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REP17/PFV

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REPORT OF THE 28th SESSION OF THE
CODEX COMMITTEE ON PROCESSED FRUITS AND VEGETABLES
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SUMMARY AND STATUS OF WORK					
Party	Purpose	Text/Topic	Code	Step	Para.
Members/ CCEXEX73/ CAC40	Comments/ Adoption	Annex on Canned Pineapples (for inclusion in the Standard for Certain Canned Fruits)	CXS 319-2015	5/8	26, App. II
Members/ CCEXEX73/ CAC40	Comments/ Adoption	Annexes for Certain Quick Frozen Vegetables (for inclusion in the Standard for Quick Frozen Vegetables)	CXS 320-2015	5/8	43, App. IV
CAC40	Adoption	Amendment to the scope of the Standard for Certain Canned Fruits	CXS 319-2015	-	27, App. III
CAC40	Adoption	Amendments to the food additive provisions in Codex standards for processed fruits and vegetables (subject to endorsement by CCFA)		-	69, 82, 83, App. V
		Standard for Canned Chestnuts and Canned Chestnut Puree	CXS 145-1985		
		Standard for Pickled Fruits and Vegetables	CXS 260-2007		
		Standard for Jams, Jellies and Marmalades	CXS 296-2009		
		Standard for Canned Applesauce	CXS 17-1981		
		Standard for Canned Fruit Cocktail	CXS 78-1981		
		Standard for Canned Tropical Fruit Salad	CXS 99-1981		
		Standard for Pickled Cucumbers	CXS 115-1981		
		Standard for Kimchi	CXS 223-2001		
		Standard for Canned Stone Fruits	CXS 242-2003		
CAC40	Revocation	Standard for Canned Pineapples	CXS 42-1981	-	29, 42, 76
		Standard for Quick Frozen Broccoli	CXS 10-1981	-	
		Standard for Quick Frozen Brussels Sprouts	CXS 112-1981	-	
		Standard for Quick Frozen Cauliflower	CXS 111-1981	-	
		Standard for Quick Frozen French Fried Potatoes	CXS 114-1981	-	
		Standard for Quick Frozen Green and Wax Beans	CXS 113-1981	-	
		Standard for Quick Frozen Peas	CXS 41-1981	-	
		Standard for Quick Frozen Spinach	CXS 77-1981	-	
Members/ CCEXEX73/ CAC40	Comments/ Information/ Adoption	Status of work on the revision of standards for processed fruits and vegetables and future work CCPFV28 agreed that: Codex Secretariat will issue a Circular Letter requesting comments on revision of the remaining 18 Codex standards for processed fruits and vegetables as well as any other new proposals for work of the Committee; proposals for new work will be submitted by the concerned countries to CCEXEX73 for critical review; CAC40 will determine the need to convene a physical meeting of the Committee based on the volume of new work.			112, 115, 116
CCEXEX73	Monitoring	CCPFV28 reaffirmed that the Criteria for the Establishment of Work Priorities as laid down in the Procedural Manual are sufficient to prioritize its work			8
CCMAS	Endorsement	CCPFV28 agreed to retain the current sampling plans in the Standard for Ginseng Products (CXS 321-2015) and that, should a variable sampling plan be required, CCMAS could develop a suitable proposal which would meet the requirements of the <i>Guidelines on Sampling</i> (CAC/GL 50-2004)			11
CCMAS	Endorsement	Methods of analysis and sampling for quick frozen vegetables for inclusion in the <i>Recommended Methods of Analysis and Sampling</i> (CXS 234-1999)			43, App. IV
CCFA49	Endorsement	Food additive provisions for canned pineapples, certain quick frozen vegetables, canned chestnut and canned chestnut puree, and pickled fruits and vegetables			51, 66, 69, App. II, IV and V
CCFA49	Information	Discussion on technological justification on the use of food additives and/or functional classes in certain categories of processed fruits and vegetables			81

LIST OF ABBREVIATIONS

AQL	Acceptable Quality Level
CAC	Codex Alimentarius Commission
CAC/RM	Codex Recommended Method
CCASIA	FAO/WHO Coordinating Committee for Asia
CCFA	Committee on Food Additives
CCEXEC	Executive Committee
CCMAS	Committee on Methods of Analysis
CCSCH	Committee on Spices and Culinary Herbs
CL	Circular Letter
CRD	Conference Room Document
EU	European Union
EWG	Electronic Working Group
FAO	Food and Agriculture Organisation
GSFA	General Standard for Food Additives
INS	International Numbering System
JECFA	Joint FAO/WHO Expert Committee on Food Additives
UNECE	United Nations Economic Commission for Europe
USA	United States of America
WG	Working Group
WTO	World Trade Organization

INTRODUCTION

1. The 28th Session of the Codex Committee on Processed Fruits and Vegetables (CCPFV) was held in Washington D.C., United States of America, from 12 to 16 September 2016 at the kind invitation of the Government of the United States of America. Mr Richard Boyd, Chief, Contract Services Branch, Specialty Crops Inspection Division, Fruit and Vegetable Program, AMS, USA chaired the Session. The Session was attended by 27 Member countries, 1 Member Organization, 1 UN organization and 5 Observer organizations. The list of participants is given in Appendix I.

OPENING OF THE SESSION

2. Ms Eleanor Starmer, Administrator, Agricultural Marketing Service, U.S Department of Agriculture, gave the keynote address. Dr Francisco Becerra, Assistant Director of the Pan American Health Organization (PAHO) and Ms Mary Frances Lowe, Codex Manager, US Codex Office, U.S Department of Agriculture also addressed the Session.

Division of Competence¹

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

ADOPTION OF THE PROVISIONAL AGENDA (Agenda Item 1)²

4. The Committee adopted the Provisional Agenda as its Agenda for the Session, noting that the following matters would be considered under the respective agenda items:
 - Revision to the Standard for Pistachio Nuts (CODEX STAN 131-1981) (Proposal from Iran) - Agenda Item 6;
 - Preliminary proposals for future work (Proposal from India) - Agenda Item 7; and
 - Discussion paper on future work of CCPFV (United States of America) - Agenda Item 8.
5. The Committee also agreed to establish two in-session working groups as follows:
 - In-session working group on quick frozen vegetables to consider technical provisions in the annexes for quick frozen vegetables including methods of analysis and sampling (Agenda Item 4) chaired by the United States of America and co-chaired by France;
 - In-session working group on food additives to consider food additive provisions in the standards under discussion (Agenda Items 3 and 4) and other food additive related questions arising from the last session of the Committee (Agenda Item 5) and referred to CCPFV by CCFA (Agenda Item 2) chaired by the United States of America.

MATTERS REFERRED TO THE COMMITTEE BY THE CODEX ALIMENTARIUS COMMISSION AND ITS SUBSIDIARY BODIES (Agenda Item 2)³

6. The Committee noted the information presented in working document CX/PFV 16/28/2.
7. The Committee agreed on the following:
 - The request from CCASIA on the development of a standard for dried longan would be examined under Agenda Item 6;
 - The information provided to CAC39 by the United States of America, as Host Country of CCPFV, on the possible adjournment of the Committee after its 28th Session, if current priority work would be completed and no proposals for new work would be presented, would be examined under Agenda Item 8;
 - The request from CCFA on various food additive provisions would be examined under Agenda Item 5;
 - The request from CCMAS on the replacement of Codex recommended methods (CAC/RMs) with international validated methods would be examined under Agenda Item 4;
 - The Codex Secretariat would proceed with the replacement of CAC/RM 46-1972 (method for fill of glass containers) with ISO 82106 (glass container – determination of capacity by gravimetric methods) in all relevant standards for processed fruits and vegetables.

¹ CRD 1.

² CX/PFV 16/28/1.

³ CX/PFV 16/28/2; CRD 2 (Comments of Chile, Costa Rica, EU, Indonesia, Kenya, USA, IFAC and IFU); CRD 6 (Comments of India); CRD 7 (Comments of Israel); CRD 9 (Comments of Republic of Korea); CRD 11 (Comments of USA); CRD 12 (Comments of Thailand).

Monitoring of Standards Development

8. The Committee recalled its reply to the questions on the status of implementation the Strategic Plan (2014-2019) (Activity 1.1.1 on the use of specific criteria for standards development) and reaffirmed that the Criteria for the Establishment of Work Priorities as laid down in the Procedural Manual were sufficient to prioritize its work.⁴

Sampling Plans in the Standard for Ginseng Products (CODEX STAN 321-2015)

9. The Committee reconsidered the sampling plan in the above Standard as it was unclear to CCMAS36 whether the attributes sampling plan actually applied to attributes and not characteristics that might be described as variable.
10. The Committee was of the opinion that the chemical and physical characteristics were quality factors for which an attribute sampling plan would be appropriate. The characteristics were either conforming or non-conforming in relation to the limit noted.
11. The Committee thus agreed to retain the current sampling plans in the Standard for Ginseng Products. It was further agreed that, should a variable sampling plan be required, CCMAS could develop a suitable proposal which would meet the requirements of the Guidelines on Sampling (CAC/GL 50-2004).

PROPOSED DRAFT ANNEX ON CANNED PINEAPPLES (for inclusion in the Standard for Certain Canned Fruits (CODEX STAN 319-2015) (Agenda Item 3)⁵

12. The Delegation of Thailand, as Chair of the EWG on Canned Pineapples, presented document CX/PFV 16/28/3 and noted that the EWG had reached consensus on all the issues identified at the last session of the Committee except the following provisions: (1) uniformity of size for cored pineapples in cube or diced form and (2) food additives provisions, for which two options were presented respectively.

General Agreements

13. The Committee agreed to consider the document section by section; made editorial changes, and took the following decisions as indicated below.
14. The Committee agreed that Section 3 – Food Additives would be considered by the in-session WG on Food Additives (established under Agenda 2).

Section 1.2.1.7 - Tidbits

15. The Committee agreed to retain the words “*reasonably* uniform” as they were consistent with the provisions in the Standard in use and there was no reported trade problem associated with its application.

Section 2.1.1 - Optional Ingredients

16. The Committee agreed to:
- change the words “aromatic plants” to “culinary herbs” in order to align the terminology with that used by the Committee on Spices and Culinary Herbs;
 - insert the words “when available” when referring to standards for spices and culinary herbs as a footnote noting that at present there were no existing Codex standards for such products. This would assist in avoiding any possible misunderstanding regarding the existence of such standards and avoid creating the perception of a restriction in the application of the provisions in the Annex.

Section 2.1.2 - Packing Media

17. The Committee rephrased the section to clearly indicate that clarified pineapple juice was allowed as this type of juice was not covered in the Guidelines for Packing Media for Canned Fruits (CAC/GL 51-2003).

Section 2.2.1.1 - Color

18. The Committee noted that different shades of color existed from white to yellowish and/or yellow-gold; and that radiating streaks were more visible in the yellowish gold colored varieties. It was therefore agreed to amend the provision to recognize color variations by making allowance for the white streak only in pineapple varieties where visible.

⁴ REP15/PFV, para. 8.

⁵ CX/PFV 16/28/3, CX/PFV 16/28/3-Add.1 (Comments of Colombia, Ecuador, EU, Ghana, Iran, Kenya, Philippines, Thailand and USA); CRD 3 (Comments of Nigeria and Republic of Korea); CRD 6 (Comments of India).

Section 2.2.2 – Uniformity of Sizes and Shapes

19. The Committee agreed to retain the section unchanged as provisions for uniformity of size were provided for “tidbits” under Section 1.2.1.7 and therefore could not be exempted from uniformity requirements as in the case of “pieces” and “chips”.

Section 2.2.2.1 (f) - Cubes or Dice

20. The Committee recognized that Option 1 reflected current industry and trade practices while Option 2 was a new practice that provided more flexibility for smaller size of cubes or dice. Both options could work together however, there was a need to clarify when each practice could apply.
21. The Committee therefore agreed to combine both options while making it clear the conditions under which each provision apply i.e. (a) cubes or dice greater than 8 mm, (b) cubes or dice greater than 3 g, and (c) cubes or dice less than 8 mm or 3 g.

Section 3 – Food Additives

22. See Agenda Item 5.

Section 4.2 – Minimum Drained Weight

23. The Committee agreed to retain the section unchanged as other styles of pineapples such as “chunks” or “spears or fingers” were not suitable for packing in “heavy packs”. In addition, such styles were already covered by “regular packs” as provisions for this type of pack applied to all styles with the exceptions of “whole” or “crushed” or “chips” styles.

Conclusion

24. The Committee noted that no outstanding issues existed for the Annex and therefore it could progress in the Step procedure.

Amendment to the Standard for Certain Canned Fruits (CODEX STAN 319-2015)

25. Further to the discussion on the inclusion of food additive sweeteners in Section 3 of the Annex on canned pineapples, where some countries were of the opinion that sweeteners should be allowed in this product, the Committee agreed to clarify that the scope of the Standard cover regular products only and therefore it did not apply to products where sugars had been partially or wholly removed and replaced by sweeteners.

STATUS OF THE PROPOSED DRAFT ANNEX ON CANNED PINEAPPLES

26. The Committee agreed to forward the proposed draft Annex to the Codex Alimentarius Commission for adoption at Step 5/8 (Appendix II). The Annex will supersede the Standard for Canned Pineapples (CODEX STAN 42-1981).
27. The Committee also agreed to forward the amendment to the scope of the Standard for Certain Canned Fruits to the Commission for adoption (Appendix III).

PROPOSED DRAFT ANNEXES ON QUICK FROZEN VEGETABLES (for inclusion in the Standard for Quick Frozen Vegetables (CODEX STAN 320-2015) AND METHODS OF ANALYSIS FOR QUICK FROZEN VEGETABLES (for inclusion in Section 11 – Methods of Analysis and Sampling of CODEX STAN 320-2015) (Agenda Item 4)⁶

28. The Delegation of the United States of America, as Chair of the in-session WG on Quick Frozen Vegetables, presented the summary of the deliberations of the WG and informed the Committee that all the unresolved general issues across the annexes and the specific issues in the seven annexes had been addressed with exception of: (1) the defects and tolerances; (2) methods of analysis and sampling and (3) food additives (including processing aids) in French fried potatoes.
29. The Committee considered the seven annexes as revised by the in-session WG, endorsed all the changes as proposed by the WG and made the following comments and decisions on the unresolved issues:

Tolerances for defects in the annexes for quick frozen vegetables

30. The Committee considered the two proposals on “Defects and Allowances” i.e. Option 1: adopt the tables of tolerances in the existing standards which are based on count method and Option 2 adopt new tables of tolerances based on weight method.

⁶ CX/PFV 16/28/4; CX/PFV 16/28/4-Add.1 (Comments of Canada, Ecuador, Ghana and Kenya); CRD 4 (Comments of EU, Nigeria and Republic of Korea); CRD 6 (Comments of India); CRD 13 (Report of the in-session WG on Quick Frozen Vegetables); and CRD 15 (Methods of analysis for quick frozen vegetables – prepared by USA).

