8.2.5 which made specific provision for the naming of products in cases where ingredients including in Section 3.1.3 (b) might alter the flavour characteristic of the product.

3.2.1 Colour, Flavour and Texture
46. The Committee agreed to indicate in Section 3.2.1.1 that canned vegetables should have a colour, flavour and odour corresponding to both the type of vegetables as well as the packing medium used by inserting a reference to “packing medium” because packing media especially with other permitted ingredients might bring changes to the original characteristics of the vegetable used and was also in line with the labelling provisions in Section 8.2.5.

47. The Committee further agreed to delete the last sentence of Section 3.2.1.1 since tolerances for defects such as fibrous and tough parts were dealt with separately in the annexes.

48. The Delegation of Brazil proposed to include in Section 3.2.1.1 that the sterility test and the pH for low-acid and acidified low-acid canned foods should be indicated as 4.6 or below as defined in the Recommended International Code of Hygienic Practice for Low-Acid and Acidified Low-Acid Canned Foods (CAC/RCP 23/1979) because in their view it was important from a food safety perspective as well as for the identity of the product, which means that a product not meeting this pH requirement could be considered as a defective. The Committee considered that food safety was dealt with in Section 6 Hygiene where reference was made to compliance with all relevant standards and codes including the aforementioned Code and that the scope already provided for clarity as per the products covered by the standard and therefore did not agree to this proposal.

Section 5 Contaminants
49. The Committee agreed to insert the new standard wording on contaminants as agreed to by the Commission (July 2008).

Section 7.1.1 Minimum Fill
50. The Committee had a discussion on whether to indicate in this section the exceptions for the 90% minimum fill in particular for small, flexible and easy-to-open containers. It was however agreed that by referring to good manufacturing practices, which reflected the agreement by the last session of the Committee when discussing similar issues related to minimum fill vis a vis flexible containers in other standards for processed fruits and vegetables, e.g. pickled fruits and vegetables, this was not necessary. It was also felt that inclusion of a list could inadvertently exclude certain containers which also fell into this category.

51. The Committee also discussed whether to delete exceptions for vacuum packaged canned vegetables, but agreed to retain this exception since some of them did not require a minimum fill when vacuum packaged and inclusion of this statement provided clarity.

Sections 7.1.4.2 and 7.2 Lot Acceptance
52. The Committee had an exchange of views on this section in relation to the current work on sampling plans for control of minimum drained weight. The Delegation of France speaking on behalf of the European Community Member States present at the Session, expressed the opinion that the provision for lot acceptance for minimum drained weight should be placed in square brackets until the work on the sampling plans for the control of minimum drained weight was completed or to simply reference this work and to indicate that it was still under development. Some other delegations proposed to retain Section 7.1.4.2 without a reference to sampling plans and to consider amendment of this section in future should the need arise and if a sampling plan for control of minimum drained weight were to be finalized.

53. Some delegations, noted that the subsequent Section 7.2 Lot Acceptance actually set out a sampling plan for minimum drained weight and that the only remaining matter of concern was how to define “unreasonable shortage” which was the main reason for the decision of the Committee to commence work on sampling plans for the control of minimum drained weight and that this section should be taken into account when discussing the matter of the sampling plans under Agenda Item 5.

54. In view of the discussion, the Committee agreed to retain Section 7.1.4.2 unchanged and to delete Section 7.2 with the understanding that in future this section might be reviewed pending the outcome of future discussions on the sampling plans for control of minimum drained weight.
Section 8.2 Name of Product

55. The Committee agreed to delete styles from Section 8.2.2 since labelling provisions for styles were already covered by the General Standard for Labelling of Prepackaged Foods (CODEX STAN 1-1985) as a mandatory requirement, and to amend this section further to indicate that labelling for size was optional by changing “shall” to “may” in line with the aforementioned standard.

56. According to its earlier decision to include provisions for packing media and provisions for vacuum packaging, the Committee agreed to introduce corresponding labelling requirements for the name of the products in Section 8.2.3.

57. The Committee amended Section 8.2.4 Other Styles in line with the recommendation of the Committee on Food Labelling.

Section 9 Methods of Analysis and Sampling

58. The Committee agreed to inform the Committee on Methods of Analysis and Sampling that CAC/RM 45-1972, Determination of Proper Fill in Lieu of Drained Weight should be revoked since this method no longer applied for canned peas and that the current method for fill of containers CAC/RM 46-1972 already covered this product. The Committee also noted that the current methods, CAC/RM 48-1972 and CAC/RM 39-1970 should be retained since no other updated methods currently existed and agreed that the methods to determine alcohol insoluble solids and calcium in canned green peas and the determination of total solids in canned mature processed peas were no longer applicable since no provisions for alcohol insoluble solids, calcium and total solids for these commodities existed in the current standard.

Canned Vegetables - Annexes

Asparagus (Annex I)

Section 1.2 - Styles

59. In Section 1.2.1 (3), the Committee agreed to add “points” as this designation reflected current trading practices for asparagus tips.

60. In Section 1.2.2 (3), the Committee acknowledged that, for green asparagus, current trade practices for allowances of colour different from green in the lower part of the spear varied among countries and regions and made difficult the establishment of a single tolerance value. Therefore, the Committee agreed to set a range of tolerance by which 20 to 50% of the length of the spear could be of a white, cream or yellowish white colour in order to provide for flexibility and inclusiveness in the application of this provision.

Section 1.3 – Sizing (new)

61. The Committee introduced a separate entry to differentiate sizing from styles provisions in line with its previous decision that labelling of sizing as opposed to styles should be optional and applied this decision to all annexes under consideration as appropriate (see paras 50 and 70).

Section 3.1 Minimum Drained Weight

62. The Committee assigned a minimum drained weight of 57% to white unpeeled asparagus.

Section 4 Labelling

Section 4.1

63. The Committee had an exchange of views on the need to retain mandatory labelling provisions for colour, peeling and sizing as they were already covered by the labelling provisions applicable to canned vegetables.

64. The Committee noted that labelling provisions in the draft Standard for Certain Canned Vegetables were additional to those of the General Standard for the Labelling of Pre-packaged Foods which apply mandatory labelling to styles and optional labelling to other grade designations like peeling and sizing.

65. However, the Committee noted that colour was an important quality criterion to ensure fair trade practices for asparagus and retained this provision in the Annex. In addition, certain countries required mandatory labelling declaration for “unpeeled” and “not sized” asparagus that was therefore referred to the legislation of the country of retail sale.

9 ALINORM 07/30/22, para 73.
66. The Committee deleted the reference to mixed sizing as this requirement was already covered by the labelling provisions applicable to canned vegetables and therefore this section was deleted from the Annex (see paras 50 and 70).

**Green Beans and Wax Beans (Annex III)**

67. The Committee agreed to add references to varieties and species for clarity (Section 1.2) and to enter a separate entry for sizing (only for whole styles) in line with its previous decision that labelling of sizing should be optional as opposed to styles (Section 1.3). 

**Green Peas (Annex IV)**

**Section 1.1 Product Definition**

68. The Committee agreed to exclude the subspecies *macrocarpum* from the species suitable for canned peas for consistency with current trade practices. It was noted that this exception already applied to mature processed peas.

**Section 1.2 Styles**

69. The Committee agreed that provisions for different product designations (Section 1.2.1) should be transferred to the labelling section and that the provisions for sizing (Section 1.2.2) should be separated from the styles for consistency with its previous decision on this matter (see paras 50 and 70). The section on styles was therefore deleted from the Annex.

**Section 1.3 Sizing (new)**

70. The Committee had an exchange of views on the way to approach sizing provisions in the annexes as industry or trade practices varied worldwide. It was noted that, likewise to optional labelling declaration for sizing, flexibility should also be provided for the application of other ways and designations of sizing to accommodate these practices. The Committee therefore agreed to insert a footnote to Section 1.3 to allow for other sizing provisions in accordance with the legislation of the country of retail sale. The Committee further agreed that this footnote should consistently apply to all annexes carrying provisions for sizing.

71. The Committee clarified that in this particular table the figures referred to the diameter of the circular sieve openings and not to the size of the peas and agreed that the reference to sweet green peas or garden peas should be deleted as the table was only relevant to those peas subject to screening.

**Hearts of Palms (Annex V)**

72. The Committee agreed to refer to “hearts of palm / palmito” in the title to reflect current trade practices worldwide. The Committee further agreed to align the definition for styles (Section 1.2) with those provided for in CRD 16.

**Mature Processed Peas (Annex VI)**

73. The Committee noted that the term “canned dry peas” might be misleading as the product addressed in this Annex referred to dried mature seeds of green pea varieties which have been soaked, packed in packing medium and have undergone heat treatment to ensure product stability. The Committee further noted that the term “mature processed peas” should be retained in the title as this was the common name most widely applied to this product. However, in order to recognize other customary practices of countries, a footnote was inserted to cover other product designations used in different countries.

**Sweet Corn (Annex VII)**

74. The Committee confirmed that corn conforming to the characteristics of *Zea mays saccharata* L. were those suitable for the preparation of this product.

75. In Section 2.2.2, the Committee had an exchange of views on the opportunity to retain both ways of measuring defect tolerances, i.e. by units or weight, for extraneous plant material (sweet corn and creamed corn) and blemished grains (sweet corn) in order to accommodate different trade practices. Some delegations questioned the correlation between the two methods and whether further testing was needed to determine the equivalence of the two measures. The Committee agreed to delete the reference to percentages by weight and inserted a footnote to indicate that these defects could also be expressed in equivalent percentages of weight.
Baby Corn or Young Corn (Annex VIII)

76. The Committee made consequential amendments to the sizing provisions in line with its previous decision in this regard (see paras 50 and 70). In addition, the Committee agreed to delete the reference to native starch and oil as not applicable to the product defined in the annex.

STATUS OF THE DRAFT CODEX STANDARD FOR CERTAIN CANNED VEGETABLES, PROPOSED DRAFT CODEX GUIDELINES FOR PACKING MEDIA FOR CANNED VEGETABLES AND THE PROPOSED DRAFT ANNEXES SPECIFIC TO CERTAIN CANNED VEGETABLES

77. The Committee agreed to forward the draft Codex Standard for Certain Canned Vegetables (general provisions) to Step 8 for final adoption by the 32nd Session of the Commission (Appendix III); to forward the proposed draft Section 3.1.3 Packing Media of the draft Codex Standard for Certain Canned Vegetables (Appendix IV) and all the proposed draft annexes to this standard for adoption at Step 5/8 with the omission of Steps 6 and 7 (Appendix V) and to inform the Commission that the Codex Guidelines for Packing Media for Canned Vegetables (as an independent guideline) would be discontinued.

PROPOSED DRAFT CODEX SAMPLING PLANS INCLUDING METROLOGICAL PROVISIONS FOR CONTROLLING MINIMUM DRAINED WEIGHT OF CANNED FRUITS AND VEGETABLES IN PACKING MEDIA (Agenda Item 5)10

78. The Delegation of France introduced the document and recalled that in current standards for canned fruits and vegetables there were provisions for minimum drained weight accompanied by criteria for lot acceptance and that the purpose of the sampling plans was to permit the control of the minimum drained weight requirements. The Delegation further explained that the proposed draft was consistent with the criteria as set out in the General Guidelines on Sampling (CAC/GL 50-2004); that it was based on an AQL of 2.5 as recommended by the International Organization of Legal Metrology (OIML); that it introduced a tolerable negative error, which provided for more flexibility while ensuring greater consumer protection than a sampling plan based on an AQL of 6.5.

79. Several delegations questioned the need for the sampling plans pointing out that current existing language in standards was simple and easily understood, that it had worked well to date and that there was no evidence that it had created any problems in international trade and that the AQL 6.5 was widely accepted and understood.

80. A delegation reminded the Committee that during the discussion on the draft Standard for Certain Canned Vegetables (see Agenda Item 4a) it had been noted that Section 7.2 Lot Acceptance actually set out a sampling plan for minimum drained weight and proposed that the procedures in this section could be used for the control of minimum drained weight and that a mechanism to determine “unreasonable shortage” in Section 7.1.4.2 could be taken from the current proposed draft sampling plans and added to this procedure.

Conclusion

81. Following the observations made, the Committee agreed that the two approaches, that of Section 7.2 previously contained in the draft Standard for Certain Canned Vegetables and that in the proposed draft sampling plans, could be used to redraft the Sampling Plans for controlling minimum drained weight of canned fruits and vegetables in packing media.

STATUS OF THE PROPOSED DRAFT CODEX SAMPLING PLANS INCLUDING METROLOGICAL PROVISIONS FOR CONTROLLING MINIMUM DRAINED WEIGHT OF CANNED FRUITS AND VEGETABLES IN PACKING MEDIA

82. The Committee agreed to return the proposed draft to Step 2 for redrafting by an electronic working group11, open to all members and observers and working in English only, that would take into account all comments submitted and made at this Session, for circulation for comments and consideration by the next session of the Committee. It was noted that in future, if deemed necessary, guidance and advice could be sought from the Committee on Methods of Analysis and Sampling.

10 CX/PFV 08/24/7; comments from Brazil, Costa Rica and OEITFL (CX/PFV 08/24/7-Add.1); Argentina (CRD 4); the United States of America (CRD 5); Ecuador (CRD 6) and Thailand (CRD 13).

11 France with assistance of Australia, Brazil, Canada, Dominican Republic, Malaysia, Thailand, the United Kingdom and the United States of America.
METHODS OF ANALYSIS AND SAMPLING FOR PROCESSED FRUITS AND VEGETABLES – Codex Standard for Aqueous Coconut Products: Coconut cream and coconut milk (CODEX STAN 240-2003) (Agenda Item 6)\textsuperscript{12}

83. The Committee recalled that when the above-mentioned Standard was finalized (21\textsuperscript{st} CCPFV, 2002) several methods of analysis were forwarded to the Committee on Methods of Analysis and Sampling for endorsement. The CCMAS did not endorse the methods for moisture, non-fat solids, total fat and total solids as the methods applied to milk and requested the Committee to provide clarification on whether these methods could also be applied to coconut cream and coconut milk. The standard was adopted by the 26\textsuperscript{th} Session of the Commission (2003) without these methods. Both the 22\textsuperscript{nd} and the 23\textsuperscript{rd} sessions of the Committee agreed to request further comments on these methods based on the request from CCMAS.

CONCLUSION

84. The Committee agreed to forward methods of analysis specific for the determination of moisture, non-fat solids, total fat and total solids in coconut cream and coconut milk as proposed by Thailand and Brazil to the 30\textsuperscript{th} Session of the Committee for Methods of Analysis and Sampling (March 2009) for endorsement and inclusion in the Standard for Aqueous Coconut Products (Appendix VI).

FOOD ADDITIVE PROVISIONS FOR PROCESSED FRUITS AND VEGETABLES (Agenda Item 7)\textsuperscript{13}

85. The Working Group on Food Additives, in considering the food additive provisions of the draft Standards for Jams, Jellies and Marmalades and Certain Canned Vegetables had noted that the revised Format for Codex Commodity Standards in the Codex Procedural Manual recommended that the section of food additives should make reference to relevant food additive functional classes and a food category of the General Standard for Food Additives (GSFA) (CODEX/STAN 192-1995) and that exceptions from, or addition to such general reference should be fully justified. However, taking into account the transitional nature of the General Standard for Food Additives, the Working Group agreed to compare the food additive provisions proposed in the draft standards with those adopted or proposed for the corresponding food categories of the GSFA as presented in the conference room documents prepared by the United States of America and to consider the alignment of provisions as much as possible.

86. The Committee considered the food additive provisions based on the recommendations of the Working Group on Food Additives as follows:

Jams, Jellies and Marmalades

87. The Committee agreed with Recommendation 1 of the Working Group to include provisions for flavourings, which were allowed in the existing Standard for Jams (Fruit Preserves) and Jellies (CODEX STAN 79-1981).

88. The Committee agreed with Recommendation 2 of the Working Group to include a general reference to the food additives listed in Table 3 of the GSFA.

89. In this regard, the Delegation of the European Community expressed their reservation on this decision, because, in their view, some of the food additives in Table 3 had no technological justification for the products in question and commodity committees should provide technological justification for all individual food additives used in commodity standards. The Delegation further expressed their concern, in particular, on the inclusion of a number of thickeners listed in Table 3 of the GSFA because according to their knowledge many of them were not used in jam making and in general, thickeners other than pectin were not necessary if jam was made with the fruit and soluble solids contents as provided in the standard. The Delegation further underlined that many food additives in Table 3 were intended to be used in the preparation of low sugar products which were outside the scope of the standard.

90. The Committee further agreed to include the list of food additives and their use levels as presented under Recommendation 3, for food additives not covered by the above general reference to Table 3 of the GSFA and noted the following comments and reservations as indicated in the paragraphs below.

91. The Delegation of Egypt, supported by the Delegation of the European Community, expressed their reservation on the inclusion of the colours allura red (INS 129) and brilliant blue FCF (INS 133), because these colours were not allowed for use in their national legislation.

\textsuperscript{12} ALINORM 07/30/27-Appendix VII; comments from the United States of America (CX/PFV 08/24/8); Brazil (CX/PFV 08/24/8-Add.1); Argentina (CRD 4); the United States of America (CRD 5); Ecuador (CRD 6) and Thailand (CRD 13).

\textsuperscript{13} ALINORM 07/30/27-Appendix XIII; comments from the European Community and the United States of America (CX/PFV 08/24/9); European Community (CX/PFV 08/24/3 and CX/PFV 08/24/4); India (CRD 7); Cuba (CRD 10); Philippines (CRD 12); Working documents for the Working Group on Food Additives (CRD 14 - Certain Canned Vegetables and CRD 15 - Jams, Jellies and Marmalades); Report of the Working Group on Food Additives (CRD 18 - Jams, Jellies and Marmalades and CRD 20 - Certain Canned Vegetables).
92. The Delegation of the European Community expressed their reservation to the decision on colours as well as to the inclusion of sorbates (INS 200-203) and benzoates (INS 210-213) because, in their view, these preservatives were necessary only for jams and jellies with a lower sugar content than those covered by this standard. The Delegation of Egypt also expressed its reservation on the use of preservatives.

**Certain Canned Vegetables**

93. The Committee agreed with Recommendation 1 of the Working Group to include in the section of food additives of the general provisions of the standard a general reference to the food additives listed in Table 3 of the GSFA.

94. The Committee further agreed to include the list of food additives and their use levels as presented under Recommendation 2, for food additives not covered by the above general reference to Table 3. The Delegation of the European Community expressed their reservation on the inclusion of colours for canned vegetables other than canned mature processed peas, because the use of colours were allowed only for canned mature processed peas in the European Community and they did not believe that colours were necessary for other canned vegetables.

95. The Committee agreed with Recommendation 4 of the Working Group to allow modified starches for use in accordance with good manufacturing practice for canned creamed corn and to list them under the food additive section of the Annex on Sweet Corn.

**Other Considerations**

**Amendment to Class Names and the International Numbering System for Food Additives**

96. The Committee agreed with Recommendation 4 (CRD 18) and Recommendation 3 (CRD 20) of the Working Group to request the Committee on Food Additives to associate new functional classes with the food additives below in the Class Names and International Numbering System for Food Additives (CAC/GL 36-1986), as follows:

- ascorbic acid (INS 300): preservative (proposed for Jams, Jellies and Marmalades) and acidity regulator (for Certain Canned Vegetables);
- mono- and diglycerides (INS 471): antifoaming agent (proposed for Jams, Jellies and Marmalades).

**Additional Food Additive Provisions for the adopted Standards**

97. The Committee recalled that at its last session it could not reach a decision on certain food additives for inclusion in the Standards for Pickled Fruits and Vegetables (CODEX STAN 260-2007), Processed Tomato Concentrates (CODEX STAN 57-1981), Preserved Tomatoes (CODEX STAN 57-1981) and Certain Canned Citrus Fruits (CODEX STAN 254-2007) and had appended them to its report for comments on the technological justification and proposed levels, for further consideration by the current session. The Committee noted that the Working Group on Food Additives had considered only food additive provisions for the draft Standards for Jams, Jellies and Marmalades and Certain Canned Vegetables and had not addressed the additional food additives for the aforementioned standards that had been finalized at its last session.

98. Due to time constraints, the Committee agreed not to consider the inclusion of these remaining food additives at this session and to append them for further comments and consideration at its next session (Appendix VII).

**PROPOSED LAYOUT FOR CODEX STANDARDS FOR PROCESSED FRUITS AND VEGETABLES (Agenda Item 8)**

99. The Committee had a general discussion on the proposed layout and the approach to be taken in its further development.

100. Some delegations expressed the opinion that the layout was too oriented towards canned fruits and vegetables and was not necessarily applicable to other processed fruits and vegetables. In view of this, these delegations questioned whether the layout should be amended to cover all processed fruits and vegetables or whether separate layouts should be developed for specific commodities other than canned fruits and vegetables.

101. A delegation pointed out that standards currently being developed were sometimes too prescriptive and not reflective of trade practices and expressed the view that a layout could provide guidance in this regard. This delegation proposed that the Codex Secretariat draft several different layouts in addition to the current one for amongst others, dried and dry produce and quick frozen fruits and vegetables, based on the layouts of other international organizations for further discussion at the next Session.

---

14 ALINORM 07/30/24, para 171.
15 CX/PFV 08/24/10; comments from Brazil and India (CX/PFV 08/24/10-Add.1) and Thailand (CRD 13).
102. Some other delegations and an observer, however, questioned whether the current proposed layout and a layout covering all other processed fruits and vegetables were truly necessary before the Committee had a clear view of its future work programme and since the Procedural Manual clearly stipulated the format for commodity standards. It was therefore proposed to discontinue work on the layout but to retain the work done as a possible reference for use by the Committee.

CONCLUSION

103. In view of the above discussion, the Committee therefore agreed to discontinue work on the proposed Layout.

PROPOSALS FOR AMENDMENTS TO THE PRIORITY LIST FOR THE STANDARDIZATION OF PROCESSED FRUITS AND VEGETABLES (Agenda Item 9)\textsuperscript{16}

104. The Committee considered the report of the Working Group on Priorities and focused on the main points and recommendations made by the Working Group as follows:

1. Additional specific criteria for priority setting;
2. Priorities for the revision and revocation of existing standards, in particular the development of standards for new commodities not yet covered by the existing standards provided that there is a strong and demonstrated need for such standards in view of facilitation of international trade and consumer protection as well as the identification and revision of those sections of existing standards which create problems for international trade while avoiding revision of entire standards for the sake of consolidation; and
3. Interval and duration of plenary sessions of the Committee.

GENERAL CONSIDERATIONS

105. The Committee had a general discussion on the approach that should be taken in respect of its work programme and agreed that the interval and duration of meetings would be dependent on the agreement on the work to be undertaken in future (see paras 112-113).

106. It was recalled that the Committee resumed its work in 1998 with the specific aim to revise existing standards for processed fruits and vegetables (e.g. canned fruits and vegetables; quick frozen fruits and vegetables; dry and dried produce, codes of hygienic practice, etc.) and in this revision to aim for simpler horizontal standards, where possible, which would make their acceptance by national governments easier. It was further recalled that following the completion of a number of standards for canned fruits and vegetables and following the decision of the Committee to advance the draft Standard for Certain Canned Vegetables and the draft Standard for Jams, Jellies and Marmalades to Step 8 for final adoption, there still remained the consideration of the possible revision of a number of other canned fruits (e.g. fruit cocktail, tropical fruit salad, strawberries, raspberries, etc.); dry and dried produce; and quick frozen fruits and vegetables as well as the remaining codes of hygienic practice.

107. The Delegation of the United States of America expressed the opinion that development of horizontal standards by combining various commodities that shared common provisions did not necessarily lead to simpler standards and that the process could be time-consuming and cautioned the Committee to carefully consider this approach. This delegation, supported by the Observer from the ICGMA, further suggested that the mandate of the Committee should be revisited in light of the difficulties faced in revising the existing standards \textit{vis a vis} the development of more horizontal ones, new Codex procedures and limited Codex resources.

108. The Delegation of Brazil and the Observer from the IOC drew the attention of the Committee to two proposals that had been submitted to the Committee for consideration for the revision of the \textit{Standard for Table Olives} (CODEX STAN 66-1981) and the partial revision of the \textit{Standard for Grated Desiccated Coconut} (CODEX STAN 177-1991) and recalled that these items had been on the priority list for a considerable period of time. Furthermore, it was noted by the Committee that consideration should be given to the inclusion of canned bamboo shoots (CODEX STAN 241-2003) and canned mushrooms (CODEX STAN 55-1991) as annexes to the draft Standard for Certain Canned Vegetables (see Agenda Item 4a).

