

codex alimentarius commission

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FOOD AND AGRICULTURE
ORGANIZATION
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Agenda Item 5 (a)

CX/FA 10/42/5
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JOINT FAO/WHO FOOD STANDARDS PROGRAMME

CODEX COMMITTEE ON FOOD ADDITIVES

Forty-second Session

Beijing, China, 15-19 March 2010

DRAFT AND PROPOSED DRAFT FOOD ADDITIVE PROVISIONS OF THE GSFA

(Prepared by the United States of America)

Governments and international organizations in Observer status with the Codex Alimentarius Commission wishing to submit comments on the document are invited to do so **no later than 30 November 2009** as follows: Secretariat, Codex Committee on Food Additives, National Institute of Nutrition and Food Safety, China CDC, 7 Panjiayuan Nanli, Chaoyang District, Beijing 100021, China (Telefax: + 86 10 67711813, E-mail: secretariat@ccfa.cc *preferably*), with a copy to the Secretary, Codex Alimentarius Commission, Joint FAO/WHO Food Standards Programme, Viale delle Terme di Caracalla, 00153 Rome, Italy (Telefax: +39 06 5705 4593; E-mail: Codex@fao.org - *preferably*).

1. The 41st Session of the Codex Committee on Food Additives (CCFA) agreed that the United States of America would prepare a document which compiles all outstanding electronic Working Group (eWG) recommendations (CX/FA 08/40/5 Part 2 and CX/FA 09/41/6) that the Committee had not been able to consider as well as all written comments providing information on the technological justification or safety of use of these food additive provisions.
2. The Committee also agreed to circulate for comments all outstanding provisions for: carmines (INS 120), beta-carotenes (vegetable) (INS 160a(ii)), carotenoids (160a(i), 160a(iii), 160e, 160f); cyclamates (INS 952(i), 952(ii), 952(iv)); grape skin extract (INS 163(ii)); indigotine (INS 132); and sucralose (INS 955) (ALINORM 09/32/12, paras 106 and 83).¹
3. The provisions for each food additive in this report are grouped by the recommendation of the eWG as recorded in CX/FA 08/40/5 Part 2 and CX/FA 09/41/6. These recommendations were based on comments submitted by the participants in the eWG and comments submitted in response to CL 2008/10-FA. The recommendations did not necessarily reflect a unanimous opinion of the eWG members. Rather, the recommendations reflected an attempt to reach consensus to facilitate the Committee's discussion. The eWG considered comments on a "weight of evidence" approach - comments containing justifications were given more weight than comments with no supporting justification.
4. The justifications considered by the eWG to reach consensus for the recommendations for each food additive provision are summarized in the "Justification/Comment" column in this report. The 40th and 41st Sessions of the Committee also received comments on certain food additive provisions subsequent to the publication of CX/FA 08/40/5 Part 2 and CX/FA 09/41/6. These comments, some contradicting the recommendation of the eWG, are also summarized in this report for each food additive.² For several food

¹ The Committee also agreed to circulate outstanding provisions for chlorophylls copper complexes (INS 141(i)) and chlorophyllins copper complexes potassium and sodium salts (INS 141(ii)) (ALINORM 09/32/12, para 83). However, there are no outstanding provisions for these food additives in the step process.

² These summarized comments are taken from CX/FA 08/40/5, Add. 1 and Add. 2, CRD 9 (40th CCFA), CRD 9 (41st CCFA), CX/FA 09/41/6 Add. 1 and Add. 2, CRD 10 (41st CCFA) and CRD 19 (41st CCFA).

additive provisions no justification and/or comments were provided beyond the initial request for their inclusion into the GSFA. For these provisions the “Justification/Comment” column is left blank.

5. Revisions to existing Proposed Draft (Step 3), Draft (Step 6) or adopted food additive provisions proposed by the eWG are indicated in **bold font** in the following tables for each additive. Where appropriate, the additional information provided, either in response to CL 2008/10-FA or as part of the eWG deliberations, is included in the recommendations below.

PART I – COLOUR ADDITIVES

GENERAL CONSIDERATIONS

6. Outstanding recommendations for provisions for the use of colour additives include the following:

INS	Food additive	INS	Food Additive
101(i, ii, iii)	Riboflavins	143	Fast green FCF
110	Sunset yellow FCF	150 (c)	Caramel III – ammonia process
120	Carmines	150 (d)	Caramel IV – ammonia sulfite process
124	Ponceau 4R	160a (i, iii), 160e, 160d	Carotenoids
127	Erythrosine	160a (ii)	<i>beta</i> -Carotenes, vegetable
129	Allura red AC	161 (g)	Canthaxanthin
132	Indigotine	163 (ii)	Grape Skin Extract
133	Brilliant blue FCF	172 (i, ii, iii)	Iron Oxides

7. The outstanding recommendations on the provisions in *Part I – Colour Additives* of this document were developed based on comments submitted by participants of the eWGs of the 40th and 41st CCFA as well as comments submitted directly to the CCFA by CCFA Members and Observers (CRD 9 of the 40th CCFA, CXFA 08/40/05 Add 1, Add 2, and CRD 9 of the 41st CCFA).

8. The 38th CCFAC agreed that the eWG should take a “horizontal” approach to its discussion of the GSFA provisions for colour additives. The eWG reached general consensus on a positive list of food categories in which the use of one or more colour additives is technologically justified (see Appendix). These food categories are highlighted in grey in the tables below.

RIBOFLAVINS (INS 101(i, ii, iii))

9. The 51st JECFA (1998) assigned a group ADI for synthetic riboflavin (101i), riboflavin-5'-phosphate (101ii), and riboflavin from *Bacillus subtilis* (101iii) of 0.5 mg/kg bw/d.

Riboflavins, INS 101(i, ii, iii)						
The following provisions were included in the GSFA at Step 3 by the 41 st CCFA.						
Food Cat No.	Food Category	Max Level		Comments	Step	Justification/Comment
06.8.1	Soybean-based beverages	10	mg/kg		3	Proposed maximum use level necessary to function as a colour
12.9.1	Fermented soybean paste (e.g., miso)	10	mg/kg		3	To colour the products, especially to adjust the tones of the products

SUNSET YELLOW FCF (INS 110)

10. The 26th JECFA (1982) assigned a group ADI of 2.5 mg/kg bw/d for sunset yellow FCF..

Sunset Yellow FCF, INS 110						
The following provision was included in the GSFA at Step 3 by the 41 st CCFA.						
Food Cat No.	Food Category	Max Level		Comments	Step	Justification/Comment
02.2.2	Fat spreads, dairy fat spreads and blended spreads	290	mg/kg		3	Consistent with Codex Standards for Dairy Fat Spreads (Codex Stan 253-2006) and Fat Spreads and Blended Spreads (Codex Stan 256-2006)

CARMINES (INS 120)

11. At the 55th meeting of the JECFA, (2000), the 1982 ADI of 0-5 mg/kg bw/d for carmines, as ammonium carmine or the equivalent of calcium, potassium and sodium salts was maintained.

Carmines, INS 120					
The following provision was included in the GSFA at Step 3 by the 41 st CCFA.					

Food Cat No.	Food Category	Max Level		Comments	Step	Justification/Comment
06.8.1	Soybean-based beverages	40	mg/kg		3	Proposed maximum use level necessary to function as a colour

PONCEAU 4R (INS 124)

12. The 26th JECFA (1982) assigned an ADI of 4 mg/kg bw/d for ponceau 4R.

Ponceau 4R (cochineal red A), INS 124 The following provision was included in the GSFA at Step 3 by the 41 st CCFA.						
Food Cat No.	Food Category	Max Level		Comments	Step	Justification/Comment
06.8.1	Soybean-based beverages	50	mg/kg		3	Proposed maximum use level necessary to function as a colour

ERYTHROSINE (INS 127)

13. The 36th JECFA (1990) assigned an ADI of 0.1 mg/kg bw/d for erythrosine.

14. The 30th CCFA requested that JECFA perform intake assessments for erythrosine based on the pending levels of maximum use in the GSFA and national food consumption data. The 53rd JECFA (1999) evaluated national intake assessments for erythrosine, which were based on data on poundage (disappearance), national regulatory and measured use levels, and model diets and individual dietary records. All of the national estimates of erythrosine intake were below the ADI of 0-0.1 mg/kg bw. Although JECFA noted that the intake of erythrosine could exceed the ADI if the maximum levels proposed in the draft GSFA were widely adopted at the national level, it also recognized that models based on these maximum levels result in overestimates of actual intake, because erythrosine will be used in only a limited number of red foods. JECFA therefore concluded that long-term intake of erythrosine is unlikely to exceed the ADI.

15. The 31st session of the Codex Alimentarius Commission (2009) noted the concerns of many delegations on the safety of certain colours, in particular erythrosine (INS 127), and a proposal that JECFA undertake a refined exposure assessment before the provisions were adopted. They noted that JECFA had already carried out an exposure assessment, which would need to be updated in the light of new data. In view of these concerns, the Commission returned the draft and proposed draft provisions for erythrosine to the CCFA for further discussion in the context of a refined exposure assessment by JECFA.

16. The following are the outstanding recommendations for erythrosine from the report of the eWG of the 40th CCFA :

Recommendation 1 -- Erythrosine, INS 127 The eWG of the 40 th CCFA recommended further discussion of the following food additive provisions for erythrosine in the GSFA.						
Food Cat No.	Food Category	Max Level		Comments	Step	Justification/Comment
04.1.2.5	Jams, jellies and marmelades	400	mg/kg		6	Justification The maximum level in Category 04.1.2.5, Jams, jellies and marmelades not only exceeds the maximum level of 300 mg/kg, set forth in all other categories but is also twice as high as the maximum level for this colour allowed by the standard for Jams and Jellies, Stan 79-1981, that is, 200 mg/kg, singly or in combination with several other colours.