31. The Committee also noted the following views as expressed by delegations.
32. Delegations in support of Option 1 noted that the tolerances in the tables of the existing standards had been in use for long time in international trade with no reported concern on their applicability and therefore, there was no justification for change to newer tolerances as proposed in the tables under Option 2.
33. Delegations in favor of Option 2 observed that the tolerances in the tables were simpler and more suitable for use; they provided alternatives when compared to the existing tables considering the wide range of shapes, sizes, weights and styles of quick frozen vegetables; and they had been derived from ongoing studies carried out by the industry.
34. The Committee noted that Option 2 was based on ongoing studies whose final outcomes were not yet available, and therefore agreed to maintain the tolerances in the tables as in the existing standards (Option 1). However, in recognition of the efforts being made to develop new practices that might better address tolerances for defects for quick frozen vegetables, as soon as the final results from studies related to Option 2 were released, these could be made available to Codex members by means a submission of a project document soliciting the revision of the relevant sections of the annexes.

Annex on Quick Frozen French Fried Potatoes

Analytical requirements

35. The Committee noted a proposal that provisions for fat and oil extracted could be aligned with corresponding provisions in the Standard for Named Vegetable Oils (CODEX STAN 210-1999) as there might be a vast list of possible vegetable oils and their mixtures for frying purposes and it would be difficult to determine the predominant fat or oil and/or their proportions in the mixtures. This in turn would make difficult the measurement of free fatty acid content following the current provisions in the Annex.
36. The Committee however agreed to retain the current provision as it was flexible enough to allow for the use of oleic acid or an equivalent fatty acid value based on the predominant fatty acid in the fat or oil. This reflected current laboratory practices in the measurement of this parameter.

Definition of “Defectives” and “Lot Acceptance” for Analytical Requirements

37. The Committee agreed to delete these provisions as they were not necessary (relevant methods of analysis for the determination of free fatty acid content had been already identified in CRD 15).

Food additives and processing aids

38. See Agenda Item 5.

Annex on Quick Frozen Spinach

Analytical requirements

39. The Committee agreed to amend the provision to refer to “sodium chloride-free dry matter” as opposed to “salt-free dry matter” as there might be other salts such as potassium chloride that were not relevant for the aim of the provision.

Others

Methods of analysis and sampling for quick frozen vegetables

Sampling plan with an AQL of 6.5

40. The Committee confirmed that, as in other standards for processed fruits and vegetables, sampling plans with an AQL of 6.5 would be applicable to quick frozen vegetables.

Methods of analysis

41. The Committee considered a proposed list of methods of analysis for quick frozen vegetables with the possible replacements of Codex Recommended Methods (CAC/RMs) and agreed on the following:
 - to recommend AOAC 940.28b and IUPAC 2.201 as methods for determination of free fatty acid in quick frozen French fried potatoes as proposed in CRD 15;
 - to replace Codex Recommended Methods (CAC/RMs) with more updated internationally validated methods as proposed in CRD 15; and
 - to request CCMAS to assist in the identification of equivalent internationally validated methods for other CAC/RMs that the Committee could not identify at its present session.

Conclusion

42. The Committee noted that no outstanding issues existed for the draft Annexes and methods of analysis and therefore they could be progressed in the Step procedure.

STATUS OF THE PROPOSED DRAFT ANNEXES ON QUICK FROZEN VEGETABLES AND METHODS OF ANALYSIS FOR QUICK FROZEN VEGETABLES

43. The Committee agreed to forward:
- The proposed draft annexes on: Broccoli; Brussels Sprouts; Cauliflower; Quick Frozen French Fried Potatoes; Green Beans and Wax Beans; Peas and Spinach to the Codex Alimentarius Commission for adoption at Step 5/8 (Appendix IV);
- The Annexes will supersede the corresponding Standards for Quick Frozen: Broccoli (CODEX STAN 10-1981), Brussels Sprouts (CODEX STAN 112-1981), Cauliflower (CODEX STAN 111-1981), French Fried Potatoes (CODEX STAN 114-1981), Green and Wax Beans (CODEX STAN 113-1981), Peas (CODEX STAN 41-1981) and Spinach (CODEX STAN 77-1981);
- Methods of analysis for quick frozen vegetables for endorsement by CCMAS, and inclusion in the Recommended Methods of Analysis and Sampling (CODEX STAN 234-1999) (Appendix IV).

FOOD ADDITIVE PROVISION IN CODEX STANDARDS FOR PROCESSED FRUITS AND VEGETABLES (Agenda Item 5)⁷

44. The Delegation of the United States of America, as Chair of the in-session WG on Food Additives, presented a summary of the outcome the discussion and explained they had considered only the food additive provisions in canned pineapples and the seven annexes of quick frozen vegetables. The Chair highlighted that most issues had been resolved except: the use of sweeteners in canned pineapples; and the use of coloring agents in French fried potatoes.

ANNEX ON CANNED PINEAPPLES

45. The Committee considered the food additive provisions in canned pineapples, endorsed all the recommendations as proposed by the in-session WG and took the following decisions:

Acidity regulators

46. The Committee agreed to delete the provision for acidity regulators in Section 3.1 of the Annex as this provision had already been included in the general provision of the Standard for Certain Canned Fruits with a general reference to the General Standard for Food Additives (CODEX STAN 192-1995)

Antifoaming agents and antioxidant agents

47. The Committee agreed to make a general reference to the GSFA and to inform CCFA that polydimethylsiloxane (INS 900a) and ascorbic acid, L- (INS 300) were respectively the only antifoaming agent and only antioxidant agent currently used in canned pineapples. The Committee also agreed to request CCFA to have this reflected in the GSFA for purposes of alignment. The Committee noted that other antifoaming agents and antioxidants for use in canned pineapples should go to the Step procedure for adoption.

Use of sweeteners in canned pineapples

48. The Committee noted that the Standard for Certain Canned Fruits required that packing media should comply with the Guidelines for Packing Media for Canned Fruits. The Committee further noted that the Guidelines only allowed the use sugars in the preparation of the syrups. Therefore, the Committee agreed to delete the proposed provision on sweeteners from the Annex.
49. In recognizing that the Standard for Certain Canned Fruits apply to regular products only, the Committee agreed to amend the scope of the Standard to make it clear that the standard and the corresponding annexes only apply to these type of products.

Flavorings

50. The Committee agreed to the inclusion of the provision on flavorings.

⁷ CL 2016/17-PFV; CX/PFV 16/28/5 (Comments of Ecuador, EU, Iran, Japan and USA); CRD 14 (Report of the in-session WG on Food Additives).

Conclusion

51. The Committee agreed with the revised food additive provisions in canned pineapple as contained in Appendix II. The Committee also agreed to request CCFA to align the food additive provisions by clarifying that only polydimethylsiloxane (INS 900a) under antifoaming agents and only ascorbic acid, L- (INS 300) under antioxidants were currently used in canned pineapples.

ANNEXES ON QUICK FROZEN VEGETABLES

52. The Committee considered the food additive provisions in the seven annexes and endorsed all the recommendations as proposed by the in-session WG and made the following comments and decisions:

General agreements

53. The Committee agreed to delete the provision on processing aids in all the annexes as these were already included in the general provision under Section 5 in the Standard for Quick Frozen Vegetables

Annex III - Cauliflower

54. The Committee agreed that no food additives were permitted for use in cauliflower.

Annex IV - French Fried Potatoes**Sequestrants**

55. The Committee agreed with the provision as proposed in the Annex.

Colors

56. The Committee noted the divergent views as to the technological justification for the use of colors in French fried potatoes.

57. Delegations supporting the use of coloring agents in this product, expressed concern that omission of "colors" from the Annex on French Fried Potatoes did not reflect their current industry practice. These delegations further noted that coloring agents were currently used to restore color and to facilitate the reduction of acrylamide in frozen French fried potatoes in a manner that did not mislead consumers. Therefore, the omission would be counter-productive to efforts of both governments and industry to minimize acrylamide formation and thereby mitigate human health risks.

58. Those delegations not supporting the use of colors were of the view that such use was not technologically justified and could mislead the consumer. As regards the formation of acrylamide, they noted that the education of consumers to accept a lighter color of French fried potatoes might be more appropriate and that other means to achieve reduced acrylamide formation existed (e.g., the use of enzyme asparaginase which would not entail the use of colors).

59. The Delegation of the United States of America explained that technological justification for any additive would normally be first considered from a safety point of view rather than the perspective of misleading consumers. The Delegation also noted that technological justification for inclusion of colors in relevant food categories in the GSFA would have to be given by this Committee.

60. The Delegation of EU pointed out that the justification for the use of food additives was laid down in Section 3.2 of the Preamble to the GSFA, which refers to: the advantages from the use of food additives, health risks, misleading the consumers, technological functions set out by Codex, and other economically technologically practicable means available.

61. The Committee noted that consensus could not be reached on the use of colors in these products and agreed: (1) not to include the provision for use of coloring agents in the Annex; (2) to ask CCFA to clarify on the possible use of colors in French fried potatoes in connection with the reduction of acrylamide.

Others

62. The Committee agreed to delete the entire Section 3.2 with the following considerations: (1) some food additives such as citric acid (INS 330) are part of Section 3.1; (2) food enzymes-asparaginase falls under the category of processing aids; and (3) emulsifying, gelling, stabilizing, thickening agents and sweeteners are used in conjunction with Section 2.1.2 of the Annex on optional ingredients and therefore there is no need to list them under this section.

63. The Committee noted that malic acid DL- (INS 296) was listed under sequestrants while in the GSFA no sequestrant function was assigned to malic acid DL- (INS 296). In order to keep consistency, the Committee agreed to request CCFA to add the sequestrant function for malic acid DL- (INS 296) in the GSFA.

Carry-over principle

64. The Committee agreed to delete that section as it was already included in the Preamble of the GSFA.

Annex VI - Peas

65. The Committee agreed to retain flavorings, and retained the existing text which provided the appropriate reference to the Guidelines for the Use of Flavorings (CAC/GL 66-2008).

Conclusion

66. The Committee agreed with the revised food additive provisions in the seven annexes as contained in Appendix III. The Committee also agreed to request CCFA to add the sequestrants function for malic acid DL- (INS 296) in the GSFA.

STANDARD FOR CANNED CHESTNUTS AND CANNED CHESTNUT PUREE (CODEX STAN 145-1985) AND STANDARD FOR PICKLED FRUITS AND VEGETABLES (CODEX STAN 260-2007)

67. The Committee agreed to make a general reference to the GSFA on the use of firming agents in the Standard for Canned Chestnuts and Canned Chestnut Puree.
68. The Committee also agreed to include color retention agents and stabilizers in the list of functional classes of the Standard for Pickled Fruits and Vegetables in which a general reference to the GSFA has been made.

Conclusion

69. The Committee agreed to inform CCFA of the decisions on the standards for canned chestnuts and chestnut puree and pickled fruits and vegetables; and to forward these amendments for adoption by the Codex Alimentarius Commission (Appendix V).

MATTERS FROM CCFA TO CCPFV**Use of “emulsifiers, stabilizers, thickeners” and “xanthan gum” (INS 415) in Food Categories “14.1.2” Fruit and Vegetable Juices” and 14.1.3 “Fruit and Vegetable Nectars”**

70. The Committee noted that there were mixed positions for the use of emulsifiers, stabilizers and thickeners in food categories 14.1.2 and 14.1.3. The Committee noted that some countries reported that xanthan gum (INS 415) was not used, as there was no technological need for its use under these food categories. In their view only pectin (INS 440) was technologically justified for use in certain products in the food categories listed. Other countries reported that xanthan gum, carboxymethyl cellulose and gellan gum (INS 418) were technically justified and being used as a thickener and stabilizer in juices.
71. The Delegation of United States of America reported that there was technological justification for emulsifiers, stabilizers and thickeners and that both xanthan gum and gellan gum were being used in these food categories. The Delegation of Brazil supported this statement as per the use of xanthan gum.

Technological justification on the use of food additivesUse of antioxidants and tocopherols (INS 307a, b, c) in Food Category 04.1.2 “Processed Fruit”

72. Some delegations reported that tocopherols were used in some food sub-categories, as Food Category 04.1.2 included a very broad range of products. Other delegations indicated that tocopherols were used in all subcategories under this food category.
73. The Committee agreed to inform CCFA that tocopherols were used as antioxidants in processed fruits, however most commodity standards did not allow them.

Use of acidity regulators in general and tartrates (INS 334, 335 (ii), 337) in Food Category 04.1.2.2 “Dried fruit”

74. The Committee agreed to inform CCFA that tartrates were not listed for use for products conforming to the Standard for Desiccated Coconut (CODEX STAN 177-1991). However, a delegation reported that tartaric acid was used both as an antioxidant and acidity regulator in desiccated coconut to control rancidity.

Use of tartrates (INS 334, 335 (ii), 337) in Food Category 04.1.2.3 “Fruit in vinegar, oil or brine”

75. The Committee noted that acidity regulators were allowed in the Standard for Pickled Fruits and Vegetables. The Committee therefore agreed to inform CCFA that use of tartrates (INS 334, 335 (ii), 337) in products conforming this Standard was technologically justified.

Use of propylene glycol alginate (INS 405) in Food Category 04.1.2.5 “Jams, Jellies and Marmalades”

76. The Committee noted that the Standard for Jams, Jellies and Marmalades (CODEX STAN 296-2009) made reference to thickeners used in accordance with Table 3 of the GSFA.

77. A delegation reported that propylene glycol alginate (INS 405) was used a stabilizer in non-standardized products.
- Use of tartrates (INS 334, 335 (ii), 337) in Food Category 04.1.2.6 "Fruit based spreads (e.g. chutney) excluding products of food category 04.1.2.5"
78. The Committee noted that tartrates were not listed in the Standard for Mango Chutney (CODEX STAN 160-1987).
79. A delegation reported that tartrates were used in mango chutney as both acidity regulators and antioxidants, and that JECFA specification listed them as both antioxidants and acidity regulators.
80. The Committee agreed to inform CCFA that these additives were used in standardized products; however there could be uncertainty on the technological function (acidity regulators and/or antioxidants) based on the information provided by one delegation.

Conclusion

81. The Committee agreed to inform CCFA of the discussion on technological justification on the use of food additives.

Revocation of food additive provision

82. The Committee agreed to revoke the food additive provisions as proposed by CCFA with exception of potassium hydrogen sulfate (INS 515(ii)) in the Standards for Preserved Tomatoes (CODEX STAN 13-1981) and Processed Tomato Concentrates (CODEX STAN 57-1981) as potassium hydrogen sulfate (INS 515(ii)) had actually not been included in those standards.

Consistency terms pertaining flavorings

83. The Committee considered the recommendations in CRD 11 and adopted all the recommendations for revision of standards under its purview.

Conclusion

84. The Committee agreed to forward the above mentioned amendments (Appendix V) for adoption by the Codex Alimentarius Commission.