SPECIFIC CONSIDERATIONS

109. The Committee therefore agreed to proceed as follows:

\textsuperscript{16} ALINORM 07/30/27-Appendix XI, comments from Brazil, the European Community, the United States of America and IOC (CX/PFV 08/24/11); Report of the Working Group on Priorities (CRD17) and IOC (CRD 19).
• To propose as new work to the 32\textsuperscript{nd} Session of the Commission inclusion of annexes for bamboo shoots and mushrooms; revision of the \textit{Standard for Table Olives} and the \textit{Standard for Grated Desiccated Coconut}; noting that project documents should be submitted through the Codex Secretariat to the Executive Committee in line with the format for project documents as set out in the Procedural Manual\textsuperscript{17} and that project documents should provide sufficiently detailed and relevant information also taking into account the \textit{Guidelines on the Application of the Criteria for the Establishment of Work Priorities Applicable to Commodities} agreed by the 60\textsuperscript{th} Session of the Executive Committee\textsuperscript{18}.

• To establish the following electronic working groups open to all members and observers and working in English only which would develop proposed draft texts for circulation for comments and consideration by the next session of the Committee:
  
  - Bamboo shoots and mushrooms for inclusion as annexes to the draft Standard for Certain Canned Vegetables led by France\textsuperscript{19};
  - Table olives led by the European Community\textsuperscript{20};
  - Grated Desiccated Coconut led by Brazil\textsuperscript{21}.

• To establish an electronic working group lead by the United States of America\textsuperscript{22}, open to all members and observers working in English only to consider all the remaining standards for canned fruits and those standards for quick frozen fruits and vegetables and to establish whether these standards were still relevant and necessary, and if so, whether they needed to be revised totally, partially or at all and to examine the feasibility to group the remaining canned fruits and quick frozen fruits and vegetables into more horizontal standards similar to the approach taken with the draft Standard for Certain Canned Vegetables and to make recommendations in this regard for consideration by the next session of the Committee.

110. The Committee acknowledged that there might be a possibility for these working groups to meet physically prior to the next session of the Committee to facilitate discussion and decision-making in plenary.

111. In light of the decision above, the Committee amended the priority list by deleting canned mushrooms, table olives and grated desiccated coconut and appended it to this Report for comments for revising the existing standards for processed fruits and vegetables and continued consideration at future sessions (Appendix VIII).

\textbf{Other considerations}

112. The Committee endorsed the recommendation of the Working Group not to develop any additional specific criteria for the setting of work priorities recognizing that the \textit{Criteria for the Establishment of Work Priorities} of the Procedural Manual were sufficient for setting priorities for the future work of the Committee.

113. The Committee further agreed, taking into consideration its proposals for new work, to retain the current interval of meetings (every 24 months) and to limit the duration of the plenary session to 5 days with the possibility of working groups meeting prior to the plenary.

\textbf{OTHER BUSINESS (Agenda Item 10)}

114. The Committee noted that there were no other matters to discuss under this agenda item.

\textbf{DATE AND PLACE OF THE NEXT SESSION (Agenda Item 11)}

115. The Committee was informed that the 25\textsuperscript{th} Session of the Codex Committee on Processed Fruits and Vegetables was tentatively scheduled to be held in the United States of America in 2010. The exact date and venue would be decided between the United States and the Codex Secretariats.

\textsuperscript{17} Section 1 – Procedures for the Elaboration of Codex Standards and Related Texts: Part 2 – Critical Review.
\textsuperscript{18} ALINORM 08/31/3-Appendix II.
\textsuperscript{19} Brazil, Canada, the European Community, Japan, Indonesia, Kenya, Malaysia, South Africa, Thailand, the United Kingdom and the United States of America.
\textsuperscript{20} Australia, Brazil, Costa Rica, France, Greece, Italy, Spain, the United Kingdom, the United States of America and IOC.
\textsuperscript{21} Côte d’Ivoire, Fiji, Indonesia, Kenya, Malaysia, Philippines, Samoa, Thailand and the United States of America.
\textsuperscript{22} With assistance from Australia, Canada, Côte d’Ivoire, Ecuador, the European Community, France, Fiji, Indonesia, Italy, Japan, Malaysia, Thailand, ICGMA and IIR.
### STATUS OF WORK

<table>
<thead>
<tr>
<th>SUBJECT</th>
<th>STEP</th>
<th>FOR ACTION BY:</th>
<th>DOCUMENT REFERENCE</th>
</tr>
</thead>
<tbody>
<tr>
<td>Draft Codex Standard for Jams, Jellies and Marmalades</td>
<td>8</td>
<td></td>
<td>para 34 and Appendix II</td>
</tr>
<tr>
<td>Draft Codex Standard for Certain Canned Vegetables (General Provisions)</td>
<td>8</td>
<td></td>
<td>para 77 and Appendix III</td>
</tr>
<tr>
<td>Proposed draft provisions for packing media for certain canned vegetables: Section 3.1.3 (draft Codex Standard for Certain Canned Vegetables)</td>
<td>5/8</td>
<td>32nd CAC</td>
<td>para 77 and Appendix IV</td>
</tr>
<tr>
<td>Proposed draft Annexes specific to certain canned vegetables (draft Codex Standard for Certain Canned Vegetables)</td>
<td>5/8</td>
<td></td>
<td>para 77 and Appendix V</td>
</tr>
<tr>
<td>Proposed draft Codex Guidelines for Packing Media for Canned Vegetables</td>
<td>discontinued</td>
<td></td>
<td>para 77</td>
</tr>
<tr>
<td>Methods of Analysis for Processed Fruits and Vegetables - Aqueous Coconut Products: Coconut Cream and Coconut Milk (CODEX STAN 240-2003)</td>
<td>-----</td>
<td>30th CCMAS 32nd CAC</td>
<td>para 84 and Appendix VI</td>
</tr>
<tr>
<td>Food Additive provisions for processed fruits and vegetables</td>
<td>-----</td>
<td>25th CCPFV</td>
<td>para 98 and Appendix VII</td>
</tr>
<tr>
<td>Proposed Layout for Codex Standards for Processed Fruits and Vegetables</td>
<td>discontinued</td>
<td>-----</td>
<td>para 103</td>
</tr>
<tr>
<td>Proposals for Amendments to the Priority List for the Standardization of Processed Fruits and Vegetables</td>
<td>-----</td>
<td>25th CCPFV</td>
<td>para 111 and Appendix VIII</td>
</tr>
</tbody>
</table>
LIST OF PARTICIPANTS
LISTE DES PARTICIPANTS
LISTA DE PARTICIPANTES

Chairperson - Président – Presidente

Mr. Terry BANE
Branch Chief, Processed Products Branch
Fruit and Vegetable Programs
Agricultural Marketing Service
U.S. Department of Agriculture
Room 0709, South Building
1400 Independence Avenue, SW
Washington, DC 10150-0247
United States
Phone: 202-720-4693
Fax: 202-690-1087
Email: Terry.Bane@usda.gov

ALBANIA

Mr. Kasa ELJAN
Food Expert
Ministry of Agriculture
Food Consumer Protection
Tirana 355
Square “Skenderbej”, NR.2
Albania
Phone: +355 4 226 551 ext 163
Fax: +355 225872
Email: Kasaelian@hotmail.com & elian.kasa@mbu.gov.al

ANGOLA

Dra. Maria Antonia SANAZENGE
Luanda – Angola, Rua amilcar cabral atras do
Hospital Josina Machel
Instituto Nacional de Saúde Pública – Ministério da Saúde
Luanda
Angola
Phone: 00244 923653695
Fax:
Email: sanazenge@hotmail.com

Dra. Esmeralda MATUES JÚNIOR
Laboratory Technician
Angola Government
Luanda- Instituto Nacional de Saúde Pública
Angola- Ministerio da Saúde
Phone: 222323724, 00244917850637
Fax: 222323724
Email: Secretariado_Codex@yahoo.com

Dr. Moisés FRANCISCO
National Institute of Public Health
Luanda
Angola
Phone: 244923353218
Email: moisesfrancisco@hotmail.com

AUSTRIA –AUTRICHE

Dr. Peter WIEDNER
Ministry of Health, Family and Youth
LUA Kaernten
Lastenstrasse 40
Klagenfurt A-9020
Austria
Phone: +43 463 3213012
Fax: +43 463 34174
Email: peter.wiedner@ktn.gv.at

AUSTRALIA –AUSTRALIE

Mr. Richard SOUNESS
General Manager, Food & Product Safety & Integrity
Department of Agriculture, Fisheries and Forestry
GPO Box 858
Canberra ACT-2601
Australia
Phone: +61 2 6272 4899
Fax: +61 2 6272 5697
Email: richard.souness@daff.gov.au

BRAZIL – BRÉSIL-BRASIL

Ms. Shirley Aparecida Garcia BERBARI
Scientific Researcher
Institute of Food Technology
Campinas
2880 Av. Jardim Chapadão
São Paulo, Brazil
Phone: 55 1937431848
Fax: 55 1932423104
Email: sberbari@ital.sp.gov.br
Mr. André BISPO OLIVEIRA  
Processed Fruits & Vegetable Coordinator  
DIPOV/SDA/MAPA  
Ministry of Agriculture, Livestock & Food Supply  
Esplanada dos Ministérios, Bloco D Anexo B sala 342  
Brazil Cep 70043-900  
Phone: +55 61 3218 2627  
Fax: +55 61 3224 4322  
Email: qualidadevegetal@agricultura.gov.br

Ms. Claudia DARBELLY CAVALIERI DE MORAES  
Assistant – General Office of Food  
Brazilian Sanitary Surveillance Agency – ANVISA  
SEPN 511, BL.A, Ed. Bittar II  
Asa Norte  
Brasilia 70.750-541  
Phone: 61 3448 6352  
Fax: 61 3448 6274  
Email: alimentos@anvisa.gov.br

Mr. Gustavo TAYAR PERES  
Specialist in Health Surveillance Agency  
Brazilian Sanitary Surveillance Agency  
SEPN 511, BL.A Ed.Bittar II  
Asa Norte  
Brasilia 70.750-541  
Phone: 61 3448 6352  
Fax: 61 3448 6274  
Email: alimentos@anvisa.gov.br

Mr. Emerson KLOSS  
First Secretary  
Embassy of Brazil  
1025 Thomas Jefferson St.  
Washington, DC 20007  
Phone: (202) 238-2758  
Fax: (202) 238-2827  
Email: ekloss@brasilemb.org

Mr. Ngatoko TA NGATOKO  
Quarantine Adviser/National Codex Contact Point  
Ministry of Agriculture  
Government of the Cook Islands  
P.O. Box 96  
Rarotonga  
Cooks Islands  
Phone: +682 28711  
Fax: +682 21881  
Email: ngatoko@agriculture.gov.ck

Ms. Laura DACHNER  
Deputy Chief of Mission  
Minister Counselor for Trade  
Embassy of Costa Rica  
2114 S Street, NW  
Washington, DC 20008  
Phone: 202-238-2282  
Fax: 202-265-4795  
Email: ldachner@costarica-embassy.org

Mr. Kevin SMITH  
National Manager  
Processed Products  
Agrifood Division  
Canadian Food Inspection Agency  
159 Cleopatra Drive  
Ottawa, Ontario  
KIA OY9  
Canada  
Phone: 613-221-7207  
Fax: 613-221-7294  
Email: Smithk@inspection.gc.ca

Mr. Jim TRENHOLM  
National Manager  
Food Safety and Assessment  
Agrifood Division  
Canadian Food Inspection Agency  
159 Cleopatra Drive  
Ottawa, Ontario  KIA OY9  
Canada  
Phone: 613-221-7151  
Fax: 613-221-7294  
Email: trenholmj@inspection.gc.ca

Mr. Gerardo Luis CASTRO RODRIGUEZ  
Laboratorista Quimico  
Derivados de Maiz Alimenticio S.A.  
Calle uno, Guapiles, Pococi  
Limón  
7299-1000 San José  
Costa Rica  
Phone: (506) 2710-0369  
Fax: (506) 2710-0249  
Email: fcastror@yahoo.com

Mr. Emile NTAHONDI  
Chef de Cabinet au Ministère de l’ Agriculture et de l’Elevage  
B.P. 1850 Bujumbura/Burundi  
Phone: +257 7991-0931  
Fax: +257 22222873  
Email: entahondi@hotmail.com

Mr. Emile NTAHONDI  
Chef de Cabinet au Ministère de l’ Agriculture et de l’Elevage  
B.P. 1850 Bujumbura/Burundi  
Phone: +257 7991-0931  
Fax: +257 22222873  
Email: entahondi@hotmail.com
**CHAD-TCHAD**

Mr. Abderrahim Zakaria ABDOULAYE  
Directeur Adjoint de la Direction de la Protection des Végétaux et du Conditionnement (DPVC)  
NDjaména, le  
DPVC B.P. 1551  
Phone: (235) 52 45 09  
Cell: (235) 629 16 02  
Email: zakaria.towdy@yahoo.fr

**CÔTE D’IVOIRE**

Mr. Souleymane BAKAYOKO  
Conseiller Technique  
Ministère du Commerce  
Plateau (Immeuble Ccia)  
Abidjan  
BPV 142 ABIDJAN  
Côte d’Ivoire  
Phone: (225) 20 21 63 41/07 59 53 53  
Fax: (225) 20 21 29 89  
Email: bsouley@hotmail.com

Mr. Georges Yapi KOUASSI  
Chargé d’ Etudes  
Ministère du Commerce  
Plateau (Immeuble Ccia)  
Abidjan  
BPV 142 ABIDJAN  
Côte d’Ivoire  
Phone: (225) 20 21 63 41/0765 31 33  
Fax: (225) 20 21 29 89  
Email: georgesyapi@yahoo.fr

Dr. Narcisse EHOUSSOU  
Président du comité national du Codex Alimentarius  
Abidjan 225  
Côte d’Ivoire  
Phone: 21353349/01015596  
Fax: 21353350  
Email: narcehoussou@yahoo.fr

Mr. Apia NDRI  
Directeur des Productions Végétales et de la Diversification, Ministere de l’Agriculture; Point focal du Codex  
BPV 82  
Abidjan 225  
Côte d’Ivoire  
Phone: 20 22 24 81  
Email: ndriapia@yahoo.fr

**DOMINICAN REPUBLIC**  
**RÉPUBLIQUE DOMINICANA-REPÚBLICA DOMINICANA**

Mr. Leandro MERCEDES  
Sub-secretario De Extension  
Secretaría de Estado de Agricultura  
Km. 6 ½, Autopista Duarte  
Jardines del Norte  
Santo Domingo  
Dominican Republic  
Phone: 809-910-0784/809-547-3888 ext. 4004  
Email: lemer33@hotmail.com

Mr. Pedro Pablo PENA  
Sub-secretario de Planificacion  
Secretaría de Estado de Agricultura  
Km 6 ½, Autopista Duarte  
Jardines del Norte  
Santo Domingo  
Dominican Republic  
Phone: (809) 547-3888, ext. 3001  
Email: sub_planificacion@agricultura.gov.do, pedroppena@hotmail.com

**ECUADOR-ÉQUATEUR**

Mr. Ramiro Edison RUANO GUERRON  
Director De Ingeniería Económica Industrial  
Ministerio De Industrias Y Competitividad  
Av. Eloy Alfaro Y Amazonas (Esq.), 3er. Piso Edif. Magap  
Quito 194-A  
Ecuador  
Phone: (593) 2 254 6690  
Fax: (593) 2 256 2258  
Email: rruano@mic.gov.ec

Mr. Jaime Enrique CAMPAÑA RAMOS  
Director Tecnico Fincavic S.A.  
Cámara De La Pequeña Industria De Pichincha  
Av. Amazonas Y Atahualpa, La Carolina Pb  
Quito  
Equador  
Phone: (593) - 2-2443388  
Fax: (593) - 2 – 2443388  
Email: jcampana@fincavic.com, mcampaña@fincavic.com

**EGYPT-ÉGYPTE-EGYOPTO**

Mr. Salah Hussein ABO-RAYA  
Professor of Food Industries  
Cairo University, Faculty of Agriculture  
Gamaa Street  
Giza, Egypt  
Phone: (202) 33375003  
Mobile: (202) 012 3199931  
Email: aborayaaoad@yahoo.com
Dr. Ismail HUSSEIN  
Agricultural Minister Plenipotentiary  
Embassy of Egypt  
Washington, DC  
Phone: (202) 966 2080

Mr. Yasser Mansour KHALEL  
Secretariat of Fruits and Vegetables Sector  
Chamber of Food Industries  
1195 Kronshe El Nile  
Cairo  
Egypt  
Phone: 202 25748627  
Fax: 202 25748312  
Email: info@egycfi.org.eg

Mr. Sobby Maiz GERGES  
Executive Manager  
Agwaa Company of Food Industries  
El-Ain El-Sokhna, El-Adabia  
Swiss Canal  
Egypt  
Phone: +062 3230425  
Fax: +062 3230409

ETHIOPIA-ÉTHIOPIE-ETIOPÍA

Ms. Genet GEBREMEDHIN  
Director, Testing Laboratories  
Quality and Standards Authority of Ethiopia  
P.O. Box 2310 Bole subcity, Kebele 12/13  
Addis Ababa, 2310  
Ethiopia  
Phone: +251 (0) 116460683  
Fax: +251 (0) 116460880 (81)  
Email: genet@qsae.org

EUROPEAN COMMUNITY(MEMBER ORGANIZATION)  
COMMUNAUTÉ EUROPÉENNE (ORGANISATION MEMBRE)  
COMUNIDAD EUROPEA (ORGANIZACIÓN MIEMBRO)

Mr. Jerome LEPEINTRE  
Acting Head of Unit  
European Commission  
Directorate General for Health and Consumers  
Rue 101 Froissart  
Brussels 1049  
Belgium  
Phone: +32 2 299 37 01  
Fax: +32 2 299 85 66  
Email: Jerome.Lepeintre@ec.europa.eu

Ms. Stella-Maria XIRAKI  
Assistant  
European Commission  
Loi 130, 7/58  
Brussels 1049  
Belgium  
Phone: +32 2 298 13 80  
Fax: +32 2 295 37 09  
Email: Stella-Maria.xiraki@ec.europa.eu

Ms. Sandrine VALENTIN  
Administrator  
European Commission  
DG Agriculture and rural development  
Rue de la loi, 130, 7/58  
Brussels 1049  
Belgium  
Phone: 00 32 2 29 66875  
Fax: 00 32 (0) 2 29 53310  
Email: Sandrine.valentin@ec.europa.eu

Mr. Risto HOLMA  
Administrator  
European Commission  
Directorate General for Health and Consumers  
Rue Froissart 101  
Brussels 1049  
Belgium  
Phone: +32 2 299 86 83  
Fax: +32 2 299 85 66  
Email: Risto.Holma@ec.europa.eu

FIJI-FIDJI

Mr. Miliakere NAWAIKULA  
Ministry of Agriculture/Research Division  
Principal Research Officer  
Koronivia Research Station  
P.O. Box 77  
Nausori  
FIJI  
Phone: (679) 3477044  
Fax: (679) 3400262  
Email: miliakere.nawaikula@govnet.gov.fj

FRANCE-FRANCIA

Ms. Claudine MUCKENSTURM  
Sous direction des produits agricoles et alimentaires  
Direction générale de la concurrence,  
de la consommation et de la répression des fraudes  
59 boulevard Vincent Auriol – teledoc 251  
PARIS CEDEX 13  
75703 France  
Phone: +33 01 44 97 24 37  
Fax: +33 01 44 97 05 27  
Email: claudine.muckensturm@dgccrf.finances.gouv.fr
Ms. Myriam EMERIT  
Head of Fruit and Vegetable Unit  
FIAC  
44 rue d’ Alésia  
75682 Paris cedex 14  
Paris  
France  
Phone: +33 1 53 91 44 59  
Fax: +33 1 53 91 44 70  
Email: memerit@adepale.org

Ms. Raluca IVANESCU  
Administrator  
Council Secretariat of the European Union  
Office 40 GH 30  
Justus Lipsius  
175 rue de la Loi  
Brussels 1048  
Belgium  
Phone : +32 2 281 3158  
Fax : +32 2 281 9425  
Email : raluca.ivanescu@consilium.europa.eu

Mr. Tornike MGALOBILISHVILI  
Head of Department Cooperation with International Organizations and Projects Management  
Ministry of Agriculture of Georgia  
6 Marshal Gelovani Ave  
Tbilisi 0159  
Phone: +995 32 37 80 05  
Fax: +995 32 37 80 06  
Email: tornikemg@yahoo.com

Ms. Aikaterini PETRAKI  
Officer  
Hellenic Food Authority  
124 Kifissias Av. & Iatridou 2  
Athens 115 26  
Greece  
Phone: +30 210 6971566  
Fax: +30 210 6971650  
Email: kpetraki@efet.gr

Ms. Cisse Minte HADJA  
Directrice Generale  
Institut Guineen de Normalisation et de Métrologie Ministere du Developpement Industriel, des PME et de l’Artisanat (MDPMEA)  
Conakry - BP 1639  
REP DE GUINEE  
Phone: 22460299539  
Fax: 22430413990  
Email: minotecisse@yahoo.fr

Mr. Amadou CAMARA  
Chef Division  
Ministere Agriculture  
Direction Nationale Agriculture  
Guineé  
Conakry - BP 576  
Guineé – Conakry  
Phone: 22460331639  
Email: acamara53@yahoo.fr

Ms. Olvy ANDRIANITA  
Assistant to the Commercial Attache  
Embassy of the Republic of Indonesia  
2020 Massachusetts Avenue, N.W.  
Washington, DC 20036  
Phone: (202) 775-5353  
Fax: (202) 775-5354  
Email: olvy.andrianita@embassyofindonesia.org; olvyandrianita@yahoo.com

Mr. Harry TIRTAKUSUMAH  
International Trade Specialist  
Embassy of the Republic of Indonesia  
2020 Massachusetts Avenue, N.W.  
Washington, DC  
Phone: (202) 775-5353  
Fax: (202) 775-5354  
Email: kusumah@embassyofindonesia.org

A.R. Aji Nasution  
Third Secretary Economic Division  
2020 Massachussetts Ave. N.W.,  
Washington, D.C. 20036  
Phone: (202) 775-5200  
Fax: (202) 774-5241  
Email: ajinasution@embassyofindonesia.org

Mr. Ciro IMPAGNATIELLO  
Ministero delle Politiche Agricole Alimentarie e Forestali  
Via XX Settembre 20  
I- 00187 Roma  
Italy  
Phone: +39 06 46656046  
Fax: +39 06 4880273  
Email: c.impagnatiello@politicheagricole.gov.it

Ms. Brunella LOTURCO  
Ministero delle Politiche Agricole Alimentarie e Forestali  
Via XX Settembre 20  
I-00187 Roma  
Italy  
Phone: +390646656061  
Fax: +39064880273  
Email: b.loturco@politicheagricole.gov.it
ALINORM 09/32/27
List of Participants

JAPAN-JAPON-JAPÓN

Mr. Sano FUMIAKI
Chief of Section, International Affairs of Fruit and Vegetables
Ministry of Agriculture
Forestry and Fisheries
1-2-1 Kasumigaseki
Chiyoda-ku
Tokyo 100-8950
Phone: 81 3 3502 5958
Fax: 81 3 3502 0899
Email: fumiaki_sano@nm.maff.go.jp

KENYA

Ms. Alice Akoth Okelo ONYANGO
Head of Delegation
Manager-National Codex Committee Secretary
Codex Office
Kenya Bureau of Standards
P.O. Box 54974 00200 G.P.O.
Kapiti Road off Mombasa Road
Nairobi
Kenya
Phone : 254-02-605490/6948303
Email : info@kebs.org/akothe@kebs.org

MALAYSIA-MALALIESIE-MALASIA

Ms. Hasimah HAFIZ AHMAD
Deputy Director
Malaysian Agricultural Research & Development Institute (MARDI)
Food Technology Research Centre
G.P.O. Box 12301
50774 Kuala Lumpur
Malaysia
Phone: +603 89437502
Fax: +603 89422906
Email: hasimah@mardi.gov.my