Erythrosine, INS 127 The following provision was included in the GSFA at Step 3 by the 41 st CCFA.						
Food Cat No.	Food Category	Max Level		Comments	Step	Justification/Comment
06.8.1	Soybean-based beverages	10	mg/kg		3	Proposed maximum use level necessary to function as colour

ALLURA RED AC (INS 129)

17. The 25th JECFA (1981) assigned an ADI of 7 mg/kg bw/d for allura red AC.

Recommendation 1 - Allura Red AC, INS 129 The eWG for the 40 th CCFA recommended the adoption of the following food additive provision for allura red AC in the GSFA ; however, the 41 st CCFA agreed to hold decisions on food additive provisions in food category 16.0 until the Committee clarifies the need for this category.						
Food Cat No.	Food Category	Max Level		Comments	Step	Justification/Comment provided to eWG

Recommendation 1 - Allura Red AC, INS 129						
The eWG for the 40 th CCFA recommended the adoption of the following food additive provision for allura red AC in the GSFA ; however, the 41 st CCFA agreed to hold decisions on food additive provisions in food category 16.0 until the Committee clarifies the need for this category.						
Food Cat No.	Food Category	Max Level		Comments	Step	Justification/Comment provided to eWG
16.0	Composite foods - foods that could not be placed in categories 01 - 15	300	mg/kg		6	Justification Potentially used for complex foods

Allura Red AC, INS 129						
The following provision was included in the GSFA at Step 3 by the 41 st CCFA.						
Food Cat No.	Food Category	Max Level		Comments	Step	Justification/Comment
02.2.2	Fat spreads, dairy fat spreads and blended spreads	290	mg/kg		3	Justification Consistent with Codex Standards for Dairy Fat Spreads (Codex Stan 253-2006) and Fat Spreads and Blended Spreads (Codex Stan 256-2006)

INDIGOTINE (INS 132)

18. The 18th JECFA (1974) assigned an ADI of 5 mg/kg bw/d for indigotine.

19. The following is the outstanding recommendation for indigotine from the 41st CCFA (ALINORM 09/32/12, para. 100).

Recommendation 1 – Indigotine, INS 132						
The 41 st CCFA agreed to request information on the following food additive provision for indigotine in the GSFA.						
Food Cat No.	Food Category	Max Level		Comments	Step	Justification/Comment
11.6	Table-top sweeteners, including those containing high-intensity sweeteners	300	mg/kg		6	Justifications 1) Used for table top sweeteners 2) maximum level is enough to achieve the technological need

Indigotine, INS 132						
The following provision was included in the GSFA at Step 3 by the 41 st CCFA.						
Food Cat No.	Food Category	Max Level		Comments	Step	Justification/Comment
02.2.2	Fat spreads, dairy fat spreads and blended spreads	290	mg/kg		3	Justification Consistent with Codex Standards for Dairy Fat Spreads (Codex Stan 253-2006) and Fat Spreads and Blended Spreads (Codex Stan 256-2006)

BRILLIANT BLUE FCF (INS 133)

The 13th JECFA (1969) assigned an ADI of 12.5 mg/kg bw/d for brilliant blue FCF.

Recommendation 1 – Brilliant Blue FCF, INS 133						
The eWG for the 40 th CCFA recommended further discussion of the following food additive provision for brilliant blue FCF in the GSFA; however, the 41 st CCFA agreed to hold decisions on food additive provisions in food category 16.0 until the Committee clarifies the need for this category..						
Food Cat No.	Food Category	Max Level		Comments	Step	Justification/Comment
16.0	Composite foods - foods that could not be placed in categories 01 - 15	100	mg/kg	Note 2 ³	6	Justifications 1) Used to colour bean-paste; maximum levels achieve the intended technological need) 2) If provisions are proposed for category 16, the products must be fully defined and the additive uses restricted to these products. In the vast majority of cases products can be covered by other food categories or as composite products (and therefore subject to carry over provisions) Comment Justification should be provided why the carry over wouldn't be sufficient

³ Note 2: On dry ingredient, dry weight, dry mix or concentrate basis.

FAST GREEN FCF (INS 143)

20. The 30th JECFA (1986) assigned an ADI of 25 mg/kg bw/d for fast green FCF.

21. The 41st CCFA agreed to request information on the technological justification for the use of fast green FCF in food category 04.6.2 “Dried pastas and noodles and like products.” (ALINORM 09/32/12, para. 99).

Recommendation 1 – Fast Green FCF, INS 143						
The 41 st CCFA agreed to request information on the following food additive provision for fast green FCF in the GSFA.						
Food Cat No.	Food Category	Max Level		Comments	Step	Justification/Comment
06.4.2	Dried pastas and noodles and like products	100	mg/kg		6	Justification 1) To provide colour (other colours are permitted) 2) To improve organoleptic properties of food
06.4.3	Pre-cooked pastas and noodles and like products	300	mg/kg	Note 153 ⁴	3	Justification 1) To align with Instant Noodles Std. 2) To provide colour (other colours are permitted) 3) To improve organoleptic properties of food

CARAMEL III — AMMONIA PROCESS (INS 150(c))

22. The 29th JECFA (1985) assigned an ADI of 200 mg/kg bw/d for caramel III – ammonia process.

23. The 41st CCFA agreed to hold any decision on food additive provisions in food category 16.0 until the Committee clarifies the need for this food category (ALINORM 09/32/12, para 86).

24. The following are the outstanding recommendations for caramel III – ammonia process from the report of the eWG to the 40th CCFA.

Recommendation 1 - Caramel III – Ammonia Process, INS 150(c)						
The eWG to the 40 th CCFA recommended the adoption of the following food additive provisions for caramel III – ammonia process in the GSFA.						
Food Cat No.	Food Category	Max Level		Comments	Step	Justification/Comment
01.4.3	Clotted cream (plain)	5000	mg/kg		3	Justification 1) Consequential effect is to revoke adopted provision 01.4.3 2) Revision: provides numeric ML to replace adopted GMP limit.
01.4.3	Clotted cream (plain)		GMP		Adopted	
01.4.4	Cream analogues	5000	mg/kg		3	Justification Consequential effect is to revoke adopted provision 01.4.4 1) Revision: Provides numeric ML to replace adopted GMP. 2) Used to colour cream-like products 3) Maximum levels are enough to achieve the intended technological need
01.4.4	Cream analogues		GMP		Adopted	
01.5.2	Milk and cream powder analogues	5000	mg/kg		3	Justification Consequential effect is to revoke adopted provision 01.5.2. Revision provides numeric ML to replace adopted GMP limit.
01.5.2	Milk and cream powder analogues		GMP		Adopted	
01.6.1	Unripened cheese	50000	mg/kg		3	Justification Consequential effect is to revoke adopted provision 01.6.1 1) Revision: Provides numeric ML to replace adopted GMP limit.
01.6.1	Unripened cheese		GMP		Adopted	

⁴ **Note 153:** For use in instant noodles only.

Recommendation 1 - Caramel III – Ammonia Process, INS 150(c)						
The eWG to the 40 th CCFA recommended the adoption of the following food additive provisions for caramel III – ammonia process in the GSFA.						
Food Cat No.	Food Category	Max Level		Comments	Step	Justification/Comment
						<p>2) These colours may be used to provide a distinguishing colour to various speciality cheeses e.g. fruit cheese. These permissions should be retained in the GSFA</p> <p>3) Used for unripened cheese;</p> <p>4) These colours may be used to provide a distinguishing colour to various speciality cheeses e.g. fruit cheese.</p> <p>Comment: Technological need questioned – rind not expected on unripened cheese</p>
01.6.2	Ripened cheese	50000	mg/kg		3	<p>Justification Consequential effect is to revoke adopted provision in subcategory 01.6.2.2</p> <p>1) These colours may be used to provide a distinguishing colour to various speciality cheeses e.g. fruit cheese. These permissions should be retained in the GSFA</p> <p>2) Used to the smoked cheeses surfaces;</p> <p>3) These colours may be used to provide a distinguishing colour to various speciality cheeses e.g. fruit cheese</p> <p>Comment: Use in too broad of a food category</p>
01.6.2.2	Rind of ripened cheese		GMP		Adopted	
01.6.4	Processed cheese	50000	mg/kg		3	<p>Justification Consequential effect is to revoke adopted provision 01.6.4</p> <p>1) Provides numeric ML to replace adopted GMP limit</p> <p>2) These colours may be used to provide a distinguishing colour to various specialty cheeses eg fruit cheese. These permissions should be retained in the GSFA</p> <p>3) Used for the colour of cheese spreads;</p> <p>4) These colours may be used to provide a distinguishing colour to various speciality cheeses e.g. fruit cheese</p> <p>Comment: ML seems high</p>
01.6.4	Processed cheese		GMP		Adopted	
01.6.5	Cheese analogues	50000	mg/kg		3	<p>Justification Consequential effect is to revoke adopted provision 01.6.5</p> <p>1) Provides numeric ML to replace adopted GMP limit</p> <p>2) These colours may be used to provide a distinguishing colour to various speciality cheeses</p>
01.6.5	Cheese analogues		GMP		Adopted	

Recommendation 1 - Caramel III – Ammonia Process, INS 150(c)						
The eWG to the 40 th CCFA recommended the adoption of the following food additive provisions for caramel III – ammonia process in the GSFA.						
Food Cat No.	Food Category	Max Level		Comments	Step	Justification/Comment
						e.g. fruit cheese. These permissions should be retained in the GSFA 3) Used for the colour of imitation cheese; 4) These colours may be used to provide a distinguishing colour to various speciality cheeses e.g. fruit cheese Comment: ML very high
01.7	Dairy-based desserts (e.g., pudding, fruit or flavoured yoghurt)	50000	mg/kg		3	Justification Consequential effect is to revoke adopted provision 01.7
01.7	Dairy-based desserts (e.g., pudding, fruit or flavoured yoghurt)	2000	mg/kg		Adopted	Comment: ML very high
01.8.1	Whey and whey products, excluding whey cheeses	50000	mg/kg		3	Comment: ML too high (child of 20 kg would reach ADI by consuming 100 g of product), tech need questioned
02.1.2	Vegetable oils and fats	20000	mg/kg		3	Justification Used for vegetable oils and fats Comment: CX STAN 19 prohibits use of colours in vegetable oils
02.1.3	Lard, tallow, fish oil, and other animal fats	20000	mg/kg		3	Justification Used for colouring edible lard Comment: Use may mislead consumer
02.2.2	Emulsions containing less than 80% fat	500	mg/kg		3	Justification 1) There is a technological need for the spreads containing other ingredients, as cocoa, in what the proposed level use is necessary to re-establish or to set the brown colour, due to the absorbance factor of this colour in aqueous solution. 2) Used for colour the processed fats Comment: Products covered by Codex fat spreads and blended spreads standard (Codex Stan 256-2007)
02.3	Fat emulsions mainly of type oil-in-water, including mixed and/or flavoured products based on fat emulsions	20000	mg/kg		3	Used to colour whipped cream.
02.4	Fat-based desserts excluding dairy-based dessert products of food category 01.7	20000	mg/kg		3	Justification Consequential effect is to revoke adopted provision 02.4
02.4	Fat-based desserts excluding dairy-based dessert products of food category 01.7		GMP		Adopted	Provides numeric ML to replace adopted GMP limit Comment: ML too high.
03.0	Edible ices, including sherbet and sorbet	30000	mg/kg		3	Justification Consequential effect is to revoke adopted provision 03.0
03.0	Edible ices, including sherbet and sorbet		GMP		Adopted	Provides numeric ML to replace adopted GMP limit Comment:

Recommendation 1 - Caramel III – Ammonia Process, INS 150(c)							
The eWG to the 40 th CCFA recommended the adoption of the following food additive provisions for caramel III – ammonia process in the GSFA.							
Food Cat No.	Food Category	Max Level		Comments	Step	Justification/Comment	
						ML too high	
04.1.2	Processed fruit	50000	mg/kg	Note 161⁵	3	<p>Justification Adopt in broader category 04.1.2. Consequential effect is to revoke provisions in subcategories 04.1.2.3, 04.1.2.4, 04.1.2.5, 04.1.2.6, 04.1.2.7, 04.1.2.8, 04.1.2.9, and 04.1.2.11.</p> <p>Comment: ML is too high and sub-categories 04.1.2.1 is not expected to contain colour and use in 04.1.2.8 could mislead consumer</p>	
04.1.2.3	Fruit in vinegar, oil, or brine		GMP		Adopted		
04.1.2.4	Canned or bottled (pasteurized) fruit		GMP		Adopted		
04.1.2.5	Jams, jellies and marmelades		GMP		Adopted		
04.1.2.6	Fruit-based spreads (e.g., chutney) excluding products of food category 04.1.2.5	500	mg/kg		Adopted		
04.1.2.7	Candied fruit		GMP		Adopted		
04.1.2.8	Fruit preparations, including pulp, purees, fruit toppings and coconut milk	7500	mg/kg		Adopted		
04.1.2.9	Fruit-based desserts, including fruit-flavoured water-based desserts		GMP		Adopted		
04.1.2.11	Fruit fillings for pastries	7500	mg/kg		Adopted		
04.2.2	Processed vegetables (including mushrooms and fungi, roots and tubers, pulses and legumes, and aloe vera), seaweeds, and nuts and seeds	50000	mg/kg	Note 161	3		<p>Justification Consequential effect is to discontinue provisions in subcategories 04.2.2.2, 04.2.2.7 and 04.2.2.8 and revoke adopted provisions in subcategories 04.2.2.3, 04.2.2.4, 04.2.2.5, and 04.2.2.6</p> <p>1) Colouring for processed vegetables. 2) To provide colour (other colours are permitted)</p> <p>Comment: Use may mislead consumer</p>
04.2.2.2	Dried vegetables (including mushrooms and fungi, roots and tubers, pulses and legumes, and aloe vera), seaweeds, and nuts and seeds		GMP	Note 76 ⁶ & 161	6		
04.2.2.3	Vegetables (including mushrooms and fungi, roots and tubers, pulses and legumes, and aloe vera) and seaweeds in vinegar, oil, brine, or soy sauce	500	mg/kg		Adopted		
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		GMP		Adopted		
04.2.2.5	Vegetable (including mushrooms and fungi, roots and tubers, pulses and legumes, and aloe vera), seaweed, and nut and seed purees and spreads (e.g., peanut butter)		GMP		Adopted		
04.2.2.6	Vegetable (including mushrooms and fungi, roots and tubers, pulses and legumes, and aloe vera), seaweed, and nut and seed pulps and preparations (e.g., vegetable desserts and sauces, candied vegetables) other than food category 04.2.2.5		GMP		Adopted		
04.2.2.7	Fermented vegetable (including mushrooms and fungi, roots and tubers, pulses and legumes, and aloe vera), and seaweed products, excluding fermented soybean products of food category 12.10		GMP	Note 161	6		
04.2.2.8	Cooked or fried vegetables (including mushrooms and fungi, roots and tubers, pulses and legumes, and aloe vera), and seaweeds		GMP	Note 161	6		

⁵ **Note 161:** Subject to national legislation of the importing country aimed, in particular, at consistency with Section 3.2 of the Preamble.

⁶ **Note 76:** Use in potatoes only.

Recommendation 1 - Caramel III – Ammonia Process, INS 150(c)						
The eWG to the 40 th CCFA recommended the adoption of the following food additive provisions for caramel III – ammonia process in the GSFA.						
Food Cat No.	Food Category	Max Level		Comments	Step	Justification/Comment
05.1.2	cocoa mixes (syrops)	50000	mg/kg		6	<p>Justification</p> <p>1) Used to colour cocoa mixes (syrops) ; use at 5000 mg/kg in come cocoas mixes (syrops) in US</p> <p>2) Maximum level of 50000 mg/kg is enough to achieve the intended technological need</p> <p>3) Level is consistent with proposed use levels in other food categories</p> <p>Comment</p> <p>The technological need is questioned</p>
05.1.4	Cocoa and chocolate products	50000	mg/kg	Note 183 ⁷	6	<p>Justification</p> <p>1) Used to colour cocoa and chocolate;</p> <p>2) Maximum levels are enough to achieve the intended technological need)</p> <p>3) Level consistent with proposed levels in other food categories;</p> <p>4) Already approved for use in candies within category 5.2 (Hard and Soft Candy, Marzipan and Nougat) at GMP levels. The candies within 5.2 fall into category 5.1.4 when they are covered with chocolate. The use levels for categories 5.1.4 and 5.2 should be considered at the same time.</p> <p>Comments:</p> <p>1) Use may mislead consumer.</p> <p>2) Inconsistencies between non-standardized chocolate product among 05.1.4 & 05.2, 05.4 - recommends CCFA ensure provisions for use of colour additive in non-standardized chocolate products are consistent with approach for use of colours in other confections without compromising colour limitations in Codex Standard for Chocolate and chocolate products.</p> <p>3) Request that no actions be taken to limit level of colours in 5.1.4 or create disparity with 5.2 but also do not effect chocolate meeting Codex Standard 87.</p>
06.4.2	Dried pastas and noodles and like products	50000	mg/kg		3	<p>Justification</p> <p>1) Used t o Colour Chinese noodles</p> <p>2) To improve organoleptic properties of food</p>
06.4.3	Pre-cooked pastas and noodles and like products	50000	mg/kg	Note 153	3	<p>Justification</p> <p>1) Adopted in Codex Instant Noodle Std (249) at 50,000 mg/kg;</p> <p>2) Used t o Colour Chinese noodles</p>

⁷ **Note 183:** Products conforming to the Standard for chocolate and chocolate products [CODEX STAN 87-1981] may only use colour for surface decoration.

Recommendation 1 - Caramel III – Ammonia Process, INS 150(c)						
The eWG to the 40 th CCFA recommended the adoption of the following food additive provisions for caramel III – ammonia process in the GSFA.						
Food Cat No.	Food Category	Max Level		Comments	Step	Justification/Comment
						3) To improve organoleptic properties of food
07.1.6	Mixes for breads and ordinary bakery wares	50000	mg/kg	Note 161	3	Justification 1) Used to colour hot cake mixes 2) To improve organoleptic properties of food
09.1	Fresh fish and fish products, including mollusks, crustaceans, and echinoderms	30000	mg/kg	Notes 4 ⁸ & 16 ⁹	3	Justification Adopt revised provision in broader category 09.1
09.1	Fresh fish and fish products, including mollusks, crustaceans, and echinoderms		GMP	Notes 3 ¹⁰ , 4, 16, & 50 ¹¹	Adopted	Consequential effect is to revoke adopted provision 09.1 and to discontinue provision in subcategory 09.1.1,
09.1.1	Fresh fish		GMP	Notes 3, 4, 16, & 50	6	Provides numeric ML to replace adopted GMP limit Comment: Discontinue 09.1 and 09.1.1 on basis that colours in fresh foods might be used as adulterants, mislead consumer
09.3	Semi-preserved fish and fish products, including mollusks, crustaceans, and echinoderms	30000	mg/kg		3	Justification Adopt in broader category 09.3.
09.3.3	Salmon substitutes, caviar, and other fish roe products		GMP	Note 50	Adopted	Consequential effect is to revoke provision in subcategory 09.3.3 Used to colour the fish dipped in soy sauce Comment: Add Note 95
09.4	Fully preserved, including canned or fermented fish and fish products, including mollusks, crustaceans, and echinoderms	30000	mg/kg	Note 95 ¹²	3	Justification Consequential effect is to revoke adopted provision 09.4
09.4	Fully preserved, including canned or fermented fish and fish products, including mollusks, crustaceans, and echinoderms	500	mg/kg	Note 50	Adopted	1) Revision of adopted provision 2) Used for colour pressure and heat treated products e.g. canned foods
10.1	Fresh eggs	20000	mg/kg	Note 4	3	Justification Consequential effect is to revoke adopted provision 10.1 Provides numeric ML to replace adopted GMP limit Comment: Colours in fresh foods might be used as adulterants, mislead consumer
10.1	Fresh eggs		GMP	Note 4	Adopted	
10.2	Egg products	20000	mg/kg		3	Justification Used for colour the egg soup and fried eggs Comment: Use may mislead consumer
10.3	Dried and/or heat coagulated egg products	20000	mg/kg		3	Justification Used for colour the peatans Comment: Add Note 4
10.4	Egg-based desserts (e.g., custard)	20000	mg/kg		3	Justification Consequential effect is to revoke adopted provision
10.4	Egg-based desserts (e.g.,		GMP		Adopted	

⁸ Note 4: For decoration, stamping, marking or branding the product.

⁹ Note 16: For use in glaze, coatings or decorations for fruit, vegetable, meat or fish.

¹⁰ Note 3: Surface treatment.

¹¹ Note 50: For use in fish roe only.

¹² Note 95: For use in surimi and fish roe products only.

Recommendation 1 - Caramel III – Ammonia Process, INS 150(c)						
The eWG to the 40 th CCFA recommended the adoption of the following food additive provisions for caramel III – ammonia process in the GSFA.						
Food Cat No.	Food Category	Max Level		Comments	Step	Justification/Comment
	custard)					10.4 Provides numeric ML to replace adopted GMP limit Comment: Question technological need for high ML
11.4	Other sugars and syrups (e.g., xylose, maple syrup, sugar toppings)	50000	mg/kg		3	Justification Used to colour the toppings for cakes
11.6	Table-top sweeteners, including those containing high-intensity sweeteners	50000	mg/kg		3	Justification 1) Caramel colour, class III, is stable in slightly acidic conditions and thus is well suited for applications in table-top sweeteners, for consumer appealing colouring. 2) The maximum use level as listed (50000 mg/kg) is adequate. It is requested to maintain this entry for cat. 11.6. Comment: Question technological need
12.2	Herbs, spices, seasonings, and condiments (e.g., seasoning for instant noodles)	100000	mg/kg		3	Justification Adopt revised provision in category 12.2.2 only
12.2.2	Seasonings and condiments	50000	mg/kg			Consequential effect is to revoke adopted provision 12.2.2
12.2.2	Seasonings and condiments		GMP		Adopted	1) Provides numeric ML to replace adopted GMP limits 2) Used for colouring of the seasoning for instant noodles. 3) To improve organoleptic properties of food Comment: Question technological need for high ML in 12.2.2
12.3	Vinegars	100000	mg/kg		3	Justification
12.3	Vinegars	1000	mg/kg		Adopted	Consequential effect is to revoke adopted provision 12.3 Comment: Question technological need for high ML
12.4	Mustards	100000	mg/kg		3	Justification
12.4	Mustards		GMP		Adopted	Consequential effect is to revoke adopted provision 12.4 Provides numeric ML to replace adopted GMP limit Comment: Question technological need for high ML
12.5	Soups and broths	100000	mg/kg		3	Justification
12.5	Soups and broths		GMP		Adopted	Consequential effect is to revoke adopted provision 12.5 Provides numeric ML to replace adopted GMP limit Comment: Question technological need for high ML
12.6	Sauces and like products	100000	mg/kg		3	Justification
12.6	Sauces and like products	1500	mg/kg		Adopted	Consequential effect is to revoke adopted provision 12.6 Revision of adopted provision at 1500 mg/kg Comment:

Recommendation 1 - Caramel III – Ammonia Process, INS 150(c)						
The eWG to the 40 th CCFA recommended the adoption of the following food additive provisions for caramel III – ammonia process in the GSFA.						
Food Cat No.	Food Category	Max Level		Comments	Step	Justification/Comment
						Question technological need for high ML
12.7	Salads (e.g., macaroni salad, potato salad) and sandwich spreads excluding cocoa- and nut-based spreads of food categories 04.2.2.5 and 05.1.3	100000	mg/kg		3	Justification Consequential effect is to revoke adopted provision 12.7 Provides numeric ML to replace adopted GMP limit
12.7	Salads (e.g., macaroni salad, potato salad) and sandwich spreads excluding cocoa- and nut-based spreads of food categories 04.2.2.5 and 05.1.3		GMP		Adopted	Comment: Question technological need for high ML
13.3	Dietetic foods intended for special medical purposes (excluding products of food category 13.1)	20000	mg/kg		3	Justification Consequential effect is to revoke adopted provision 13.3 Provides numeric ML to replace adopted GMP limit
13.3	Dietetic foods intended for special medical purposes (excluding products of food category 13.1)		GMP		Adopted	Comment: Question technological need for high ML
13.4	Dietetic formulae for slimming purposes and weight reduction	20,000	mg/kg		3	Justification Consequential effect is to revoke adopted provision 13.4 Provides numeric ML to replace adopted GMP limit
13.4	Dietetic formulae for slimming purposes and weight reduction		GMP		Adopted	Comment: Question technological need for high ML
13.5	Dietetic foods (e.g., supplementary foods for dietary use) excluding products of food categories 13.1 - 13.4 and 13.6	20,000	mg/kg		3	Justification Consequential effect is to revoke adopted provision 13.5 Provides numeric ML to replace adopted GMP limit
13.5	Dietetic foods (e.g., supplementary foods for dietary use) excluding products of food categories 13.1 - 13.4 and 13.6		GMP		Adopted	Comment: Question technological need for high ML
13.6	Food supplements	20,000	mg/kg		3	Justification Consequential effect is to revoke adopted provision 13.6 1) Provides numeric ML to replace adopted GMP limit 2) Caramel Colour Class III (INS Number 150c) is used as a colourant for food supplements (category 13.6) and is specifically used in capsule shells and tablet coatings to give an opaque dark-brown colour. 3) When manufactured, most food supplements are white or beige in colour, even though they contain a range of active ingredients. Surface colouring of the products has been found to be the best way to differentiate between products, both in post production handling and for the consumer's own recognition and control. 4) In certain soft-gel capsules the contents can settle with time producing an unsightly stain on the inner surface of the capsule shell. The opacity of caramel as a colour can hide the stain.
13.6	Food supplements		GMP		Adopted	

Recommendation 1 - Caramel III – Ammonia Process, INS 150(c)						
The eWG to the 40 th CCFA recommended the adoption of the following food additive provisions for caramel III – ammonia process in the GSFA.						
Food Cat No.	Food Category	Max Level		Comments	Step	Justification/Comment
						5) Usage level varies depending on the thickness of the capsule shell and its surface area, and in the case of tablets on the thickness of the coating, in relation to the total weight of the product. However, all applications should be accommodated within a maximum level of 20000mg / kg. Comment: Question technological need for high ML
14.1.3.2	Vegetable nectar	50000	mg/kg		3	Justification Consequential effect is to revoke adopted provision 14.1.3.2 Provides numeric ML to replace adopted GMP limit Comments: No technological need / justification. These are similar to fruit nectars, in which colours are not justified
14.1.3.2	Vegetable nectar		GMP		Adopted	
14.1.3.4	Concentrates for vegetable nectar	50000	mg/kg	Note 127 ¹³	3	Justification Consequential effect is to revoke adopted provision 14.1.3.4 Provides numeric ML to replace adopted GMP limit Comments: No technological need / justification. These are similar to fruit nectars, in which colours are not justified
14.1.3.4	Concentrates for vegetable nectar		GMP		Adopted	
14.1.4	Water-based flavoured drinks, including "sport," "energy" or "electrolyte" drinks and particulated drinks	50000	mg/kg		3	Justification Consequential effect is to revoke adopted provision 14.1.4 Provides numeric ML to replace adopted GMP limit Comment: 1) The use levels according to GMP should be acceptable due to the high ADI and suggests reconsidering the proposed revocation 2) Doesn't support, ML too high for drink. Child of 20 kg bw reach ADI by consuming 100 ml of product.
14.1.4	Water-based flavoured drinks, including "sport," "energy" or "electrolyte" drinks and particulated drinks		GMP		Adopted	
14.1.5	Coffee, coffee substitutes, tea, herbal infusions, and other hot cereal and grain beverages, excluding cocoa	100000	mg/kg	Note 160 ¹⁴	3	Justification 1) Used to colour coffee drinks 2) If a numeric value is required, we support adopting the proposed level at Step 5/8 based on information provided on the use of caramel colours in canned coffees and coffee extenders. MLs according to GMP should be accepted due to the high ADI and a

¹³ **Note 127:** As served to the consumer.

¹⁴ **Note 160:** For use in ready-to-drink products and pre-mixes for ready-to-drink products only.

Recommendation 1 - Caramel III – Ammonia Process, INS 150(c)						
The eWG to the 40 th CCFA recommended the adoption of the following food additive provisions for caramel III – ammonia process in the GSFA.						
Food Cat No.	Food Category	Max Level		Comments	Step	Justification/Comment
						long history of safe use of the colour. Comment: Technological need in coffee substitutes, tea, herbal infusion questioned. Mislead consumer, mask quality

Recommendation 2 - Caramel III – Ammonia Process, INS 150c						
The eWG of the 40 th CCFA recommended further discussion of the following food additive provisions for caramel III – ammonia process in the GSFA.						
Food Cat No.	Food Category	Max Level		Comments	Step	Justification/Comment
05.0	Confectionery	50000	mg/kg		3	Justification Recommendation for broader food category 5.0 will have consequential effects on adopted provisions in subcategories 05.1.3, 05.2, 05.3, and 05.4 1) There are no non-standardized foods in subcategory 05.1.1 2) The relevant commodity standards (CX STAN 105 (Codex Standards for Cocoa powders and dry mixtures of cocoa and sugar) & CX STAN 141 (Codex Standard for cocoa mass (cocoa/chocolate liquor) and cocoa cake)) do not contain any provisions for the use of colours. 3) Used to colour rice biscuits and biscuits. 4) To provide colour (other colours are permitted 5) To improve organoleptic properties of food 6) Caramel colour is one of the most widely used colourants in foods. It is used in soft drinks, baked goods, candy, ice cream, gravies and meats to impart a brown colour. See recommendation for food category 05.0; revise accordingly
05.1.3	Cocoa-based spreads, including fillings		GMP		Adopted	
05.2	Confectionery including hard and soft candy, nougat, etc. other than food categories 05.1, 05.3 and 05.4		GMP		Adopted	
05.3	Chewing gum	20000	mg/kg		Adopted	
05.4	Decorations (e.g., for fine bakery wares), toppings (non-fruit) and sweet sauces		GMP		Adopted	
14.2	Alcoholic beverages, including alcohol-free and low-alcoholic counterparts	50000	mg/kg		3	Justification Recommendation for broader food category 14.2 will have consequential effects on adopted provisions in subcategories 14.2.1, 14.2.2, 14.2.3.3, 14.2.4, 14.2.6, and 14.2.7 and on draft provisions in subcategories 14.2.2, 14.2.4, and 14.2.5 1) Current use in distilled spirits and other alcoholic beverages to prevent batch to batch variation in colour and flavour profile of beverages (ex. 14.2.1) in clear glass bottles Comment: 1) Technological need in 14.2 is questioned, as this use could mislead the consumer 2) Recommend adopt at 50 000 mg/kg in subcategories 14.2.1, 14.2.3.3, 14.2.6, and 14.2.7
14.2.1	Beer and malt beverages		GMP		Adopted	
14.2.2	Cider and perry	1000	mg/kg			
14.2.2	Cider and perry		GMP		Adopted	
14.2.3.3	Fortified grape wine, grape liquor wine, and sweet grape wine		GMP		Adopted	
14.2.4	Wines (other than grape)	1000	mg/kg			
14.2.4	Wines (other than grape)		GMP		Adopted	
14.2.5	Mead	1000	mg/kg		6	
14.2.6	Distilled spirituous beverages containing more than 15% alcohol		GMP		Adopted	
14.2.7	Aromatized alcoholic beverages (e.g., beer, wine and spirituous cooler-type beverages, low-alcoholic refreshers)		GMP		Adopted	

Recommendation 2 - Caramel III – Ammonia Process, INS 150c						
The eWG of the 40 th CCFA recommended further discussion of the following food additive provisions for caramel III – ammonia process in the GSFA.						
Food Cat No.	Food Category	Max Level		Comments	Step	Justification/Comment
16.0	Composite foods - foods that could not be placed in categories 01 - 15	20000	mg/kg		3	Justification Consequential effects on adopted provision for food category 16.0, currently adopted at ML of 1000 mg/kg. 1) Used to colour bean-paste. 2) To improve organoleptic properties of food. 3) maximum levels are enough to achieve the intended technological need) Comment 1) Technological need is questioned. Justification should be provided why the carry over wouldn't be sufficient. 2) If provisions are proposed for category 16, the products must be fully defined and the additive uses restricted to these products. In the vast majority of cases products can be covered by other food categories or as composite products (and therefore subject to carry over provisions)
16.0	Composite foods - foods that could not be placed in categories 01 - 15		GMP		Adopted	

Caramel III – Ammonia Process, INS 150(c)						
The following provisions were included in the GSFA at Step 3 by the 41 st CCFA.						
Food Cat No.	Food Category	Max Level		Comments	Step	Justification/Comment
06.8.1	Soybean-based beverages	1500	mg/kg		3	Proposed maximum use level necessary to function as colour
06.8.8	Other soybean protein products	20000	mg/kg		3	To colour the products brown to adjust the tones of the products
12.9.2.1	Fermented soybean sauce	20000	mg/kg		3	To colour the products to adjust the tones of the products
12.9.2.2	Non-fermented soybean sauce	1500	mg/kg		3	Proposed use level to function as colour
12.9.2.3	Other soybean sauce	7500	mg/kg		3	Proposed use level to function as colour

CARAMEL IV — SULPHITE AMMONIA PROCESS (INS 150(d))

25. The 29th JECFA (1985) assigned an ADI of 200 mg/kg bw/d for caramel IV – sulphite ammonia process.

26. The following are the outstanding recommendations for caramel IV – sulphite ammonia process from the report of the eWG to the 40th CCFA:

Recommendation 1 – Caramel IV – Ammonia Sulphite Process, INS 150(d)						
The eWG of the 40 th CCFA recommended the discontinuation of further work on the following food additive provision for caramel IV – sulphite ammonia process in the GSFA.						
Food Cat No.	Food Category	Max Level		Comments	Step	Justification provided to eWG
14.2	Alcoholic beverages, including alcohol-free and low-alcoholic counterparts	50000	mg/kg		3	Justification 1) Currently used in distilled spirits and other alcoholic beverages 2) Prevents batch variation in colour 3) Protects flavour profile (e.g. 14.2.1) of beverages in clear glass. See comment supporting revision of adopted provisions in subcategories 14.2.1, 14.2.3.3., 14.2.6, and 14.2.7 from ML of GMP to ML of 50 000 mg/kg