DISCUSSION PAPER ON THE STANDARDIZATION OF DRY AND DRIED PRODUCE (Agenda Item 6)⁸

85. The Delegation of Brazil, as Chair of the EWG on Dry and Dried Produce, introduced working document CX/PFV 16/28/6. The Delegation noted that the EWG had been established to assess provisions in existing Codex standards for dry and dried produce to determine the need for revision in order to assist the Committee on its decision on work priorities. The Delegation highlighted the general recommendations with respect to which standards required full revision (pistachios) or partial revision (dates, raisins) as well as the possibility to simplify and group these standards into horizontal standards for dried fruits and nuts.
86. The Chair informed the Committee that the outcomes of the EWG would directly input into the consideration of work on the review of Codex standards for processed fruits and vegetables under Agenda Item 7 and called for a general discussion on the conclusions and recommendations of the paper.
87. A number of delegations indicated that should the Committee proceed with work on dry and dried produce, account should be taken of the work already accomplished by other international organizations in the field. These delegations stressed the need to avoid duplication of work but rather look for mechanisms of cooperation between Codex and other bodies (such as the United Nations Economic Commission for Europe (UNECE)) in order to make the most efficient use of resources available.
88. The Representative of UNECE informed the Committee about the work carried out by the UNECE Specialized Section on Dry and Dried Produce noting: the existence of 28 regularly revised standards for dry and dried produce (which had all gone through trial periods before adoption); the ongoing work to update the UNECE Standard on Unshelled Pistachios; the capacity development work in transition and developing countries including workshops and guidance material for public and private sectors; the study of food waste in fresh fruits and vegetable value chains in Kenya; as well as the forthcoming UNECE/FAO conference on food waste. The Representative also noted the existing cooperation between Codex and UNECE including the referencing of relevant Codex food safety texts in UNECE standards. She also stressed that participation in the UNECE's Specialized Sections (which met once a year in Geneva at United Nations Offices) was open to all United Nations Member States.

⁸ CX/PFV 16/28/6; CRD 5 (Comments of Kenya, Nigeria and Thailand); CRD 10 (Proposal for new work on cashew nuts by India).

89. The Codex Secretariat noted that the mandate of the Codex Alimentarius Commission was also to promote coordination of all food standards work undertaken by international organizations. The Secretariat further noted that the Commission had also encouraged cooperation with UNECE by using UNECE standards as a basis for the development of Codex standards and in doing so to give UNECE worldwide recognition for its standards⁹. She also informed the Committee that there was a standing item on the agenda of the Commission where observer organizations were invited to provide an update on their activities and that UNECE activities in the area of standardization of agricultural products were regularly reported at each session of the Commission.
90. The Delegation of Iran noted that the Codex Standard for Unshelled Pistachio Nuts (CODEX STAN 131-1981) was outdated (as also emerged from the analysis in the document CX/PFV 16/28/6), and that since its elaboration, the international trade picture, including commodity sub-categories had substantially changed, and that the commodity was now being traded internationally in US dollars. The Delegation mentioned that Iran had prepared an outline of the proposed changes to the Standard as available in CX/PFV 16/28/6 and offered to lead the work on the revision of the standard if new work were recommended by CCPFV. The Delegation expressed their willingness to work together with interested member countries as well as to take account of work already conducted in other relevant fora such as UNECE. He noted that UNECE was a regional body while Codex, and CCPFV in particular, was the global venue to set up harmonized requirements for safety and quality of pistachio nuts and to ensure trade flow in this commodity.
91. The Delegation of Iran also expressed interest in the revision of the Standard for Dates (CODEX STAN 143-1085) and the Standard for Raisins (CODEX STAN 67-1981) as well as in other commodities falling under the dry and dried produce category. The Delegation indicated that Iran gave priority to the revision of the Standard for Unshelled Pistachio Nuts but indicated that Iran would actively participate in the revision of the standards for dates and raisins under the leadership of another country as well as in the discussion on the possibility to develop general standards for these products.
92. The Delegation of Thailand, recalled the recommendation of CCASIA on the proposal for new work on dried longan to be undertaken by CCPFV, and supported the recommendation on the revision of the standards for dates and raisins as single standards or with a view to developing more horizontal standards for dried fruits that could include dried longan.
93. The Delegation of India referred to its proposal to start new work on a standard for cashew nuts. The Delegation recognized the importance of collaboration with other relevant organizations including UNECE however the Codex Alimentarius Commission was the referenced worldwide food standard-setting body under the World Trade Organization (WTO).
94. The Delegation of Brazil noted that Codex standards were used as a reference for international trade and they should therefore be simple for better uptake by member countries and users in general. In this regard, the Delegation offered to lead the work to operationalize the recommendation contained in points (d) and (e) of paragraph 12 of CX/PFV 16/28/6 (i.e., on development of horizontal standards for dried fruits - dates and raisins and horizontal standards for pistachio nuts and other nuts) and proposed that an EWG led by Brazil be established by the Committee to undertake this work.
95. The Delegation of Chile supported the recommendations in paragraph 12 of CX/PFV 16/28/6 and indicated its readiness to lead work on the revision of the Standard for Raisins.
96. The Committee noted the recommendations of the EWG and the support by various delegations on the revision of the standards for pistachio nuts, raisins and dates and the possible grouping of some of the standards into more horizontal standards for dried fruits and/or nuts as well as on work on dry and dried produce in CCPFV.
97. The Committee also encouraged further collaboration between Codex and UNECE in the development of standards for dry and dried produce.

Conclusion

98. Based on the above discussion, the Committee agreed to consider the proposals for new work in the framework of the prioritization of work under Agenda Item 7.

⁹ ALINORM 99/37, para. 206; ALINORM 10/33/REP, para. 135.

STATUS OF WORK ON THE REVIEW OF CODEX STANDARDS FOR PROCESSED FRUITS AND VEGETABLES (Agenda Item 7)¹⁰

99. The Codex Secretariat introduced working document CX/PFV 16/28/7 and noted that at its re-establishment in 1998, the Committee had been tasked by the Commission with reviewing all existing individual standards for processed fruits and vegetables to determine their relevance to international trade and the need for their revision and if so, to proceed with updating and simplifying them as well as when appropriate and possible, grouping similar products into more horizontal standards in line with the recommendation of the Commission.
100. The Secretariat called the attention of the Committee to some remaining work on certain individual standards and groups of products (e.g. canned berry fruits, quick frozen fruits, canned fruit salads, etc.); miscellaneous processed fruits and vegetables (e.g. pickled cucumbers, mango chutney; fungi and fungus products, etc.) and dry and dried produce.
101. The Secretariat recalled that the agenda of CCPFV27 included status of work on the review of the remaining standards. However, due to time constraints, CCPFV27 had not been able to do this thoroughly and therefore the Committee had requested the Secretariat to undertake the editorial amendments of the remaining 18 Codex standards for processed fruits and vegetables (pending review in particular of those sections related to horizontal committee inputs such as hygiene, contaminants, labeling, etc.) so that CCPFV28 could focus its discussion on the technical provisions in order to determine the need for review and to prioritize future work. The editorial amendments were presented in CX/PFV 16/28/7-Add.1. The Committee also requested the Secretariat to provide examples of combined standards for processed fruits. Examples of amalgamated standards for selected set of products were submitted in CX/PFV 16/28/7-Add.2.
102. The Chair informed the Committee that since 1998, CCPFV had made a substantial contribution to the work of Codex and that many standards had been revised and a number of new ones elaborated. He noted that it was important for the Committee to examine the next steps the Committee could take while at the same time ensuring that Codex resources were being utilized responsibly.
103. The Chair proposed that the Committee should consider adjourning sine die since its top priority work had been completed at the session and that the pending issues would not warrant holding a physical meeting. He further proposed that in light of the late availability of CX/PFV 16/28/7-Add.1 (and in original language only), the Codex Secretariat would issue a Circular letter (CL), after the document had been translated, calling for comments and new work proposals which could be submitted to CCEXEC that would then determine how such work would be undertaken including the possibility of reconvening the Committee.

Discussion

104. The Committee noted the following general views as expressed by delegations:
 - The document on Status of work on the review (CX/PFV 16/28/7) as well as the proposal to adjourn CCPFV for example as outlined in CRD 8 had been circulated late, and delegations had had no time to consult with stakeholders on the two documents. Therefore discussions on the status of work and the possible adjournment *sine die* of the Committee should be deferred;
 - The Agenda for the meeting had been adopted according to procedure and the plan of work agreed at the last session of the Committee; consequently actions and conclusions were expected on the future work of the Committee;
 - The question of adjournment was not included on the Provisional Agenda nor in the matters referred paper for action by the Committee and the Committee had agreed to discuss it under other business following the outcome of the discussion on the items scheduled for consideration at this session. The question of adjournment was included as a matter for information in the matters referred paper (CX/PFV 16/28/2, paragraph 3).
105. The Codex Secretariat clarified that adjournment of the Committee meant a direct acknowledgement of completion of its work as assigned by the Commission. However, even after adjourning, work may still be submitted to CCEXEC for critical review and determination of how best to handle such work. The Secretariat noted that the option of work by correspondence usually applied to cases where most of the work had been completed and only one or very few items remained on the agenda that did not justify the convening of a physical meeting of the Committee. The Secretariat further clarified that any matters included under Agenda Item "Other Business" would normally be discussed subject to availability of time.

¹⁰ CX/PFV 16/28/7; CX/PFV 16/28/7-Add.1; CX/PFV 16/28/7-Add.2; CRD 10 (Proposals from India on new work on chilli sauce and mango chutney).

106. The Committee agreed with the Chair's proposal to use the following approach to identify future work: examine recommendations and proposals on dried and dry produce (CX/PFV 16/28/6); consider requests for new work identified by delegations during the session and take into account the pending review of the 18 standards in document (CX/PFV 16/28/7).
107. The Committee noted the following requests for new work, including the offer by respective countries to prepare project documents for consideration by CCEXEC as well as lead the different EWGs in some cases, and further noted that the only project document submitted for consideration was on a proposed standard for dried longan prepared by Thailand:
- Simplification of existing standards for dry and dried produce and elaboration of horizontal standards on dried fruits (based on the standards for dates, raisins and other proposals for dried fruits) and nuts (based on pistachio nuts and other proposals for nuts) (Brazil);
 - Revision of Standard for Unshelled Pistachio Nuts (CODEX STAN 131-1981) (Iran);
 - Revision of Standard for Raisins CODEX STAN 67-1981 (Chile);
 - Revision of the Standard for Mango Chutney (CODEX STAN 160 1987); elaboration of a Codex Standard for Cashew Kernels; conversion of the Regional Standard for Chili Sauce (CODEX STAN 306R-2011) into a worldwide standard (India);
 - Revision of the Standards for Canned Fruit Cocktail (CODEX STAN 78-1981) and Canned Tropical Fruit Salad (CODEX STAN 99-1981) with a view to developing a Standard for Canned Fruit Salads and elaboration of a Codex Standard for Dried Longan (Thailand).
108. The Committee acknowledged the commitment of the above delegations to lead work on the above proposals for work and noted the support of several delegations in relation to pursuing work on revised/new standards for the products indicated.
109. The Committee further considered what mechanism could be used in advancing the identified projects as well as receiving new project proposals in the situation when only one project document from Thailand had been submitted (and this could not warrant continuing running the Committee). The following views were expressed on this issue:
- In the project document submitted by Thailand, the trade data seemed to indicate that the trade volumes were small, the product was produced and mostly traded in the Asian region rather than globally and therefore the product could best be handled by CCASIA as a regional standard, as an appropriate first step. The Delegation of Thailand supported by India explained that the product was traded worldwide, and that CCASIA had noted lack of capacity/expertise as a regional coordinating committee to elaborate such a standard while CCPFV was the subsidiary body of CAC having competence on dry and dried produce. It was also noted in the project document that CCASIA would consider this work if there was no support in CCPFV for the work.
 - It was the responsibility of CCPFV to analyze project documents before recommending any new work to CCEXEC and in absence of project documents, consensus to advance identified topics remained questionable, as the Committee decisions were not supported by facts. Any new work should take into account existing international standards to avoid duplication and wasting of resources;
 - Member countries should be informed and allowed to submit proposals for new work directly to CCEXEC through the Codex Secretariat, moreover, a CL with CX/PFV 16/28/7-Add.1 attached (providing the 18 standards pending review with examples of editorial amendments included) could be distributed so that interested countries could submit project documents on the need for the revision of the standards of their interest. The CCEXEC would then examine these project documents under the Critical Review process and determine the relevance of such proposals for Codex work and as appropriate, recommend approval of new work by CAC. CCEXEC would also assess whether there was enough work to support a physical meeting of CCPFV and if not, what mechanisms were in place to best deal with such proposals and advise the Commission accordingly.
110. The Delegation of Mexico indicated its interest in possibly co-hosting the next session of CCPFV. The Delegation further noted that some work on standards could be referred to CCFFV for consideration if the amount of work would not warrant a physical meeting of CCPFV. A delegation questioned the competence of CCFFV to address CCPFV matters.

111. In recognition of the interest of many delegations on the revision of existing/development of new standards for processed fruits and vegetables, the Chair proposed that those Member countries having interest in continuing work on standardization of these products within the framework of CCPFV submit proposals for new work in reply to a CL to be issued by the Codex Secretariat and submit project documents to CCEXEC for its consideration. Upon CCEXEC's review and the volume of new work recommended to CAC for approval, the CAC would consider approval of new work and whether a physical meeting could be convened. During this process it would be advisable that consultation occur between the Codex Secretariat, the Host Country Secretariat and CCEXEC to assist CAC and its deliberations.

Conclusion

112. Taking into account that only one project document had been submitted for consideration at the session, the Committee:
- agreed that the Codex Secretariat would issue a CL requesting comments on revision of the remaining 18 Codex standards for processed fruits and vegetables (CX/PFV 16/28/7 and CX/PFV 16/28/7-Add.1) as well as new proposals for work of the Committee;
 - agreed that all proposals for new work would be submitted by the concerned countries directly to CCEXEC for critical review by means of project documents, before CCEXEC's next session in 2017;
 - agreed that based on the outcome of the critical review from CCEXEC; volume of the approved new work by CAC, the Commission would determine the opportunity to convene a physical meeting of the Committee;
 - noted that consultation should occur between the Codex Secretariat, the Host Country Secretariat and CCEXEC to assist CAC in its deliberations.

OTHER BUSINESS AND FUTURE WORK (Agenda Item 8)¹¹

DISCUSSION PAPER ON FUTURE WORK OF THE CODEX COMMITTEE ON PROCESSED FRUITS AND VEGETABLES

113. The Delegation of the United States of America, as Host Country of CCPFV, drew the attention of the Committee to CRD 8; highlighted the achievements of CCPFV since its re-establishment in 1998 including: revision of many standards for canned fruits and vegetables and quick frozen vegetables and development of new standards for several products.
114. The Delegation further highlighted the challenges faced by the Committee especially the decreasing trend in participation, by members and observers in both the physical meetings of CCPFV and in the electronic working groups; absence of project documents from CCPFV28 for submission to the next session of CCEXEC; and the high costs associated with holding of physical meetings. The Delegation also offered the different options that the Committee could consider after CCPFV28 including: working by correspondence, setting a future work plan, or re-assigning work to another Committee. The question of setting a meeting date would require re-assessment of the potential workload.
115. The Committee noted statement and interest of the Host Country Secretariat for responsible stewardship of Codex resources.