NETHERLANDS-PAYS-BAS-PAÍSES BAJOS

Ms. Caroline FEITEL-BERENSCHT
Agricultural Trade Officer
Office of the Agricultural Counsellor
4200 Linnean Avenue, NW
Washington, DC 20008
Phone: 202-274-2716
Fax: 202-244-3325
Email: was-Inv@minbuza.nl

NIGER-NÍGER

Ms. Hassane AISSATOU CISSE
Responsable de la Cellule Nutrition/Alimentation
Ministère du Développement Agricole
Direction Generale de l’ Agriculture Miamey
Niger
BP 323
Phone : 00227 96 96 94 23
Fax : 00227 20 722775
Email: bureima_moussa@yahoo.fr

NIGERIA-NÍGERÍA

Mr. S.T. LAIYE
Leader of Nigerian Delegation
Director, Food & Drug Services Department
Federal Ministry of Health
Abuja
Federal Secretariat Complex, Phase III
Ahmadu Bello Way
P.M.B 083, Garki
F.C.T Abuja
Phone : +234 8055121318
Ms. Margaret EFIONG ESHIETT  
Deputy Director  
Standards Organisation of Nigeria  
14A Missouri St  
Maitama, Abuja  
Nigeria  
Phone : +234 8023179774  
Email : megesciett@yahoo.com

Mr. D.U. ONYEAGOCHA  
Deputy Director  
Food & Drug Services Department  
Food Chemical & Water Safety Division  
Federal Ministry of Health  
Federal Secretariat Complex, Phase III  
Ahmadu Bello Way  
P.M.B 083, Garki  
F.C.T Abuja  
Phone : 234 8033147808  
Email : dennyo_2003@yahoo.com

Ms. Akeju Olagbaju Mudasiru  
Assistant Director  
Federal Ministry of Agriculture and Water Resources  
Abuja  
Nigeria  
Phone : 23470856841  
Email : plaakeju@mail.com

Ms. Zuny Zarza DE RIQUELME  
Coordinator Nacional SCT Frutas y Hortalizas Elaboradas  
Ministerio de Salud Pública y Bienestar Social – MSPyBS  
Instituto Nacional de Alimentación y Nutrición – INAN  
Santisima Trinidad e/Itapua  
Asunción  
Paraguay  
Phone : 59521206874  
Fax : 59521206874  
Email : zmzarza@hotmail.com

Ms. Patricia ECHEVERRÍA  
Coordinador Nacional SCT Frutas y Hortalizas Elaboradas  
Ministerio de Salud Pública y Bienestar Social – MSPyBS  
Instituto Nacional de Alimentación y Nutrición – INAN  
Santisima Trinidad e/Itapua  
Asunción  
Paraguay  
Phone : 59521206874  
Fax : 59521206874  
Email : paechema@gmail.com inanpy@hotmail.com

Ms. Melamie Tablada AVECILLA  
Food-Drug Regulation Officer I  
Food Inspection Section, Regulation Division II  
Bureau of Food and Drugs – Department of Health  
Civic Drive, Filinvest Corporate City  
Alabang  
Muntinlupa City 1781  
Philippines  
Phone : (632) 8072843/(632) 8070701  
Fax : (632) 8078511  
Email : mtavecilla@yahoo.com.ph mtavecilla@bfad.gov.ph

Mr. Ella KONSTANTIN  
Head of the Division  
Institute of Nutrition  
2/14 Usfinsky Proezd  
Moscow  
109240  
Russia  
Phone : 495-698-5467  
Fax : 495-698-5467  
Email : eller@ion.rm

Mr. Papalii Grant PERCIVAL  
Member of the Samoa National Codex Committee  
President Samoa Association of Manufacturers & Exporters  
P.O. Box 1872  
Apia  
Samoa  
Tel: (0685) 7774325, 24177  
Fax: (0685) 723380, 20368  
Email: percival@ipasifika.net

Mr. Abdulhakim Abdulrahman YOUSEF  
Saudi Arabia  
Ministry of Agriculture  
Email: ksapqi@hotmail.com

Mr. Suliman Abdullah AL-SAWI  
Saudi Arabia  
Ministry of Agriculture  
Email: ssmsls45@yahoo.com
**SERBIA-SERBIE**

Mr. Nenad VUJOVIC  
Head of Department of Inspection for Quality of Foodstuff  
Republic of Serbia  
Ministry of Agriculture  
Forestry and Water Management  
Office of the Inspector General  
1 Omladinskih brigade St., SIV 3/525  
Belgrade  
Postal 11 000  
Republic of Serbia  
Phone: +381 11 311 74 19  
Fax: +381 11 311 74 19  
Email: nevujovic@minpolj.sr.gov.yu

Mr. Aleksandar DAVIDOV  
Assistant of Director  
Republic of Serbia  
Ministry of Agriculture, Forestry and Water Management  
Office of the Inspector General  
1 Omladinskih brigade St., SIV 3/525  
Belgrade  
11 000  
Phone: +381 11 311 74 73  
Fax: +381 11 311 74 19  
Email: aleksandar.Davidov@minpolj.sr.gov.yu

**SPAIN-ESPAGNE-ESPAÑA**

Dr. Elisa Revilla GARCIA  
Subdirectora General Adjunta  
De Planificación y Control Alimentario  
Ministerio de Medio Ambiente y Medio Rural y Marino  
Paseo Infanta Isabel No 1  
Madrid 28014  
España  
Phone: +34 913474596  
Fax: +34 913475728  
Email: erevilla@mapya.es

**SWEDEN-SUÈDE-SUECIA**

Ms. Eva Rolfsdotter LÖNBERG  
Codex co-ordinator  
National Food Administration  
Box 622  
SE 751 26 UPPSALA  
Sweden  
Phone: 46 18 175547  
Fax: 46 18 105848  
Email: codex@slv.se

**THAILAND-THAÏLANDE-TAILANDIA**

Ms. Oratai SILAPANAPAPORN  
Director of Office of Commodity and System Standards  
National Bureau of Agricultural Commodity and Food Standards  
50 Paholyothin Rd.  
Ladyao, Chatuchak  
Bangkok 10900  
Thailand  
Phone: 662-561-2277 Ext 1401  
Fax: 662 561 3373  
Email: oratai@acfs.go.th

Ms. Voranuch KITSUKCHIT  
Standards Officer  
National Bureau of Agricultural Commodity and Food Standards  
50 Paholyothin Rd  
Ladyao, Chatuchak  
Bangkok 10900  
Thailand  
Phone: 662-561-2277 ext.1411  
Fax: 662-561-3373/561 3357  
Email: voranuch@acfs.go.th

**SOUTH AFRICA  
AFRIQUE DU SUD  
SUDÁFRICA**

Mr. Willem Motlana MADIBA  
Quality Assurance Officer  
National Department of Agriculture  
Directorate Food Safety and Quality Assurance  
Private Bag X 343  
Pretoria  
0001  
South Africa  
Phone: +27 12 319 6051  
Fax: +27 12 319 6055  
Email: madibaw@nda.agric.za

Mr. Michiel Daniel ERASMUS  
Quality Assurance Officer  
National Department of Agriculture  
Directorate Food Safety and Quality Assurance  
Private Bag X343  
Pretoria  
0001 South Africa  
Phone: +27 12 319 6027  
Fax: +27 12 319 6055  
Email: niele@nda.agric.za
Ms. Somkid RUENPARKWOOT
Senior Expert on Agricultural Products
Postharvest and Products Processing Research and Development Office
Department of Agriculture
50 Paholyothin Rd.
Ladyao, Chachuchak
Bangkok 10900
Thailand
Phone: 662-940 6996
Fax: 662-940 6996
Email: t_somkid@hotmail.com

Ms. Malinee SUBVANICH
Thai Food Processor’s Association
170/21-22 9th Floor Ocean Tower 1 Building
New Ratchadaphisek Rd., Klongtoey
Bangkok 10110
Thailand
Phone: 662 261 2684-6
Fax: 662 2612996-7
Email: thaifood@thaifood.org

UNITED KINGDOM
ROYAUME-UNI
REINO UNIDO

Dr. Michelle MCQUILLAN
Senior Scientific Officer
Food Standards Agency
Room 115B Aviation House
125 Kingsway
London, WC2B 6NH
United Kingdom
Phone: 00-44-207-276-8159
Fax: 00-44-207-276-8193
Email: michelle.mcquillan@foodstandards.gsi.gov.uk

Ms. Donatella HOWE
Higher Executive Officer
Food Standards Agency
Room 115B Aviation House
125 Kingsway
London, WC2B 6NH
United Kingdom
Phone: 00 44 207 276 8153
Fax: 00 44 207 276 8193
Email: donatella.howe@foodstandards.gsi.gov.uk

UNITED STATES OF AMERICA
ÉTATS-UNIS D’AMÉRIQUE
ESTADOS UNIDOS DE AMÉRICA

Mr. Dorian A. LAFOND
International Standards Coordinator
Office of the Deputy Administrator
AMS Fruit and Vegetable Programs
1400 Independence Avenue, SW
Washington, DC 20250
Phone: (202)690-4944
Cell: (202) 577-5583
Fax: (202) 720-0016
Email: dorian.lafond@usda.gov

Dr. Paul SOUTH
Division of Plant Product Safety
Office of Plant and Dairy Foods
Center for Food Safety and Applied Nutrition
Food and Drug Administration
5100 Paint Branch Parkway
College Park, MD 20740
Phone: (301)436-1640
Fax: (301)436-2561
Email: paul.south@fda.hhs.gov

Mr. Richard BOYD
Head, Defense Contract Inspection Section
Processed Products Branch
Fruit and Vegetable Programs
Agricultural Marketing Service
U.S. Department of Agriculture
1400 Independence Avenue, SW
Mail Stop 0247, Room 0726-South Building
Washington, DC 20250
United States
Phone: (202) 720-5021
Fax: (202) 690-1527
Email: richard.boyd@usda.gov

Dr. Dennis KEEFE
OFAS/CFSAN/FDA, HFS-255
5100 Paint Branch Parkway
College Park, MD 20740
United States
Phone: (202) 418-3113
Fax: (202) 418-3131
Email: dkeefe@cfsan.fda.gov
ALINORM 09/32/27
List of Participants

Mr. Richard PETERSON
Inspector In-charge
Processed Products Branch
U.S. Department of Agriculture
1400 Independence Avenue, SW
Mail Stop 0247
Room 0726 - South Building
Washington, DC 20250
United States
Phone: (202) 720-5021
Fax: (202) 720-4631
Email: richard.peterson@usda.gov

Ms. Chere SHORTER
Assistant Head
Processed Products Branch
Inspection & Standardization Section
U.S. Department of Agriculture
1400 Independence Avenue, SW
Mail Stop 0247
Room 0726 - South Building
Washington, DC 20250
United States
Phone: (202) 720-5021
Fax: (202) 720-1527
Email: chere.shorter@usda.gov

Ms. Jane W. HO
Food Technologist
U.S. Department of Agriculture
Agricultural Marketing Service
Science & Technology
1400 Independence Ave
Room 3524, Stop 0272
Washington, DC 202250
Phone: (202)-720-0042
Email: jane.ho@usda.gov

Ms. Leila G SALDANHA, Ph.D., RD
NUTRIQ® LLC
Fax: (703) 317-9253
Cell: (202) 460-3529
E-mail: lgs@NutriQ-LLC.com

Ms. Shannon COLE
Director of Analytical Chemistry and for Science Operations
Grocery Manufacturers Association (GMA)
1350 I Street NW, Suite 300
Washington, DC 20005
Phone: (202) 639-5979
Email: scole@gmaonline.org

Ms. Kelly STRZELECKI
Agricultural Economist
Processed Products and Technical Regulations Division
USDA/FAS/OSTA
Rm. 5939-S/STOP 1015
Washington, DC 20250-1015
Tel: (202) 690-0522;
Fax: (202) 690-0677
E-mail: Kelly.Strzelecki@fas.usda.gov

Mr. Javier FAJARDO
International Trade Specialist
Processed Products and Technical Regulations Division
Office of Scientific & Technical Affairs
USDA/FAS
1400 Independence Avenue, SW
Room 5939-S
Washington, DC 20250
Phone: (202) 720-0981
Fax: (202) 720-0677
Email: Javier.fajardo@fas.usda.gov

Mr. Kenneth LOWERY
International Trade Specialist
USDA/FAS
1400 Independence Avenue, SW
Stop 1014
Washington, DC 20250-0240
Phone: (202) 720-5461
Fax: (202) 720-0133
E-mail: Kenneth.lowery@fas.usda.gov

Ms. Patricia DEMARK
ADM Edible Bean Technologist
Archer Daniel Midland Company
Edible Bean Specialties, Division
James R. Randall Research Center
1001 N. Brush College Rd.
Decatur, Illinois 62521
Phone: (217) 451-2060
Fax: (217) 451-2457
E-mail: patricia_demark@admworld.com

Mr. Brian E. GRIFFIN
Agricultural Marketing Specialist
USDA, AMS,FV,PPB
1400 Independence Ave., SW
Stop 0247
Washington, DC 20250
Phone: (202)-720-5021
Email: brian.griffin@usda.gov

Ms. Karen BURRESS
Sr. International Trade Specialist
U.S. Department of Commerce
1401 Constitution Ave.
Washington, DC 20230
Phone: (202) 482-5149
Fax: (202) 482-5198
Email: Karen_Burress@ita.doc.gov
VIETNAM-VIET NAM

Mr. Tran Huu THANH
Manager General Planning Department
Vietnam National Vegetable, Fruit & Agricultural Product Corporation
2 Pham Ngoc Thach St.
Dongda District
Hanoi
Vietnam
Phone: 844 8523058
Fax: 844 8523926
Email: Vegetexcoql@fpt.vn

INTERNATIONAL FROZEN FOODS ASSOCIATION
ASSOCIATION INTERNATIONALE DES DENRÉES CONGÉLÉES
ASOCIACIÓN INTERNACIONAL DE ALIMENTOS CONGELADOS

Ms. Cristina POLI
Specialist, Regulatory and International Affairs
2000 Corporate Ridge
Suite 1000
McLean, VA 22102
Phone: (703) 821-0770
Fax: (703) 821-1350
Email: Cpoli@affi.com

INTERNATIONAL INSTITUTE OF REFRIGERATION (IIR)

Mr. Brian A FRICKE, Ph.D.
Member of Commission C2: Food Science and Engineering
International Institute of Refrigeration
177 Boulevard Malesherbes
Paris, France
75017
Phone: 33 0 1 42 27 32 35
Fax: 33 0 1 47 63 17 98
Email: iif-iir@iifiir.org

INTERNATIONAL OLIVE COUNCIL (IOC)
CONSEIL OLÉICOLE INTERNATIONAL (COI)
CONSEJO OLEÍCOLA INTERNACIONAL (COI)

Dr. Mercedes Fernández ALBALADEJO
Head of the Olive Oil Chemistry & Standards Unit
Calle Príncipe de Vergara 154
28002 Madrid
Spain
Phone: +34 91 590 36 38
Fax: +34 91 563 12 63
Email: m.fernandez@internationaloliveoil.org
iooc@internationaloliveoil.org

ICGMA

Ms. Peggy S. ROCHETTE
Sr. Director of International Affairs
Grocery Manufacturers Association (GMA)
1350 I Street NW
Washington, DC 20005
Phone: (202) 639-5921
Fax: (202) 639-5991
Email: prochette@gmaonline.org

Ms. Christie GRAY
Mgr. Regulatory Affairs
Grocery Manufacturers Association (GMA)
1350 I Street, NW
Washington, DC 20005
Phone: (202) 639-5922
Fax: (202) 639-5991
Email: cgray@gmaonline.org

Ms. Maia JACK
Manager
Scientific Regulatory Affairs
Grocery Manufacturers Association
1350 I Street, N.W.
Washington, DC 20005
Phone: (202) 639-5922
Email: mjack@gmaonline.org

JOINT FAO/WHO SECRETARIAT
SECRÉTARIAT MIXTE FAO/OMS
SECRETARÍA MIXTA FAO/OMS

Ms. Gracia BRISCO LÓPEZ
Food Standards Officer
Joint FAO/WHO Food Standards Programme
FAO
Viale delle Terme di Caracalla
Rome, 00153
Italy
Phone: 3906-5705-2700
Fax: 3906-5705-4593
Email: gracia.brisco@fao.org

Ms. Verna CAROLISSEN
Food Standards Officer
Joint FAO/WHO Food Standards Programme
FAO
Viale delle Terme di Caracalla
Rome, 00153
Italy
Phone: 3906-5705-5629
Fax: 3906-5705-4593
Email: verna.carolissen@fao.org
Mr. Masashi KUSUKAWA  
Food Standards Officer  
Secretariat for the Codex Alimentarius Commission  
Joint FAO/WHO Food Standards Programme  
Viale delle Terme di Caracalla  
Rome 00153  
Italy  
Phone: +39 06 570 54796  
Fax: 39 06 570 54593  
Email: masashi.kusukawa@fao.org

Ms. Jennifer CALLAHAN  
Office of Risk Assessment & Cost-Benefit Analysis  
Office of the Chief Economist  
U.S. Department of Agriculture  
Room 4032 South Bldg.  
1400 Independence Avenue, SW  
Washington, DC 20250  
United States  
Phone: 202-720-8024  
Email: jcallahan@oce.usda.gov

Ms. Doreen CHEN-MOULEC  
U.S. Codex Office  
U.S. Department of Agriculture  
Food Safety and Inspection Service  
Room 4861 South Bldg.  
1400 Independence Avenue, SW  
Washington, DC 20250  
United States  
Phone: (202) 205-7760  
Fax: (202) 720-3157  
Email: Doreen.Chen-Moulec@fsis.usda.gov

Ms. Edith KENNARD  
U.S. Codex Office  
U.S. Department of Agriculture  
Food Safety and Inspection Service  
Room 4861 South Bldg.  
1400 Independence Avenue, SW  
Washington, DC 20250  
United States  
Phone: 202-720-5261  
Fax: 202-720-3157  
Email: edith.kennard@fsis.usda.gov

Ms. Jasmine MATTHEWS  
U.S. Codex Office  
U.S. Department of Agriculture  
Food Safety and Inspection Service  
Room 4861 South Bldg.  
1400 Independence Avenue, SW  
Washington, DC 20250  
Phone: 202-690-1124  
Fax: 202-720-3157  
Email: jasmine.matthews@fsis.usda.gov

Ms. Maria Teresa ESPINOZA  
U.S. Codex Office  
U.S. Department of Agriculture  
Food Safety and Inspection Service  
Room 4861 South Bldg.  
1400 Independence Avenue, SW  
Washington, DC 20250  
United States  
Phone: (202) 205-7760  
Fax: (202) 720-3157  
Email: Maria.Espinoza@fsis.usda.gov
DRAFT CODEX STANDARD FOR JAMS, JELLIES AND MARMALADES

(AT STEP 8)

1 SCOPE

1.1 This Standard applies to jams, jellies and marmalades, as defined in Section 2 below, and offered for direct consumption, including for catering purposes or for repacking if required. This Standard does not apply to:

(a) products when indicated as being intended for further processing such as those intended for use in the manufacture of fine bakery wares, pastries or biscuits;
(b) products which are clearly intended or labelled as intended for special dietary uses;
(c) reduced sugar products or those with a very low sugar content;
(d) products where the foodstuffs with sweetening properties have been replaced wholly or partially by food additive sweeteners.

1.2 The terms, “preserve”, “conserve” or “fruit spread” are sometimes used to represent products covered by this Standard. The use of the terms “preserve”, “conserve” and fruit spread are thereby required to comply with the requirements for jam and/or extra jam as set out in this Standard.

2 DESCRIPTION

2.1 PRODUCT DEFINITIONS

<table>
<thead>
<tr>
<th>Product</th>
<th>Definition</th>
</tr>
</thead>
<tbody>
<tr>
<td>Jam¹</td>
<td>is the product brought to a suitable consistency, made from the whole fruit, pieces of fruit, the unconcentrated and/or concentrated fruit pulp or fruit puree, of one or more kinds of fruit, which is mixed with foodstuffs with sweetening properties as defined in Section 2.2, with or without the addition of water.</td>
</tr>
<tr>
<td>Jellies</td>
<td>are the products brought to a semi solid gelled consistency and made from the juice and/or aqueous extracts of one or more fruits, mixed with foodstuffs with sweetening properties as defined in section 2.2, with or without the addition of water.</td>
</tr>
<tr>
<td>Citrus Marmalade</td>
<td>is the product obtained from a single or a mixture of citrus fruits and brought to a suitable consistency. It may be made from one or more of the following ingredients: whole fruit or fruit pieces, which may have all or part of the peel removed, fruit pulp, puree, juice, aqueous extracts and peel and is mixed with foodstuffs with sweetening properties as defined in section 2.2, with or without the addition of water.</td>
</tr>
<tr>
<td>Non Citrus Marmalade</td>
<td>is the product prepared by cooking fruit, whole, in pieces, or crushed adding foodstuffs with sweetening properties as defined in Section 2.2 to obtain a semi-liquid or thick liquid.</td>
</tr>
<tr>
<td>Jelly Marmalade</td>
<td>is the product described under citrus marmalade from which all the insoluble solids have been removed but which may or may not contain a small proportion of thinly cut peel.</td>
</tr>
</tbody>
</table>

¹ Citrus jam may be obtained from the whole fruit cut into strips and/or sliced.

This Standard will supersede individual standards for citrus marmalade (CODEX STAN 80-1981) and jams (fruit preserves) and jellies (CODEX STAN 79-1981).
2.2 OTHER DEFINITIONS

For the purposes of this Standard the following definitions shall also apply:

<table>
<thead>
<tr>
<th>Product</th>
<th>Definition</th>
</tr>
</thead>
<tbody>
<tr>
<td>Fruit</td>
<td>Means all of the recognised fruits and vegetables that are used in making jams, including but not limited to those fruits mentioned in this Standard, either fresh, frozen, canned, concentrated, dried, or otherwise processed and/or preserved which shall be sound, wholesome and clean and of suitable ripeness but free from deterioration and containing all its essential characteristics except that it has been trimmed, sorted and otherwise treated to remove any blemishes, bruises, toppings, tailings, cores, pits (stones) and may or may not be peeled.</td>
</tr>
<tr>
<td>Fruit Pulp</td>
<td>The edible part of the whole fruit, if appropriate less the peel, skin, seeds, pips, etc., which may have been sliced or crushed but which has not been reduced to a puree.</td>
</tr>
<tr>
<td>Fruit Puree</td>
<td>The edible part of the whole fruit, if appropriate, less the peel, skin, seeds, pips and similar which has been reduced to a puree by sieving or other processes.</td>
</tr>
<tr>
<td>Aqueous extracts</td>
<td>The aqueous extract of fruits which subject to losses necessarily occurring during proper manufacture, contains all the water-soluble constituents of the fruit concerned.</td>
</tr>
<tr>
<td>Fruit Juices and concentrates</td>
<td>Products as defined in the Codex General Standard for Fruit Juices and Nectars (CODEX STAN 247-2005).</td>
</tr>
<tr>
<td>Citrus fruit</td>
<td>Fruit of the <em>Citrus</em> L. family.</td>
</tr>
<tr>
<td>Foodstuffs with sweetening</td>
<td>(a) All sugars as defined in the Codex Standard for Sugars (CODEX STAN 212-1999);</td>
</tr>
<tr>
<td>properties</td>
<td>(b) Sugars extracted from fruit (fruit sugars);</td>
</tr>
<tr>
<td></td>
<td>(c) Fructose syrup;</td>
</tr>
<tr>
<td></td>
<td>(d) Brown sugar;</td>
</tr>
<tr>
<td></td>
<td>(e) Honey as defined in the Codex Standard for Honey (CODEX STAN 12-1981).</td>
</tr>
</tbody>
</table>

3 ESSENTIAL COMPOSITION AND QUALITY FACTORS

3.1 COMPOSITION

3.1.1 Basic Ingredients

(a) Fruit ingredient, as defined in Section 2.2, in quantities laid down in Sections 3.1.2 (a) – (d) below. In the case of jellies the quantities where appropriate shall be calculated after deduction of the weight of water used in preparing the aqueous extracts.

(b) Foodstuffs with sweetening properties as defined in Section 2.2.