Recommendation 2 - Caramel IV – Ammonia Sulphite Process, INS 150(d)						
The eWG of the 40 th CCFA recommended the adoption of the following food additive provisions for caramel IV – sulphite ammonia process in the GSFA.						
Food Cat No.	Food Category	Max Level		Comments	Step	Justification/Comment
01.1.2	Dairy-based drinks, flavoured and/or fermented (e.g., chocolate milk, cocoa, eggnog, drinking yoghurt, whey-based drinks)	50000	mg/kg	Note 52 ¹⁵	3	Justification Consequential effect is to revoke adopted provision 01.1.2 at 150 mg/kg
01.1.2	Dairy-based drinks, flavoured and/or fermented (e.g., chocolate milk, cocoa, eggnog, drinking yoghurt, whey-based drinks)	150	mg/kg	Note 52	Adopted	
01.6.1	Unripened cheese	50000	mg/kg		3	Justification Consequential effect is to revoke adopted provision 01.6.1 Revision: Provides numeric ML to replace adopted GMP limit 1) These colours may be used to provide a distinguishing colour to various speciality cheeses eg fruit cheese. These permissions should be retained in the GSFA 2) Used for unripened cheeses, 3) These colours may be used to provide a distinguishing colour to various speciality cheeses eg fruit cheese
01.6.1	Unripened cheese		GMP		Adopted	
01.6.2	Ripened cheese	50000	mg/kg		3	Justification Consequential effect is to revoke adopted provision in subcategory 01.6.2.2 Revision: Provides numeric ML to replace adopted GMP limit 1) These colours may be used to provide a distinguishing colour to various speciality cheeses eg fruit cheese. These permissions should be retained in the GSFA 2) Used to colour the surface of smoked, ripened cheeses. 3) These colours may be used to provide a distinguishing colour to various speciality cheeses eg fruit cheese Comment: Too broad of a food category.
01.6.2.2	Rind of ripened cheese		GMP		Adopted	
01.6.4	Processed cheese	50000	mg/kg		3	Justification Consequential effect is to revoke adopted provision 01.6.4 and s to discontinue provisions in subcategories 01.6.4.1 and 01.6.4.2 1) These colours may be used to provide a distinguishing colour to various specialty cheeses eg fruit cheese. These permissions should be retained in the GSFA 2) Used for coloured cheese spreads. 3) These colours may be used to provide a distinguishing colour to various speciality cheeses eg fruit cheese
01.6.4	Processed cheese	100	mg/kg		Adopted	
01.6.4.1	Plain processed cheese		GMP		6	
01.6.4.2	Flavoured processed cheese, including containing fruit, vegetables, meat, etc.	100	mg/kg	Notes 5 ¹⁶ & 72 ¹⁷	6	
01.6.5	Cheese analogues	50000	mg/kg		3	Justification Consequential effect is to revoke adopted provision 01.6.5 Revision: Provides numeric ML to
01.6.5	Cheese analogues		GMP		Adopted	

¹⁵ **Note 52:** Excluding chocolate milk.

¹⁶ **Note 5:** Used in raw materials for manufacture of the finished food.

¹⁷ **Note 72:** Ready-to-eat basis.

Recommendation 2 - Caramel IV – Ammonia Sulphite Process, INS 150(d)						
The eWG of the 40 th CCFA recommended the adoption of the following food additive provisions for caramel IV – sulphite ammonia process in the GSFA.						
Food Cat No.	Food Category	Max Level		Comments	Step	Justification/Comment
						replace adopted GMP limit 1) These colours may be used to provide a distinguishing colour to various specialty cheeses eg fruit cheese. These permissions should be retained in the GSFA 2) Used to colour imitation cheese. 3) These colours may be used to provide a distinguishing colour to various specialty cheeses eg fruit cheese
01.7	Dairy-based desserts (e.g., pudding, fruit or flavoured yoghurt)	50000	mg/kg		3	Justification Consequential effect is to revoke adopted provision 01.7 at 2000 mg/kg
01.7	Dairy-based desserts (e.g., pudding, fruit or flavoured yoghurt)	2000	mg/kg		Adopted	
03.0	Edible ices, including sherbet and sorbet	30000	mg/kg		3	Justification Consequential effect is to revoke adopted provision 03.0 at 1000 mg/kg
03.0	Edible ices, including sherbet and sorbet	1000	mg/kg		Adopted	
04.1.2	Processed fruit	80000	mg/kg	Note 161	3	Justification Consequential effect is to revoke adopted provisions in subcategories 04.1.2.3, 04.1.2.4, 04.1.2.5, 04.1.2.6, 04.1.2.7, 04.1.2.8, 04.1.2.9, and 04.1.2.11 1) Used to colour processed fruit; 2) Maximum levels are enough to achieve the intended technological need Comment 04.1.2.5 - STAN 79 limits caramel colours to 200 mg/kg singly or in combo
04.1.2.3	Fruit in vinegar, oil, or brine		GMP		Adopted	
04.1.2.4	Canned or bottled (pasteurized) fruit		GMP		Adopted	
04.1.2.5	Jams, jellies, marmelades	1500	mg/kg		Adopted	
04.1.2.6	Fruit-based spreads (e.g., chutney) excluding products of food category 04.1.2.5	500	mg/kg		Adopted	
04.1.2.7	Candied fruit		GMP		Adopted	
04.1.2.8	Fruit preparations, including pulp, purees, fruit toppings and coconut milk	7500	mg/kg		Adopted	
04.1.2.9	Fruit-based desserts, incl. fruit-flavoured water-based desserts		GMP		Adopted	
04.1.2.11	Fruit fillings for pastries	7500	mg/kg		Adopted	
05.1.2	Cocoa mixes (syrups)	50000	mg/kg		6	
05.1.3	Cocoa-based spreads, including fillings	50000	mg/kg	Note 161		Justification Consequential effect is to revoke adopted provision 05.1.3 Revision: provides numeric ML to replace adopted GMP limit. 1) Used to colour cocoa-based spreads; 2) Maximum levels are enough to achieve the intended technological need 3) Consistent with proposed use levels in other food categories; current use level of 2000 to 5000 mg/kg in some fillings for chocolates in the US.
05.1.3	Cocoa-based spreads, including fillings		GMP		Adopted	
05.1.4	Cocoa and chocolate products	50000	mg/kg	Note 183	6	Justification Revision: provides numeric ML to replace GMP limit 1) Used to colour cocoa, chocolates 2) To improve organoleptic properties of food 3) maximum levels are enough to

Recommendation 2 - Caramel IV – Ammonia Sulphite Process, INS 150(d)						
The eWG of the 40 th CCFA recommended the adoption of the following food additive provisions for caramel IV – sulphite ammonia process in the GSFA.						
Food Cat No.	Food Category	Max Level		Comments	Step	Justification/Comment
						<p>achieve the intended technological need</p> <p>4) Consistent with proposed levels in other food categories.</p> <p>5) Caramel IV is approved for use in candies within Food Category 5.2 (Hard and Soft Candy, Marzipan and Nougat) at GMP levels. The candies within Category 5.2 fall into category 5.1.4 when they are covered with chocolate. Therefore the use levels for categories 5.1.4 and 5.2 should be considered at the same time.</p> <p>6) Caramel IV use in candies including liquorice can be 10,000 mg/kg</p> <p>Comments:</p> <p>1) Use may mislead consumer.</p> <p>2) Inconsistencies between non-standardized chocolate product among 05.1.4 & 05.2, 05.4 - recommends CCFA ensure provisions for use of colour additive in non-standardized chocolate products are consistent with approach for use of colours in other confections without compromising colour limitations in Codex Standard for Chocolate and chocolate products.</p> <p>3) Request that no actions be taken to limit level of colours in 5.1.4 or create disparity with 5.2 but also do not effect chocolate meeting Codex Standard 87.</p>
05.1.5	Imitation chocolate, chocolate substitute products	50000	mg/kg		6	<p>Justification</p> <p>Revision: provides numeric ML to replace GMP limit</p>
06.3	Breakfast cereals, including rolled oats	50000	mg/kg	Note AA ¹⁸	3	<p>Justification</p> <p>Consequential effect is to revoke adopted provision 06.3 at 2500 mg/kg</p>
06.3	Breakfast cereals, including rolled oats	2500	mg/kg		Adopted	
06.4.2	Dried pastas and noodles and like products	50000	mg/kg		3	<p>Justification</p> <p>1) Consistency with the adoption of caramel class III for the same food category</p> <p>2) Used to colour Chinese noodle</p> <p>3) maximum levels are enough to achieve the intended technological need</p>
06.4.3	Pre-cooked pastas and noodles and like products	50000	mg/kg	Note 153	3	<p>Justification</p> <p>Consistent with the Codex Standard for instant noodles (CX STAN 249)</p>
06.5	Cereal and starch based desserts (e.g., rice pudding, tapioca pudding)	50000	mg/kg		3	<p>Justification</p> <p>Consequential effect is to revoke adopted provision 06.5</p>
06.5	Cereal and starch based desserts (e.g., rice pudding, tapioca pudding)		GMP		Adopted	<p>Revision provides numeric ML to replace adopted GMP limit</p>
06.6	Batters (e.g., for breading or batters for fish or poultry)	50000	mg/kg		3	
06.7	Pre-cooked or processed rice products, including rice cakes (Oriental type only)	50000	mg/kg		3	

¹⁸ **Note AA: Excluding rolled oats.**

Recommendation 2 - Caramel IV – Ammonia Sulphite Process, INS 150(d)						
The eWG of the 40 th CCFA recommended the adoption of the following food additive provisions for caramel IV – sulphite ammonia process in the GSFA.						
Food Cat No.	Food Category	Max Level		Comments	Step	Justification/Comment
07.1.2	Crackers, excluding sweet crackers	50000	mg/kg	Note 161	3	Justification 1) Consistency with the adoption of caramel class III for the same food category 2) Used to colour crackers 3) Maximum levels are enough to achieve the intended technological need
07.1.3	Other ordinary bakery products (e.g., bagels, pita, English muffins)	50000	mg/kg	Note 161	3	Justification 1) To improve organoleptic properties of food 2) Used for fillings for innovative biscuit products, support ML 50,000 mg/kg
07.1.4	Bread-type products, including bread stuffing and bread crumbs	50000	mg/kg	Note 161	3	Justification 1) Consistency with the adoption of caramel class III for the same food category 2) Used to colour croutons 3) Maximum levels are enough to achieve the intended technological need
07.1.5	Steamed breads and buns	50000	mg/kg	Note 161	3	Justification Consistency with the adoption of caramel class III for the same food category
07.1.6	Mixes for breads and ordinary bakery wares	50000	mg/kg	Note 161	3	Justification To improve organoleptic properties of food
07.2	Fine bakery wares (sweet, salty, savoury) and mixes	50000	mg/kg	Note 161	3	Justification Consequential effect is to discontinue provision in subcategory 07.2.2 and to revoke adopted provisions 07.2.1 and 07.2.3
07.2.1	Cakes, cookies and pies (e.g., fruit-filled or custard types)		GMP		Adopted	
07.2.2	Other fine bakery products (e.g., doughnuts, sweet rolls, scones, and muffins)	1200	mg/kg		Adopted	
07.2.3	Mixes for fine bakery wares (e.g., cakes, pancakes)		GMP		Adopted	
10.1	Fresh eggs	20000	mg/kg	Note 4	3	Justification Consequential effect is to revoke adopted provision 10.1 Provides numeric ML to replace adopted GMP limit Comment: Colours in fresh foods might be used as adulterants, mislead consumer
10.1	Fresh eggs		GMP	Note 4	Adopted	
11.4	Other sugars and syrups (e.g., xylose, maple syrup, sugar toppings)	50000	mg/kg		3	Justification 1) Used to colour toppings for cakes 2) Maximum levels are enough to achieve the intended technological need
12.2	Herbs, spices, seasonings, and condiments (e.g., seasoning for instant noodles)	100000	mg/kg		3	Justification Consequential effect is to revoke adopted provision in subcategory 12.2.2
12.2.2	Seasonings and condiments		GMP		Adopted	
12.3	Vinegars	100000	mg/kg		3	Justification Consequential effect is to revoke adopted provision 12.3 Provides numeric ML to replace adopted GMP limit
12.3	Vinegars		GMP		Adopted	
12.4	Mustards	100000	mg/kg		3	Justification Consequential effect is to revoke adopted provision 12.4 Provides numeric ML to replace adopted GMP limit
12.4	Mustards		GMP		Adopted	
12.5	Soups and broths	100000	mg/kg		3	Justification Consequential effect is to revoke adopted provisions in subcategories 12.5.1 and 12.5.2
12.5.1	Ready-to-eat soups and broths, including canned, bottled, and frozen	3000	mg/kg		Adopted	