DATE AND PLACE OF THE NEXT SESSION (Agenda Item 9)

116. The Committee was informed that holding of the 29th Session of CCPFV was contingent on the outcome of the CCEXEC review of proposals for new work, approval of new work by CAC and a determination made by CAC as to whether the amount of new work approved merited a physical meeting of CCPFV. The exact date and venue would be decided between the Codex and Host Country Secretariats.

¹¹ CRD 8 (Prepared by USA as Host Country of CCPFV).

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APPENDIX II**PROPOSED DRAFT ANNEX ON CANNED PINEAPPLE****(For adoption at Strep 5/8)**

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

1. DESCRIPTION**1.1 PRODUCT DEFINITION**

Canned pineapple is the product, conforming to the characteristics of *Ananas comosus* (L) Merr. (*Ananas sativus* (L) Lindl.) and from which peel have been removed whether it is cored or uncored

1.2 STYLES

Canned pineapple may be packed in the following cored or uncored styles:

1.2.1 Cored pineapples

1.2.1.1 **Whole** - cylindrical whole unit with the core removed

1.2.1.2 **Slices or spiral slices or whole slice or rings** - uniformly cut circular slices or rings cut across the axis of the peeled, cored pineapple cylinders.

1.2.1.3 **Half slices** - uniformly cut approximately semi-circular halves of slices.

1.2.1.4 **Quarter slices** - uniformly cut, one-fourth portions of slices of cored pineapples.

1.2.1.5 **Broken slices** - arc-shaped portions of cored pineapples which may not be uniform in size and/or shape.

1.2.1.6 **Spears or fingers** - long, slender pieces cut radially and lengthwise of the cored pineapple cylinder, predominantly 65 mm or longer.

1.2.1.7 **Tidbits** - reasonably uniform, wedge-shaped sectors cut from slices or portions thereof, predominantly from 8 mm to 13 mm thick.

1.2.1.8 **Chunks** - short, thick pieces cut from thick slices and/or from peeled cored pineapple and predominantly more than 12 mm in both thickness and width, and less than 38 mm in length.

1.2.1.9 **Dice or cubes** - reasonably uniform, cube-shaped pieces, predominantly 14 mm or less in the longest edge dimensions.

1.2.1.10 **Pieces** - irregular shapes and sizes not identifiable as a specific style and does not include "chunks" or "chips" styles.

1.2.1.11 **Chips** - small, irregular shapes and sizes of pineapple pieces similar to that left over after dicing of pineapple and which may be included in "crushed" style.

1.2.1.12 **Crushed or crisp cut** - finely cut or shredded or grated or diced pieces of pineapple and which may include chips in the crushed mass.

1.2.2 Uncored pineapples

1.2.2.1 **Slice or whole slices** - uniformly cut circular slices across the axis of the cylindrical whole unit.

1.2.2.2 **Half slices** - uniformly cut approximately semi-circular halves of slices.

1.2.2.3 **Quarter slices** - uniformly cut, one-fourth portions of slices.

1.2.2.4 **Spears or fingers** - long, slender pieces cut radially and lengthwise of the whole pineapple cylinder, predominantly 65 mm or longer.

1.3 TYPES OF PACK

Canned pineapple may be packed in the following types of pack:

1.3.1 **Regular pack:** refers to all styles, with a liquid packing medium.

1.3.2 **Heavy pack:** "Tidbits" or "dice or cubes" or "pieces" or "chips" or "crushed" styles containing at least 73% drained fruit weight.

1.3.3 **Solid pack:** "Chips" or "crushed" styles containing at least 78% drained fruit weight.

2. ESSENTIAL COMPOSITION AND QUALITY FACTORS

2.1 COMPOSITION

2.1.1 Optional Ingredients

Spices and culinary herbs¹, spice oils.

2.1.2 Packing Media

In addition to Section 3.1.3 of Standard for Certain Canned Fruits (CODEX STAN 319-2015) clarified pineapple juice is allowed.

2.2 QUALITY CRITERIA

2.2.1 Colour

Canned pineapple containing optional ingredients shall be considered to be of characteristic colour when there is no abnormal discolouration for the respective ingredient used. In non-white coloured pineapple varieties, white radiating streaks may be present.

2.2.2 Texture

Cored pineapples

The canned pineapple shall have a reasonably good texture, shall be reasonably compact in structure, and the product shall be fairly free from porosity. The drained pineapple - of all styles - may contain no more than 7% by weight of "core material"² for the cored pineapple. In determining the percentage of core material, the areas which consist of core material are trimmed from the pineapple unit and weighed against the drained fruit ingredient in the container.

Uncored pineapples

The canned pineapple shall have a reasonably good texture, shall be reasonably compact in structure, and the product shall be fairly free from porosity.

2.2.2 Uniformity of size and shape

These requirements do not apply to canned pineapple in the styles of: Whole, broken slices, pieces, chips or crushed.

2.2.2.1 ***Cored pineapples***

- (a) **Slices or spiral slices or whole slices or rings** - the weight of the largest slice in a container shall not be more than 1.4 times the weight of the smallest.
- (b) **Half slices or quarter slices** - the weight of the largest unit in a container shall be not more than 1.75 times the weight of the smallest, except for an occasional broken piece due to splitting or an occasional whole slice not completely cut through.
- (c) **Spears or fingers** - the weight of the largest unbroken unit in a container shall be not more than 1.4 times the weight of the smallest unbroken unit.
- (d) **Tidbits** - not more than 15% of the drained weight of pineapple in the container may consist of tidbits, each of which shall weigh less than three-fourths of the average weight of the untrimmed tidbits.
- (e) **Chunks** - not more than 15% of the drained weight of pineapple in the container may consist of pieces which weigh less than 5 g each.
- (f) **Cubes or dice**
 - (i) not more than 10% of the drained weight of pineapple in the container may consist of units of such size that they will pass through a screen that has square openings of 8 mm;
 - (ii) not more than 15% of the drained weight of pineapple in the container may consist of pieces which weight more than 3 g each.
 - (iii) for dice or cubes less than 8 mm or 3 g, no more than 15% of the drained weight of pineapple in the container may consist of cubes or dice, each of which shall weigh less than three-fourths of the average weight of cubes or dice.

¹ In accordance with the relevant Codex standards for spices and culinary herbs when available.

² The hard fibrous centre portion of the fruit.

2.2.2.2 **Uncored pineapples**

- (a) **Slices or whole slices** - the weight of the largest slice in a container shall not be more than 1.4 times the weight of the smallest.
- (b) **Half slices or quarter slices** - the weight of the largest unit in a container shall be not more than 1.75 times the weight of the smallest, except for an occasional broken piece due to splitting or an occasional whole slice not completely cut through.
- (c) **Spears or fingers** - the weight of the largest unbroken unit in a container shall be not more than 1.4 times the weight of the smallest unbroken unit.

2.2.3 **Definition of Defects**

- (a) **Blemish** - surface areas and spots which contrast strongly in colour or texture against the normal pineapple tissue or which may penetrate into the flesh. Such blemishes are normally removed in preparation of pineapple for culinary use and include deep fruit eyes more than 2 mm, pieces of shell, brown spots, bruised portions and other abnormalities.
- (b) **Broken** - (considered a defect only in sliced and spear styles). A unit severed into definite parts; all of such portions that equal the size of a full-size unit are considered to be one defect in applying the allowances herein.
- (c) **Excessive trim** - (considered a defect only in the styles of whole, slices including spiral slices, half slices, quarter slices and spears). A unit trimmed to the extent that its normal shape and conformation is destroyed and detracts from the appearance of such unit. Trim will be considered “excessive” if the portion trimmed away exceeds five percent of the apparent physical bulk of the perfectly formed unit and if such trimming destroys the normal circular shape of the outer or inner edge of the unit.
- (d) **Woody** – tough and fibrous core

2.2.4 **Allowances for Defects**

Canned pineapple shall not contain excessive defects greater than the extent indicated below:

Defects for Cored Pineapples

Styles	Units with Excessive Trim	Blemishes or Broken Units
Whole	10% by count of fruit units (cylinders) ³	3 blemishes per fruit unit (cylinder)
Slices or spiral slices or whole slices; Half slices; Quarter slices	1 unit if 10 or less per can; 2 units if over 10 but not over 27 per can; or 7.5% by count if over 27 per can	1 unit if 5 or less per can; 2 units if over 5 but not over 10 per can; 4 units if over 10 but not over 32 per can; or 12.5% by total number of units if over 32 per can
Spears	15% by count of all units	1 unit if 5 or less per can; 2 units if over 5 but not over 10 per can; 4 units if over 10 but not over 32 per can; or 12.5% by total number of units if over 32 per can
Broken slices; tidbits; chunks; cubes; pieces	Not applicable	12.5% by total number of units
Chips; crushed	Not applicable	Not more than 1.5% by weight of the drained fruit

³ Based on average from all containers in the sample

Defects for Uncored Pineapples

Styles	Units with excessive trim	Blemishes	Woody
Whole slices; Half slices; Quarter slices	1 unit if 10 or less per can; 2 units if over 10 but not over 27 per can; or 7.5% by count if over 27 per can	1 unit if 5 or less per can; 2 units if over 5 but not over 10 per can; 4 units if over 10 but not over 32 per can; or 12.5% by count if over 32 per can	5% by weight
Spears	15% by count of all units	1 unit if 5 or less per can; 2 units if over 5 but not over 10 per can; 4 units if over 10 but not over 32 per can; or 12.5% by count if over 32 per can	5% by weight

3. FOOD ADDITIVES

- 3.1 Antifoaming agents and antioxidants used in accordance with Tables 1 and 2 of the *General Standard for Food Additives* (CODEX STAN 192-1995) in Food Category 04.1.2.4 (Canned or bottled (pasteurized) fruit) or listed in Table 3 of the General Standard are acceptable for use in foods conforming to this Annex.
- 3.2 Flavourings used in products covered by this Annex shall comply with the *Guidelines for the Use of Flavourings* (CAC/GL 66-2008).

4. WEIGHTS AND MEASURES

4.1 MINIMUM FILL

In case of flexible containers and rigid plastic containers, these should be filled as full as commercially practicable.”

4.2 MINIMUM DRAINED WEIGHT

Types of pack	Styles	% Minimum drained weight
1. Regular pack	1.1 All styles other than “whole” or “crushed” or “chips” styles	58%
	1.2 “Crushed” or “chips” styles	63%
2. Heavy pack	“Tidbits” or “dice or cubes” or “pieces” or “chips” or “crushed” styles	73%
3. Solid pack	“Chips” or “crushed” styles	78%

APPENDIX III**AMENDMENT TO THE SCOPE OF THE
STANDARD FOR CERTAIN CANNED FRUITS
(CODEX STAN 319-2015)****(For adoption by the Commission)****1. SCOPE**

This Standard applies to certain canned fruits, 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 canned applesauce, canned berry fruits, canned citrus fruits, and canned stone fruits which are covered by other Codex standards.

This Standard does not cover:

- (a) products which are clearly intended or labelled as intended for special dietary uses;
- (b) reduced sugar products or those with a very low sugar content;
- (c) products where the foodstuffs with sweetening properties have been replaced wholly or partially by food additive sweeteners.

APPENDIX IV-PART I**PROPOSED DRAFT ANNEXES FOR CERTAIN QUICK FROZEN VEGETABLES
(for inclusion in the Standard for Quick Frozen Vegetables (CODEX STAN 320-2015))****(At Step 5/8)****ANNEX I: BROCCOLI**

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

1. DESCRIPTION**1.1 PRODUCT DEFINITION**

Quick frozen broccoli is the product prepared from the fresh, clean, sound stalks or shoots of the broccoli plant conforming to the characteristics of the species *Brassica oleracea* L. var. *italica* Plenck (Sprouting Broccoli) which have been sorted, trimmed, washed and sufficiently blanched to ensure adequate stability of colour and flavour during normal marketing cycles.

1.2 PRESENTATION**1.2.1 Styles**

- (a) **Spears** - The head and adjoining portion of the stem, with or without small tender attached leaves, ranging in length from more than 7 cm to 16 cm. The spears may be split longitudinally. Within each sample unit not more than 20% by count fall outside the designated length.
- (b) **Florets** - The head and adjoining portion of the stem, with or without small tender attached leaves ranging in length from 15 mm to 80 mm with sufficient attached stem to maintain a compact head. The florets may be split longitudinally. Within each sample unit not more than 20% by count fall outside the designated length.
- (c) **Cut spears** – Spears, which have been cut into portions and which may be irregular in shape. Pieces from 1.5 cm to 5 cm in the longest dimension. Leaf material may be present but shall not exceed 35% m/m and head material shall not be less than 15% m/m.
- (d) **Chopped** - Broccoli finely cut into pieces less than 1.5 cm in the longest dimension. Leaf material may be present but shall not exceed 35% m/m and head material shall not be less than 15% m/m.

1.2.2 Sizing

Quick frozen broccoli florets may be presented sized or un-sized.

When sized, a size name designation and size parameter in mm should be indicated on the package. The package shall contain no less than 80.0% by weight of the declared size.

Table 1: Sizing

Size Designation	Diameter size range of the head of the florets (mm)
(a) Small florets	12 – 40 mm
(b) Florets	> 40 – 80 mm

2. ESSENTIAL COMPOSITION AND QUALITY FACTORS**2.1 COMPOSITION****2.1.1 Basic Ingredients**

Broccoli as defined in Section 1.1.

2.1.2 Optional Ingredients

- (a) Sugars as defined in the *Standard for Sugars* (CODEX STAN 212-1999);
- (b) Salt (sodium chloride) as defined in the *Standard for Food Grade Salt* (CODEX STAN 150-1985);
- (c) Edible fats and oils as defined in the *Standard for Named Vegetable Oils* (CODEX STAN 210-1999) and in the *Standard for Named Animal Fats* (CODEX STAN 211-1999);
- (d) Spices and culinary herbs;¹
- (e) Named sauces.

¹ In accordance with the relevant Codex standards for spices and culinary herbs, when available.

2.2 QUALITY FACTORS

2.2.1 General Requirements

Quick frozen broccoli shall be of reasonably uniform dark green to light green depending on the varieties. The inflorescences shall be firm, compact of fine/ close grained with floral buttons completely closed.