3.1.2 Fruit Content

The following percentage fruit content for jams and jellies specified at 3.1.2 (a) or 3.1.2 (b) below shall apply and labelled in accordance with Section 8.2:

(a) The products, as defined in Section 2.1, shall be produced such that the quantity of fruit ingredient used as a percentage of finished product shall be not less than 45% in general, with the exception of the following fruits:

- 35% for blackcurrants, mangoes, quinces, rambutan, redburrants, rosehips, roselle, rowanberries and sea-buckthorns;
- 30% for soursop and cranberry;
- 25% for banana, cempedak, ginger, guava, jackfruit and sappota;
- 23% for cashew apples;
- 20% for durian;
- 10% for tamarind;
- 8% for passion fruit and other strong flavoured or high acidity fruits.

When fruits are mixed together, the minimum content must be reduced in proportion to the percentages used.

or

(b) The products, as defined in Section 2.1, shall be produced such that the quantity of fruit ingredient used as a percentage of finished product shall be not less than 35% in general, with the exception of the following fruits:

- 25% for blackcurrants, mangoes, quinces, rambutan, redcurrants, rosehips, roselles, rowanberries and sea-buckthorns;
- 20% for soursop and cranberry;
- 16% for cashew apples;
- 15% for banana, cempedak, guava, jackfruit and sappota;
- 11% - 15% for ginger;
- 10% for durian;
- 6% for passion fruit, tamarind or other strong flavoured or high acidity fruits.

When fruits are mixed together, the minimum content must be reduced in proportion to the percentages used.

In the case of Labrusca grape jam, grape juice and grape juice concentrate when added as optional ingredients, this may constitute a part of the required fruit content.

(c) Citrus Marmalade

The product, as defined in Section 2.1, shall be produced such that the quantity of citrus fruit ingredients used in the manufacturing of 1000 g of finished product must not be less than 200 g of which at least 75 g must be obtained from the endocarp.

In addition the term “jelly marmalade” as defined in Section 2.1 may be used when the product contains no insoluble matter but may contain small quantities of thinly cut peel.

(d) Non Citrus Marmalade

The product, as defined in Section 2.1, shall be produced such that the quantity of fruit ingredient used as a percentage of the finished product shall not be less than 30% in general, with the exception of the following fruits:

- 11% for ginger.

3.1.3 Other Permitted Ingredients

Any appropriate food ingredient of plant origin may be used in the products covered by this Standard. This includes fruit, herbs, spices, nuts, alcoholic drinks and essential oils and vegetable edible oils and fats (used as antifoaming agents), as long as they do not mask poor quality and mislead the consumer. For example, red fruit juice and red beetroot juice may only be added to jams as defined in points 3.1.2 (a) and (b) made from gooseberries, plums, raspberries, redcurrants, rhubarb, rosehips, roselle or strawberries.

---

2 Fruits when used at higher percentages, could render the product unpalatable in accordance with consumers preferences in the country of retail sale.

3 In the case of citrus fruit the endocarp means the fruit pulp (or flesh) which is often subdivided into segments and vesicas containing the juices and the seeds
3.2 **SOLUBLE SOLIDS**

The soluble solids content for the finished products defined in Sections 3.1.2 (a) – (c) shall in all cases be between 60 to 65% or greater\(^4\). In the case of the finished product defined in Section 3.1.2 (d), the soluble solids content shall be 40 - 65% or less.

3.3 **QUALITY CRITERIA**

3.3.1 **General Requirements**

The end product shall be of an appropriate gelled consistency, having normal colour and flavour appropriate to the type or kind of fruit ingredient used in the preparation of the mixture, while taking into account any flavour imparted by optional ingredients or any permitted colouring agents used. It shall be free from defective materials normally associated with fruits. Jelly and extra jelly shall be reasonably clear or transparent.

3.3.2 **Defects and Allowances for Jams**

The products covered by this Standard shall be largely free of defects such as plant material skins (if peeled), stones and pieces of stones and mineral matters. In the case of berry fruits, Dragon fruit and passion fruit, seeds shall be considered a natural fruit component and not a defect unless the product is presented as “seedless”.

3.4 **CLASSIFICATION OF “DEFECTIVES”**

A container that fails to meet one or more of the applicable quality requirements as set out in Section 3.3.1 should be considered as a “defective”.

3.5 **LOT ACCEPTANCE**

A lot should be considered as meeting the applicable quality requirements referred to in Section 3.3.1 when the number of "defectives" as defined in Section 3.4 does not exceed the acceptance number (c) of the appropriate sampling plan with an AQL of 6.5.

4 **FOOD ADDITIVES**

Only those food additive classes listed below are technologically justified and may be used in products covered by this Standard. Within each additive class only those food additives listed below, or referred to, may be used and only for the functions, and within limits, specified.

4.1 Acidity regulators, antifoaming agents, firming agents, preservatives and thickeners used in accordance with Table 3 of the Codex General Standard for Food Additives (CODEX STAN 192-1995) are acceptable for use in foods conforming to this Standard.

4.2 **ACIDITY REGULATORS**

<table>
<thead>
<tr>
<th>INS No.</th>
<th>Name of the Food Additive</th>
<th>Maximum Level</th>
</tr>
</thead>
<tbody>
<tr>
<td>334; 335(i), (ii); 336(i), (ii); 337</td>
<td>Tartrates</td>
<td>3,000 mg/kg</td>
</tr>
</tbody>
</table>

4.3 **ANTIFOAMING AGENTS**

<table>
<thead>
<tr>
<th>INS No.</th>
<th>Name of the Food Additive</th>
<th>Maximum Level</th>
</tr>
</thead>
<tbody>
<tr>
<td>900a</td>
<td>Polydimethylsiloxane</td>
<td>10 mg/kg</td>
</tr>
</tbody>
</table>

\(^4\) In accordance with the legislation of the country of retail sale.
### 4.4 COLOURS

<table>
<thead>
<tr>
<th>INS No.</th>
<th>Name of the Food Additive</th>
<th>Maximum Level</th>
</tr>
</thead>
<tbody>
<tr>
<td>100(i)</td>
<td>Curcumin</td>
<td>500 mg/kg</td>
</tr>
<tr>
<td>101(i), (ii)</td>
<td>Riboflavins</td>
<td>200 mg/kg</td>
</tr>
<tr>
<td>104</td>
<td>Quinoline Yellow</td>
<td>100 mg/kg</td>
</tr>
<tr>
<td>110</td>
<td>Sunset Yellow FCF</td>
<td>300 mg/kg</td>
</tr>
<tr>
<td>120</td>
<td>Carmines</td>
<td>200 mg/kg</td>
</tr>
<tr>
<td>124</td>
<td>Ponceau 4R (Cochineal Red A)</td>
<td>100 mg/kg</td>
</tr>
<tr>
<td>129</td>
<td>Allura Red</td>
<td>100 mg/kg</td>
</tr>
<tr>
<td>133</td>
<td>Brilliant Blue FCF</td>
<td>100 mg/kg</td>
</tr>
<tr>
<td>140</td>
<td>Chlorophylls</td>
<td>GMP</td>
</tr>
<tr>
<td>141(i), (ii)</td>
<td>Chlorophylls and Chlorophyllins, Copper Complexes</td>
<td>200 mg/kg</td>
</tr>
<tr>
<td>143</td>
<td>Fast Green FCF</td>
<td>400 mg/kg</td>
</tr>
<tr>
<td>150a</td>
<td>Caramel I-Plain</td>
<td>GMP</td>
</tr>
<tr>
<td>150b</td>
<td>Caramel II Caustic Sulfite Process</td>
<td>80,000 mg/kg</td>
</tr>
<tr>
<td>150c</td>
<td>Caramel III – Ammonia Process</td>
<td>80,000 mg/kg</td>
</tr>
<tr>
<td>150d</td>
<td>Caramel IV – Sulfite Ammonia Process</td>
<td>1,500 mg/kg</td>
</tr>
<tr>
<td>160a(i), a(iii), e, f</td>
<td>Carotenoids</td>
<td>500 mg/kg</td>
</tr>
<tr>
<td>160a(ii)</td>
<td>Carotenes, Beta- (Vegetable)</td>
<td>1,000 mg/kg</td>
</tr>
<tr>
<td>160d(i), 160d(iii)</td>
<td>Lycopenes</td>
<td>100 mg/kg</td>
</tr>
<tr>
<td>161b(i)</td>
<td>Lutein from <em>Tagetes erecta</em></td>
<td>100 mg/kg</td>
</tr>
<tr>
<td>162</td>
<td>Beet Red</td>
<td>GMP</td>
</tr>
<tr>
<td>163(ii)</td>
<td>Grape Skin Extract</td>
<td></td>
</tr>
<tr>
<td>172(i)-(iii)</td>
<td>Iron Oxides</td>
<td>200 mg/kg</td>
</tr>
</tbody>
</table>

### 4.5 PRESERVATIVES

<table>
<thead>
<tr>
<th>INS No.</th>
<th>Name of the Food Additive</th>
<th>Maximum Level</th>
</tr>
</thead>
<tbody>
<tr>
<td>200-203</td>
<td>Sorbates</td>
<td>1,000 mg/kg</td>
</tr>
<tr>
<td>210-213</td>
<td>Benzoates</td>
<td>1,000 mg/kg</td>
</tr>
<tr>
<td>220-225, 227, 228, 539</td>
<td>Sulfites</td>
<td>50 mg/kg as residual SO₂ in the end product, except when made with sulfited fruit when a maximum level of 100 mg/kg is permitted in the end product.</td>
</tr>
</tbody>
</table>
4.6 FLAVOURINGS

The following flavourings are acceptable for use in foods conforming to this Standard when used in accordance with good manufacturing practices: natural flavouring substances that are extracted from the named fruits in the respective product; natural mint flavour; natural cinnamon flavour; vanillin, vanilla or vanilla extracts.

5 CONTAMINANTS

5.1 The products covered by this Standard shall comply with the maximum levels of the Codex General Standard for Contaminants and Toxins in Foods (CODEX STAN 193-1995).

5.2 The products covered by this Standard shall comply with the maximum residue limits for pesticides and/or veterinary drugs established by the Codex Alimentarius Commission.

6 HYGIENE

6.1 It is recommended that the products covered by the provisions of this Standard be prepared and handled in accordance with the appropriate sections of the Recommended International Code of Practice – General Principles of Food Hygiene (CAC/RCP 1-1969) and other relevant Codex texts such as codes of hygienic practice and codes of practice.

6.2 The products should comply with any microbiological criteria established in accordance with the Principles for the Establishment and Application of Microbiological Criteria for Foods (CAC/GL 21-1997).

7 WEIGHTS AND MEASURES

7.1 FILL OF CONTAINER

7.1.1 Minimum Fill

The container should be well filled with the product which should occupy not less than 90% (minus any necessary head space according to good manufacturing practices) 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.

7.1.2 Classification of “Defectives”

A container that fails to meet the requirement for minimum fill of Section 7.1.1 should be considered as a “defective”.

7.1.3 Lot Acceptance

A lot should be considered as meeting the requirement of Section 7.1.1 when the number of “defectives”, as defined in Section 7.1.2, does not exceed the acceptance number (c) of the appropriate sampling plan with an AQL of 6.5.

8 LABELLING

8.1 The products covered by the provisions of this Standard shall be labelled in accordance with the Codex General Standard for the Labelling of Prepackaged Foods (CODEX STAN 1-1985). In addition, the following specific provisions apply:

8.2 NAME OF THE PRODUCT

8.2.1 The names of the products shall be,

- Jam (or preserve or conserve, if appropriate);
- Extra jam (preserve or conserve, if appropriate);
- High Fruit jam (preserve or conserve, if appropriate);
- Jelly;
- Extra jelly.

5 The provision in parenthesis applies only to the English version of the Standard.
In the case of Section 3.1.2 (b):
- Jam (or preserve\textsuperscript{5} or conserve\textsuperscript{5} or fruit spread);
- Jelly (or fruit spread);

In the case of Section 3.1.2 (c):
- Marmalade or jelly marmalade.

In the case of Section 3.1.2 (d):
- “X” marmalade (“X” is a non citrus fruit).

The name used should be in accordance with the legislation of the country of retail sale.

8.2.2 The name of the product shall provide an indication of the fruit(s) used in descending order of weight of the raw material used. In the case of products made with three of more different fruits the alternative phrase “mixed fruit” or similar wording or by the number of fruits may be used.

8.2.3 The name of the product may provide an indication of the variety of fruit e.g. “Victoria” plum and/or may include an adjective describing the character e.g. “seedless”, “shredless”.

8.2.4 The name of the product shall be accompanied by the term “prepared with added alcohol” in accordance with the legislation of the country of retail sale.

8.3 **FRUIT QUANTITY AND SUGAR DECLARATION**

Depending on the legislation or requirements of the country of retail sale, the products covered by this Standard may also give an indication of the fruit ingredient content in the form of “prepared with X g of fruit per 100 g” and the total sugar content with the phrase “total sugar content X g per 100 g”. If an indication of fruit content is given this should relate to the quantity and type of fruit ingredient used in the product as sold with a deduction for the weight of any water used in preparing the aqueous extracts.

8.4 **LABELLING OF NON-RETAIL CONTAINERS**

Information for non-retail containers shall be given either on the container or in accompanying documents, except that the name of the product, lot identification, and the name and address of the manufacturer, packer, distributor or importer, as well as storage instructions, shall appear on the container. However, lot identification, and the name and address of the manufacturer, packer, distributor or importer may be replaced by an identification mark, provided that such a mark is clearly identifiable with the accompanying documents.

<table>
<thead>
<tr>
<th>Provision</th>
<th>Method</th>
<th>Principle</th>
<th>Type</th>
</tr>
</thead>
<tbody>
<tr>
<td>Fill of containers</td>
<td>CAC/RM 46-1972 (Codex General Method for processed fruits and vegetables)</td>
<td>Weighing</td>
<td>I</td>
</tr>
<tr>
<td>Soluble solids</td>
<td>AOAC 932.14C ISO 2173:2003 (Codex General Method for processed fruits and vegetables)</td>
<td>Refractometry</td>
<td>I</td>
</tr>
</tbody>
</table>
DETERMINATION OF WATER CAPACITY OF CONTAINERS
(CAC/RM 46-1972)

1 **SCOPE**

   This method applies to glass containers.\(^6\)

2 **DEFINITION**

   The water capacity of a container is the volume of distilled water at 20°C which the sealed container will hold when completely filled.

3 **PROCEDURE**

   3.1 Select a container which is undamaged in all respects.

   3.2 Wash, dry and weigh the empty container.

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

4 **CALCULATION AND EXPRESSION OF RESULTS**

   Subtract the weight found in 3.2 from the weight found in 3.3. The difference shall be considered to be the weight of water required to fill the container. Results are expressed as ml of water.

---

\(^6\) For determination of water capacity in metal containers the reference method is ISO 90.1:1986.
**SAMPLING PLANS**

The appropriate inspection level is selected as follows:

- **Inspection level I** - Normal Sampling
- **Inspection level II** - Disputes, (Codex referee purposes sample size), enforcement or need for better lot estimate

### SAMPLING PLAN 1

**(Inspection Level I, AQL = 6.5)**

<table>
<thead>
<tr>
<th>Net Weight</th>
<th>Lot Size (N)</th>
<th>Sample Size (n)</th>
<th>Acceptance Number (c)</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>NET WEIGHT IS EQUAL TO OR LESS THAN 1 KG (2.2 LB)</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>4,800 or less</td>
<td>6</td>
<td>1</td>
</tr>
<tr>
<td></td>
<td>4,801 - 24,000</td>
<td>13</td>
<td>2</td>
</tr>
<tr>
<td></td>
<td>24,001 - 48,000</td>
<td>21</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>48,001 - 84,000</td>
<td>29</td>
<td>4</td>
</tr>
<tr>
<td></td>
<td>84,001 - 144,000</td>
<td>38</td>
<td>5</td>
</tr>
<tr>
<td></td>
<td>144,001 - 240,000</td>
<td>48</td>
<td>6</td>
</tr>
<tr>
<td></td>
<td>more than 240,000</td>
<td>60</td>
<td>7</td>
</tr>
<tr>
<td><strong>NET WEIGHT IS GREATER THAN 1 KG (2.2 LB) BUT NOT MORE THAN 4.5 KG (10 LB)</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>2,400 or less</td>
<td>6</td>
<td>1</td>
</tr>
<tr>
<td></td>
<td>2,401 - 15,000</td>
<td>13</td>
<td>2</td>
</tr>
<tr>
<td></td>
<td>15,001 - 24,000</td>
<td>21</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>24,001 - 42,000</td>
<td>29</td>
<td>4</td>
</tr>
<tr>
<td></td>
<td>42,001 - 72,000</td>
<td>38</td>
<td>5</td>
</tr>
<tr>
<td></td>
<td>72,001 - 120,000</td>
<td>48</td>
<td>6</td>
</tr>
<tr>
<td></td>
<td>more than 120,000</td>
<td>60</td>
<td>7</td>
</tr>
<tr>
<td><strong>NET WEIGHT GREATER THAN 4.5 KG (10 LB)</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>600 or less</td>
<td>6</td>
<td>1</td>
</tr>
<tr>
<td></td>
<td>601 - 2,000</td>
<td>13</td>
<td>2</td>
</tr>
<tr>
<td></td>
<td>2,001 - 7,200</td>
<td>21</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>7,201 - 15,000</td>
<td>29</td>
<td>4</td>
</tr>
<tr>
<td></td>
<td>15,001 - 24,000</td>
<td>38</td>
<td>5</td>
</tr>
<tr>
<td></td>
<td>24,001 - 42,000</td>
<td>48</td>
<td>6</td>
</tr>
<tr>
<td></td>
<td>more than 42,000</td>
<td>60</td>
<td>7</td>
</tr>
</tbody>
</table>
### SAMPLING PLAN 2
(Inspection Level II, AQL = 6.5)

<table>
<thead>
<tr>
<th>Lot Size (N)</th>
<th>Sample Size (n)</th>
<th>Acceptance Number (c)</th>
</tr>
</thead>
<tbody>
<tr>
<td>4,800 or less</td>
<td>13</td>
<td>2</td>
</tr>
<tr>
<td>4,801 - 24,000</td>
<td>21</td>
<td>3</td>
</tr>
<tr>
<td>24,001 - 48,000</td>
<td>29</td>
<td>4</td>
</tr>
<tr>
<td>48,001 - 84,000</td>
<td>38</td>
<td>5</td>
</tr>
<tr>
<td>84,001 - 144,000</td>
<td>48</td>
<td>6</td>
</tr>
<tr>
<td>144,001 - 240,000</td>
<td>60</td>
<td>7</td>
</tr>
<tr>
<td>more than 240,000</td>
<td>72</td>
<td>8</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Lot Size (N)</th>
<th>Sample Size (n)</th>
<th>Acceptance Number (c)</th>
</tr>
</thead>
<tbody>
<tr>
<td>2,400 or less</td>
<td>13</td>
<td>2</td>
</tr>
<tr>
<td>2,401 - 15,000</td>
<td>21</td>
<td>3</td>
</tr>
<tr>
<td>15,001 - 24,000</td>
<td>29</td>
<td>4</td>
</tr>
<tr>
<td>24,001 - 42,000</td>
<td>38</td>
<td>5</td>
</tr>
<tr>
<td>42,001 - 72,000</td>
<td>48</td>
<td>6</td>
</tr>
<tr>
<td>72,001 - 120,000</td>
<td>60</td>
<td>7</td>
</tr>
<tr>
<td>more than 120,000</td>
<td>72</td>
<td>8</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Lot Size (N)</th>
<th>Sample Size (n)</th>
<th>Acceptance Number (c)</th>
</tr>
</thead>
<tbody>
<tr>
<td>600 or less</td>
<td>13</td>
<td>2</td>
</tr>
<tr>
<td>601 - 2,000</td>
<td>21</td>
<td>3</td>
</tr>
<tr>
<td>2,001 - 7,200</td>
<td>29</td>
<td>4</td>
</tr>
<tr>
<td>7,201 - 15,000</td>
<td>38</td>
<td>5</td>
</tr>
<tr>
<td>15,001 - 24,000</td>
<td>48</td>
<td>6</td>
</tr>
<tr>
<td>24,001 - 42,000</td>
<td>60</td>
<td>7</td>
</tr>
<tr>
<td>more than 42,000</td>
<td>72</td>
<td>8</td>
</tr>
</tbody>
</table>
DRAFT CODEX STANDARD FOR CERTAIN CANNED VEGETABLES
(AT STEP 8)

1 SCOPE

This Standard applies to certain canned vegetables, as defined in Section 2 below and in the corresponding Annexes and offered for direct consumption, including for catering purposes or for repackaging if required. It does not apply to the product when indicated as being intended for further processing. This Standard does not cover vegetables that are lacto-fermented, pickled or preserved in vinegar.

2 DESCRIPTION

2.1 PRODUCT DEFINITION

Canned vegetables are the products:

(1) prepared from substantially sound, fresh (barring mature processed peas) or frozen vegetables, as defined in the corresponding Annexes, having reached appropriate maturity for processing. None of their essential elements are removed from them but they shall be washed and prepared appropriately, depending on the product to be produced. They undergo operations such as washing, peeling, grading, cutting, etc., depending on the type of product.

(2) (a) packed with a suitable liquid packing medium in accordance with Section 3.1.3.

(b) vacuum packaged with packing media that does not exceed 20% of the product’s net weight and when the container is sealed in such conditions as to generate an internal pressure in accordance with good manufacturing practices.1

(3) processed by heat, in an appropriate manner, before or after being hermetically sealed in a container, so as to prevent spoilage and to ensure product stability in normal storage conditions at room temperature.

2.2 STYLES

In addition to the styles defined in the corresponding Annexes, any other styles should be permitted as indicated in Section 2.2.1.

2.2.1 Other Styles

Any other presentation of the product should be permitted provided that the product:

(a) is sufficiently distinctive from other forms of presentation laid down in the Standard;

(b) meets all relevant requirements of the Standard, including requirements relating to limitations on defects, drained weight, and any other requirements which are applicable to that style which most closely resembles the style or styles intended to be provided for under this provision; and

(c) is adequately described on the label to avoid confusing or misleading the consumer.

3 ESSENTIAL COMPOSITION AND QUALITY FACTORS

3.1 COMPOSITION

3.1.1 Basic Ingredients

Vegetables as defined in Section 2 and liquid packing medium appropriate to the product.

3.1.2 Other Permitted Ingredients

In accordance with the relevant provisions in the corresponding Annexes.

1 High vacuum products typically have an internal pressure of approximately 300 millibars or more below atmospheric pressure (depending on container size and other relevant factors).
3.1.3 Packing Media  
(See Appendix IV)

3.2 QUALITY CRITERIA

3.2.1 Colour, Flavour and Texture

Canned vegetables shall have normal colour, flavour and odour of canned vegetables, corresponding to the type of vegetable and packing medium used and shall possess texture characteristic of the product.

3.2.2 Defects and Allowances

Canned vegetables should be substantially free from defects. Certain common defects should not be present in amounts greater than the limitations fixed in the corresponding Annexes.

3.3 CLASSIFICATION OF “DEFECTIVES”

A container that fails to meet one or more of the applicable quality requirements, as set out in Section 3.2 (except those based on sample averages), should be considered as a “defective”.

3.4 LOT ACCEPTANCE

A lot should be considered as meeting the applicable quality requirements referred to in Section 3.2 when:

(a) for those requirements which are not based on averages, the number of “defectives”, as defined in Section 3.3, does not exceed the acceptance number (c) of the appropriate sampling plan with an AQL of 6.5; and

(b) the requirements of Section 3.2, which are based on sample averages, are complied with.

4 FOOD ADDITIVES

Only those food additive classes listed below and in the corresponding Annexes are technologically justified and may be used in products covered by this Standard. Within each additive class only those food additives listed below and in the corresponding Annexes, or referred to, may be used and only for the functions, and within limits, specified.

4.1 Acidity regulators, colours, colour retention agents and calcium salts of firming agents used in accordance with Table 3 of the Codex General Standard for Food Additives (CODEX STAN 192-1995) are acceptable for use in foods conforming to this standard.