Recommendation 2 - Caramel IV – Ammonia Sulphite Process, INS 150(d)						
The eWG of the 40 th CCFA recommended the adoption of the following food additive provisions for caramel IV – sulphite ammonia process in the GSFA.						
Food Cat No.	Food Category	Max Level		Comments	Step	Justification/Comment
12.5.2	Mixes for soups and broths		GMP		Adopted	
12.6	Sauces and like products	100000	mg/kg		3	Justification Consequential effect is to revoke adopted provision 12.6 at 1500 mg/kg
12.6	Sauces and like products	1500	mg/kg		Adopted	
12.7	Salads (e.g., macaroni salad, potato salad) and sandwich spreads excluding cocoa- and nut-based spreads of food categories 04.2.2.5 and 05.1.3	100000	mg/kg		3	Justification Consequential effect is to revoke adopted provision 12.7 Provides numeric ML to replace adopted GMP limit
12.7	Salads (e.g., macaroni salad, potato salad) and sandwich spreads excluding cocoa- and nut-based spreads of food categories 04.2.2.5 and 05.1.3		GMP		Adopted	
14.1.2.2	Vegetable juice	50000	mg/kg		3	Justification 1) Used to colour vegetable juice 2) Maximum levels are enough to achieve the intended technological need Comments: No technological need/justification. These are similar to fruit juice, in which colours are not justified
14.1.2.4	Concentrates for vegetable juice	50000	mg/kg		3	Justification 1) Used to colour concentrates for vegetable juice 2) Maximum levels are enough to achieve the intended technological need Comments: No technological need/justification. These are similar to fruit juice, in which colours are not justified
14.1.3.2	Vegetable nectar	50000	mg/kg		3	Justification Consequential effect is to revoke adopted provision 14.1.3.2 to replace adopted GMP limit 1) Used to colour vegetable nectar 2) Maximum levels are enough to achieve the intended technological need Comment Discontinue on basis of no technological need/justification. These are similar to fruit nectars, in which colours are not justified
14.1.3.2	Vegetable nectar		GMP		Adopted	
14.1.3.4	Concentrates for vegetable nectar	50000	mg/kg		3	Justification Consequential effect is to revoke adopted provision 14.1.3.4 Provides numeric ML to replace adopted GMP limit 1) Colouring for concentrates for vegetable nectar 2) Maximum levels are enough to achieve the intended technological need Comment: No technological need/justification. These are similar to fruit nectars, in which colours are not justified
14.1.3.4	Concentrates for vegetable nectar		GMP		Adopted	
14.2.1	Beer and malt beverages	50,000	mg/kg			Justification
14.2.1	Beer and malt beverages		GMP		Adopted	Consequential effect is to revoke adopted provision 14.2.1 Revise adopted maximum level of GMP to 50,000 mg/kg Comment: recommend adopt at 50 000 mg/kg in subcategories

Recommendation 2 - Caramel IV – Ammonia Sulphite Process, INS 150(d)						
The eWG of the 40 th CCFA recommended the adoption of the following food additive provisions for caramel IV – sulphite ammonia process in the GSFA.						
Food Cat No.	Food Category	Max Level		Comments	Step	Justification/Comment
						14.2.1, 14.2.3.3, 14.2.6, and 14.2.7
14.2.3.3	Fortified grape wine, grape liquor wine, and sweet grape wine	50,000	mg/kg			Justification Consequential effect is to revoke adopted provision 14.2.3.3
14.2.3.3	Fortified grape wine, grape liquor wine, and sweet grape wine		GMP		Adopted	Revise adopted maximum level of GMP to 50,000 mg/kg
14.2.6	Distilled spirituous beverages containing more than 15% alcohol	50,000	mg/kg			Justification Consequential effect is to revoke adopted provision 14.2.6
14.2.6	Distilled spirituous beverages containing more than 15% alcohol		GMP		Adopted	Revise adopted maximum level of GMP to 50,000 mg/kg
16.0	Composite foods - foods that could not be placed in categories 01 - 15	20000	mg/kg		3	Justification Consequential effect is to revoke adopted provision 16.0 at 1000 mg/kg
16.0	Composite foods - foods that could not be placed in categories 01 - 15		GMP		Adopted	1) Used to colour bean-pastes 2) To improve organoleptic properties of food

Recommendation 3 - Caramel IV – Ammonia Sulphite Process, INS 150(d)						
The eWG of the 40 th CCFA recommended further discussion of the following food additive provisions for caramel IV – sulphite ammonia process in the GSFA.						
Food Cat No.	Food Category	Max Level		Comments	Step	Justification/Comment
05.0	Confectionery	50000	mg/kg		3	Justification 1) No non-standardized foods in sub-category 05.1.1 2) There are no provisions for colours in Codex Standards for Cocoa powders and dry mixtures of cocoa and sugar (Std. 105-1981, rev. 1-2001) or in the Codex Standard for cocoa mass (cocoa/chocolate liquor) and cocoa cake (Std. 141-1983, rev. 1-2001).
11.6	Table-top sweeteners, including those containing high-intensity sweeteners	50000	mg/kg		3	Justification 1) The technological need is questioned. 2) Caramel colour, class IV, is stable in acidic conditions and thus is well suited for applications in table-top sweeteners, for consumer appealing colouring. The maximum use level as listed (50000 mg/kg) is adequate. It is requested to maintain this entry for cat. 11.6. 3) there isn't a consumer expectation to have this product coloured 4) there is a suggestion to add a subcategory for flavoured table-top sweeteners, which could be coloured
14.1.5	Coffee, coffee substitutes, tea, herbal infusions, and other hot cereal and grain beverages, excluding cocoa	100000	mg/kg	Note 160	3	Justification 1) Used to colour coffee-like drinks 2) Maximum levels are enough to achieve the intended technological need 3) Suggestion that caramel IV should not be allowed in all foods in food category. Suggested Notes: - Note 142 and excluding herbal infusions - Excluding tea, coffee, and coffee substitutes - Note 160

Caramel IV – Ammonia Sulphite Process, INS 150(d)						
The following provisions were included in the GSFA at Step 3 by the 41 st CCFA.						
Food Cat No.	Food Category	Max Level		Comments	Step	Justification /Comment
02.2.2	Fat spreads, dairy fat spreads and blended spreads	500	mg/kg		3	Consistent with Codex Standards for Dairy Fat Spreads (Codex Stan 253-2006) and Fat Spreads and Blended Spreads (Codex Stan

Caramel IV – Ammonia Sulphite Process, INS 150(d)						
The following provisions were included in the GSFA at Step 3 by the 41 st CCFA.						
Food Cat No.	Food Category	Max Level		Comments	Step	Justification /Comment
						256-2006)
06.8.8	Other soybean protein products	20000	mg/kg		3	To colour the products brown to adjust the tones of the products
12.9.2.1	Fermented soybean sauce	20000	mg/kg		3	To colour the products to adjust the tones of the products

CAROTENOIDS ((INS 160a(i), 160a(iii), 160e, 160f)

27. The 18th JECFA (1974) assigned a group ADI of 5 mg/kg bw/d for β -Apo-8-carotenal (160e), synthetic β -Carotene (160ai), and β -Apo-8-carotenoic acid, methyl or ethyl ester (160f). The 57th JECFA (2001) assigned β -Carotene from *Blakeslea trispora* (160a(ii)) to the group ADI for synthetic β -carotenes. These substances are collectively referred to in the GSFA as carotenoids.

28. The following are the outstanding recommendations for carotenoids from the report of the eWG to the 40th CCFA.

Recommendation 1 - Carotenoids, INS 160a(i), 160a(iii), 160e, 160f						
The eWG of the 40 th CCFA recommended adoption of the following food additive provisions for carotenoids in the GSFA.						
Food Cat No.	Food Category	Max Level		Comments	Step	Justification/Comment
01.3.2	Beverage whiteners	100	mg/kg	Note 180 ¹⁹	3	Justification 1) Permitted in food category 1.5.2 - milk and cream powder analogues so provision in this food category should be retained. 2) <i>Carotenes, Natural Extracts, (Vegetable) 160a(ii)</i> are already permitted at 1000 mg/kg since 2005. Other carotenes perform the same function and should be listed at the same level in the GSFA. 3) Emulsified colour preparations are used in beverages. 4) Permitted in food category 1.5.2 - milk and cream powder analogues so provision in this food category should be retained and provides appropriate colour to the food. 5) <i>Carotenes, Natural Extracts, (Vegetable) 160a(ii)</i> are already permitted at 1000 mg/kg since 2005. Other carotenes perform the same function and should be listed at the same level in the GSFA
01.4	Cream (plain) and the like	20	mg/kg	Note 180	3	Justification 1) Carotenoids are routinely used as colorant in 1.4.2 - cream products and 1.4.4 - cream analogues as a preferred alternative to artificial colouring agents. Continuation of this provision is strongly supported. 2) Colour for cream. 3) Carotenoids are routinely used as colourant in 1.4.2 - cream products and 1.4.4 - cream analogues as a preferred alternative to artificial colouring agents in order to standardise the colour of these products 4) Colours are used to standardise the colour.

¹⁹ Note 180: Expressed as beta-carotene.