With respect to visual or other defects with a tolerance, quick frozen broccoli shall be reasonably free from:

- (a) an excessive amount of leaf material, particularly large coarse leaves;
- (b) detached fragments and loose leaves (only for spears and florets);
- (c) extraneous vegetable material;
- (d) yellow or brown coloured florets;
- (e) damage due to mechanical, pathological, or insect injury;
- (f) poorly trimmed units (spears and florets);
- (g) flowered or poorly developed units;
- (h) fibrous or woody units.

2.2.2 Definition of Visual Defects

- (a) **Extraneous vegetable material (E.V.M.)** - means leaf, stem, or similar harmless vegetable material other than from the broccoli plant.
- (b) **Detached leaves** (for spears and florets) - mean broccoli leaves and pieces thereof not attached to a unit.
- (c) **Fragments** (for spears and florets) - means pieces less than 20 mm in length for spears and weighing less than 5 g for florets.
- (d) **Blemished** - A unit or product, which is stained, spotted, affected by discolouration or disease or insect injury.
 - (i) Minor - Slightly affecting the appearance or eating quality.
 - (ii) Major - Materially affecting the appearance or eating quality.
 - (iii) Serious - Seriously affecting the appearance or objectionably affecting the eating quality to such an extent that customarily it would be discarded under normal culinary preparation.
- (e) **Mechanical damage** (for spears and florets) - means a unit bearing the general configuration of a spear or floret, but from which more than 50% of the buds have become detached, or otherwise mechanically damaged so as to materially affect the appearance of the product.
- (f) **Poorly trimmed** (for spears and florets) - means units in which the appearance is seriously affected by attached coarse leaves or pieces thereof, or ragged removal of leaves, or small side shoots, or poor cutting of the stem.
- (g) **Over mature or poorly developed** - means individual buds are in the flowered stage and with respect to spears and florets branching bud clusters which comprise the head are spread so as to seriously affect the appearance of the unit, or the bud clusters are of such advanced maturity that individual buds and supporting stems from loosely structured clusters.
- (h) **Fibrous** - means tough fibre that is normally developed near the outside portion of the broccoli stem; such units are tough but still edible.
- (i) **Woody** - means tough fibre that is normally developed near the outside portion of the broccoli stem, such units are extremely tough and highly objectionable.

2.2.3 Standard Sample Size

The standard sample size for presentation (styles) shall be 300 g.

2.2.4 Defects and Allowances

In addition, the following sample size applies for visual defects:

Table 2: Sample Size

Styles	Sample Size for Visual Defects
(a) Spears, florets	300 g for detached fragments, loose leaves, and E.V.M.; for other defects 25 units
(b) Cut spears and other styles	300 g
(c) Chopped	100 g

Table 3: Classification of Defects by Count for Spears and Florets

Visual Defects	Unit of Measurement	Defect Categories			
		Minor	Major	Serious	Total
(a) E.V.M.	Each piece		2		
(b) Detached leaves	Each 5 g	1			
(c) Fragments					
(i) Spears	Each 20 mm	1			
(ii) Florets	Each 5 g	1			
(d) Blemished	Each unit				
(i) Minor		1			
(ii) Major			2		
(iii) Serious				4	
(e) Mechanical damage	Each unit		1		
(f) Poorly trimmed	Each unit	1			
(g) Over-mature/poorly	Each unit				
(h) Fibrous	Each unit		2		
(i) Woody	Each unit		2		
Total Allowable Points		25	12	4	25

For tolerance based on the standard sample sizes indicated in Section 2.2.3, visual defects shall be assigned points in accordance with the appropriate Table in this Section. The maximum number of defects permitted is the Total Allowable Points rating indicated for the respective categories Minor, Major and Serious or the Combined Total of the foregoing categories.

Table 4 – Chopped

Visual Defects	Unit of Measurement	Defect Categories			
		Minor	Major	Serious	Total
(a) E.V.M.	Each piece		2		
(b) Blemished	Each piece				
(i) Minor		1			
(ii) Major			2		
(iii) Serious				4	
(c) Over-mature / poorly developed	Each 10 g for cut		2		
	Each 2 g for chopped		2		
(d) Fibrous	Each 2 g		2		
(e) Woody	Each 2 g t			4	
Total Allowable Points		25	12	4	25

2.3 DEFINITION OF “DEFECTIVES”

Any standard sample unit, which fails to comply with the quality requirements, as set out in Sections 1.2.1, 2.2.1 and 2.2.4 shall be regarded as a “defective”.

2.4 LOT ACCEPTANCE

A lot will be considered acceptable when the number of “defectives” as defined in Section 2.2 does not exceed the acceptance number (c) for the appropriate sample plan with an AQL of 6.5.

In applying the acceptance procedure each “defective”, as indicated in Sections 2.2.1 and 2.2.4, is treated individually for the respective categories.

3. FOOD ADDITIVES

None permitted.

4. LABELLING

4.1 NAME OF THE PRODUCT

The name of the product shall include the designation “Broccoli” and the size or size designation when the broccoli is sized.

ANNEX II: BRUSSELS SPROUTS

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

1. DESCRIPTION

1.1 PRODUCT DEFINITION

Quick frozen Brussels sprouts are the product prepared from fresh, clean, sound, whole auxiliary buds of the plant conforming to the characteristics of *Brassica oleracea* L. var. *gammier* Gemmifera (DC) Schulz – which buds are trimmed, sorted, washed and sufficiently blanched to ensure adequate stability of colour and flavour during normal marketing cycles.

1.2 PRESENTATION

1.2.1 Sizing

- (a) Quick frozen Brussels sprouts may be presented sized or unsized.
- (b) Whether sized or unsized, the amount of frozen sprouts passing a square holed sieve of 12 mm, shall not exceed 5% by number.
- (c) If quick frozen Brussels sprouts are presented as size graded, they shall conform to a, size name designation and size parameter in mm should be indicated on the package when measured in the frozen condition. The following system of size designations and diameters is a guide. Other designations including mixtures of sizes are allowed.

Table 1: Size Designation

Size Designation	Diameter of sprouts in mm using a square hole sieve or caliper
(a) Very small	12 – 22 mm
(b) Small	> 22 – 26 mm
(c) Medium	> 26 – 36 mm
(d) Large	over 36 mm

2. ESSENTIAL COMPOSITION AND QUALITY FACTORS

2.1 COMPOSITION

2.1.1 Basic Ingredients

Brussels sprouts as defined in Section 1.

2.1.2 Optional Ingredients

- (a) Sugars as defined in the *Standard for Sugars* (CODEX STAN 212-1999);
- (b) Salt (sodium chloride) as defined in the *Standard for Food Grade Salt* (CODEX STAN 150-1985);
- (c) Edible fats and oils as defined in the *Standard for Named Vegetable Oils* (CODEX STAN 210-1999) and in the *Standard for Named Animal Fats* (CODEX STAN 211-1999);
- (d) Spices and culinary herbs;¹
- (e) Named sauces.

2.2 QUALITY FACTORS

2.2.1 General Requirements

With respect to visual defects or other defects subject to a tolerance, quick frozen Brussels sprouts shall be reasonably free from:

¹ In accordance with the relevant Codex standards for spices and culinary herbs, when available.

- (a) extraneous vegetable material (E.V.M.);
- (b) loosely structured buds;
- (c) poorly trimmed or mechanically damaged units;
- (d) damage by insects or disease;
- (e) loose leaves.

2.2.2 Definition of Visual Defects

- (a) **Extraneous vegetable material (E.V.M.)** - Extraneous material from the Brussels sprouts plant including stem and leaf, but excluding bud leaves and fragments thereof; harmless vegetable material from other plants.
- (b) **Yellow colour** - More than 50% of the outer surface of a sprout yellow in colour due to loss of outer leaves resulting either from over trimming or mechanical damage.
- (c) **Loosely structured** - Sprout not compact, having loosely packed or open leaves. A sprout in which the leaves form a rosette appearance.
- (d) **Perforated leaves** (by insects) - A sprout with one or more surface perforations larger than 6 mm in diameter, showing scar tissue at the edge of the perforation(s).
- (e) **Decayed** - A sprout which shows significant internal or external decomposition.
- (f) **Seriously blemished** - A sprout which is stained, spotted, discoloured or otherwise blemished, covering an aggregate area greater than that of a circle 15 mm in diameter, in such a way as to detract seriously from its appearance/eating quality, and to such an extent that it would be discarded under normal culinary preparation.
- (g) **Blemished** - A sprout which is stained, spotted, discoloured, or otherwise blemished to the extent that the aggregate area affected is greater than the area of a circle 6 mm in diameter, or in such a way as to detract materially but not seriously from its appearance. Sprouts with slight blemishes may be ignored.
- (h) **Poorly trimmed or mechanically damaged unit** - A unit in which: the stem end is very ragged leaving a heel extending more than 10 mm beyond the point of attachment of the lowest outer leaves;
 - (i) 4 or more outer leaves have been damaged such that only the petioles remain attached to the stem;
 - (ii) the stem extends more than 10 mm below the point of attachment of the lowest outer leaves;
 - (iii) the appearance is damaged to an extent that the sprout is lacerated, can be separated easily into two pieces, or more than 25% of its volume has been removed.
- (i) **Loose leaf**: Leaf or leaf fragments detached from the bud.

2.2.3 Standard Sample Size

2.2.3.1 Presentation (styles and sizing)

The standard sample size shall be 1 kg.

2.2.3.2 Visual Defects

The standard sample size shall be 1 kg for the assessment of E.V.M. and loose leaf, and 100 sprouts for the assessment of other visual defects.

2.2.4 Defects and Allowances

2.2.4.1 Styles – “Free Flowing”

When the product is presented as “free flowing” a tolerance of 10% m/m shall be allowed for pieces which are stuck together to such an extent that they cannot easily be separated in the frozen state.

2.2.4.2 Sizing

If represented as size graded, of the sprouts 12 mm or larger, a minimum of 80% by number shall be of the declared size and a maximum of the following percentages by number of other sizes:

Table 2: Sizing

Size Designation	Very Small	Small	Medium	Large
(a) Max% 12 – 22 mm	-	20	20	5
(b) Max% 22 26 mm	20	-	20	-
(c) Max% 26– 36 mm	5	20	-	20
(d) Max% over 36 mm	0		20	-
Total Max%	20	20	20	20

2.2.4.3 Visual Defects

For tolerances based on the standard sample size indicated in Section 2.2.3.2, visual defects shall be assigned points in accordance with the Table in this Section. The maximum number of defects permitted is the Total Allowable Points rating indicated for the respective categories 1, 2 and 3 or the Combined Total of the foregoing categories.

Table 3: Defects Allowances

Defect	Unit of Measurement	Defect Categories			Total
		1	2	3	
(a) E.V.M.	Each piece	2			
(b) Loosely structured	Each sprout		2		
(c) Perforated leaves	Each sprout		1		
(d) Decayed	Each sprout			4	
(e) Seriously blemished	Each sprout			2	
(f) Blemished	Each sprout		2		
(g) Poorly trimmed or mechanically damaged	Each sprout		1		
(h) Loose leaf	Each 1% m/m	1			
Maximum Total Allowable Points		10	45	10	55

Maximum percentage by count of (b) Yellow sprouts: 25

2.3 CLASSIFICATION OF “DEFECTIVES”

Any standard sample unit which fails to comply with the quality requirements, as set out in Sections 2.2.1 and 2.2.4 shall be regarded as a “defective”.

2.4 LOT ACCEPTANCE

A lot will be considered acceptable when the number of “defectives” as defined in Section 2.3 does not exceed the acceptance number (c) for the appropriate sample plan with an AQL of 6.5.

In applying the acceptance procedure each “defective”, as indicated in Sections 2.2.1 and 2.2.4.3, is treated individually for the respective characteristics.

3. FOOD ADDITIVES

None permitted.

4. LABELLING**4.1 NAME OF THE PRODUCT**

The name of the product shall include the designation “Brussels sprouts”.

4.2 SIZE DESIGNATION

4.2.1 If a term designating the size of the Brussels sprouts is used:

- (a) it shall be supported by the sieve size in mm; and/or
- (b) the words “very small”, “small”, “medium” or “large” as appropriate; and/or
- (c) by a size representation on the label of the size range to which the Brussels sprouts predominantly conform; and/or
- (d) the customary method of declaring size in the country in which the product is sold.

ANNEX III: CAULIFLOWER

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

1. DESCRIPTION

1.1 PRODUCT DEFINITION

Quick frozen cauliflower is the product prepared from fresh, clean, sound heads of the cauliflower plant conforming to the characteristics of the species *Brassica oleracea* L. var. *botrytis* L., which heads may be trimmed and separated into parts, and which are washed and sufficiently blanched to ensure stability of colour and flavor during normal marketing cycles.

1.2 PRESENTATION

1.2.1 Style

- (a) **Whole** - The whole, intact head, which is trimmed at the base. Small tender modified leaves may be present or attached to the unit;
- (b) **Split** - The whole head, cut vertically into two or more sections which may have attached small, tender, modified leaves;
- (c) **Florets¹** - Segments of the head, which may have a portion of the attached, measuring at least 12 mm across the top in the greatest dimension. A maximum tolerance of 20% m/m is permitted for units in which the greatest dimension across the floret is more than 5 mm and less than 12 mm. Small, tender modified leaves may be present or attached to the units.

1.2.2 Sizing

1.2.2.1 Quick frozen cauliflower florets may be presented sized or un-sized. When sized, Size is determined by the maximum diameter of the equatorial section.

1.2.2.2 If presented as size graded they shall conform to the following specifications.

- (a) **Large florets** - Segments of head measuring at least 30 mm across the top in the greatest dimension and of which a portion of secondary stem may be attached. Small tender modified leaves may be present or attached to the unit.
- (b) **Small florets** - Segments of head measuring at least 12 mm but less than 30 mm across the top in the greatest dimension and to which a small portion of secondary stem may be attached. Small tender modified leaves may be present or attached to the unit.

2. ESSENTIAL COMPOSITION AND QUALITY FACTORS

2.1 COMPOSITION

2.1.1. Basic Ingredients

Cauliflower as defined in Section 1.

2.1.2 Optional Ingredients

- (a) Sugars as defined in the *Standard for Sugars* (CODEX STAN 212-1999);
- (b) Salt (sodium chloride) as defined in the *Standard for Food Grade Salt* (CODEX STAN 150-1985);
- (c) Edible fats and oils as defined in the *Standard for Named Vegetable Oils* (CODEX STAN 210-1999) and in the *Standard for Named Animal Fats* (CODEX STAN 211-1999);
- (d) Spices and culinary herbs;²
- (e) Named sauces.

2.2 QUALITY FACTORS

2.2.1 General Requirements

Quick frozen cauliflower shall be of reasonably uniform white to dark cream colour over the tops of the units which may be slightly dull and have a tinge of green, yellow or pink. The inflorescences shall be firm, compact, of fine / close grained.

¹ The term "clusters" is used as an alternative to "florets" in some English speaking countries.

² In accordance with the relevant Codex standards for spices and culinary herbs, when available.