4.2 COLOURS

<table>
<thead>
<tr>
<th>INS No.</th>
<th>Name of the Food Additive</th>
<th>Maximum Level</th>
</tr>
</thead>
<tbody>
<tr>
<td>102</td>
<td>Tartrazine</td>
<td>100 mg/kg</td>
</tr>
<tr>
<td>133</td>
<td>Brilliant Blue FCF</td>
<td>20 mg/kg</td>
</tr>
<tr>
<td>143</td>
<td>Fast Green FCF</td>
<td>200 mg/kg</td>
</tr>
<tr>
<td>150(c)</td>
<td>Caramel III-Ammonia Process</td>
<td>GMP</td>
</tr>
<tr>
<td>150(d)</td>
<td>Caramel IV- Sulfite Ammonia Process</td>
<td></td>
</tr>
</tbody>
</table>

4.3 Colour Retention Agents

<table>
<thead>
<tr>
<th>INS No.</th>
<th>Name of the Food Additive</th>
<th>Maximum Level</th>
</tr>
</thead>
<tbody>
<tr>
<td>385, 386</td>
<td>Ethylene Diamine Tetra Acetates</td>
<td>365 mg/kg</td>
</tr>
<tr>
<td>512</td>
<td>Stannous Chloride</td>
<td>25 mg/kg calculated as tin. Should not be added to foods in uncoated tin cans.</td>
</tr>
</tbody>
</table>
CONTAMINANTS

5.1 The products covered by this Standard shall comply with the maximum levels of the Codex General Standard for Contaminants and Toxins in Foods (CODEX STAN 193-1995).

5.2 The products covered by this Standard shall comply with the maximum residue limits for pesticides and/or veterinary drugs established by the Codex Alimentarius Commission.

HYGIENE

6.1 It is recommended that the products covered by the provisions of this Standard be prepared and handled in accordance with the appropriate sections of the Recommended International Code of Practice – General Principles of Food Hygiene (CAC/RCP 1-1969), Recommended International Code of Hygienic Practice for Low-Acid and Acidified Low-Acid Canned Foods (CAC/RCP 23-1979) and other relevant Codex texts such as codes of hygienic practice and codes of practice.

6.2 The products should comply with any microbiological criteria established in accordance with the Principles for the Establishment and Application of Microbiological Criteria for Foods (CAC/GL 21-1997).2

WEIGHTS AND MEASURES

7.1 FILL OF CONTAINER

7.1.1 Minimum Fill

The container should be well filled with the product (including packing medium) which should occupy not less than 90% (minus any necessary head space according to good manufacturing practices) 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. This provision does not apply to vacuum packaged vegetables.

7.1.2 Classification of “Defectives”

A container that fails to meet the requirement for minimum fill of Section 7.1.1 should be considered as a “defective”.

7.1.3 Lot Acceptance

A lot should be considered as meeting the requirement of Section 7.1.1 when the number of “defectives”, as defined in Section 7.1.2, does not exceed the acceptance number (c) of the appropriate sampling plan with an AQL of 6.5.

7.1.4 Minimum Drained Weight

7.1.4.1 The drained weight of the product should be not less than the percentages indicated in the corresponding Annexes, calculated on the basis of the weight of distilled water at 20°C which the sealed container will hold when completely filled3.

7.1.4.2 Lot Acceptance

The requirements for minimum drained weight should 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.

LABELLING

8.1 The products covered by the provisions of this Standard shall be labelled in accordance with the latest edition of the Codex General Standard for the Labelling of Prepackaged Foods (CODEX STAN 1-1985). In addition, the following specific provisions apply:

8.2 NAME OF THE PRODUCT

8.2.1 The names of the canned products shall be those defined in the corresponding Annexes.

---

2 For products that are rendered commercially sterile in accordance with the Recommended International Code of Hygienic Practice for Low-Acid and Acidified Low-Acid Canned Foods (CAC/RCP 23-1979), microbiological criteria are not recommended as they do not offer benefit in providing the consumer with a food that is safe and suitable for consumption.

3 For non-metallic rigid containers such as glass jars, the basis for the determination should be calculated on the weight of distilled water at 20°C which the sealed container will hold when completely filled less 20 ml.
8.2.2 When the vegetables are sized, the size (or sizes when sizes are mixed), as defined in the corresponding Annexes, may be declared as part of the name or in close proximity to the name of the product.

8.2.3 The name of the product shall include the indication of the packing medium as set out in Section 2.1.2 (a). For canned vegetables packaged in accordance with Section 2.1.2 (b) the words “vacuum packaged” shall be affixed to the commercial designation of the product or in close proximity.

8.2.4 Other styles - If the product is produced in accordance with the other styles provision (Section 2.2.1), the label should contain in close proximity to the name of the product such additional words or phrases that will avoid misleading or confusing the consumer.

8.2.5 If an added ingredient, as defined in Sections 3.1.2 and 3.1.3, alters the flavour characteristic of the product, the name of the food shall be accompanied by the term "flavoured with X" or "X flavoured" as appropriate.

8.3 Labelling of Non-Retail Containers

Information for non-retail containers shall be given either on the container or in accompanying documents, except that the name of the product, lot identification, and the name and address of the manufacturer, packer, distributor or importer, as well as storage instructions, shall appear on the container. However, lot identification, and the name and address of the manufacturer, packer, distributor or importer may be replaced by an identification mark, provided that such a mark is clearly identifiable with the accompanying documents.

9 Methods of Analysis and Sampling

<table>
<thead>
<tr>
<th>Provision</th>
<th>Method</th>
<th>Principle</th>
<th>Type</th>
</tr>
</thead>
<tbody>
<tr>
<td>Drained weight</td>
<td>AOAC 968.30 (Codex General Method for processed fruits and vegetables)</td>
<td>Sieving Gravimetry</td>
<td>I</td>
</tr>
<tr>
<td>Fill of containers</td>
<td>CAC/RM 46-1972 (Codex General Method for processed fruits and vegetables)</td>
<td>Weighing</td>
<td>I</td>
</tr>
<tr>
<td>Mineral impurities (sand)</td>
<td>AOAC 971.33 (Codex General Method for processed fruits and vegetables)</td>
<td>Gravimetry</td>
<td>I</td>
</tr>
</tbody>
</table>
TOUGH STRING TEST
(CAC/RM 39-1970)

1 DEFINITION
A tough string is a string that will support the weight of 250 g for five seconds or longer when tested in accordance with the procedure described below.

2 PRINCIPLE
Strings are removed from individual pods, fastened through a clamp assembly weighing 250 g, and hung so that the string supports the entire weight. If the string supports the weight for five seconds or more it is considered a tough string.

3 APPARATUS
3.1 Weighted clamp
Use battery clamp (with teeth filed off or turned back), spring operated clothes pin, or binder clip which presents a flat clamping surface. Attach weight so that entire assembly of weight and clamp weighs 250 g. See Figure 1. A bag containing lead pellets is convenient as a weight.

4 PROCEDURE
4.1 From the drained product select a representative sample of not less than 285 g. Record the weight of this test sample.
4.2 Break the individual bean units and set aside those that show evidence of tough strings. Remove the strings from the pods and retain the pod material for weighing.
4.3 Fasten the clamp assembly to one end of the string. Grasp the other end of the string with the fingers (a cloth may be used to aid in holding the string) and lift gently.
4.4 If the string supports the 250 g assembly for at least five seconds consider the bean unit as containing tough string. If the string breaks in less than five seconds, retest the broken parts that are 13 mm or longer to determine if such portions are tough.
4.5 Weigh the bean units which contain tough strings.

5 CALCULATION AND EXPRESSION OF RESULTS
\[
\% \text{ m/m pods containing tough strings} = \frac{\text{pods containing tough strings (g)}}{\text{test sample (g)}} \times 100
\]

Figure 1 - Tough String Tester for Green or Wax Beans
DETERMINATION OF WATER CAPACITY OF CONTAINERS
(CAC/RM 46-1972)

1 SCOPE
This method applies to glass containers.4

2 DEFINITION
The water capacity of a container is the volume of distilled water at 20°C which the sealed container will hold when completely filled.

3 PROCEDURE
3.1 Select a container which is undamaged in all respects.
3.2 Wash, dry and weigh the empty container.
3.3 Fill the container with distilled water at 20°C to the level of the top thereof, and weigh the container thus filled.

4 CALCULATION AND EXPRESSION OF RESULTS
Subtract the weight found in 3.2 from the weight found in 3.3. The difference shall be considered to be the weight of water required to fill the container. Results are expressed as ml of water.

METHOD FOR DISTINGUISHING TYPE OF PEAS
(CAC/RM 48-1972)

1 DEFINITION
This method is based on differentiation between starch granules of the wrinkled-seeded types and starch granules of the smooth-seeded types.

2 REAGENTS AND MATERIALS
2.1 Compound microscope
   - 100 to 250 magnification.
   - Phase contrast.
2.2 Microscope slide and cover glass.
2.3 Spatula.
2.4 Ethanol - 95% v/v.
2.5 Glycerine.

3 PROCEDURE
3.1 Preparing mount
3.1.1 Remove a small portion of the endosperm and place on glass slide;
3.1.2 Using a spatula grind the material with 95% v/v ethanol;
3.1.3 Add a drop of glycerine, place cover glass on material and examine under microscope.
3.2 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, early, Continental) show up as an amorphous mass with no well defined geometric shape.

4 For determination of water capacity in metal containers the reference method is ISO 90.1:1986.
1. **Definition**

The method for determination of proper fill is an alternative method for determining a fill of canned peas in lieu of the drained weight.

2. **Procedure**

2.1. 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.

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

3. **Expression of Results**

3.1. A container with lid attached by double seam shall be considered to be completely filled when it is filled to the level 4.8 mm vertical distance below the top of the double seam.

3.2. 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.
## Sampling Plans

The appropriate inspection level is selected as follows:

- **Inspection level I** - Normal Sampling
- **Inspection level II** - Disputes, (Codex referee purposes sample size), enforcement or need for better lot estimate

### SAMPLING PLAN 1

*Inspection Level I, AQL = 6.5*

<table>
<thead>
<tr>
<th>Lot Size (N)</th>
<th>Sample Size (n)</th>
<th>Acceptance Number (c)</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>NET WEIGHT IS EQUAL TO OR LESS THAN 1 KG (2.2 LB)</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>4,800 or less</td>
<td>6</td>
<td>1</td>
</tr>
<tr>
<td>4,801 - 24,000</td>
<td>13</td>
<td>2</td>
</tr>
<tr>
<td>24,001 - 48,000</td>
<td>21</td>
<td>3</td>
</tr>
<tr>
<td>48,001 - 84,000</td>
<td>29</td>
<td>4</td>
</tr>
<tr>
<td>84,001 - 144,000</td>
<td>38</td>
<td>5</td>
</tr>
<tr>
<td>144,001 - 240,000</td>
<td>48</td>
<td>6</td>
</tr>
<tr>
<td>more than 240,000</td>
<td>60</td>
<td>7</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Lot Size (N)</th>
<th>Sample Size (n)</th>
<th>Acceptance Number (c)</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>NET WEIGHT IS GREATER THAN 1 KG (2.2 LB) BUT NOT MORE THAN 4.5 KG (10 LB)</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2,400 or less</td>
<td>6</td>
<td>1</td>
</tr>
<tr>
<td>2,401 - 15,000</td>
<td>13</td>
<td>2</td>
</tr>
<tr>
<td>15,001 - 24,000</td>
<td>21</td>
<td>3</td>
</tr>
<tr>
<td>24,001 - 42,000</td>
<td>29</td>
<td>4</td>
</tr>
<tr>
<td>42,001 - 72,000</td>
<td>38</td>
<td>5</td>
</tr>
<tr>
<td>72,001 - 120,000</td>
<td>48</td>
<td>6</td>
</tr>
<tr>
<td>more than 120,000</td>
<td>60</td>
<td>7</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Lot Size (N)</th>
<th>Sample Size (n)</th>
<th>Acceptance Number (c)</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>NET WEIGHT GREATER THAN 4.5 KG (10 LB)</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>600 or less</td>
<td>6</td>
<td>1</td>
</tr>
<tr>
<td>601 - 2,000</td>
<td>13</td>
<td>2</td>
</tr>
<tr>
<td>2,001 - 7,200</td>
<td>21</td>
<td>3</td>
</tr>
<tr>
<td>7,201 - 15,000</td>
<td>29</td>
<td>4</td>
</tr>
<tr>
<td>15,001 - 24,000</td>
<td>38</td>
<td>5</td>
</tr>
<tr>
<td>24,001 - 42,000</td>
<td>48</td>
<td>6</td>
</tr>
<tr>
<td>more than 42,000</td>
<td>60</td>
<td>7</td>
</tr>
</tbody>
</table>
## SAMPLING PLAN 2

*(Inspection Level II, AQL = 6.5)*

### NET WEIGHT IS EQUAL TO OR LESS THAN 1 KG (2.2 LB)

<table>
<thead>
<tr>
<th>Lot Size (N)</th>
<th>Sample Size (n)</th>
<th>Acceptance Number (c)</th>
</tr>
</thead>
<tbody>
<tr>
<td>4,800 or less</td>
<td>13</td>
<td>2</td>
</tr>
<tr>
<td>4,801 - 24,000</td>
<td>21</td>
<td>3</td>
</tr>
<tr>
<td>24,001 - 48,000</td>
<td>29</td>
<td>4</td>
</tr>
<tr>
<td>48,001 - 84,000</td>
<td>38</td>
<td>5</td>
</tr>
<tr>
<td>84,001 - 144,000</td>
<td>48</td>
<td>6</td>
</tr>
<tr>
<td>144,001 - 240,000</td>
<td>60</td>
<td>7</td>
</tr>
<tr>
<td>more than 240,000</td>
<td>72</td>
<td>8</td>
</tr>
</tbody>
</table>

### NET WEIGHT IS GREATER THAN 1 KG (2.2 LB) BUT NOT MORE THAN 4.5 KG (10 LB)

<table>
<thead>
<tr>
<th>Lot Size (N)</th>
<th>Sample Size (n)</th>
<th>Acceptance Number (c)</th>
</tr>
</thead>
<tbody>
<tr>
<td>2,400 or less</td>
<td>13</td>
<td>2</td>
</tr>
<tr>
<td>2,401 - 15,000</td>
<td>21</td>
<td>3</td>
</tr>
<tr>
<td>15,001 - 24,000</td>
<td>29</td>
<td>4</td>
</tr>
<tr>
<td>24,001 - 42,000</td>
<td>38</td>
<td>5</td>
</tr>
<tr>
<td>42,001 - 72,000</td>
<td>48</td>
<td>6</td>
</tr>
<tr>
<td>72,001 - 120,000</td>
<td>60</td>
<td>7</td>
</tr>
<tr>
<td>more than 120,000</td>
<td>72</td>
<td>8</td>
</tr>
</tbody>
</table>

### NET WEIGHT GREATER THAN 4.5 KG (10 LB)

<table>
<thead>
<tr>
<th>Lot Size (N)</th>
<th>Sample Size (n)</th>
<th>Acceptance Number (c)</th>
</tr>
</thead>
<tbody>
<tr>
<td>600 or less</td>
<td>13</td>
<td>2</td>
</tr>
<tr>
<td>601 - 2,000</td>
<td>21</td>
<td>3</td>
</tr>
<tr>
<td>2,001 - 7,200</td>
<td>29</td>
<td>4</td>
</tr>
<tr>
<td>7,201 - 15,000</td>
<td>38</td>
<td>5</td>
</tr>
<tr>
<td>15,001 - 24,000</td>
<td>48</td>
<td>6</td>
</tr>
<tr>
<td>24,001 - 42,000</td>
<td>60</td>
<td>7</td>
</tr>
<tr>
<td>more than 42,000</td>
<td>72</td>
<td>8</td>
</tr>
</tbody>
</table>
3.1.3 Packing Media

3.1.3.1 Basic Ingredients

Water, and if necessary salt.

3.1.3.2 Other Permitted Ingredients

Packing media may contain ingredients subject to labelling requirements of Section 8 and may include, but is not limited to:

(a) sugars and/or other foodstuffs with sweetening properties such as honey;
(b) aromatics plants, spices or extracts thereof, seasoning;
(c) vinegar;
(d) regular or concentrated fruit juice;
(e) oil;
(f) tomato puree.
PROPOSED DRAFT ANNEX ON ASPARAGUS
(for inclusion in the draft Codex Standard for Certain Canned Vegetables)
(AT STEP 5/8)

In addition to the general provisions applicable to canned vegetables, the following specific provisions apply:

1 DESCRIPTION

1.1 PRODUCT DEFINITION

The name “asparagus” stands for the product prepared from the tender portions of peeled or unpeeled stems of varieties of asparagus complying with the characteristics of *Asparagus officinalis* L.

1.2 STYLES

1.2.1 Asparagus comes in the following shapes and sizes:

1. Whole asparagus, asparagus or whole spears: tip and adjoining part of the spear measuring at most 18 cm and at least 12 cm in length.

2. Short asparagus or short spears: tip and adjoining part of the spear measuring at most 12 cm and at least 7 cm in length.

3. Asparagus tips/points: upper extremity (bud) and adjoining part of spears measuring at most 7 cm and at least 3 cm in length.

4. Cut asparagus: spears cut widthways into sections measuring at most 7 cm and at least 2 cm in length.

5. Cut asparagus with tips: the percentage of tips shall be equal to or greater than 15% of the drained weight.

6. Cut asparagus without tips: the occasional presence of tips is allowed.

1.2.2 Asparagus are canned as follows in terms of their colour:

1. White asparagus: white, cream or yellowish spears; no more than 20% in number of spears may have green, light green or yellowish green tips.

2. White asparagus with violet or green tips: white, asparagus may have violet, green, light green or yellowish green tips, and these colours may also apply to the adjoining region, but no more than 25% in number of the units may present these colours over more than 50% of their length.

3. Green asparagus: the units are green, light green or yellowish green; no more than 20% in number of the units may present a white, cream or yellowish white colour in the lower part of the spear over more than 20 to 50% of their length in accordance with the legislation of the country of retail sale.

4. Mixed: mixes of white, cream, yellowish white, violet, green, light green or yellowish green units.

1.3 SIZING (optional)

Asparagus may be sized in accordance with the Table below. The size corresponds to the maximum diameter of the thickest part of the unit measured perpendicularly to the longitudinal axis of the unit.

<table>
<thead>
<tr>
<th>Size</th>
<th>White Peeled Asparagus (diameter)</th>
<th>White unpeeled asparagus (diameter)</th>
<th>Green asparagus (diameter)</th>
</tr>
</thead>
<tbody>
<tr>
<td>(1) Small</td>
<td>up to 8 mm</td>
<td>up to 10 mm, inclusive</td>
<td>3 to 6 mm</td>
</tr>
<tr>
<td>(2) Medium</td>
<td>over 8 mm and up to 13 mm, inclusive</td>
<td>over 10 mm, and up to 15 mm, inclusive</td>
<td>over 6 mm and up to 8 mm, inclusive</td>
</tr>
</tbody>
</table>

---

1 Maximum length should not exceed 9.5 cm in accordance with the legislation of the country of retail sale.

2 The size designations in the table, or other sizing provisions, may be used in accordance with the legislation of the country of retail sale.
### Size

<table>
<thead>
<tr>
<th>Size</th>
<th>White Peeled Asparagus (diameter)</th>
<th>White unpeeled asparagus (diameter)</th>
<th>Green asparagus (diameter)</th>
</tr>
</thead>
<tbody>
<tr>
<td>(3) Large</td>
<td>over 13 mm and up to 18 mm, inclusive</td>
<td>over 15 mm, and up to 20 mm, inclusive</td>
<td>over 8 mm and up to 10 mm, inclusive</td>
</tr>
<tr>
<td>(4) Very large</td>
<td>over 18 mm and up to 25.4 mm, inclusive</td>
<td>over 20 mm</td>
<td>over 10 mm</td>
</tr>
<tr>
<td>(5) Colossal</td>
<td>over 25.4 mm</td>
<td></td>
<td></td>
</tr>
<tr>
<td>(6) Blend of sizes or assorted sizes</td>
<td>a mixture of two or more single sizes</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

### ESSENTIAL COMPOSITION AND QUALITY FACTORS

#### 2.1 QUALITY CRITERIA

##### 2.1.1 Uniformity

1. **Length**: the specifications required in Section 1.2 regarding the types of presentation of asparagus are met when:

   - The predominant length of the units in the sample falls within the designated style classification; and
   - The length of the units is reasonably uniform. By “reasonably uniform”, on the basis of the average of the samples, the following is meant:
     - at least 75% of the number of units do not deviate by more than 1 cm from the most frequent length and at least 90% of the number of units do not deviate by more than 2 cm from the most frequent length.

2. **Diameter**: compliance with respect to the individual size names.

   When a product is said to be, presented or sold as complying with the names of the individual sizes of Section 1.2, the sampling unit should comply with the specified diameter for each individual grade, provided no more than 25% in number of all the units contained in the container belong to the group (or groups) of adjacent sizes.

   Any container or sampling unit, which exceeds the tolerance of 25% laid down above, should be considered as a “defective” as far as sizing is concerned.

##### 2.1.2 Definition of Defects and Allowances

<table>
<thead>
<tr>
<th>Defects</th>
<th>Definition</th>
<th>Maximum</th>
</tr>
</thead>
<tbody>
<tr>
<td>(1) Asparagus tips and other parts crushed</td>
<td>broken or crushed pieces to the extent that they seriously impair the product aspect and comprising fragments under 1 cm in length.</td>
<td>The product should be reasonably free of such defects.</td>
</tr>
<tr>
<td>(2) Extraneous material</td>
<td>such as sand, soil or substances from soil.</td>
<td>The product should be practically free of such defects.</td>
</tr>
<tr>
<td>(3) Asparagus with skin (only in the case of asparagus presented peeled)</td>
<td>units comprising unpeeled zones which seriously impair the aspect or the edibility of the product.</td>
<td>10% in number</td>
</tr>
<tr>
<td>(4) Hollow and fibrous asparagus</td>
<td>hollow units to the extent that they seriously impair the product aspect and fibrous, tough asparagus but that stay edible.</td>
<td>10% in number</td>
</tr>
<tr>
<td>(5) Deformed asparagus</td>
<td>comprising spears or tips that are very curved, or any unit seriously impaired by splitting into two or any other malformation and open tips.</td>
<td>10% in number</td>
</tr>
</tbody>
</table>
Defects  |  Definition  |  Maximum  
---|---|---
(6) Damaged asparagus  |  a colour defect, a mechanical lesion, a disease, which are not harmful for the consumer.  |  15% in number  

Total of all the defects described in (3), (4), (5), (6), for the following types of presentation:

| Defects and Allowances  |  Maximum  
---|---
(1) Asparagus, whole asparagus, whole spears  |  15% in number  
(2) Short asparagus or short spears  |  15% in number  
(3) Asparagus tips  |  15% in number  
(4) Asparagus cut with tips  |  20% in number  
(5) Cut asparagus without tips  |  25% in number  

3  **WEIGHTS AND MEASURES**

3.1  **MINIMUM DRAINED WEIGHT**

| Styles  | Minimum drained weight (%)  
---|---
(1) White peeled asparagus (whole, short)  |  59  
(2) White unpeeled asparagus  |  57  
(3) Green asparagus  |  50  
(4) Other types of presentation  |  58  

4  **LABELLING**

For asparagus, colour shall be included into the styles as defined in Section 1.2. For white asparagus, the words “not peeled” and/or “not sized” shall be declared in accordance with legislation of country of retail sale.
**PROPOSED DRAFT ANNEXE ON CARROTS**
(for inclusion in the draft Codex Standard for Certain Canned Vegetables)

(A **AT STEP 5/8**)

In addition to the general provisions applicable to canned vegetables, the following specific provisions apply:

1 **DESCRIPTION**

1.1 **PRODUCT DEFINITION**

The name “carrots” stands for the product prepared using clean and sound roots of varieties (cultivars) of carrots complying with the characteristics of the species *Daucus carota* L., trimmed of their tops, green extremities and peel.

1.2 **STYLES**

1. **Whole**:

   (a) *Conical or cylindrical cultivars*: carrots, which, after processing, more or less keep their initial shape. The largest diameter of carrots, measured at right angles to the longitudinal axis, shall not exceed 50 mm. The ratio between the diameters of the biggest and smallest carrots shall not be greater than 3:1.

   (b) *Spherical cultivars*: carrots that have reached full maturity, of rounded shape, whose largest diameter in each direction shall not exceed 45 mm.

2. **Baby whole carrots**:

   (a) *Conical or cylindrical cultivars*: carrots whose diameter does not exceed 23 mm and whose length does not exceed 100 mm.

   (b) *Spherical cultivars*: whole carrots whose diameter in each direction does not exceed 27 mm.

3. **Halves**: Carrots cut along the longitudinal axis into two roughly equal parts.