Recommendation 1 - Carotenoids, INS 160a(i), 160a(iii), 160e, 160f						
The eWG of the 40 th CCFA recommended adoption of the following food additive provisions for carotenoids in the GSFA.						
Food Cat No.	Food Category	Max Level		Comments	Step	Justification/Comment
01.5.2	Milk and cream powder analogues	100	mg/kg	Note 180	3	Justification Colours are used to standardise the colour
01.6.1	Unripened cheese	100	mg/kg	Note 180	6	Justification 1) Colours are used to standardise the colour 2) Standardized cheeses subject to this category provide for the use of carotenoids
02.1.2	Vegetable oils and fats	250	mg/kg	Note 180	6	Justification 1) Used for vegetable oils and fats in Japan, Korea, Singapore, Malaysia and others. 2) ML expressed on beta-carotene level should be 250 mg/kg
02.1.3	Lard, tallow, fish oil, and other animal fats	250	mg/kg	Note 180	6	Justification 1) Used to colour edible lard; maximum levels are enough to achieve the intended technological need. 2) Potentially by using the fat emulsion colour preparation. 3) CX Stan 19 contains already provisions for colours and GSFA adopted provisions in this category. Comment Support for level of 250 mg/kg
02.2.2	Emulsions containing less than 80% fat	25	mg/kg	Note 180	6	Justification 1) There is a technological need to colouring variety of products with flavours. 2) Used for emulsions 3) This food category includes reduced-fat counterparts of butter, margarine, and their mixtures. Since such products are also derived from butter (e.g., "butterine," a spreadable butter blend with vegetable oils) it makes sense to permit carotenoids at the same level as in butter and concentrated butter. 4) To provide colour (other colours are permitted) Comment: <u>Revise 35 mg/kg</u> , consistent with Standard for Fat Spreads and Blended spreads (Codex Stan 256-2007)
04.1.2.4	Canned or bottled (pasteurized) fruit	200	mg/kg	Note 161	6	Justification 1) Restoration of colour which was destroyed during production. 2) CX STANS 60, 61, 78, 99, 159, 242 contain provisions for colours that apply to this category
04.2.1.2	Surface-treated fresh vegetables (including mushrooms and fungi, roots and tubers, pulses and legumes, and aloe vera), seaweeds, and nuts and seeds	500	mg/kg	Notes 4,16, 161 & 180	6	Comment: Colours in fresh foods might be used as adulterants, mislead consumer
04.2.2.3	Vegetables (including mushrooms and fungi, roots and tubers, pulses and legumes, and aloe vera) and seaweeds in vinegar, oil, brine, or soy sauce	50	mg/kg	Note 161 & 180	6	Comment: ADI may be exceeded

Recommendation 1 - Carotenoids, INS 160a(i), 160a(iii), 160e, 160f						
The eWG of the 40 th CCFA recommended adoption of the following food additive provisions for carotenoids in the GSFA.						
Food Cat No.	Food Category	Max Level		Comments	Step	Justification/Comment
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	50	mg/kg	Note 161 &180	6	Justification 1) Used for rootstalks; maximum levels are enough to achieve the intended technological need. 2) Restoration of colour which was destroyed during production. 3) CX STAN 55, 58, 81 and 115 contains provisions for colours and GSFA has adopted provisions in this category. 4) To improve organoleptic properties of food.. 5) 50 mg/kg as beta-carotene is needed to achieve the colour Comment: ADI may be exceeded
04.2.2.5	Vegetable (including mushrooms and fungi, roots and tubers, pulses and legumes, and aloe vera), seaweed, and nut and seed purees and spreads (e.g., peanut butter)	50	mg/kg	Note 161 &180	3	Justification 1) Used to colour peanut butter; maximum levels are enough to achieve the intended technological need. 2) Restoration of colour which was destroyed during processing. 3) CX STAN 55, 58, 81 and 115 contains provisions for colours and GSFA has adopted provisions in this category. 4) Potentially used for e.g. vegetable purees. 5) To improve organoleptic properties of food. 6) 50 mg/kg as beta-carotene is needed to achieve the colour Comment: ADI may be exceeded
04.2.2.6	Vegetable (including mushrooms and fungi, roots and tubers, pulses and legumes, and aloe vera), seaweed, and nut and seed pulps and preparations (e.g., vegetable desserts and sauces, candied vegetables) other than food category 04.2.2.5	50	mg/kg	Notes 92²⁰, 161 &180	6	Justification 1) Used for sugared, vinegar-pickled vegetables; maximum levels are enough to achieve the intended technological need. 2) Restoration of colour which was destroyed during heat treatment. 3) CX Stan 55, 58, 81 and 115 contains provisions for colours and GSFA adopted provisions in this category. 4) Potentially used for e.g. vegetable purees. 5) To improve organoleptic properties of food 6) 50 mg/kg as beta-carotene is needed to achieve the colour Comment: Excluding tomato-based sauces
05.1.2	Cocoa mixes (syrops)	100	mg/kg	Note 180	6	Justification 1) Potentially used in cocoa mixtures 2) Colour supports the various flavour and types of products. Comment: doesn't support,

²⁰ **Note 92:** Excluding tomato-based sauces.

Recommendation 1 - Carotenoids, INS 160a(i), 160a(iii), 160e, 160f						
The eWG of the 40 th CCFA recommended adoption of the following food additive provisions for carotenoids in the GSFA.						
Food Cat No.	Food Category	Max Level		Comments	Step	Justification/Comment
						mislead consumer
05.1.3	Cocoa-based spreads, including fillings	100	mg/kg	Notes 161 & 180	6	Justification 1) Potentially used for fillings 2) Colour supports the various flavour and types of products.
05.1.4	Cocoa and chocolate products	100	mg/kg	Notes 180 & 183	6	Justification 1) Used for chocolate products. 2) Carotenoids are naturally occurring red, yellow and orange pigments. Carotenoids are used to colour beverages, frozen foods, fruit fillings, candies, baked goods and food supplements. Colour is an important characteristic of food that enhances the appeal of the food and our enjoyment of eating. Colour additives are used in foods to offset colour loss that can occur due to exposure to light, air, temperature extremes, and moisture and storage conditions. Colour additives enhance colours that occur naturally and correct natural variations in colour. Colour additives also provide a colourful identity to foods that would otherwise be virtually colourless. 3) Colour supports the various flavour and types of products. Comments: 1) Use may mislead consumer. 2) Inconsistencies between non-standardized chocolate product btwn 05.1.4 & 05.2, 05.4 - recommends CCFA ensure provisions for use of colour additive in non-standardized chocolate products are consistent with approach for use of colours in other confections without compromising colour limitations in Codex Standard for Chocolate and chocolate products. 3) request that no actions be taken to limit level of colours in 5.1.4 or create disparity with 5.2 but also do not effect chocolate meeting Codex Standard 87.
07.1.1	Breads and rolls	35	mg/kg	Note 161 & 180	6	Justification 1) Used to colour bread; maximum levels are enough to achieve the intended technological need. 2) Colour the speciality breads e.g. carrot containing bread. 3) Already adopted provision for colour in this category in the GSFA. Comment: Technological need questioned

Recommendation 1 - Carotenoids, INS 160a(i), 160a(iii), 160e, 160f						
The eWG of the 40 th CCFA recommended adoption of the following food additive provisions for carotenoids in the GSFA.						
Food Cat No.	Food Category	Max Level		Comments	Step	Justification/Comment
07.1.3	Other ordinary bakery products (e.g., bagels, pita, English muffins)	1000	mg/kg	Note 161	3	Justification 1) Used to colour brown sugar breads; maximum levels are enough to achieve the intended technological need. 2) Used to colour lemon/orange flavoured sugar breads. 3) To improve organoleptic properties of food. 4) 100 mg/kg as beta-carotene is needed to achieve the colour Comment: Technological need questioned
07.1.4	Bread-type products, including bread stuffing and bread crumbs	1000	mg/kg	Notes 116 ²¹ & 161	3	Justification 1) Used to colour croutons; maximum levels are enough to achieve the intended technological need. 2) 200 mg/kg as beta-carotene is needed to achieve the colour Comment: Technological need questioned
07.1.5	Steamed breads and buns	1000	mg/kg	Note 161	3	Justification 1) Used to colour brown sugar steamed breads; maximum levels are enough to achieve the intended technological need). 2) Used to colour lemon/orange flavoured sugar breads 3) 100 mg/kg as beta-carotene is needed to achieve the colour Comment: Technological need questioned
07.1.6	Mixes for breads and ordinary bakery wares	1000	mg/kg	Note 161	6	Justification 1) Used to colour hot cake (pancake) mix; maximum levels are enough to achieve the intended technological need). 2) Used to colour cake mixes e.g. lemon cake. 3) To improve organoleptic properties of food. 4) Allowed in lots of countries like Philippines, India, Korea and others. 5) The amount needed for this colouration is 1000 mg/kg Comment: Technological need questioned
08.3.1.1	Cured (including salted) non-heat treated processed comminuted meat, poultry, and game products	100	mg/kg	Note 118	6	Comment: Add Note 16
08.3.1.2	Cured (including salted) and dried non-heat treated processed comminuted meat, poultry, and game products	20	mg/kg		6	Comment: Add Note 16
08.3.1.3	Fermented non-heat treated processed comminuted meat, poultry, and game products	20	mg/kg		6	Comment: Add Note 16

²¹ **Note 116:** For use in doughs only.

Recommendation 1 - Carotenoids, INS 160a(i), 160a(iii), 160e, 160f						
The eWG of the 40 th CCFA recommended adoption of the following food additive provisions for carotenoids in the GSFA.						
Food Cat No.	Food Category	Max Level		Comments	Step	Justification/Comment
08.3.2	Heat-treated processed comminuted meat, poultry, and game products	20	mg/kg		6	Comment: Add Note 16
09.1.1	Fresh fish	300	mg/kg	Notes 4, 16, & 50	6	Comment: Colours in fresh foods might be used as adulterants, mislead consumer
09.2	Processed fish and fish products, including mollusks, crustaceans, and echinoderms	100	mg/kg	Notes 95 & 180	3	Justification Consequential effect is to discontinue provisions in subcategories 09.2.1, 09.2.2, 09.2.4.1, 09.2.4.2, and 09.2.5 Comment: Revise 09.2.4.1, add Note 95
09.2.1	Frozen fish, fish fillets, and fish products, including mollusks, crustaceans, and echinoderms	500	mg/kg	Note 95	6	
09.2.2	Frozen battered fish, fish fillets, and fish products, including mollusks, crustaceans, and echinoderms	100	mg/kg	Note 41 ²²	6	
09.2.4.1	Cooked fish and fish products	500	mg/kg		6	
09.2.4.2	Cooked mollusks, crustaceans, and echinoderms	250	mg/kg		6	
09.2.5	Smoked, dried, fermented, and/or salted fish and fish products, including mollusks, crustaceans, and echinoderms	500	mg/kg	Note 22 ²³	6	
09.3	Semi-preserved fish and fish products, including mollusks, crustaceans, and echinoderms	100	mg/kg	Notes 95 & 180	3	Justification Consequential effect is to discontinue provisions in subcategories 09.3.3 and 09.3.4
09.3.3	Salmon substitutes, caviar, and other fish roe products	500	mg/kg		6	
09.3.4	Semi-preserved fish and fish products, including mollusks, crustaceans, and echinoderms (e.g., fish paste), excluding products of food categories 09.3.1 - 09.3.3	500	mg/kg		6	
10.1	Fresh eggs	1000	mg/kg	Note 4	3	Comment: Colours in fresh foods might be used as adulterants, mislead consumer
10.2	Egg products	1000	mg/kg		3	Justification Used for egg products
14.1.3.2	Vegetable nectar	100	mg/kg	Note 180	6	Justification Used for vegetable nectars Comments: No technological need / justification. These are similar to fruit nectars, in which colours are not justified
14.1.3.4	Concentrates for vegetable nectar	100	mg/kg	Notes 127 & 180	6	Justification Used for vegetable nectar concentrates Comments: No technological need/justification. These are similar to fruit nectars, in which colours are not justified
15.1	Snacks - potato, cereal, flour or starch based (from roots and tubers, pulses and legumes)	400	mg/kg		3	Revise and adopt provision at 100 mg/kg with Note CC Comment:
15.1	Snacks - potato, cereal, flour or starch based (from roots and tubers, pulses and legumes)	100	mg/kg	Note 180	6	ML of 400 mg/kg is too high; ML of 100 mg/kg is acceptable

²² **Note 41:** Use in breading or batter coatings only.