The stem or branch portions may be light green or have a tinge of blue; and with respect to visual defects or other defects subject to a tolerance shall be reasonably:

- (a) free from discoloured areas confined essentially to the surface;
- (b) free from damaged or blemished areas;
- (c) free from fibrous stems;
- (d) free from poorly trimmed units;
- (e) free from fragments;
- (f) compact and reasonably well-developed;
- (g) free from coarse green leaves;
- (h) free from loose stems (for floret styles).

2.2.2 **Definition of Visual Defects**

Table 1 – Definition of Visual Defects

(a) Discolouration	(i) <u>Light</u> - The discolouration disappears almost entirely upon cooking.
	(ii) <u>Dark</u> - The discolouration does not disappear upon cooking.
(b) Blemished	(i) <u>Minor</u> - The appearance of the unit is only slightly affected.
	(ii) <u>Major</u> - The appearance of the unit is materially affected.
	(iii) <u>Serious</u> - The appearance of the unit is objectionably affected to such an extent that it would customarily be discarded under normal culinary
(c) Mechanically damaged	(i) <u>Major</u> - A unit in which more than 50% of the curd has been mechanically damaged or is missing (for split and floret styles).
	(ii) <u>Major</u> - A unit in which more than 25% of the curd has been mechanically damaged or is missing (for whole style).
(d) Fibrous	(i) <u>Major</u> - A unit which possesses tough fibres that are quite noticeable and materially affect the eating quality.
	(ii) <u>Serious</u> - A unit which possesses tough fibres that are objectionable and of such nature that it would be customarily discarded.
(e) Poorly trimmed	- A unit which has deep-knife gouges or a ragged appearance.
(f) Leaves	- Coarse green leaves or parts thereof whether or not attached to the unit.
(g) Fragments	- Portions of the floret 5 mm or less across the greatest dimension.
(h) Not compact	- A unit in which the florets are spreading, or the flowerhead has a “ricey” appearance or the flowerhead is very soft or mushy.
(i) Loose stem	- Each piece of stem exceeding 2.5 cm in length detached from a cauliflower unit.

2.2.3 **Standard Sample Size**

The standard sample size for presentation³ shall be 500 g having a minimum of 50 florets.

2.2.4 **Defects and Allowances**

When cauliflower is presented as sized, a tolerance of 20% by weight is permitted as not conforming to the size indicated on the package.

³ For whole style, the minimum number of heads weighing in total at least 500 g.

For tolerances based on the standard sample size indicated in Section 2.2.3, visual defects shall be assigned points in accordance with the Tables 2 and 3. The maximum number of defects permitted is the Total Allowable Points rating indicated for the respective categories Minor, Major and Serious or the Combined Total of the foregoing categories.

Table 2 – Whole Style

Defect		Unit of Measurement	Defect Categories			
			Minor	Major	Serious	Total
(a) Discolouration	(i) Light	Each area or combined area of 8 cm ²	1			
	(ii) Dark	Each area or combined area of 4 cm ²		2		
(b) Blemished	(i) Minor	Each head	1			
	(ii) Major			2		
	(iii) Serious				4	
(c) Mechanically damaged	(i) Major	Each head		2		
(d) Fibrous	(i) Major	Each head		2		
	(ii) Serious				4	
(e) Poorly trimmed leaves		Each head		2		
		Each 2 cm ²		2		
(f) Not compact		Each area or combined area of 12 cm ²		2		
Total Allowable Points			10	6	4	10

Table 3 Split, Florets and Other Styles

Defect		Unit of Measurement	Defect Categories			
			Minor	Major	Serious	Total
(a) Discolouration	(i) Light	Each area or combined area of 8 cm ²	1			
	(ii) Dark	Each area or combined area of 4 cm ²		2		
(b) Blemished	(i) Minor	Each unit	1			
	(ii) Major			2		
	(iii) Serious				4	
(c) Mechanically damaged	(i) Major	Each unit		2		
(d) Fibrous	(i) Major	Each unit		2		
	(ii) Serious				4	
(e) Poorly trimmed leaves		Each unit	1			
		Each 2 cm ²		2		
(f) Fragments		Each 3% m/m		2		
(g) Not compact		Each area or combined area of 12 cm ²		2		
(h) Loose stem		Each piece	1			
Total Allowable Points			25	16	4	25

2.3 CLASSIFICATION OF "DEFECTIVES"

Any standard sample unit which fails to comply with the quality requirements, as set out in Sections 2.2.1 and 2.2.4 shall be regarded as a "defective".

2.4 LOT ACCEPTANCE

A lot will be considered acceptable when the number of "defectives" as defined in Section 2.2 does not exceed the acceptance number (c) for the appropriate sample plan with an AQL of 6.5.

3. FOOD ADDITIVES

None permitted.

4. LABELLING

4.1 NAME OF THE PRODUCT

4.1.1 The name of the product shall include the designation "cauliflower".

4.1.2 If a term designating the size of the florets is used:

- the words "large florets", "medium florets", "small florets" or "cut florets" as appropriate; and/or
- by a correct representation on the label of the size range to which the florets predominantly conform; and/or;
- the customary method of declaring size in the country of retail sale.

ANNEX IV: FRENCH FRIED POTATOES

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

1. DESCRIPTION

1.1 PRODUCT DEFINITION

Quick frozen French fried potatoes are the product prepared from clean, sufficiently developed, sound tubers of the potato plant conforming to the characteristics of the species *Solanum tuberosum* L, *Solanum Andigena* L and rhizomes of the sweet potato plant conforming to the characteristics of the species of *Ipomoea batatas*. They shall have been sorted, washed, peeled or unpeeled, cut into various shapes and treated as necessary to achieve satisfactory colour and fried or pre-cooked in edible oil, fat, or water blanched. The treatment, pre-cooking and frying operations shall be sufficient to ensure adequate stability of colour and flavour during normal marketing cycles. Following the frying or pre-cooking operation the product is quickly cooled and quick frozen. Products that have not been fried or pre-cooked are not covered by this annex.

1.2 PRESENTATION

1.2.1 Styles

The styles of the product shall be determined by the nature of the surface and the nature of the cross section.

1.2.1.1 Nature of the Surface

The product may be presented in any one of the following styles including:

- (a) Straight cut - Strips of potato with practically parallel sides and with smooth surfaces;
- (b) Crinkle cut - Strips of potato with practically parallel sides and in which two or more sides have a corrugated surface.

1.2.1.2 Dimensions of the cross section

The cross sectional dimensions of strips of quick frozen French fried potatoes that have been cut on all four sides (Styles (a) and (b) above) shall not be less than 4 mm when measured in the frozen condition. The quick frozen French fried potatoes within each pack shall be of similar cross sectional dimensions.

The product may be identified:

- (a) by the approximate dimensions of the cross sections or by reference to the following system for designations:

Table 1. Size designations

Designation	Dimension in mm across the largest cut surface
(a) Shoestring	4 - 8
(b) Medium	> 8 - 12
(c) Thick cut	> 12 - 16
(d) Extra large	> 16

Uniformity

Uniformity may be expressed as a tolerance of 10% by length of non-conforming styles units applies, when specific lengths are not indicated.

2. ESSENTIAL COMPOSITION AND QUALITY FACTORS

2.1 COMPOSITION

2.1.1 Basic Ingredients

- (a) Potatoes as defined in Section 1.1;
- (b) Edible fats and oils as defined in the *Standard for Named Vegetable Oils* (CODEX STAN 210-1999) and in the *Standard for Named Animal Fats* (CODEX STAN 211-1999)

2.1.2 **Optional Ingredients**

- (a) Sugars as defined in the *Standard for Sugars* (CODEX STAN 212-1999);
- (b) Salt (sodium chloride) as defined in the *Standard for Food Grade Salt* (CODEX STAN 150-1985);
- (c) Spices and culinary herbs;¹
- (d) Batters.

2.2 **QUALITY FACTORS**

2.2.1 **General Requirements**

Quick frozen French fried potatoes shall:

- (a) be free from any foreign flavours and odours;
- (b) be clean, sound and practically free from foreign matter;
- (c) have a reasonably uniform colour.

and with respect to visual defects subject to a tolerance shall be:

- (a) without excessive external defects such as blemishes, eyes and discolouration;
- (b) without excessive sorting effects, such as slivers, small pieces and scrap;
- (c) reasonably free from frying defects, such as burnt parts.

When prepared in accordance with the manufacturer’s instructions quick frozen French fried potatoes shall:

- (a) have a reasonably uniform desired colour;
- (b) have a texture characteristic of the product and be neither excessively hard nor excessively soft or soggy.

2.2.2 **Analytical Requirements**

2.2.2.1 Moisture - the maximum moisture content of the whole product in the styles shoestring, medium and thick cut shall be 76% m/m; and in extra-large and other styles 78% m/m.

2.2.2.2 The fat or oil extracted from the product shall have a free fatty acid content of not more than 1.5% of oil m/m measured as oleic acid or an equivalent fatty acid value based on the predominant fatty acid in the fat or oil

2.2.2.3 **Definition of Visual Defects**

<p>External defects: are blemishes or discolouration (either internally or on the surface) due to exposure to light, mechanical, pathological or pest agents, eye material or peeling remnants.</p>
<p>(a) <u>Minor defect</u> - A unit affected by disease, dark or intense discolouration, eye material, or dark peel covering an area or a circle greater than 3 mm but less than 7 mm in diameter; pale brown peel or light discolouration of any area greater than 3 mm in diameter.</p>
<p>(b) <u>Major defect</u> - A unit affected by disease, dark or intense discolouration, eye material, or dark peeling covering an area or a circle greater than 7 mm but less than 12 mm in diameter.</p>
<p>(c) <u>Serious defect</u> - A unit affected by disease, dark or intense discolouration, eye material, or dark peel covering an area or a circle of 12 mm in diameter or more.</p>
<p>Note: “Slight” external defects which in either area or intensity fall below the definition shown for minor defects shall be ignored.</p>

¹ In accordance with the relevant Codex standards for spices and culinary herbs, when available.

Sorting Defects
(a) <u>Sliver</u> - A very thin unit (generally an edge piece) which will pass through a slot the width of which is 50% of the minimum dimension of the nominal or normal size.
(b) <u>Small piece</u> - Any unit less than 25 mm in length.
(c) <u>Scrap</u> - Potato material of irregular form not conforming to the general conformation of French fried potatoes.
Frying Defects
Burnt pieces - Any unit which is dark brown to black and hard due to gross over frying.

2.2.3 Standard Sample Size

The standard sample size shall be 1 kg.

2.2.4 Tolerances for Visual Defects

For tolerances based on the standard sample size as specified in Section 2.2.4 the visual external defects are classified as “minor” or “major” or “serious”. The tolerances in respect of external defects are dependent on the cross section of the French fried potatoes.

To be acceptable, the standard samples shall not contain units in excess of the numbers shown for the respective categories, including total, in Table 2.

Table 2: Tolerances for External Defects

Defect category	Number of units affected cross section of strips	
	4 - 16 mm	over 16 mm
(a) Serious	7	3
(b) Serious + major	21	9
Total (serious + major + minor)	60	27

The tolerances for the other defects (not depending on cross section) (depending on the style) are:

Table 3. Sorting defects (Grades)

Slivers	maximum 12% m/m
Small Pieces and Scraps	maximum 6% m/m
Total Sorting Defects	maximum 12% m/m
Frying Defects	maximum 0.5% m/m

2.3 DEFINITION OF “DEFECTIVES”

Any sample unit taken shall be regarded as a “defective” for the respective characteristics when it:

- (a) fails to meet any of the requirements given in Section 2.1;
- (b) fails to meet any of the general requirements given in Section 2.2.1;
- (c) exceeds the tolerances for visual defects in any one or more respective defect categories in Section 2.2.5.

2.4 **LOT ACCEPTANCE FOR COMPOSITION AND QUALITY FACTORS**

A lot will be considered acceptable with respect to composition and quality factors when the number of “defectives” as defined in Section 2.2 does not exceed the acceptance number (c) of an appropriate sampling plan with an AQL of 6.5.

In applying the acceptance procedure each “defective” (as defined in section 2.3(a) to (c)) is treated individually for the respective characteristics.

3. **FOOD ADDITIVES**

Sequestrants used in accordance with Tables 1 and 2 of the *General Standard for Food Additives* (CODEX STAN 192-1995) in Food Category 0.4.2.2.1 Frozen Vegetables (including mushrooms and fungi, roots and tubers, pulses and legumes, and aloe vera), seaweeds, and nuts and seeds, are acceptable for use in food conforming to this Standard.

4. **LABELLING**

4.1 **NAME OF THE PRODUCT**

4.1.1 The name of the product shall be “French Fried Potatoes” or the equivalent designation used in the country in which the product is intended to be sold. Where the sweet potato variety is used, the name of the product shall be “French Fried Sweet Potatoes”.

4.1.2 In addition, there shall appear on the label a designation of the style as appropriate, for example “straight cut” or “crinkle cut” and there may also appear an indication of the approximate dimensions of the cross section or the appropriate designation, i.e. “Shoestring”, “medium”, “thick cut” or “extra-large”.

4.2 **ADDITIONAL REQUIREMENTS**

The packages shall bear clear directions for keeping from the time they are purchased from the retailer to the time of their use, as well as directions for cooking.

ANNEX V: GREEN BEANS AND WAX BEANS

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

1. DESCRIPTION

1.1 PRODUCT DEFINITION

Quick frozen green beans is the product prepared from fresh, clean, sound, succulent pods of the plants conforming to the characteristics of suitable varieties of the species *Phaseolus vulgaris* L. or *Phaseolus coccineus* L. Strings (if any), stems, and stem ends are removed, and the pods washed and sufficiently blanched to ensure adequate stability of colour and flavour during normal marketing cycles.

1.2 PRESENTATION

1.2.1 Type

Green beans or wax beans having distinct varietal differences with regard to shape may be designated as:

- (a) **Round** - Pods having a width not greater than 1½ times the thickness.
- (b) **Flat** - Pods having a width greater than 1½ times the thickness.

1.2.2 Styles

Quick frozen green beans and quick frozen wax beans shall be presented in the following styles:

- (a) **Whole**: Whole pods of any length.
- (b) **Cut**: Transversely cut pods in which 70% or more by count of the units are at least 20 mm long but not longer than 65 mm.
- (c) **Short cut**: Transversely cut pods in which 70% or more by count of the units are more than 10 mm but less than 20 mm long.
- (d) **Diagonal cut**: pods cut approximately 45° to the longitudinal axis in which 70% by count of the units are more than 6 mm long.
- (e) **Sliced/French Cut**: pods sliced lengthwise or at an angle up to approximately 45° to the longitudinal axis, with a maximum thickness of 7 mm.

1.2.3 Colour (for wax beans only)

The predominant colour of the pods of wax beans excluding the seeds and immediate surrounding tissue shall be yellow, or yellow with a green tinge.