4. **Quarters**: Carrots cut into four roughly equal parts by slicing in two points perpendicularly to the longitudinal axis.

5. **Lengthways portions**: Carrots sliced lengthways, in a straight or wavy manner, into four or more pieces of roughly equal dimensions of approximately 20 mm long and not less than 5 mm in width measured at maximum width.

6. **Rounds or Sliced**: Carrots cut, in a straight or wavy manner, perpendicularly to the longitudinal axis, in rounds with a maximum thickness of approximately 10 mm and a maximum diameter of approximately 50 mm.

7. **Diced**: Carrots cut into cubes with an approximately 15 mm sides at most.

8. **Strips, Julienne, French style, or Shoestring**: Carrots cut lengthways, in a straight or wavy manner, into sticks. The section of the sticks should not exceed 5 mm (measured at the longest edges of the section).

9. **Chunks or Pieces**: Whole carrots cut into sections whose shape or grade may be irregular.

2 **ESSENTIAL COMPOSITION AND QUALITY FACTORS**

2.1 **QUALITY CRITERIA**

2.1.1 **Uniformity**

1. **Length**: for carrots defined in 1.2 (1) and (2) at least 75% by number shall not deviate by more than 5 mm from the average carrot length, and at least 90% by number shall not deviate by more than 10 mm from the average carrot length.

2. **Diameter and other measurements**: there is a 15% tolerance with respect to the maximum dimension.

3. Any container or sampling unit that exceeds the tolerances set forth in (1) and (2) above should be considered as a “defective”.
2.1.2 Definition of Defects and Allowances

Whole Carrots and Baby Whole Carrots, Carrots in Halves, in Quarters, Strips.

<table>
<thead>
<tr>
<th>Defects</th>
<th>Definition</th>
<th>Tolerances as a percentage of the drained product weight (m/m)</th>
</tr>
</thead>
<tbody>
<tr>
<td>(1) Blemished carrots</td>
<td>blemished or faded zones with a diameter above 5 mm.</td>
<td>20</td>
</tr>
<tr>
<td>(2) Mechanical damage</td>
<td>carrots that are crushed or grazed during canning.</td>
<td>10</td>
</tr>
<tr>
<td>(3) Malformations</td>
<td>deformations or fissures that appeared during growth.</td>
<td>20</td>
</tr>
<tr>
<td>(4) Unpeeled parts</td>
<td>30% or more of the surface is unpeeled.</td>
<td>20</td>
</tr>
<tr>
<td>(5) Fibrous</td>
<td>carrots that are hard or woody owing to their fibrousness.</td>
<td>10</td>
</tr>
<tr>
<td>(6) Black or dark green collar</td>
<td>collar with a ring that is one millimetre thick over more than half its circumference.</td>
<td>20</td>
</tr>
<tr>
<td>(7) Extraneous plant material</td>
<td>vegetal substance from the carrot or any other innocuous vegetal matter.</td>
<td>1 piece per 1000 g of total content in the container</td>
</tr>
</tbody>
</table>

The total amount of defects from (1) to (6) shall not exceed 25% of the drained product weight.

Defects (3), (4) and (6) do not apply to diced, rounds, strips; for these presentations the total amount of defects (1), (2) and (5) shall not exceed 25% of the drained product weight.

3 WEIGHTS AND MEASURES

3.1 Minimum Drained Weight

<table>
<thead>
<tr>
<th>Styles</th>
<th>Minimum drained weight (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>(1) Whole carrots</td>
<td>57.0</td>
</tr>
<tr>
<td>(2) Halves, Baby whole carrots</td>
<td>62.5</td>
</tr>
<tr>
<td>(3) Lengthways portions</td>
<td>52.0</td>
</tr>
<tr>
<td>(4) Diced</td>
<td>62.5</td>
</tr>
<tr>
<td>(5) Strips</td>
<td>56.5</td>
</tr>
<tr>
<td>(6) Quarters, pieces, rounds</td>
<td>56.5</td>
</tr>
<tr>
<td>(7) Chunk or pieces</td>
<td>56.5</td>
</tr>
</tbody>
</table>
PROPOSED DRAFT ANNEXE ON GREEN BEANS OR WAX BEANS
(for inclusion in the draft Codex Standard for Certain Canned Vegetables)

(At Step 5/8)

In addition to the general provisions applicable to canned vegetables, the following specific provisions apply:

1 DESCRIPTION

1.1 PRODUCT DEFINITION

   The names “green beans” or “wax beans” stand for the products prepared from the pods (or runners), incompletely ripe and with cut off ends from varieties in accordance with the characteristics of the species *Phaseolus vulgaris* L., *Phaseolus coccineas* L., or *Phaseolus multiflorus* LMK. Beans of distinct varietal groups with respect to shape may be designated as:

   (1) Round: beans having a width not greater than 1 ½ times the thickness of the bean.

   (2) Flat: beans having a width greater than 1 ½ times the thickness of the bean.

1.2 STYLES

   Green beans and wax beans come in the following shapes and sizes:

   (1) Whole: whole pods of any length.

   (2) Cut/broken: approximately uniform pieces cut or broken widthways with respect to the longitudinal axis; no less than 20 mm.

   (3) Short cuts: pieces cut widthways of which 75%, by count, or more are less than 20 mm long.

   (4) Shoestring, Sliced lengthwise, French style: pieces in strips, of a thickness under 6.5 mm, of which the majority is cut slantwise or lengthways.

   (5) Diagonal cut: approximately 45 degrees to the longitudinal.

1.3 SIZING (optional)

   Green beans and wax beans as defined in Section 1.2 (1) may be graded. If that is the case, they are graded in accordance with the table below. The grade is determined by measuring the diameter on the main axis at the widest point from one suture to the other.

   **Grading Requirements for round and flat Beans (Green or Wax Beans)**

<table>
<thead>
<tr>
<th>Size</th>
<th>Grading Criterion (maximum diameter - mm)²</th>
<th>Maximum percentage (m/m of non conforming beans)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Rounds</td>
<td>Flats</td>
</tr>
<tr>
<td>(1) Extra small</td>
<td>1 5.8 - 6.5</td>
<td>-</td>
</tr>
<tr>
<td>(2) Very small</td>
<td>2 7.3 - 8.0</td>
<td>5.8</td>
</tr>
<tr>
<td>(3) Small</td>
<td>3 8.3 - 9.0</td>
<td>7.3</td>
</tr>
<tr>
<td>(4) Medium</td>
<td>4 9.5 - 10.5</td>
<td>8.3</td>
</tr>
<tr>
<td>(5) Large</td>
<td>5 10.5 - 10.7</td>
<td>9.5</td>
</tr>
<tr>
<td>(6) Extra large</td>
<td>6 more than 10.7</td>
<td>more than 9.5</td>
</tr>
<tr>
<td>(7) Not screened</td>
<td>Not screened (*)</td>
<td>Natural breakdown of the size beans (*)</td>
</tr>
</tbody>
</table>

1 The size designations in the table, or other sizing provisions, may be used in accordance with the legislation of the country of retail sale.

2 The maximum diameters indicated in the column « round » are not equivalent to a range; they mean for example for a size “extra small” or “1” that the maximum diameter would be 5.8, or 5.9 or 6.5.
(*) Not screened: beans in the natural proportion of size after cleaning, without the removal or addition of screened beans.

2 ESSENTIAL COMPOSITION AND QUALITY FACTORS

2.1 QUALITY CRITERIA

2.1.1 Definition of Defects

(1) **Stringy pods**: a stringy pod corresponds to a bean where one of strings surrounding the pod resist traction.

(2) **Pods without ends removed**: Beans whose attachment is still present (beans where only the protuberance remains where the peduncle was attached are not considered as pods without ends removed).

(3) **Damaged pods**: Beans are deemed to be damaged if they have pods presenting rust, blemishes greater than 5 mm in diameter, spots, or — upon organoleptic examination — whose skin has grown thick, thereby diminishing the food value.

(4) **Bean pieces**: Pieces of beans whose length is lower than 20 mm (for cans of whole beans).

(5) **Harmless plant material**: Parts of the plant (bean) and innocuous foreign vegetal matter are considered as vegetal debris.

2.1.2 Defects and Allowances

The following limitations of defects are expressed in percentages, and related to the drained weight of the product.

When tested in accordance with the appropriate sampling plan with an AQL of 6.5, canned beans shall be free of defects to the extent indicated below:

<table>
<thead>
<tr>
<th>Defects</th>
<th>Tolerances (% m/m)</th>
</tr>
</thead>
<tbody>
<tr>
<td>(1) Stringy pods</td>
<td>3</td>
</tr>
<tr>
<td>(2) Pods without ends removed</td>
<td>3</td>
</tr>
<tr>
<td>(3) Damaged pods</td>
<td>10</td>
</tr>
<tr>
<td>(4) Bean pieces</td>
<td>4</td>
</tr>
<tr>
<td>(5) Harmless plant material</td>
<td>4</td>
</tr>
<tr>
<td>(6) AGGREGATE DEFECTS</td>
<td>15</td>
</tr>
</tbody>
</table>

3 WEIGHTS AND MEASURES

3.1 MINIMUM DRAINED WEIGHT

<table>
<thead>
<tr>
<th>Styles</th>
<th>Minimum drained weight (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>(1) Whole</td>
<td>50</td>
</tr>
<tr>
<td>(2) Other presentations, except shoestring, sliced lengthwise, french style</td>
<td>52</td>
</tr>
<tr>
<td>(3) Shoestring, sliced lengthwise, french style</td>
<td>50</td>
</tr>
</tbody>
</table>
PROPOSED DRAFT ANNEXE ON GREEN PEAS
(for inclusion in the draft Codex Standard for Certain Canned Vegetables)

(At Step 5/8)

In addition to the general provisions applicable to canned vegetables, the following specific provisions apply:

1 DESCRIPTION

1.1 PRODUCT DEFINITION

The name “green peas” stands for the product prepared from immature (green) seeds of *Pisum sativum* L. peas, of the smooth, wrinkled varieties, or other types (crosses or hybrids of the wrinkled of round seeded varieties) but excluding the subspecies *macrocarpum*.

When the peas are of sweet green wrinkled varieties or hybrids having similar characteristics, the name is “sweet green peas”.

1.2 SIZING (optional)

Green peas may be sized in accordance with the table below.¹

<table>
<thead>
<tr>
<th>Size designation</th>
<th>Diameter in circular sieve openings in millimeters</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Will Not Pass Through</td>
</tr>
<tr>
<td>Smooth Green Peas</td>
<td></td>
</tr>
<tr>
<td>1) Extra Small</td>
<td>7.5</td>
</tr>
<tr>
<td>2) Very Small</td>
<td>7.5</td>
</tr>
<tr>
<td>3) Small</td>
<td>8.2</td>
</tr>
<tr>
<td>4) Medium</td>
<td>8.75</td>
</tr>
<tr>
<td>5) Large</td>
<td>9.3</td>
</tr>
<tr>
<td>wrinkled Sweet Green Peas</td>
<td></td>
</tr>
<tr>
<td>1) Extra Small</td>
<td>7.5</td>
</tr>
<tr>
<td>2) Very Small</td>
<td>7.5</td>
</tr>
<tr>
<td>3) Small</td>
<td>8.2</td>
</tr>
<tr>
<td>4) Medium</td>
<td>9.3</td>
</tr>
<tr>
<td>5) Large</td>
<td>10.2</td>
</tr>
</tbody>
</table>

2 ESSENTIAL COMPOSITION AND QUALITY FACTORS

2.1 QUALITY CRITERIA

2.1.1 Definition of 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:

¹ The size designations in the table, or other sizing provisions, may be used in accordance with the legislation of the country of retail sale.
### Defects

<table>
<thead>
<tr>
<th>Defects</th>
<th>Definition</th>
<th>Maximum Limits (based on the weight of drained peas)</th>
</tr>
</thead>
<tbody>
<tr>
<td>(1) Blemished peas</td>
<td>consisting of peas which are slightly stained or spotted.</td>
<td>5% m/m</td>
</tr>
<tr>
<td>(2) Seriously blemished peas</td>
<td>consisting of peas which are spotted, discoloured or other-wise blemished (including worm-eaten peas) to the extent that the appearance or eating quality is seriously affected.</td>
<td>1% m/m</td>
</tr>
<tr>
<td>(3) Pea fragments</td>
<td>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.</td>
<td>10% m/m</td>
</tr>
<tr>
<td>(4) Yellow peas</td>
<td>entire pea is substantially yellow and is not a so-called “blond” pea which is very pale in colour.</td>
<td>2% m/m</td>
</tr>
<tr>
<td>(5) Extraneous plant material</td>
<td>consisting of any vine or leaf or pod material from the pea plant, or other harmless plant material not purposely added as an ingredient.</td>
<td>0.5% m/m</td>
</tr>
<tr>
<td>Total of the foregoing defects (1), (2), (3), (4), (5)</td>
<td></td>
<td>12% m/m</td>
</tr>
</tbody>
</table>

### 3 WEIGHTS AND MEASURES

#### 3.1 MINIMUM DRAINED WEIGHT

<table>
<thead>
<tr>
<th>Sizes</th>
<th>Minimum drained weight (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>(1) Extra small</td>
<td>66</td>
</tr>
<tr>
<td>(2) Very small</td>
<td></td>
</tr>
<tr>
<td>(3) Small</td>
<td></td>
</tr>
<tr>
<td>(4) Medium</td>
<td>62.5</td>
</tr>
<tr>
<td>(5) Large</td>
<td></td>
</tr>
<tr>
<td>(6) Not graded</td>
<td>59</td>
</tr>
</tbody>
</table>

### 4 LABELLING

4.1. When green peas are not graded the label may contain in close proximity to the name of the product the words “not graded”.

4.2. The name of the product may be “Peas”, “Green Peas”, “Garden Peas”, “Green Garden Peas”, “Early Peas”, “Sweet Peas”, “Petit Pois”, or the equivalent description used in the country of retail sale.
PROPOSED DRAFT ANNEX ON HEARTS OF PALM / PALMITO
(for inclusion in the draft Codex Standard for Certain Canned Vegetables)

(AT STEP 5/8)

In addition to the general provisions applicable to canned vegetables, the following specific provisions apply:

1 DESCRIPTION

1.1 PRODUCT DEFINITION

The name “hearts of palm / palmito” stands for the product prepared from the terminal buds of palms (upper and inferior meristems), where young stems rise, trimmed of fibrous and non edible parts. The product has a heterogeneous structure and has the characteristics of species of palms fit for human consumption.

1.2 STYLES

(1) Palms are presented as below:

(a) “Hearts of palm” correspond to the terminal bud of the palm, cut perpendicularly to the axis into pieces having a minimum length of 40 mm and a maximum length depending on the size of the container, with a variable shape between conical and cylindrical.

(b) “Pieces of palms” correspond to cuts from both upper and lower portion of the terminal part of meristematic pieces, regularly or irregularly cut with a minimum length of 5 mm and a maximum length of 39 mm.

(c) “Rounds” or “slices” of “hearts of palm” correspond to the product obtained from the upper portion of the terminal part of meristematic pieces, cut widthways into pieces having a minimum thickness of 15 mm and a maximum thickness of 40 mm.

(d) “Medallions” correspond to pieces regularly cut in circular or oval formats from the lower portion of the terminal part of meristematic pieces of the palm with a minimum diameter of 20 mm and a thickness of 3 to 10 mm.

2 ESSENTIAL COMPOSITION AND QUALITY FACTORS

2.1 QUALITY CRITERIA

2.1.1 Uniformity

(1) The specifications laid down in Section 1.2 concerning the styles of palm are met when: the length, the diameter and/or the thickness of the sample units, in accordance to the style are reasonably uniform. The words “reasonably uniform” on the basis of the average of samples means, compliance with the provisions of Section 1.2 that:

(a) the gap between the length of all the units and the predominant length does not exceed approximately ±10 mm.

(b) the gap between the thickness of all the units and the predominant thickness does not exceed ±10mm.

(c) the gap between the diameter of all the units and the predominant diameter does not exceed ±10mm.
2.1.2 Definition of Defects and Allowances

<table>
<thead>
<tr>
<th>Defects</th>
<th>Definition</th>
<th>Maximum limits/ drained weight m/m</th>
</tr>
</thead>
<tbody>
<tr>
<td>(1) Defective texture</td>
<td>hard or fibrous and/or excessively soft texture, which seriously impairs product edibility.</td>
<td>10</td>
</tr>
<tr>
<td>(2) Mineral impurities</td>
<td>such as sand, gravel or other soil elements.</td>
<td>0.1</td>
</tr>
<tr>
<td>(3) Damaged units</td>
<td>Units presenting scars and grazes, abrasions and other imperfections of the same type which seriously impair product appearance.</td>
<td>15</td>
</tr>
<tr>
<td>(4) Mechanical damage</td>
<td>broken or split units, fragments or detached pieces, which seriously impair product appearance.</td>
<td>10</td>
</tr>
<tr>
<td>(5) Abnormal colour</td>
<td>colour considerably different from the typical colour of the product.</td>
<td>10</td>
</tr>
<tr>
<td>(6) Physiological defects</td>
<td>units with palm tree stem apical meristems for “hearts of palm” and “rounds” or “slices” of “hearts of palm”.</td>
<td>10</td>
</tr>
</tbody>
</table>

TOTAL percentage of defects for palm hearts 20

TOTAL percentage of defects for other styles 25

3 WEIGHTS AND MEASURES

3.1 Minimum Drained Weight

<table>
<thead>
<tr>
<th>Styles</th>
<th>Minimum drained weight(%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>(1) Hearts of palm</td>
<td>50</td>
</tr>
<tr>
<td>(2) Other styles</td>
<td>52</td>
</tr>
</tbody>
</table>

4 LABELLING

The name “hearts of palm / palmito” may be complemented by the common name of the palm used.
PROPOSED DRAFT ANNEX ON MATURE PROCESSED\textsuperscript{1} PEAS
(for inclusion in the draft Codex Standard for Certain Canned Vegetables)

(AT Step 5/8)

In addition to the general provisions applicable to canned vegetables, the following specific provisions apply:

1 DESCRIPTION

1.1 PRODUCT DEFINITION

The name “mature processed peas” stands for the product prepared using clean, sound, whole, threshed, and dried grains of the species \textit{Pisum sativum} L., which has undergone soaking, but excluding the macrocarpum sub-species.

1.2 DEFINITION OF DEFECTS AND ALLOWANCES

<table>
<thead>
<tr>
<th>Defects</th>
<th>Definition</th>
<th>Maximum Limits in drained weight (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>(1) Blemished peas</td>
<td>peas with slight stains or spots.</td>
<td>10 m/m</td>
</tr>
<tr>
<td>(2) Seriously blemished peas</td>
<td>peas with spots and colour defects or otherwise blemished to the extent that their aspect or edibility are seriously affected; worm-eaten peas come under this category.</td>
<td>2 m/m</td>
</tr>
<tr>
<td>(3) Pea fragments</td>
<td>fractions of peas such as separated or detached cotyledons, crushed cotyledons partially or totally broken, and detached skins.</td>
<td>10 m/m</td>
</tr>
<tr>
<td>(4) Extraneous plant material</td>
<td>any fragment of tendril, peduncle, leaf or pod and any other plant material.</td>
<td>0.5 m/m</td>
</tr>
</tbody>
</table>

The total of the defects (1), (2), (3) and (4) should not exceed 15% m/m by weight.

2 LABELLING

When colour of mature processed peas is not green, colour of peas should be declared (for example: brown peas or yellow peas).

\textsuperscript{1} Also known in certain countries as “canned dry peas” or “processed dry peas”.
PROPOSED DRAFT ANNEX ON SWEET CORN
(for inclusion in the draft Codex Standard for Certain Canned Vegetables)

(AT STEP 5/8)

In addition to the general provisions applicable to canned vegetables, the following specific provisions apply:

1 DESCRIPTION

1.1 PRODUCT DEFINITION

The name “sweet corn” stands for the product prepared from clean and sound grains of sweet corn, of white or yellow colour, complying with the characteristics of Zea mays saccharata L.

Whole grains packaged with or without a liquid packing media.

**Creamed corn**: whole or partially whole cut kernels packed in a creamy component from the corn kernels, and other liquid or other ingredients, in accordance with the Section 2.1, so as to form a product of creamy consistency.

2 ESSENTIAL COMPOSITION AND QUALITY FACTORS

2.1 COMPOSITION

2.1.1 Other Permitted Ingredients

(a) native starch for creamed corn;

(b) For the sweet corn: pieces of green or red peppers mixed or not or other vegetables in a total proportion under 15% m/m of the net weight of the product.

2.2 QUALITY CRITERIA

2.2.1 Colour, Flavour and Texture

Creamed corn should present a fine but not excessively fluid consistency, or which may be dense and thick but not excessively dry or pasty, so that after two minutes a moderate but not excessive separation of free liquid can be seen.

2.2.2 Definition of Defects and Allowances

Sweet corn grains should have a reasonably tender texture, offering some resistance to chewing.

The finished product shall be practically free of fragments of cobs, silks, shucks, grains with an abnormal colour or a malformation, extraneous plant material and other defects not expressly mentioned, within the limits set forth as follows:

<table>
<thead>
<tr>
<th>Defects</th>
<th>Definition</th>
<th>Tolerances</th>
<th>Tolerances</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>Sweet corn/drained weight</td>
<td>Creamed corn/total weight</td>
</tr>
<tr>
<td>(1) Extraneous plant material</td>
<td>COB and HUSK</td>
<td>1 cm$^3$/400 g and 7 cm$^2$/400 g$^1$</td>
<td>1 cm$^3$/600 g and 7 cm$^2$/600 g$^1$</td>
</tr>
<tr>
<td>SILKS</td>
<td>180 mm in 28 g</td>
<td>150 mm in 28 g</td>
<td></td>
</tr>
<tr>
<td>(2) Blemished grains</td>
<td>Grains affected by a lesion due to insects or diseases, or presenting an abnormal colour.</td>
<td>7 kernels or pieces that are damaged and seriously damaged but not more than 5 may be seriously damaged per 400g$^1$</td>
<td></td>
</tr>
</tbody>
</table>

---

$^1$ or equivalent percentage (m/m).
Defects | Definition | Tolerances Sweet corn/drained weight | Tolerances Creamed corn/total weight
--- | --- | --- | ---
(3) Torn grains | Grains keeping a piece of cob or hard matter adhering to them. | 2% m/m | –
(4) Split grains or empty skins | Entirely open grains. | 20% m/m | –

Any unit where the proportion of defects exceeds the tolerances laid down above shall be considered as “defective”.

3 **WEIGHTS AND MEASURES**

3.1 **MINIMUM DRAINED WEIGHT (for canned sweet corn only)**

<table>
<thead>
<tr>
<th>Whole grains</th>
<th>Minimum drained weight (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. with a liquid packing medium</td>
<td>61</td>
</tr>
<tr>
<td>2. vacuum packaged or without a liquid packing medium</td>
<td>67</td>
</tr>
</tbody>
</table>

4 **FOOD ADDITIVES**

4.1 **THICKENERS** (for creamed corn only)

<table>
<thead>
<tr>
<th>INS No.</th>
<th>Name of the Food Additive</th>
<th>Maximum Level</th>
</tr>
</thead>
<tbody>
<tr>
<td>1400</td>
<td>Dextrins, roasted starch</td>
<td>GMP</td>
</tr>
<tr>
<td>1401</td>
<td>Acid-treated starch</td>
<td></td>
</tr>
<tr>
<td>1402</td>
<td>Alkaline-treated starch</td>
<td></td>
</tr>
<tr>
<td>1403</td>
<td>Bleached starch</td>
<td></td>
</tr>
<tr>
<td>1404</td>
<td>Oxidized starch</td>
<td></td>
</tr>
<tr>
<td>1405</td>
<td>Starches, enzyme treated</td>
<td></td>
</tr>
<tr>
<td>1410</td>
<td>Monostarch phosphate</td>
<td></td>
</tr>
<tr>
<td>1412</td>
<td>Distarch phosphate</td>
<td></td>
</tr>
<tr>
<td>1413</td>
<td>Phosphated distarch</td>
<td></td>
</tr>
<tr>
<td>1414</td>
<td>Acetylated distarch phosphate</td>
<td></td>
</tr>
<tr>
<td>1420</td>
<td>Starch acetate</td>
<td></td>
</tr>
<tr>
<td>1422</td>
<td>Acetylated distarch adipate</td>
<td></td>
</tr>
<tr>
<td>1440</td>
<td>Hydroxypropyl starch</td>
<td></td>
</tr>
<tr>
<td>1442</td>
<td>Hydroxypropyl distarch phosphate</td>
<td></td>
</tr>
<tr>
<td>1450</td>
<td>Starch sodium octenyl</td>
<td></td>
</tr>
<tr>
<td>1451</td>
<td>Acetylated oxidized starch</td>
<td></td>
</tr>
</tbody>
</table>

5 **LABELLING**

5.1 For sweet corn, the word “white” shall be declared as part of the name of the product when white variety is used.

5.2 When green or red peppers or other vegetables are added (Section 2.1.1 b) a mention is declared in close proximity to the name.
1 DESCRIPTION

1.1 PRODUCT DEFINITION

The name “baby corn” or “young corn” stands for the product prepared from selected young corn cob fresh or canned, without pollination of commercial varieties conforming to the characteristics of *Zea mays* L., from which silk and husk are removed.