1.2.4 Sizing

- (a) Quick frozen whole and cut green beans and wax beans may be presented sized or unsized.
- (b) If round type beans are presented as size graded on diameter, they shall conform when measured in the thawed conditions, to the following size designation for the size names. However, other size designations may be used, and should be labelled accordingly.

Table 1: Size designation

Size Designations	Bean pod diameter in mm measured by passing through parallel bars
(a) Extra small	up to 6.5
(b) Very small	up to 8
(c) Small	up to 9.5
(d) Medium	up to 11
(e) Large	over 11

2. ESSENTIAL COMPOSITION AND QUALITY FACTORS

2.1 COMPOSITION

2.1.1 Basic Ingredients

Green Beans and Wax Beans as defined in Section 1.

2.1.2 Optional Ingredients

- (a) Sugars as defined in the *Standard for Sugars* (CODEX STAN 212-1999);
- (b) Salt (sodium chloride) as defined in the *Standard for Food Grade Salt* (CODEX STAN 150-1985);
- (c) Edible fats and oils as defined in the *Standard for Named Vegetable Oils* (CODEX STAN 210-1999) and in the *Standard for Named Animal Fats* (CODEX STAN 211-1999);
- (d) Spices and culinary herbs;¹
- (e) Named sauces.

2.2 QUALITY FACTORS

2.2.1 General Requirements

With regard to visual defects subject to a tolerance, quick frozen beans shall be:

- (a) without excessive small pieces;
- (b) normally developed (for whole beans);
- (c) reasonably free from extraneous vegetable material (E.V.M.);
- (d) reasonably free from stem ends;
- (e) reasonably free from damage by insects or disease;
- (f) reasonably free from mechanically damaged units;
- (g) reasonably free from tough strings and fibrous units.

2.2.2 Definition of Visual Defects

- (a) **Extraneous Vegetable Material:** Vegetable material from the bean plant, other than pod, such as leaf or vine, but excluding stem ends; other harmless vegetable material, not purposely included as an ingredient. For the purpose of assessment, E.V.M. comprising bean leaf material will be differentiated from other E.V.M.
- (b) **Stem end:** A piece of the immediate stem which attaches the pod to the vine stem whether still attached to the unit or loose in the product.
- (c) **Major blemish:** Each piece blemished due to insect or pathological damage affecting an area greater than a 6 mm diameter circle, 2 mm to 4 mm for the “extra small” size or blemished by other means to a degree which seriously detracts from its appearance.
- (d) **Minor blemish:** Each piece blemished due to insect or pathological damage affecting an area greater than a 3 mm diameter circle, 2 mm to 4 mm for the “extra small” size or blemished by other means to a degree which seriously detracts from its appearance.
- (e) **Mechanical damage** (whole and cut styles): a unit that is broken or split into two parts, crushed, or has very ragged edges to an extent that the appearance is seriously affected.
- (f) **Undeveloped** (whole style only): Each unit which measures less than 3 mm at its widest point.
- (g) **Tough strings:** Tough fibre which will support a weight of 250 g for 5 seconds or more when tested in accordance with the procedure as given in CAC/RM 39-1970.
- (h) **Fibrous unit:** Each piece having parchment - like material formed during the ripening of the pod, to the extent that the eating quality is seriously affected.
 - (i) **Edible fibre** means fibre developed in the wall of the bean pod that, after cooking, is noticeable upon chewing, but can be consumed with the rest of the bean material without objection.

¹ In accordance with the relevant Codex standards for spices and culinary herbs, when available.

- (ii) **Inedible fibre** means fibre developed in the wall of the bean pod that, after cooking, is objectionable upon chewing and tends to separate from the rest of the bean material.
- (iii) **Small pieces** (cut and sliced styles): bean pieces less than 10 mm in length including loose seeds and pieces of seeds; - (whole style) bean pieces less than 20 mm in length including loose seeds and pieces of seeds.

2.2.3 Standard Sample Size

2.2.3.1 Presentation

The standard sample size for sizing shall be 1 kg.

2.2.3.2 Visual Defects

The standard sample size is 1 kg for E.V.M. and stem ends, and 300 g for other defect categories.

2.2.4 Defects and Allowances

2.2.4.1 Presentation

- (a) When the product is presented as “free-flowing” a tolerance of 10% (m/m) shall be allowed for pieces which are stuck together to such an extent that they cannot easily be separated in the frozen state. When assessing this factor, the sample unit shall be the entire contents of the pack or 1 kg.
- (b) If presented as size graded, the product shall contain not less than 80% by number of bean pods of the declared size or smaller sizes. Of the 20% by number which may be of larger sizes, not more than a quarter may be of the second size larger and none may be larger than the second size larger.

2.2.4.2 Visual Defects

For tolerance based on the standard sample size indicated in Section 2.2.3, visual defects shall be assigned points in accordance with the Table in this Section. The maximum number of defects permitted is the Total Allowable Points rating indicated for the respective categories 1, 2 and 3 or the Combined Total of the foregoing categories.

Table 2. Defect Tolerances by Count

Defect	Defect Categories			Total
	1	2	3	
(a) E.V.M.				
(i) Bean leaf (each piece)	1			
(ii) Other E.V.M. (each piece)	2			
(b) Stem end	1			
(c) Major blemish		3		
(d) Minor blemish		1		
(e) Mechanical damage (whole and cut styles)		1		
(f) Undeveloped (whole style)		2		
(g) Tough strings			3	
(h) Fibrous unit			1	
(A) All but whole style	15	50	10	60
(B) Whole style only	15	30	6	40
(i) Small pieces (whole, cut and sliced styles) - maximum 20% m/m				

2.3 DEFINITION OF “DEFECTIVES”

Any standard sample unit which fails to comply with the quality requirements, as set out in Sections 2.2.1 and 2.2.4 shall be regarded as a “defective”.

2.4 LOT ACCEPTANCE

A lot will be considered acceptable when the number of “defectives” as defined in Section 2.3 does not exceed the acceptance number (c) for the appropriate sample plan with an AQL of 6.5.

In applying the acceptance procedure each “defective”, as indicated in Sections 2.2.1 and 2.2.4.2, is treated individually for the respective characteristics.

3. FOOD ADDITIVES

None permitted.

4. LABELLING**4.1 NAME OF THE PRODUCT**

4.1.1 The name of the product shall include the designations “green beans” or “wax beans” as applicable.

4.1.2 A statement regarding type (“round” or “flat”) may be made if customary in the country of retail sale.

4.2 SIZE DESIGNATION

If a term designating the size of the beans is used:

- (a) it shall be supported by the size in mm as shown in Section 2.4.5.2; and/or
- (b) the words “extra small”, “very small”, “small”, “medium”, or “large” as appropriate; and/or
- (c) by a correct graphic representation on the label of the size range to which the beans predominantly conform; and/or
- (d) the customary method of declaring size in the country in which the product is sold.

ANNEX VI: PEAS

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

1. DESCRIPTION

1.1 PRODUCT DEFINITION

Quick frozen peas are the product prepared from fresh, clean, sound, whole, young and tender peas conforming to the characteristics of the species *Pisum sativum* L. which have been washed, sufficiently blanched to ensure adequate stability of colour and flavor during normal marketing cycles.

1.1.1 Types

- (a) Any suitable variety of peas conforming to species *Pisum sativum* L may be used.
- (b) The product shall be presented as “peas” or may be presented as “garden peas” provided they meet the organoleptic and analytical characteristics.
- (c) Sweet green wrinkled varieties or hybrids having similar characteristics included.

1.2 PRESENTATION

1.2.1 Sizing

1.2.1.1 Quick frozen peas of either type may be presented sized or un-sized.

1.2.1.2 If peas are size graded they shall conform to one of the two following systems of specifications for the size names. Other size ranges and designations may be used and should be labelled accordingly.

Table 1 – Specifications for Sizing

Size Designation	Round Hole Sieve Size In mm
Specification A	
1) Small	up to 8.75
2) Medium	up to 10.2
3) Large	over 10.2
Specification B	
1) Extra small	up to 7.5
2) Very small	up to 8.2
3) Small	up to 8.75
4) Medium	up to 10.2
5) Large	over 10.2

1.2.1.3 Tolerances for Sizes

If size graded, the product shall have a minimum of 80% either by number or weight of peas of the declared size, or of smaller sizes. It shall contain no more than 20% either by number or weight of peas of the next two larger adjoining sizes when applicable. █

2. ESSENTIAL COMPOSITION AND QUALITY FACTORS

2.1 COMPOSITION

2.1.1 Basic Ingredients

Peas as defined in Section 1.

2.1.2 Optional Ingredients

- (a) Sugars as defined in the *Standard for Sugars* (CODEX STAN 212-1999);
- (b) Salt (sodium chloride) as defined in the *Standard for Food Grade Salt* (CODEX STAN 150-1985);
- (c) Edible fats and oils as defined in the *Standard for Named Vegetable Oils* (CODEX STAN 210-1999) and in the *Standard for Named Animal Fats* (CODEX STAN 211-1999);
- (d) Spices and culinary herbs;¹
- (e) Named sauces.

2.2 QUALITY FACTORS

2.2.1 Organoleptic and other characteristics

2.2.1.1 The product shall be of a reasonably uniform green colour according to type, whole, clean, practically free from foreign matter, free from any foreign taste or smell and practically free from damage by insects or diseases.

2.2.1.2 The product shall have a normal flavour, taking into consideration any seasonings or ingredients added.

2.2.2 Analytical Characteristics

The alcohol-insoluble solids content as determined by the method specified in CODEX STAN 234-1999 must not exceed:

- (a) for Peas /Garden Peas 23% m/m;
- (b) for Sweet Green Peas 19% m/m.

2.2.3 Definition of Defects

- (a) **Blond Peas** means peas which are yellow or white but which are edible (that is, not sour or rotted).
- (b) **Blemished Peas** means peas which are slightly stained or spotted.
- (c) **Seriously Blemished Peas** means peas which are either hard, shrivelled, spotted, discoloured, worm-eaten or otherwise blemished to an extent that the appearance or eating quality is seriously affected.
- (d) **Pea fragments** means portions of peas, separated or individual cotyledons, that are crushed, partially broken, broken or loose skins, excluding entire intact peas with skins detached.
- (e) **Extraneous Vegetable Material (E.V.M.)** means any vine, leaf or pod material from the pea plant, or other harmless vegetable material.

2.2.4 Standard Sample Size

The standard sample size for presentation shall be 500 g

2.2.5 Tolerances for Visual Defects

Based on a sample unit of 500 g the end product shall have not more than the following:

Table 2. Tolerances for Visual Defects

Blond Peas	2% m/m
Blemished Peas	5% m/m
Seriously Blemished Peas	1% m/m
Pea Fragments	12% m/m
E.V.M.	0.5% m/m but not more than 12 cm ² in area

¹ In accordance with the relevant Codex standards for spices and culinary herbs, when available.

2.3 CLASSIFICATION OF “DEFECTIVES”

Any standard sample unit which fails to comply with the quality requirements, as set out in Sections 2.2.1 and 2.2.2 shall be regarded as a “defective”.

In addition, any standard sample unit which fails to comply with the quality requirements shall be regarded as a “defective” when any of the defects listed under section 2.2.3 is present in more than twice the amount of the specified tolerance for the individual defect as listed under section 2.2.4 or if the total of section 2.2.4 from (a) to (d) inclusive exceeds 15% m/m.

2.4 LOT ACCEPTANCE

A lot will be considered acceptable when the number of “defectives” as defined in Section 2.3 does not exceed the acceptance number for the appropriate sample plan with an AQL of 6.5.

3. FOOD ADDITIVES**3.1. FLAVOURINGS**

The flavourings used in products covered by this standard shall comply with the *Guidelines for the Use of Flavourings* (CAC/GL 66-2008).

4. LABELLING**4.1 NAME OF THE PRODUCT**

4.1.1 The name of the product shall include the designation “peas”, except that where peas are presented in conformity with Section 1.1.1

4.1.2 Types “Garden Peas”, Sweet Green Peas, the designation shall be “garden peas” or the equivalent designation used in the country of retail sale.

ANNEX VII: SPINACH

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

1. DESCRIPTION

1.1 PRODUCT DEFINITION

Quick frozen spinach is the product prepared from fresh, clean, sound edible parts of the spinach plant conforming to the characteristics of the species *Spinacia oleracea* L., and which have been sorted, washed, sufficiently blanched to ensure adequate stability of colour and flavor during normal marketing cycles and properly drained.

1.2 PRESENTATION

1.2.1 Styles

- (a) **Whole spinach** - The complete tender/young spinach plant with root removed;
- (b) **Leaf spinach** - Substantially whole leaves most of which are separated from the root crown with a maximum length of the stem of 10 cm;
- (c) **Cut-leaf spinach** - Parts of leaves of spinach generally larger than 20 mm in the smallest dimension;
- (d) **Chopped spinach** - Spinach leaves cut into small pieces ranging from 3 to 10 mm in the largest dimension, but not comminuted to a pulp or puree;
- (e) **Pureed spinach (spinach puree)** - Spinach finely chopped which passes through a sieve such that the leaf particles are less than 3 mm dimension.

2. ESSENTIAL COMPOSITION AND QUALITY FACTORS

2.1 COMPOSITION

2.1.1 Basic Ingredients

Spinach as defined in Section 1.

2.1.2 Optional Ingredients

- (a) Sugars as defined in the *Standard for Sugars* (CODEX STAN 212-1999);
- (b) Salt (sodium chloride) as defined in the *Standard for Food Grade Salt* (CODEX STAN 150-1985);
- (c) Edible fats and oils as defined in the *Standard for Named Vegetable Oils* (CODEX STAN 210-1999) and in the *Standard for Named Animal Fats* (CODEX STAN 211-1999);
- (d) Spices and culinary herbs;¹
- (e) Named sauces.

2.2 QUALITY FACTORS

2.2.1 Uniformity

A tolerance of 10% by weight of non-conforming styles applies.

2.2.2 General Requirements

Quick frozen spinach shall be practically free from tough fibrous material and for the styles of "whole leaf" and "cut leaf" not materially disintegrated due to mechanical damage; and, with respect to visual defects or other defects subject to a tolerance, shall be:

- (a) well drained and containing no excess water;
- (b) practically free from sand and grit;
- (c) practically free from loose or detached leaves in "whole" style only;
- (d) practically free from root material;
- (e) reasonably free from discoloured leaves or portions thereof;

¹ In accordance with the relevant Codex standards for spices and culinary herbs, when available.

- (f) reasonably free from flower stems (seed heads);
- (g) reasonably free from flower buds;
- (h) reasonably free from crown and portion thereof, except for “whole” spinach;
- (i) reasonably free from extraneous vegetable material (E.V.M.).

2.2.3 Analytical Characteristics

- (a) Mineral impurities such as sand, grit and silt shall be not more than 0.1% m/m, measured on the whole product basis;
- (b) Sodium chloride-free dry matter - not less than 5.5% m/m.