1.2 STYLES

Baby corn comes in the following styles:

1. Whole: whole cob of baby corn from which silk, husk and shank are removed.

2. Cut Corn: baby corn with diameter not more than 25 mm cut crosswise into section having a length between 1.5 and 4 cm.

1.3 SIZING (optional)

Canned-baby corn in whole style may be sized in accordance with the table below.\(^1\)

<table>
<thead>
<tr>
<th>Cob Size</th>
<th>Length (cm)</th>
<th>Diameter (cm)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Extra large</td>
<td>10 – 13</td>
<td>1.8 - 2.5</td>
</tr>
<tr>
<td>Large</td>
<td>8 – 10</td>
<td>1.0 - 2.0</td>
</tr>
<tr>
<td>Medium</td>
<td>6 – 9</td>
<td>1.0 - 1.8</td>
</tr>
<tr>
<td>Small</td>
<td>4 – 7</td>
<td>&lt; 1.5</td>
</tr>
</tbody>
</table>

2 ESSENTIAL COMPOSITION AND QUALITY FACTORS

2.1 QUALITY CRITERIA

2.1.1 Uniformity

For every size of whole baby corn, the length of the longest cob should not be more than 3 cm longer than the length of the shortest cob in each container.

Any container or sampling unit that exceeds the tolerances laid down in paragraph (1) should be considered as a “defective”.

---

\(^1\) The size designations in the table, or other sizing provisions, may be used in accordance with the legislation of the country of retail sale.
2.1.2 Definition of Defects and Allowances

2.1.2.1 Cut Baby Corn

<table>
<thead>
<tr>
<th>Defects</th>
<th>Maximum limits by number in drained weight (sample size 1 kg)</th>
</tr>
</thead>
<tbody>
<tr>
<td>(1) Over/under size</td>
<td>5%</td>
</tr>
<tr>
<td>(2) Discolour</td>
<td>5%</td>
</tr>
<tr>
<td>(3) Peel</td>
<td>5%</td>
</tr>
<tr>
<td>(4) Silk</td>
<td>20 cm of broken silks put together</td>
</tr>
<tr>
<td>(5) TOTAL DEFECTS without (4)</td>
<td>15%</td>
</tr>
</tbody>
</table>

2.1.2.2 Whole Baby Corn

<table>
<thead>
<tr>
<th>Defects</th>
<th>Definition</th>
<th>Maximum limits by number in drained weight (sample size 1 kg)</th>
</tr>
</thead>
<tbody>
<tr>
<td>(1) Discolour</td>
<td></td>
<td>5%</td>
</tr>
<tr>
<td>(2) Irregular shape</td>
<td></td>
<td>5%</td>
</tr>
<tr>
<td>(3) Young husk and shank</td>
<td></td>
<td>10%</td>
</tr>
<tr>
<td>(4) Silk broken from the cob</td>
<td></td>
<td>20 cm of broken silks put together</td>
</tr>
<tr>
<td>(5) Brown tip</td>
<td></td>
<td>5%</td>
</tr>
<tr>
<td>(6) Broken tip with the diameter larger than 5 mm</td>
<td>broken tip means tips of the cobs that are broken after packing. When these pieces are put together, the cob shape will be formed.</td>
<td>5%</td>
</tr>
<tr>
<td>(7) Damage resulting from cutting</td>
<td></td>
<td>10%</td>
</tr>
<tr>
<td>(8) Broken pieces</td>
<td>broken pieces means the portions of broken pieces that cannot be put together to form the cob shape.</td>
<td>2%</td>
</tr>
<tr>
<td>TOTAL DEFECTS without (4)</td>
<td></td>
<td>25%</td>
</tr>
</tbody>
</table>
### METHODS OF ANALYSIS AND SAMPLING FOR PROCESSED FRUITS AND VEGETABLES

**Codex Standard for Aqueous Coconut Products: Coconut Cream and Coconut Milk**

**CODEX STAN 240-2003**

<table>
<thead>
<tr>
<th>Provision</th>
<th>Method</th>
<th>Principle</th>
<th>Note</th>
<th>Type</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total Fats</td>
<td>Bligh-Dyer</td>
<td>Gravimetry</td>
<td>Chloroform-methanol Extraction method for foods in general</td>
<td>IV</td>
</tr>
<tr>
<td>Total Fats</td>
<td>AOAC 963.15</td>
<td>Gravimetry</td>
<td>Soxhlet Extraction method for foods/cacao beans and its products</td>
<td>I</td>
</tr>
<tr>
<td>Total Fats</td>
<td>AOAC 983.23</td>
<td>Gravimetry</td>
<td>Chloroform-methanol Extraction method for foods in general</td>
<td>I</td>
</tr>
<tr>
<td>Total Fats</td>
<td>ISO 1211:1999</td>
<td>Gravimetry</td>
<td>Alkaline hydrolysis method</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Röse-Gottlieb method</td>
<td></td>
</tr>
<tr>
<td>Total solids</td>
<td>ISO 6731:1989</td>
<td>Gravimetry</td>
<td>Drying in hot air oven at 102 ±2°C</td>
<td></td>
</tr>
<tr>
<td>Non-fat solids</td>
<td>ISO 1211:1999</td>
<td>Gravimetry</td>
<td>Alkaline hydrolysis method</td>
<td></td>
</tr>
<tr>
<td></td>
<td>and ISO 6731:1989</td>
<td></td>
<td>Röse-Gottlieb method</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>Gravimetry</td>
<td>Drying in hot air oven at 102 ±2°C</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Calculation:</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Subtracting total fats from total solids</td>
<td></td>
</tr>
<tr>
<td>Moisture</td>
<td>ISO 6731:1989</td>
<td>Gravimetry</td>
<td>Drying in hot air oven at 102 ±2°C</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Calculation:</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Subtracting total solids from 100</td>
<td></td>
</tr>
</tbody>
</table>
FOOD ADDITIVE PROVISIONS
FOR PROCESSED FRUITS AND VEGETABLES

With a view toward possible inclusion in the standards at a later stage, comments are requested justifying the need for the following food additives in each of the standards. Food additives and their acceptable maximum use levels in the tables are extracted from the relevant food categories in the Codex General Standard for Food Additives (CODEX STAN 192) (GSFA). These food additives and their acceptable maximum use levels are either adopted by the Commission or are in the Step process and apply to each of the standards that are listed below.

Comments submitted justifying the technological need for additives should address the following criteria for justifying the use of food additives as established in Section 3.2 of the Codex General Standard for Food Additives and in Section 2 of the Procedural Manual of the Codex Alimentarius Commission in particular the relations between commodity committees and general committees concerning food additives.

3.2 JUSTIFICATION FOR THE USE OF ADDITIVES

The use of food additives is justified only when such use has an advantage, does not present an appreciable health risk to consumers, does not mislead the consumer, and serves one or more of the technological functions set out by Codex and the needs set out from (a) through (d) below, and only where these objectives cannot be achieved by other means that are economically and technologically practicable:

a) to preserve the nutritional quality of the food; an intentional reduction in the nutritional quality of a food would be justified in the circumstances dealt with in sub-paragraph (b) and also in other circumstances where the food does not constitute a significant item in a normal diet;

b) to provide necessary ingredients or constituents for foods manufactured for groups of consumers having special dietary needs;

c) to enhance the keeping quality or stability of a food or to improve its organoleptic properties, provided that this does not change the nature, substance or quality of the food so as to deceive the consumer;

d) to provide aids in the manufacture, processing, preparation, treatment, packing, transport or storage of food, provided that the additive is not used to disguise the effects of the use of faulty raw materials or of undesirable (including unhygienic) practices or techniques during the course of any of these activities.

Pickled Fruits and Vegetables

<table>
<thead>
<tr>
<th>INS</th>
<th>Substance</th>
<th>GSFA(^1)</th>
<th>Food Cat. No.</th>
<th>ML</th>
<th>Step</th>
<th>Comment</th>
</tr>
</thead>
<tbody>
<tr>
<td>Acidity Regulators</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>297</td>
<td>Fumaric Acid</td>
<td>04.2.2.7</td>
<td>GMP</td>
<td>4</td>
<td></td>
<td></td>
</tr>
<tr>
<td>327</td>
<td>Calcium Lactate</td>
<td>04.2.2.7</td>
<td>10,000 mg/kg</td>
<td>4 Note 58</td>
<td>2</td>
<td></td>
</tr>
<tr>
<td>331iii</td>
<td>Trisodium Citrate</td>
<td>04.2.2.7</td>
<td>GMP</td>
<td>4</td>
<td></td>
<td></td>
</tr>
<tr>
<td>350ii</td>
<td>Sodium Malate</td>
<td>04.2.2.7</td>
<td>GMP</td>
<td>4</td>
<td></td>
<td></td>
</tr>
<tr>
<td>355-357, 359</td>
<td>Adipates</td>
<td>04.2.2.3(^3)</td>
<td>50,000 mg/kg</td>
<td>7 Note 1(^4)</td>
<td>4</td>
<td></td>
</tr>
<tr>
<td>365</td>
<td>Sodium Fumarate</td>
<td>04.2.2.7</td>
<td>GMP</td>
<td>4</td>
<td></td>
<td></td>
</tr>
<tr>
<td>500i</td>
<td>Sodium Carbonate</td>
<td>04.2.2.7</td>
<td>GMP</td>
<td>4</td>
<td></td>
<td></td>
</tr>
<tr>
<td>501i</td>
<td>Potassium Carbonate</td>
<td>04.2.2.7</td>
<td>GMP</td>
<td>4</td>
<td></td>
<td></td>
</tr>
<tr>
<td>504i</td>
<td>Magnesium Carbonate</td>
<td>04.2.2.7</td>
<td>5000 mg/kg</td>
<td>4 Note 36(^5)</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

---

1 Codex General Standard for Food Additives (GSFA) (CODEX STAN 192-2006).
2 Note 58 As calcium.
3 Food Category Number 04.2.2.3: Vegetables (including mushrooms and fungi, roots and tubers, pulses and legumes, and aloe vera) and seaweeds in vinegar, oil, brine, or soy sauce.
4 Note 1 As adipic acid.
5 Note 36 Residual level.
## Pickled Fruits and Vegetables

<table>
<thead>
<tr>
<th>INS</th>
<th>Substance</th>
<th>Food Cat. No.</th>
<th>ML</th>
<th>Step</th>
<th>Comment</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Antioxidants</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>301</td>
<td>Sodium Ascorbate</td>
<td>04.2.2.7</td>
<td>GMP</td>
<td>4</td>
<td></td>
</tr>
<tr>
<td>315</td>
<td>Erythorbic Acid</td>
<td></td>
<td>Table 3</td>
<td></td>
<td></td>
</tr>
<tr>
<td>322</td>
<td>Lecithin</td>
<td>04.2.2.7</td>
<td>GMP</td>
<td>4</td>
<td></td>
</tr>
<tr>
<td><strong>Colours</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>100i</td>
<td>Curcumin</td>
<td>04.2.2.3</td>
<td>500 mg/kg</td>
<td>7</td>
<td></td>
</tr>
<tr>
<td>101</td>
<td></td>
<td>04.2.2.7</td>
<td>500 mg/kg</td>
<td>4</td>
<td></td>
</tr>
<tr>
<td>104</td>
<td>Quinoline Yellow</td>
<td>04.2.2.3</td>
<td>500 mg/kg</td>
<td>7</td>
<td></td>
</tr>
<tr>
<td>110</td>
<td>Sunset Yellow FCF</td>
<td>04.2.2.3</td>
<td>500 mg/kg</td>
<td>6</td>
<td></td>
</tr>
<tr>
<td>120</td>
<td>Carmines</td>
<td>04.2.2.3</td>
<td>500 mg/kg</td>
<td>6</td>
<td></td>
</tr>
<tr>
<td>122</td>
<td>Azorubine</td>
<td>04.2.2.3</td>
<td>500 mg/kg</td>
<td>7</td>
<td></td>
</tr>
<tr>
<td>123</td>
<td>Amaranth</td>
<td>04.2.2.3</td>
<td>300 mg/kg</td>
<td>7</td>
<td></td>
</tr>
<tr>
<td>124</td>
<td>Ponceau 4R</td>
<td>04.2.2.3</td>
<td>500 mg/kg</td>
<td>6</td>
<td></td>
</tr>
<tr>
<td>127</td>
<td>Erythrosine</td>
<td>04.2.2.3</td>
<td>300 mg/kg</td>
<td>6</td>
<td></td>
</tr>
<tr>
<td>129</td>
<td>Allura Red AC</td>
<td>04.2.2.3</td>
<td>500 mg/kg</td>
<td>6</td>
<td></td>
</tr>
<tr>
<td>132</td>
<td>Indigo-Tone</td>
<td>04.2.2.3</td>
<td>500 mg/kg</td>
<td>6</td>
<td></td>
</tr>
<tr>
<td>133</td>
<td>Brilliant Blue FCF</td>
<td>04.2.2.3</td>
<td>500 mg/kg</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>143</td>
<td>Fast Green FCF</td>
<td>04.2.2.3</td>
<td>300 mg/kg</td>
<td>Adopted</td>
<td></td>
</tr>
<tr>
<td>150a</td>
<td>Carmel Colour, Class I</td>
<td>04.2.2.7</td>
<td>GMP</td>
<td>4</td>
<td></td>
</tr>
<tr>
<td>150b</td>
<td>Caramel Colour, Class II</td>
<td>04.1.2</td>
<td>80,000 mg/kg</td>
<td>4</td>
<td></td>
</tr>
<tr>
<td>150c</td>
<td>Caramel Colour, Class III</td>
<td>04.1.2</td>
<td>80,000 mg/kg</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>151</td>
<td>Brilliant Black PN</td>
<td>04.2.2.3</td>
<td>500 mg/kg</td>
<td>7</td>
<td></td>
</tr>
<tr>
<td>155</td>
<td>Brown HT</td>
<td>04.2.2.3</td>
<td>500 mg/kg</td>
<td>7</td>
<td></td>
</tr>
<tr>
<td>160aii</td>
<td>Carotenes, Vegetable</td>
<td>04.1.2.10</td>
<td>200 mg/kg</td>
<td>Adopted</td>
<td></td>
</tr>
<tr>
<td>160a, ai, e, f</td>
<td>Carotenoids</td>
<td>04.2.2.3</td>
<td>300 mg/kg</td>
<td>7</td>
<td></td>
</tr>
<tr>
<td>160b</td>
<td>Anatto Extracts</td>
<td>04.2.2.7</td>
<td>200 mg/kg</td>
<td>7</td>
<td></td>
</tr>
<tr>
<td>161bi</td>
<td>Lutein from Tagetes erecta</td>
<td>04.2.2.7</td>
<td>GMP</td>
<td>4</td>
<td></td>
</tr>
<tr>
<td>161g</td>
<td>Canthaxanthin</td>
<td>04.2.2.3</td>
<td>GMP</td>
<td>6</td>
<td></td>
</tr>
<tr>
<td>163ii</td>
<td>Grape Skin Extract</td>
<td>04.1.2.10</td>
<td>1500 mg/kg</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>172i-iii</td>
<td>Iron Oxides</td>
<td>04.2.2.3</td>
<td>500 mg/kg</td>
<td>6</td>
<td></td>
</tr>
<tr>
<td><strong>Firming Agents</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>523</td>
<td>Aluminium Ammonium Sulphate</td>
<td>04.2.2.3</td>
<td>35 mg/kg</td>
<td>Adopted</td>
<td>Note 6*</td>
</tr>
<tr>
<td>523</td>
<td></td>
<td>04.2.2.7</td>
<td>500 mg/kg</td>
<td>6</td>
<td></td>
</tr>
<tr>
<td><strong>Flavour Enhancers</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>627</td>
<td>Disodium Guanylate, 5'</td>
<td>04.2.2.7</td>
<td>GMP</td>
<td>4</td>
<td></td>
</tr>
<tr>
<td>631</td>
<td>Disodium Inosinate, 5'</td>
<td>04.2.2.7</td>
<td>GMP</td>
<td>4</td>
<td></td>
</tr>
<tr>
<td>634</td>
<td>Calcium Ribonucleotides, 5'</td>
<td>04.2.2.7</td>
<td>GMP</td>
<td>4</td>
<td></td>
</tr>
<tr>
<td>635</td>
<td>Disodium Ribonucleotides 5'</td>
<td>04.2.2.7</td>
<td>GMP</td>
<td>4</td>
<td></td>
</tr>
</tbody>
</table>

---

*Note 6* As aluminium.

*Note 9* As total bixin or norbixin.
## Pickled Fruits and Vegetables

<table>
<thead>
<tr>
<th>INS</th>
<th>Substance</th>
<th>Food Cat. No.</th>
<th>ML</th>
<th>Step</th>
<th>Comment</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Preservatives</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>214, 216, 218</td>
<td>Hydroxybenzoates</td>
<td>04.1.2.3</td>
<td>800  mg/kg</td>
<td>7</td>
<td>Note 27</td>
</tr>
<tr>
<td></td>
<td></td>
<td>04.1.2.10</td>
<td>800  mg/kg</td>
<td>7</td>
<td>Note 27</td>
</tr>
<tr>
<td></td>
<td></td>
<td>04.2.2.3</td>
<td>1000 mg/kg</td>
<td>7</td>
<td>Note 27</td>
</tr>
<tr>
<td></td>
<td></td>
<td>04.2.2.7</td>
<td>300  mg/kg</td>
<td>7</td>
<td>Note 27</td>
</tr>
<tr>
<td>220-225, 227, 228</td>
<td>Sulphites</td>
<td>04.2.2.7</td>
<td>500  mg/kg</td>
<td>Adopted</td>
<td>Note 44</td>
</tr>
<tr>
<td>262(ii)</td>
<td>Sodium Diacetate</td>
<td>04.1.2.3</td>
<td>GMP</td>
<td>7</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>04.2.2.3</td>
<td>GMP</td>
<td>7</td>
<td></td>
</tr>
<tr>
<td><strong>Sequestrants</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>334, 335i, 335ii, 336i, 336ii, 337</td>
<td>Tartrates</td>
<td>04.1.2.10</td>
<td></td>
<td></td>
<td>Note 45</td>
</tr>
<tr>
<td>450iii</td>
<td>Tetrasodium Diphosphate</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>338; 339i-iii; 340i-iii; 341i-iii; 342i,ii, 343i-iii; 450i, ii, iii, v, vi, vii; 451i, ii; 452i-v; 542</td>
<td>Phosphates</td>
<td>04.1.2.3</td>
<td>1100 mg/kg</td>
<td>7</td>
<td>Note 33</td>
</tr>
<tr>
<td></td>
<td></td>
<td>04.2.2.3</td>
<td>2200 mg/kg</td>
<td>7</td>
<td>Note 33</td>
</tr>
<tr>
<td></td>
<td></td>
<td>04.2.2.3</td>
<td>2200 mg/kg</td>
<td>7</td>
<td>Note 33 and 76</td>
</tr>
<tr>
<td>472c</td>
<td>Citric and fatty acid esters of glycerol</td>
<td>04.2.2.7</td>
<td>GMP</td>
<td>4</td>
<td></td>
</tr>
<tr>
<td>472e</td>
<td>Diacetyltartaric and fatty esters of glycerol</td>
<td>04.1.2.10</td>
<td>2500 mg/kg</td>
<td>Adopted</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>04.2.2.7</td>
<td>2500 mg/kg</td>
<td>Adopted</td>
<td></td>
</tr>
<tr>
<td>576</td>
<td>Sodium Gluconate</td>
<td>04.2.2.7</td>
<td>GMP</td>
<td>4</td>
<td></td>
</tr>
<tr>
<td><strong>Sweeteners</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>420</td>
<td>Sorbitol (Including Sorbitol Syrup)</td>
<td>04.2.2.7</td>
<td>70,000 mg/kg</td>
<td>4</td>
<td></td>
</tr>
<tr>
<td>950</td>
<td>Acesulfame Potassium</td>
<td>04.1.2.3</td>
<td>200  mg/kg</td>
<td>6</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>04.1.2.10</td>
<td>1000 mg/kg</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>04.2.2.3</td>
<td>1000 mg/kg</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>04.2.2.7</td>
<td>1000 mg/kg</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>951</td>
<td>Aspartame</td>
<td>04.1.2.10</td>
<td>2000 mg/kg</td>
<td>6</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>04.2.2.7</td>
<td>2500 mg/kg</td>
<td>6</td>
<td></td>
</tr>
<tr>
<td>953</td>
<td>Isomalt</td>
<td>04.2.2.7</td>
<td>50,000 mg/kg</td>
<td>4</td>
<td></td>
</tr>
<tr>
<td>954</td>
<td>Saccharin</td>
<td>04.2.2.7</td>
<td>500  mg/kg</td>
<td>6</td>
<td></td>
</tr>
<tr>
<td>957</td>
<td>Thaumatin</td>
<td>04.2.2.7</td>
<td>GMP</td>
<td>4</td>
<td></td>
</tr>
<tr>
<td>961</td>
<td>Neotame</td>
<td>04.1.2.3</td>
<td>100  mg/kg</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>04.1.2.10</td>
<td>65   mg/kg</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>04.2.2.3</td>
<td>10   mg/kg</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>04.2.2.7</td>
<td>33   mg/kg</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>962</td>
<td>Aspartame-Acesulfame Salt</td>
<td>04.1.2.3</td>
<td>450  mg/kg</td>
<td>3</td>
<td>Note 113 &amp; 144</td>
</tr>
<tr>
<td></td>
<td></td>
<td>04.2.2.3</td>
<td>460  mg/kg</td>
<td>3</td>
<td>Note 119 &amp; 144</td>
</tr>
<tr>
<td></td>
<td></td>
<td>04.2.2.7</td>
<td>2270 mg/kg</td>
<td>3</td>
<td>Note 113</td>
</tr>
<tr>
<td>965</td>
<td>Maltitol and Maltitol Syrup</td>
<td>04.2.2.7</td>
<td>100,000 mg/kg</td>
<td>4</td>
<td></td>
</tr>
<tr>
<td>966</td>
<td>Lactitol</td>
<td>04.2.2.7</td>
<td>10,000 mg/kg</td>
<td>4</td>
<td></td>
</tr>
<tr>
<td>967</td>
<td>Xylitol</td>
<td>04.2.2.7</td>
<td>10,000 mg/kg</td>
<td>4</td>
<td></td>
</tr>
</tbody>
</table>

---

8 Note 27 As p-hydroxybenzoic acid.  
9 Note 44 As residual SO₂.  
10 Note 45 As tartaric acid.  
11 In the draft standard (CX/PFV 06/23/4), sodium pyrophosphate (INS 451iii) was included with an acceptable maximum use level of 2200 mg/kg, but this reference does not exist in the Codex INS (CODEX GL 36. The 23rd CCPFV was of the opinion that it was a typing error and thought that the substance in question was INS 450iii Tetrasodium Diphosphate. 
12 Note 33 As phosphorus.  
13 Note 76 Use in potatoes only.  
14 Note 113 Use level reported as acesulfame potassium equivalents.  
15 Note 119 Use level reported as aspartame equivalents.  
16 Note 144 For use in sweet and sour products only.
# GSFA Table 3 Food Additives by Food Additive Functional Class

## Table 3 Acidity Regulators

<table>
<thead>
<tr>
<th>INS</th>
<th>Additive</th>
<th>INS</th>
<th>Additive</th>
</tr>
</thead>
<tbody>
<tr>
<td>170i</td>
<td>Calcium Carbonate</td>
<td>380</td>
<td>Triammonium Citrate</td>
</tr>
<tr>
<td>261</td>
<td>Potassium Acetates</td>
<td>500i</td>
<td>Sodium Carbonate</td>
</tr>
<tr>
<td>263</td>
<td>Calcium Acetate</td>
<td>500ii</td>
<td>Sodium Hydrogen Carbonate</td>
</tr>
<tr>
<td>264</td>
<td>Ammonium Acetate</td>
<td>500iii</td>
<td>Sodium Sesquicarbonate</td>
</tr>
<tr>
<td>297</td>
<td>Fumaric Acid</td>
<td>501i</td>
<td>Potassium Carbonate</td>
</tr>
<tr>
<td>325</td>
<td>Sodium Lactate</td>
<td>501ii</td>
<td>Potassium Hydrogen Carbonate</td>
</tr>
<tr>
<td>326</td>
<td>Potassium Lactate</td>
<td>503i</td>
<td>Ammonium Carbonate</td>
</tr>
<tr>
<td>327</td>
<td>Calcium Lactate</td>
<td>503ii</td>
<td>Ammonium Hydrogen Carbonate</td>
</tr>
<tr>
<td>328</td>
<td>Ammonium Lactate</td>
<td>504i</td>
<td>Magnesium Carbonate</td>
</tr>
<tr>
<td>329</td>
<td>Magnesium Lactate</td>
<td>504ii</td>
<td>Magnesium Hydrogen Carbonate</td>
</tr>
<tr>
<td>331i</td>
<td>Sodium Dihydrogen Citrate</td>
<td>507</td>
<td>Hydrochloric Acid</td>
</tr>
<tr>
<td>331ii</td>
<td>Trisodium Citrate</td>
<td>514</td>
<td>Sodium Sulphate</td>
</tr>
<tr>
<td>332i</td>
<td>Potassium Dihydrogen Citrate</td>
<td>515</td>
<td>Potassium Sulphate</td>
</tr>
<tr>
<td>332ii</td>
<td>Tripotassium Citrate</td>
<td>524</td>
<td>Sodium Hydroxide</td>
</tr>
<tr>
<td>333</td>
<td>Calcium Citrates</td>
<td>525</td>
<td>Potassium Hydroxide</td>
</tr>
<tr>
<td>350i</td>
<td>Sodium Hydrogen Malate</td>
<td>526</td>
<td>Calcium Hydroxide</td>
</tr>
<tr>
<td>350ii</td>
<td>Sodium Malate</td>
<td>527</td>
<td>Ammonium Hydroxide</td>
</tr>
<tr>
<td>351i</td>
<td>Potassium Hydrogen Malate</td>
<td>528</td>
<td>Magnesium Hydroxide</td>
</tr>
<tr>
<td>351ii</td>
<td>Potassium Malate</td>
<td>529</td>
<td>Calcium Oxide</td>
</tr>
<tr>
<td>352i</td>
<td>Calcium Malate</td>
<td>575</td>
<td>Glucono Delta-Lactone</td>
</tr>
<tr>
<td>365</td>
<td>Sodium Fumarate</td>
<td>578</td>
<td>Calcium Gluconate</td>
</tr>
<tr>
<td>380</td>
<td>Ammonium Citrate</td>
<td>580</td>
<td>Magnesium Gluconate</td>
</tr>
</tbody>
</table>

## Table 3 Antifoaming Agents

<table>
<thead>
<tr>
<th>INS</th>
<th>Additive</th>
</tr>
</thead>
<tbody>
<tr>
<td>404</td>
<td>Calcium Alginate</td>
</tr>
</tbody>
</table>

## Table 3 Antioxidants

<table>
<thead>
<tr>
<th>INS</th>
<th>Additive</th>
<th>INS</th>
<th>Additive</th>
</tr>
</thead>
<tbody>
<tr>
<td>301</td>
<td>Sodium Ascorbate</td>
<td>322</td>
<td>Lecithins</td>
</tr>
<tr>
<td>302</td>
<td>Calcium Ascorbate</td>
<td>325</td>
<td>Sodium Lactate</td>
</tr>
<tr>
<td>303</td>
<td>Potassium Ascorbate</td>
<td>326</td>
<td>Potassium Lactate</td>
</tr>
<tr>
<td>315</td>
<td>Erythorbic Acid</td>
<td>330</td>
<td>Citric Acid</td>
</tr>
<tr>
<td>316</td>
<td>Sodium Erythorbate</td>
<td>1102</td>
<td>Glucose Oxidase (Aspergillus Niger var.)</td>
</tr>
</tbody>
</table>

## Table 3 Colours

<table>
<thead>
<tr>
<th>INS</th>
<th>Additive</th>
<th>INS</th>
<th>Additive</th>
</tr>
</thead>
<tbody>
<tr>
<td>150a</td>
<td>Caramel Colour, Class I</td>
<td>171</td>
<td>Titanium Dioxide</td>
</tr>
</tbody>
</table>

## Table 3 Firming Agents

<table>
<thead>
<tr>
<th>INS</th>
<th>Additive</th>
<th>INS</th>
<th>Additive</th>
</tr>
</thead>
<tbody>
<tr>
<td>333</td>
<td>Calcium Citrates</td>
<td>526</td>
<td>Calcium Hydroxide</td>
</tr>
<tr>
<td>511</td>
<td>Magnesium Chloride</td>
<td>580</td>
<td>Magnesium Gluconate</td>
</tr>
<tr>
<td>516</td>
<td>Calcium Sulphate</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
### Table 3 Flavour Enhancers

<table>
<thead>
<tr>
<th>INS</th>
<th>Additive</th>
<th>INS</th>
<th>Additive</th>
</tr>
</thead>
<tbody>
<tr>
<td>580</td>
<td>Magnesium Gluconate</td>
<td>631</td>
<td>Disodium Inosinate, 5'-</td>
</tr>
<tr>
<td>620</td>
<td>Glutamic Acid (L+)-</td>
<td>632</td>
<td>Dipotassium Inosinate, 5'-</td>
</tr>
<tr>
<td>622</td>
<td>Monopotassium Glutamate, L-</td>
<td>633</td>
<td>Calcium Inosinate, 5'-</td>
</tr>
<tr>
<td>623</td>
<td>Calcium Glutamate, Dl-L-</td>
<td>634</td>
<td>Calcium Ribonucleotides, 5'-</td>
</tr>
<tr>
<td>624</td>
<td>Monoammonium Glutamate, L-</td>
<td>635</td>
<td>Disodium Ribonucleotides, 5'-</td>
</tr>
<tr>
<td>625</td>
<td>Magnesium Glutamate, Dl-L-</td>
<td>957</td>
<td>Thaumatin</td>
</tr>
<tr>
<td>626</td>
<td>Guanylic Acid, 5'-</td>
<td>968</td>
<td>Erythritol</td>
</tr>
<tr>
<td>627</td>
<td>Disodium Guanylate, 5'-</td>
<td>1101ii</td>
<td>Papain</td>
</tr>
<tr>
<td>628</td>
<td>Dipotassium Guanylate, 5'-</td>
<td>1101iii</td>
<td>Bromelain</td>
</tr>
<tr>
<td>629</td>
<td>Calcium Guanylate, 5'-</td>
<td>1104</td>
<td>Lipase (Animal Sources)</td>
</tr>
<tr>
<td>630</td>
<td>Inosinic Acid, 5'-</td>
<td>1104</td>
<td>Lipase (Aspergillus oryzae var.)</td>
</tr>
</tbody>
</table>

### Table 3 Preservatives

<table>
<thead>
<tr>
<th>INS</th>
<th>Additive</th>
<th>INS</th>
<th>Additive</th>
</tr>
</thead>
<tbody>
<tr>
<td>260</td>
<td>Acetic Acid, Glacial</td>
<td>280</td>
<td>Propionic Acid</td>
</tr>
<tr>
<td>261</td>
<td>Potassium Acetates</td>
<td>281</td>
<td>Sodium Propionate</td>
</tr>
<tr>
<td>262i</td>
<td>Sodium Acetate</td>
<td>282</td>
<td>Calcium Propionate</td>
</tr>
<tr>
<td>263i</td>
<td>Calcium Acetate</td>
<td>283</td>
<td>Potassium Propionate</td>
</tr>
</tbody>
</table>

### Table 3 Sequestrants

<table>
<thead>
<tr>
<th>INS</th>
<th>Additive</th>
<th>INS</th>
<th>Additive</th>
</tr>
</thead>
<tbody>
<tr>
<td>262i</td>
<td>Sodium Acetate</td>
<td>472a</td>
<td>Acetic and Fatty Acid Esters of Glycerol</td>
</tr>
<tr>
<td>330</td>
<td>Citric Acid</td>
<td>472c</td>
<td>Citric and Fatty Acid Esters of Glycerol</td>
</tr>
<tr>
<td>331i</td>
<td>Sodium Dihydrogen Citrate</td>
<td>472b</td>
<td>Lactic and Fatty Acid Esters of Glycerol</td>
</tr>
<tr>
<td>331iii</td>
<td>Trisodium Citrate</td>
<td>516</td>
<td>Calcium Sulphate</td>
</tr>
<tr>
<td>332i</td>
<td>Potassium Dihydrogen Citrate</td>
<td>576</td>
<td>Sodium Gluconate</td>
</tr>
<tr>
<td>332ii</td>
<td>Tripotassium Citrate</td>
<td>577</td>
<td>Potassium Gluconate</td>
</tr>
<tr>
<td>333</td>
<td>Calcium Citrates</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

### Table 3 Sweeteners

<table>
<thead>
<tr>
<th>INS</th>
<th>Additive</th>
<th>INS</th>
<th>Additive</th>
</tr>
</thead>
<tbody>
<tr>
<td>420</td>
<td>Sorbitol (Including Sorbitol Syrup)</td>
<td>965</td>
<td>Maltitol (Including Maltitol Syrup)</td>
</tr>
<tr>
<td>421</td>
<td>Mannitol</td>
<td>966</td>
<td>Lactitol</td>
</tr>
<tr>
<td>953</td>
<td>Isomalt</td>
<td>967</td>
<td>Xylitol</td>
</tr>
<tr>
<td>957</td>
<td>Thaumatin</td>
<td>968</td>
<td>Erythritol</td>
</tr>
<tr>
<td>964</td>
<td>Polyglycitol Syrup</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Processed Tomato Concentrates

<table>
<thead>
<tr>
<th>Table 3 Acidity Regulators</th>
</tr>
</thead>
<tbody>
<tr>
<td>INS</td>
</tr>
<tr>
<td>-----</td>
</tr>
<tr>
<td>170i</td>
</tr>
<tr>
<td>260</td>
</tr>
<tr>
<td>261</td>
</tr>
<tr>
<td>262i</td>
</tr>
<tr>
<td>263</td>
</tr>
<tr>
<td>264</td>
</tr>
<tr>
<td>270</td>
</tr>
<tr>
<td>296</td>
</tr>
<tr>
<td>297</td>
</tr>
<tr>
<td>325</td>
</tr>
<tr>
<td>326</td>
</tr>
<tr>
<td>327</td>
</tr>
<tr>
<td>328</td>
</tr>
<tr>
<td>329</td>
</tr>
<tr>
<td>350i</td>
</tr>
<tr>
<td>350i</td>
</tr>
<tr>
<td>351i</td>
</tr>
<tr>
<td>351ii</td>
</tr>
<tr>
<td>352i</td>
</tr>
<tr>
<td>365</td>
</tr>
<tr>
<td>380</td>
</tr>
<tr>
<td>380</td>
</tr>
</tbody>
</table>

Preserved Tomatoes

<table>
<thead>
<tr>
<th>Preserved Tomatoes</th>
</tr>
</thead>
<tbody>
<tr>
<td>INS</td>
</tr>
<tr>
<td>Food Cat. No.</td>
</tr>
<tr>
<td>Acidity regulators</td>
</tr>
<tr>
<td>338; 339i-iii; 340i-iii; 341i-iii; 342i,ii, 343i-iii, 450i, ii, iii, v, vi, vii-v, 451i, ii; 452i-v; 542</td>
</tr>
<tr>
<td>Firming agents</td>
</tr>
<tr>
<td>341i</td>
</tr>
<tr>
<td>338; 339i-iii; 340i-iii; 341i-iii; 342i,ii, 343i-iii, 450i, ii, iii, v, vi, vii-v, 451i, ii; 452i-v; 542</td>
</tr>
</tbody>
</table>

\textsuperscript{17} Canned or bottled (pasteurized) or retort pouch vegetables (including mushrooms and fungi, roots and tubers, pulses and legumes, and aloe vera), and seaweeds.

\textsuperscript{18} Note 33 As phosphorus.

\textsuperscript{19} Canned or bottled (pasteurized) or retort pouch vegetables (including mushrooms and fungi, roots and tubers, pulses and legumes, and aloe vera), and seaweeds.

\textsuperscript{20} Note 33 As phosphorus.
## Table 3 Acidity Regulators

<table>
<thead>
<tr>
<th>INS</th>
<th>Additive</th>
<th>INS</th>
<th>Additive</th>
</tr>
</thead>
<tbody>
<tr>
<td>170i</td>
<td>Calcium Carbonate</td>
<td>500i</td>
<td>Sodium Carbonate</td>
</tr>
<tr>
<td>260i</td>
<td>Acetic Acid, Glacial</td>
<td>500ii</td>
<td>Sodium Hydrogen Carbonate</td>
</tr>
<tr>
<td>261i</td>
<td>Potassium Acetates</td>
<td>500iii</td>
<td>Sodium Sesquicarbonate</td>
</tr>
<tr>
<td>262i</td>
<td>Sodium Acetate</td>
<td>501i</td>
<td>Potassium Carbonate</td>
</tr>
<tr>
<td>263i</td>
<td>Calcium Acetate</td>
<td>501ii</td>
<td>Potassium Hydrogen Carbonate</td>
</tr>
<tr>
<td>264i</td>
<td>Ammonium Acetate</td>
<td>503i</td>
<td>Ammonium Carbonate</td>
</tr>
<tr>
<td>270i</td>
<td>Lactic Acid</td>
<td>503ii</td>
<td>Ammonium Hydrogen Carbonate</td>
</tr>
<tr>
<td>296i</td>
<td>Malic Acid (DL-)</td>
<td>504i</td>
<td>Magnesium Carbonate</td>
</tr>
<tr>
<td>297i</td>
<td>Fumaric Acid</td>
<td>504ii</td>
<td>Magnesium Hydrogen Carbonate</td>
</tr>
<tr>
<td>325i</td>
<td>Sodium Lactate</td>
<td>507</td>
<td>Hydrochloric Acid</td>
</tr>
<tr>
<td>326i</td>
<td>Potassium Lactate</td>
<td>514</td>
<td>Sodium Sulphate</td>
</tr>
<tr>
<td>328i</td>
<td>Ammonium Lactate</td>
<td>515</td>
<td>Potassium Sulphate</td>
</tr>
<tr>
<td>329i</td>
<td>Magnesium Lactate (DL-)</td>
<td>524</td>
<td>Sodium Hydroxide</td>
</tr>
<tr>
<td>350i</td>
<td>Sodium Hydrogen Malate</td>
<td>525</td>
<td>Potassium Hydroxide</td>
</tr>
<tr>
<td>350ii</td>
<td>Sodium Malate</td>
<td>526</td>
<td>Calcium Hydroxide</td>
</tr>
<tr>
<td>351i</td>
<td>Potassium Hydrogen Malate</td>
<td>527</td>
<td>Ammonium Hydroxide</td>
</tr>
<tr>
<td>351ii</td>
<td>Potassium Malate</td>
<td>528</td>
<td>Magnesium Hydroxide</td>
</tr>
<tr>
<td>352i</td>
<td>Calcium Malate</td>
<td>529</td>
<td>Calcium Oxide</td>
</tr>
<tr>
<td>365i</td>
<td>Sodium Fumarate</td>
<td>578</td>
<td>Calcium Gluconate</td>
</tr>
<tr>
<td>380i</td>
<td>Ammonium Citrate</td>
<td>580</td>
<td>Magnesium Gluconate</td>
</tr>
<tr>
<td>380i</td>
<td>Triammonium Citrate</td>
<td>578</td>
<td>Calcium Gluconate</td>
</tr>
</tbody>
</table>

## Table 3 Firming Agents

<table>
<thead>
<tr>
<th>INS</th>
<th>Additive</th>
<th>INS</th>
<th>Additive</th>
</tr>
</thead>
<tbody>
<tr>
<td>511i</td>
<td>Magnesium Chloride</td>
<td>578i</td>
<td>Calcium Gluconate</td>
</tr>
<tr>
<td>516i</td>
<td>Calcium Sulphate</td>
<td>580i</td>
<td>Magnesium Gluconate</td>
</tr>
<tr>
<td>526i</td>
<td>Calcium Hydroxide</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

## Table 3 Modified Starches

<table>
<thead>
<tr>
<th>INS</th>
<th>Additive</th>
<th>INS</th>
<th>Additive</th>
</tr>
</thead>
<tbody>
<tr>
<td>1400</td>
<td>Dextrins, Roasted Starch Yellow and White</td>
<td>1413</td>
<td>Distarch Phosphate, phosphated</td>
</tr>
<tr>
<td>1401</td>
<td>Acid-Treated Starches</td>
<td>1414</td>
<td>Acetylated Distarch Phosphate</td>
</tr>
<tr>
<td>1402</td>
<td>Alkali-Treated Starches</td>
<td>1420</td>
<td>Starch Acetate</td>
</tr>
<tr>
<td>1403</td>
<td>Bleached Starches</td>
<td>1422</td>
<td>Acetylated Distarch Adipate</td>
</tr>
<tr>
<td>1404</td>
<td>Oxidized Starches</td>
<td>1440</td>
<td>Hydroxypropyl Starch</td>
</tr>
<tr>
<td>1405</td>
<td>Starches, Enzyme Treated</td>
<td>1442</td>
<td>Hydroxypropyl Distarch Phosphate</td>
</tr>
<tr>
<td>1410</td>
<td>Monostarch Phosphate</td>
<td>1450</td>
<td>Starch Sodium Octenyl Succinate</td>
</tr>
<tr>
<td>1412</td>
<td>Distarch Phosphate</td>
<td>1451</td>
<td>Acetylated Oxidized Starch</td>
</tr>
</tbody>
</table>

21 For use in creamed corn only.
Certain Canned Citrus Fruits

<table>
<thead>
<tr>
<th>INS</th>
<th>Substance</th>
<th>GSFA</th>
<th>Cat. No.</th>
<th>ML</th>
<th>Step</th>
<th>Comment</th>
</tr>
</thead>
<tbody>
<tr>
<td>334; 335i,ii; 336i,ii; 337</td>
<td>Tartrates</td>
<td>04.1.2.4</td>
<td>1300 mg/kg</td>
<td>7</td>
<td></td>
<td>Note 45</td>
</tr>
<tr>
<td>338; 339i-iii; 340i-iii; 341i-iii; 342i,ii; 343i-iii; 450i, ii, iii, v, vi, vii; 451i, ii; 452i-v; 542</td>
<td>Phosphates</td>
<td>04.1.2.4</td>
<td>200 mg/kg</td>
<td>7</td>
<td></td>
<td>Note 33</td>
</tr>
</tbody>
</table>

**Anti-clouding Agent**

INS 461 – METHYL CELLULOSE AT 10 MG/KG – There is no functional class for anti-clouding agents in the Class Names and the International Numbering System for Food Additives. INS 461 is identified with a technological function of thickener, emulsifier or stabilizer. The Committee should identify a functional class for this Additive or to seek the advice of CCFA to enter a new category “Anti-clouding Agent”

---

**Table 3 Acidity Regulators**

<table>
<thead>
<tr>
<th>INS</th>
<th>Additive</th>
<th>INS</th>
<th>Additive</th>
</tr>
</thead>
<tbody>
<tr>
<td>170i</td>
<td>Calcium Carbonate</td>
<td>365</td>
<td>Sodium Fumarate</td>
</tr>
<tr>
<td>260</td>
<td>Acetic Acid, Glacial</td>
<td>380</td>
<td>Ammonium Citrate</td>
</tr>
<tr>
<td>261</td>
<td>Potassium Acetates</td>
<td>380</td>
<td>Triammonium Citrate</td>
</tr>
<tr>
<td>262i</td>
<td>Sodium Acetate</td>
<td>500i</td>
<td>Sodium Carbonate</td>
</tr>
<tr>
<td>263</td>
<td>Calcium Acetate</td>
<td>500ii</td>
<td>Sodium Hydrogen Carbonate</td>
</tr>
<tr>
<td>264</td>
<td>Ammonium Acetate</td>
<td>500iii</td>
<td>Sodium Sesquicarbonate</td>
</tr>
<tr>
<td>270</td>
<td>Lactic Acid</td>
<td>501i</td>
<td>Potassium Carbonate</td>
</tr>
<tr>
<td>296</td>
<td>Malic Acid (DL-)</td>
<td>501ii</td>
<td>Potassium Hydrogen Carbonate</td>
</tr>
<tr>
<td>297</td>
<td>Fumaric Acid</td>
<td>503i</td>
<td>Ammonium Carbonate</td>
</tr>
<tr>
<td>325</td>
<td>Sodium Lactate</td>
<td>503ii</td>
<td>Ammonium Hydrogen Carbonate</td>
</tr>
<tr>
<td>326</td>
<td>Potassium Lactate</td>
<td>504i</td>
<td>Magnesium Carbonate</td>
</tr>
<tr>
<td>327</td>
<td>Calcium Lactate</td>
<td>504ii</td>
<td>Magnesium Hydrogen Carbonate</td>
</tr>
<tr>
<td>328</td>
<td>Ammonium Lactate</td>
<td>507</td>
<td>Hydrochloric Acid</td>
</tr>
<tr>
<td>329</td>
<td>Magnesium Lactate (DL-)</td>
<td>514</td>
<td>Sodium Sulphate</td>
</tr>
<tr>
<td>330</td>
<td>Citric Acid</td>
<td>515</td>
<td>Potassium Sulphate</td>
</tr>
<tr>
<td>331i</td>
<td>Sodium Dihydrogen Citrate</td>
<td>524</td>
<td>Sodium Hydroxide</td>
</tr>
<tr>
<td>331ii</td>
<td>Trisodium Citrate</td>
<td>525</td>
<td>Potassium Hydroxide</td>
</tr>
<tr>
<td>332i</td>
<td>Tri potassium Citrate</td>
<td>526</td>
<td>Calcium Hydroxide</td>
</tr>
<tr>
<td>332ii</td>
<td>Potassium Dihydrogen Citrate</td>
<td>527</td>
<td>Ammonium Hydroxide</td>
</tr>
<tr>
<td>333</td>
<td>Calcium Citrates</td>
<td>528</td>
<td>Magnesium Hydroxide</td>
</tr>
<tr>
<td>350i</td>
<td>Sodium Hydrogen Malate</td>
<td>529</td>
<td>Calcium Oxide</td>
</tr>
<tr>
<td>350ii</td>
<td>Sodium Malate</td>
<td>575</td>
<td>Glucono Delta-Lactone</td>
</tr>
<tr>
<td>351i</td>
<td>Potassium Hydrogen Malate</td>
<td>578</td>
<td>Calcium Gluconate</td>
</tr>
<tr>
<td>351ii</td>
<td>Potassium Malate</td>
<td>580</td>
<td>Magnesium Gluconate</td>
</tr>
<tr>
<td>352ii</td>
<td>Calcium Malate</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**Table 3 Firming Agents**

<table>
<thead>
<tr>
<th>INS</th>
<th>Additive</th>
<th>INS</th>
</tr>
</thead>
<tbody>
<tr>
<td>333</td>
<td>Calcium Citrates</td>
<td>526</td>
</tr>
<tr>
<td>511</td>
<td>Magnesium Chloride</td>
<td>578</td>
</tr>
<tr>
<td>516</td>
<td>Calcium Sulphate</td>
<td>580</td>
</tr>
</tbody>
</table>

---

22 **Note 45** As tartaric acid.

23 **Note 36** Residual level.
PRIORITY LIST
FOR THE STANDARDIZATION
OF PROCESSED FRUITS AND VEGETABLES

- Canned Berry Fruits
- Canned Fruit Cocktail
- Canned Mango
- Canned Pineapple
- Canned Tropical Fruit Salad
- Chutney (including Mango Chutney)
- Dried Figs
- Quick Frozen Broccoli
- Whole Dates