2.2.4 Definition of Visual Defects

- (a) **Loose leaves (“whole” style only)** - Leaves which are detached from the crown.
- (b) **Discolouration** - Discolouration of any kind on the leaves or stem portions and which materially detracts from the appearance of the product.
 - (i) Minor - Discolouration which is light in colour;
 - (ii) Major - Discolouration which is dark brown or black in colour.
- (c) **Extraneous Vegetable Matter** - Harmless vegetable material such as grass, (E.V.M) weeds, straw, etc.
 - (iii) Minor - E.V.M. which is green and tender;
 - (iv) Major - E.V.M. which is other than green or is coarse.
- (d) **Seed heads (flower stems)** - The flower bearing portion of the spinach plant, which is longer than 25 mm;
- (e) **Flower buds** - The separate flower buds detached from the seed head;
- (f) **Crowns (exclusive of “whole” style)** - The solid area of the spinach plant between the root and the attached leaf clusters;
- (g) **Root material** - Any portion of the root, either loose or attached to leaves.

2.2.5 Standard Sample Size

The standard sample size for segregating and evaluating visual defects shall be as indicated in Table 1.

Table 1. Sample Size

Style	Standard Sample Size (g)
(a) Whole and leaf	300
(b) Cut leaf	300
(c) Chopped	100
(d) Pureed	100

2.2.6 Method of Examination

For separation and enumeration of visual defects the test sample (standard sample size) is placed in water in a deep tray, and the leaves or leaf portion separated one by one.

2.2.7 Defects and Allowances

For tolerances based on the standard sample sizes indicated in Section 2.2.4, visual defects shall be assigned points in accordance with the appropriate Table in this Section. The maximum number of defects permitted is the Total Allowable Points rating indicated for the respective categories Minor, Major and Serious or the Combined Total of the foregoing categories.

Table 2 - Whole leaf and cut leaf style

Defect	Unit of Measurement	Defect Categories			
		Minor	Major	Serious	Total
(a) Loose Leaves (whole style only)	Each Leaf	1			
(b) Discolouration	Each 4 cm ²				
(i) Minor		1			
(ii) Major			2		
(c) E.V.M.	Each 5 cm				
(i) Minor		1			
(ii) Major			2		
(d) Seed heads	Each whole head		2		
	Each portion	1			
(e) Crown (exclusive of "whole" style)	Each whole crown		2		
	Each part				
(f) Root material	Each piece			4	
Total Allowable Points		20	10	4	20

Table 2 - Chopped Style

Defect	Unit of Measurement	Defect Categories		
		Minor	Major	Total
(a) Discolouration	Each cm ²			
(i) Minor		1		
(ii) Major			2	
(b) E.V.M.	Each 1 cm			
(i) Minor		1		
(ii) Major			2	
(c) Flower buds	Each 50 pieces	1		
(d) Crown material	Each piece		2	
(e) Root material	Each piece		2	
Total Allowable Points		20	10	20

Table 3 - Pureed Style

Defect	Allowance
Any dark particle or flower bud	Shall not affect the overall appearance of the product

2.3 CLASSIFICATION OF "DEFECTIVES"

Any standard sample unit which fails to comply with the quality requirements, as set out in Sections 2.1.1, 2.1.6 and 2.2.1 shall be regarded as a "defective".

2.4 LOT ACCEPTANCE

A lot will be considered acceptable when the number of "defectives" as defined in Section 2.2 does not exceed the acceptance number (c) for the appropriate sample plan with an AQL of 6.5.

In applying the acceptance procedure each "defective", as indicated in Section 2.2, is treated individually for the respective characteristics.

3. FOOD ADDITIVES

None permitted.

4. LABELLING**4.1 NAME OF THE PRODUCT**

The name of the product shall include the designation "Spinach".

APPENDIX IV-PART II**SECTION 8 – STANDARD FOR QUICK FROZEN VEGETABLES (CODEX STAN 320-2015)****METHODS OF ANALYSIS FOR QUICK FROZEN VEGETABLES****(For endorsement by CCMAS and inclusion in CODEX STAN 234-1999)¹**

METHODS OF ANALYSIS FOR QUICK FROZEN VEGETABLES Products	Provisions	Method	Principle	Type
Quick frozen fruits and vegetables	Thawing procedure	CAC/RM 32 <u>AOAC 974.25</u>	Thawing	I
Quick frozen fruits and vegetables: Vegetables	Cooking procedure	CAC/RM 33	Cooking	I
Quick frozen fruits and vegetables (non-glazed)	Net weight	CAC/RM 34 <u>AOAC 963.26</u>	Weighing	I
Quick frozen peas	Solids, alcohol insoluble	CAC/RM 35	Gravimetry	I
Quick frozen green and wax beans	Tough strings	CAC/RM 39	Stretching	I
Quick frozen fruits and vegetables: Berries, Whole kernel corn and Corn- on-the-cob	Soluble solids, total	CAC/RM 43 <u>AOAC 974.25</u> <u>then 932.14C-</u>	Refractometry	I
Quick frozen fruits and vegetables: Berries, leek and carrot	Mineral impurities	CAC/RM 54 <u>AOAC 974.25</u> <u>then 971.33</u>	Flotation and sedimentation	I
Quick frozen fruits and vegetables: Peaches and berries	Drained fruit/drained berries	Described in the Standards	Draining	I
Quick frozen spinach	Dry matter, Sodium chloride-free	Described in the Standard	Weighing	I
Quick frozen French fried potatoes	Moisture	AOAC 984.25	Gravimetry (convection oven)	I
Quick frozen French fried potatoes	Free fatty acid	ISO 660:2009; or AOCS Cd 3d-63 (09)	Titrimetry	I

¹ Section 8 (Methods of Analysis and Sampling) of the Standard for Quick Frozen Vegetables will contain the general wording as in the Procedural Manual.

SAMPLING PLANS FOR QUICK FROZEN VEGETABLES**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)**

NET WEIGHT IS EQUAL TO OR LESS THAN 1 KG (2.2 LB)		
Lot Size (N)	Sample Size (n)	Acceptance Number (c)
4,800 or less	6	1
4,801 - 24,000	13	2
24,001 - 48,000	21	3
48,001 - 84,000	29	4
84,001 - 144,000	38	5
144,001 - 240,000	48	6
more than 240,000	60	7
NET WEIGHT IS GREATER THAN 1 KG (2.2 LB) BUT NOT MORE THAN 4.5 KG (10 LB)		
Lot Size (N)	Sample Size (n)	Acceptance Number (c)
2,400 or less	6	1
2,401 - 15,000	13	2
15,001 - 24,000	21	3
24,001 - 42,000	29	4
42,001 - 72,000	38	5
72,001 - 120,000	48	6
more than 120,000	60	7
NET WEIGHT GREATER THAN 4.5 KG (10 LB)		
Lot Size (N)	Sample Size (n)	Acceptance Number (c)
600 or less	6	1
601 - 2,000	13	2
2,001 - 7,200	21	3
7,201 - 15,000	29	4
15,001 - 24,000	38	5
24,001 - 42,000	48	6
more than 42,000	60	7

SAMPLING PLAN 2
(Inspection Level II, AQL = 6.5)

NET WEIGHT IS EQUAL TO OR LESS THAN 1 KG (2.2 LB)		
Lot Size (N)	Sample Size (n)	Acceptance Number (c)
4,800 or less	13	2
4,801 - 24,000	21	3
24,001 - 48,000	29	4
48,001 - 84,000	38	5
84,001 - 144,000	48	6
144,001 - 240,000	60	7
more than 240,000	72	8
NET WEIGHT IS GREATER THAN 1 KG (2.2 LB) BUT NOT MORE THAN 4.5 KG (10 LB)		
Lot Size (N)	Sample Size (n)	Acceptance Number (c)
2,400 or less	13	2
2,401 - 15,000	21	3
15,001 - 24,000	29	4
24,001 - 42,000	38	5
42,001 - 72,000	48	6
72,001 - 120,000	60	7
more than 120,000	72	8
NET WEIGHT GREATER THAN 4.5 KG (10 LB)		
Lot Size (N)	Sample Size (n)	Acceptance Number (c)
600 or less	13	2
601 - 2,000	21	3
2,001 - 7,200	29	4
7,201 - 15,000	38	5
15,001 - 24,000	48	6
24,001 - 42,000	60	7
more than 42,000	72	8

APPENDIX V**AMENDMENTS TO FOOD ADDITIVE PROVISIONS IN
CODEX STANDARDS FOR PROCESSED FRUITS AND VEGETABLES**

(For Adoption by the Commission)

(Existing text recommended for deletion is shown in ~~strike through~~ font. Text recommended for addition is shown **bold** font)

**STANDARD FOR CANNED CHESTNUTS AND CANNED CHESTNUT PUREE
(CODEX STAN 145-1985)****3. FOOD ADDITIVES****3.8 Firming Agents**

Firming agents used in accordance with Tables 1 and 2 of the General Standard for Food Additives (CODEX STAN 192-1995) in Food Category 04.2.2.4 (Canned or bottled (pasteurized) or retort pouch vegetables (including mushrooms and fungi, roots and tubers, pulses and legumes, and aloe vera), and seaweeds or listed in Table 3 of the General Standard are acceptable for use for foods conforming to this Annex.

**STANDARD FOR PICKLED FRUITS AND VEGETABLES
(CODEX STAN 260-2007)****4 FOOD ADDITIVES**

Acidity regulators, antifoaming agents, antioxidants, colours, **colour retention agents**, firming agents, flavour enhancers, preservatives, sequestrants, **stabilizers** and sweeteners used in accordance with Tables 1 and 2 of the *General Standard of Food Additives* in the food category in which the individual pickled fruit or vegetable fall into (i.e., one of the following categories: 04.1.2.3, 04.1.2.10, 04.2.2.3, and 04.2.2.7) or listed in Table 3 of the General Standard are acceptable for use in foods conforming to this Standard.

**STANDARD FOR JAMS, JELLIES AND MARMALADES
(CODEX STAN 296-2009)****4.5 PRESERVATIVES**

INS No.	Name of the Food Additive	Maximum Level
200-203	Sorbates	1,000 mg/kg
210-213	Benzoates	1,000 mg/kg
220-225, 227 , 228 , 539	Sulfites	50 mg/kg as residual SO ₂ in the end product, except when made with sulfited fruit when a maximum level of 100 mg/kg is permitted in the end product.

**REVISIONS TO THE TERMS PERTAINING TO “FLAVOURINGS”
STANDARD FOR CANNED APPLESAUCE
(CODEX STAN 17-1981)**

4. FOOD ADDITIVES

4.3 FLAVOURINGS

<u>Existing text</u>	<u>Revised text</u>
Natural and artificial flavours except those which reproduce the flavour of apples	Natural and synthetic flavourings except those which reproduce the flavour of apples

**STANDARD FOR CANNED FRUIT COCKTAIL
(CODEX STAN 78-1981)**

1. DESCRIPTION

1.1 PRODUCT DEFINITION

(a) Cherries

<u>Existing text</u>	<u>Revised text</u>
(iii) artificially coloured red and flavoured , whether natural or artificial .	(iii) artificially coloured red with added flavourings , whether natural or synthetic .

3. FOOD ADDITIVES

<u>Existing text</u>	<u>Revised text</u>
3.2 Flavours	3.2 Flavourings
3.2.2 Natural flavours and their identical synthetic equivalents	3.2.2 Natural and synthetic flavourings
3.2.3 Cherry Laurel Oil (to flavour artificially coloured cherries only)	3.2.3 Cherry Laurel Oil (artificially coloured cherries only)
3.2.4 Bitter Almond Oil (to flavour artificially coloured cherries only)	3.2.4 Bitter Almond Oil (artificially coloured cherries only)

7. LABELLING

7.2 LIST OF INGREDIENTS

<u>Existing text</u>	<u>Revised text</u>
7.2.2 When cherries are artificially coloured and/or artificially flavoured , the following declarations are permitted in the list of ingredients in lieu of naming the additive: “Cherries artificially coloured red”; or “Cherries artificially coloured red and artificially flavoured ”.	7.2.2 When cherries are artificially coloured and/or have added flavourings , the following declarations are permitted in the list of ingredients in lieu of naming the additive: “Cherries artificially coloured red”; or “Cherries artificially coloured red with added flavourings ”.

**STANDARD FOR CANNED TROPICAL FRUIT SALAD
(CODEX STAN 99-1981)**

3. FOOD ADDITIVES

<u>Existing text</u>	<u>Revised text</u>
3.2 Flavours	3.2 Flavourings
3.2.1 Natural flavours and their identical synthetic equivalents	3.2.2 Natural and synthetic flavourings
3.2.3 Cherry Laurel Oil (to flavour artificially coloured cherries only)	3.2.3 Cherry Laurel Oil (artificially coloured cherries only)
3.2.2 Bitter Almond Oil (to flavour artificially coloured cherries only)	3.2.4 Bitter Almond Oil (artificially coloured cherries only)
3.2.3 Natural flavours and nature-identical flavours	3.2.2 Natural and synthetic flavourings

7. LABELLING

7.2 LIST OF INGREDIENTS

<u>Existing text</u>	<u>Revised text</u>
7.2.2 The declaration of Maraschino Cherries shall be: "Cherries artificially coloured and flavoured"	7.2.2 The declaration of Maraschino Cherries shall be: "Cherries artificially coloured with added flavourings ".

**STANDARD FOR PICKLED CUCUMBERS (CUCUMBER PICKLES)
(CODEX STAN 115-1981)**

4. FOOD ADDITIVES

<u>Existing text</u>	<u>Revised text</u>
4.7 Flavours	4.7 Flavourings
Natural flavours and nature-identical flavours	Natural and synthetic flavourings

**STANDARD FOR CANNED CHESNUTS AND CANNED CHESTNUT PUREE
(CODEX STAN 145-1985)**

3. FOOD ADDITIVES

<u>Existing text</u>	<u>Revised text</u>
3.6 Flavours	3.6 Flavourings

**STANDARD FOR KIMCHI
(CODEX STAN 223-2001)**

4. FOOD ADDITIVES

4.3 FLAVOURINGS

<u>Existing text</u>	<u>Revised text</u>
Natural flavours and nature-identical flavours.	Natural and synthetic flavourings

STANDARD FOR CANNED STONE FRUITS**(CODEX STAN 242-2003)****4. FOOD ADDITIVES****4.4 FLAVOURINGS**

<u>Existing text</u>	<u>Revised text</u>
Natural and artificial flavours except those which reproduce the flavour of the respective stone fruit	Natural and synthetic flavourings except those which reproduce the flavour of the respective stone fruit

STANDARD FOR JAMS, JELLIES AND MARMALADES**(CODEX STAN 296-2009)****4. FOOD ADDITIVES****4.6 FLAVOURINGS**

<u>Existing text</u>	<u>Revised text</u>
...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	...natural flavourings that are extracted from the named fruits in the respective product; natural mint flavouring ; natural cinnamon flavouring ; vanillin, vanilla or vanilla extracts