²³ **Note 22:** For use in smoked fish products only.

Recommendation 2 - Carotenoids, INS 160a(i), 160a(iii), 160e, 160f						
The eWG of the 40 th CCFA recommended further discussion of the following food additive provisions for carotenoids in the GSFA.						
Food Cat No.	Food Category	Max Level		Comments	Step	Justification provided to eWG
08.1.2	Fresh meat, poultry, and game, comminuted	100	mg/kg	Notes 4, 16, & 117 ²⁴	6	Justification 1) Used to make the colour uniform raw meat for utilized in processed products of the categories 08.1.2, 08.2 and 08.3, such as hamburger, meat balls, fresh sausage, and pâtés. Therefore, the Notes 4 and 16 should not be applied to these products. 2) Adopted provisions for other colours
16.0	Composite foods - foods that could not be placed in categories 01 - 15	500	mg/kg		6	Justification 1) Used to colour bean-paste; maximum levels are enough to achieve the intended technological need. 2) Used for complex foods which are not covered by the other categories. 3) Colour used to improve the organoleptic properties of food 4) If provisions are proposed for category 16, the products must be fully defined and the additive uses restricted to these products. In the vast majority of cases products can be covered by other food categories or as composite products (and therefore subject to carry over provisions).

Carotenoids, INS 160a(i), 160a(iii), 160e, 160f						
The 41 st CCFA agreed to circulate for comments at Step 3 the following food additive provisions for carotenoids in the GSFA.						
Food Cat No.	Food Category	Max Level		Comments	Step	Justification/Comment
08.4	Edible casings (e.g., sausage casings)	100	mg/kg	Note 180	3	Justification 1) Used to colour casings; maximum levels are enough to achieve the intended technological need. 2) Colour for giving pleasant palatable appearance. 3) For use in glaze, coatings or decorations for fruit, vegetables, meat or fish (Note 16). 4) 100 mg/kg as beta-carotene is needed to achieve the colour
09.1.2	Fresh mollusks, crustaceans and echinoderms	100	mg/kg	Notes 4, 16 & 180	3	Justification 1) Coloration purpose. 2) Already adopted provisions for colours in the GSFA Comment: 1) Colours in fresh foods might be used as adulterants, mislead consumer 2) Support for 100 mg/kg as beta-carotene
09.2.4.3	Fried fish and fish products, including mollusks, crustaceans, and echinoderms	100	mg/kg		3	The eWG recommends adoption of a maximum level of 100 mg/kg in food category 09.2 with Notes 95 and CC.
11.4	Other sugars and syrups (e.g., xylose, maple syrup, sugar toppings)	50	mg/kg	Note 180	3	Justification 1) Used for topping syrups; maximum levels are enough to achieve the intended technological need. 2) Used for colouring syrups. 3) supports max use of 50 mg/kg beta-carotene, same as for Carotenes vegetable which is already permitted 11.4
11.6	Table-top sweeteners, including those containing high-intensity sweeteners	300	mg/kg		3	Justification 1) Used table sweeteners; maximum levels are enough to achieve the intended technological need). 2) Appealing colour to consumers when used in home cooking and baking
14.2.1	Beer and malt beverages	200	mg/kg	Note 180	3	Justification 1) To colour the alcoholic beverages. 2) Vegetable carotenes have adopted provision at 600 mg/kg in this category. Comment Support for max use of 200 mg/kg as beta-carotene

²⁴ **Note 117:** Except for use in loganiza (fresh, uncured sausage) at 1 000 mg/kg.

CAROTENES, VEGETABLE (INS 160a(ii))

29. The 41st JECFA (1993) determined vegetable carotenes to be acceptable for use as a colour, provided the level of use does not exceed the level normally found in vegetables.

30. The following are the outstanding recommendations for vegetable carotenes from the report of the eWG to the 40th CCFA.

Recommendation 1 - Carotenes, Beta-, (Vegetable), INS 160a(ii)						
The eWG of the 40 th CCFA recommended adoption of the following food additive provisions for vegetable beta-carotenes in the GSFA.						
Food Cat No.	Food Category	Max Level		Comments	Step	Justification/Comment
04.1.1.2	Surface-treated fresh fruit		GMP	Notes 4 & 16	6	Comment: Colours in fresh foods might be used as adulterants, mislead consumer
04.1.2.8	Fruit preparations, including pulp, purees, fruit toppings and coconut milk	100	mg/kg	Notes 180 & 182²⁵	6	Comment: Use may mislead consumer
04.2.2.2	Dried vegetables (including mushrooms and fungi, roots and tubers, pulses and legumes, and aloe vera), seaweeds, and nuts and seeds	200	mg/kg		3	Justification 1) Used to colour sunflower seeds; levels are enough to achieve the intended technological need. 2) Fruits and vegetables discolour during processing and storage. Therefore use as restoration of colour which was destroyed during heat processing. 3) CX Stan 79 and 80 contains provisions for colours and GSFA adopted provisions in this category. Comment: Only in dried potato granules and flakes as other uses may mislead consumer
04.2.2.3	Vegetables (including mushrooms and fungi, roots and tubers, pulses and legumes, and aloe vera) and seaweeds in vinegar, oil, brine, or soy sauce	1320	mg/kg		3	Justification 1) Used to colour pickles; levels are enough to achieve the intended technological need 2) Restoration of colour which was destroyed during production; 3) To provide colour ; 4) Potentially used for e.g. root stalks; 5) To improve organoleptic properties of food. 50 mg/kg as beta-carotene is needed to achieve the colour Comment: Use may mislead consumer
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	200	mg/kg		3	Justification 1) Used to colour pulses and legumes; levels are enough to achieve the intended technological need 2) Restoration of colour which was destroyed during production.; 3) To provide colour - CX Stan 55, 58, 81 and 115 contains provisions for colours and GSFA has adopted provisions in this category; 4) Potentially used for e.g. root stalks; and 5) To improve organoleptic properties of food. 50 mg/kg as beta-carotene is needed to

²⁵ **Note 182:** Except for use in coconut milk.

Recommendation 1 - Carotenes, Beta-, (Vegetable), INS 160a(ii)						
The eWG of the 40 th CCFA recommended adoption of the following food additive provisions for vegetable beta-carotenes in the GSFA.						
Food Cat No.	Food Category	Max Level		Comments	Step	Justification/Comment
						achieve the colour Comment: Use may mislead consumer
05.1.3	Cocoa-based spreads, including fillings	100	mg/kg	Note 180	3	Comment: Use may mislead consumer
05.1.4	Cocoa and chocolate products	100	mg/kg	Notes 180 & 183	6	Adopt 100 mg/kg with Note 180
05.1.4	Cocoa and chocolate products	1000	mg/kg	Note 183	3	Comments: 1) Use may mislead consumer. 2) Inconsistencies between non-standardized chocolate product between 05.1.4 & 05.2, 05.4 - recommends CCFA ensure provisions for use of colour additive in non-standardized chocolate products are consistent with approach for use of colours in other confections without compromising colour limitations in Codex Standard for Chocolate and chocolate products. 3) Request that no actions be taken to limit level of colours in 5.1.4 or create disparity with 5.2 but also do not effect chocolate meeting Codex Standard 87.
06.4.2	Dried pastas and noodles and like products	1000	mg/kg		3	Justification 1) The use of other colours, as caramel class III, is being adopted in this food category 2) Used to colour Chinese noodle; levels are enough to achieve the intended technological need) 3) Beta-carotene provides colour and supports the various flavour and types of products.
06.4.3	Pre-cooked pastas and noodles and like products	1000	mg/kg	Note 153	3	Justification For consistency with the CX STAN 249
07.1.6	Mixes for breads and ordinary bakery wares	100	mg/kg	Note 180	3	Justification 1) Used to colour hot cake (pancake) mix; levels are enough to achieve the intended technological need 2) Used to colour cake mixes e.g. lemon cake; 3) To improve organoleptic properties of food; 4) Allowed in lots of countries like Philippines, India, Korea and others 5) Used for innovative biscuit products
09.1.1	Fresh fish	100	mg/kg	Notes 4, 16, 50, & 180	6	Comment: Colours in fresh foods might be used as adulterants, mislead consumer
12.2	Herbs, spices, seasonings, and condiments (e.g., seasoning for instant noodles)	500	mg/kg		3	Justification Adopt in subcategory 12.2.2 only.
12.2.2	Seasoning and condiments	500	mg/kg			Consequential effect is to discontinue provision in broader food category 12.2

Recommendation 1 - Carotenes, Beta-, (Vegetable), INS 160a(ii)						
The eWG of the 40 th CCFA recommended adoption of the following food additive provisions for vegetable beta-carotenes in the GSFA.						
Food Cat No.	Food Category	Max Level		Comments	Step	Justification/Comment
14.1.2.2	Vegetable juice	2000	mg/kg		3	Justification 1) Potentially used as a colour for vegetable juice. 2) To improve organoleptic properties of food, preferred to synthetic colorants Comments: No technological need/justification. These are similar to fruit juices, in which colours are not justified
14.1.2.4	Concentrates for vegetable juice	2000	mg/kg	Note 127	3	Justification 1) Potentially used as a colour for vegetable 2) To improve organoleptic properties of food, preferred to synthetic colourants Comments: No technological need / justification. These are similar to fruit juices, in which colours are not justified
14.1.3.2	Vegetable nectar	100	mg/kg	Note 180	3	Justification 1) Used for vegetable nectars; levels are enough to achieve the intended technological need) 2) Vegetables discolour during processing and storage. Therefore use as restoration of colour which was destroyed during heat processing. Comments: No technological need / justification. These are similar to fruit nectars, in which colours are not justified
14.1.3.4	Concentrates for vegetable nectar	100	mg/kg	Notes 127 & 180	3	Justification 1) Used for concentrates for vegetable nectars; levels are enough to achieve the intended technological need) 2) Vegetables discolour during processing and storage. Therefore use as restoration of colour which was destroyed during heat processing. Comments: No technological need / justification. These are similar to fruit nectars, in which colours are not justified
15.2	Processed nuts, including covered nuts and nut mixtures (with e.g., dried fruit)	20000	mg/kg		3	Justification Colour to coat Comment: tech need for high ML requested
16.0	Composite foods - foods that could not be placed in categories 01 - 15	1000	mg/kg		3	Justification Used for complex foods.

Recommendation 2 – Carotenes, Beta-, (Vegetable), INS 160a(ii)						
The eWG of the 40 th CCFA recommended further discussion of the following food additive provisions for vegetable beta-carotenes in the GSFA.						
Food Cat No.	Food Category	Max Level		Comments	Step	Justification/Comments
08.1.2	Fresh meat, poultry, and game, comminuted	20	mg/kg	Notes 4, 16, & 117	6	Justification 1) Used to uniform the colour of raw meat utilized in processed products of the categories 08.1.2, 08.2 and 08.3, such as hamburger, meat balls, fresh sausage, and pâtés. Therefore, the Notes 4 and 16 should not be applied to these products.

Recommendation 2 – Carotenes, Beta-, (Vegetable), INS 160a(ii)					
The eWG of the 40 th CCFA recommended further discussion of the following food additive provisions for vegetable beta-carotenes in the GSFA.					
Food Cat No.	Food Category	Max Level	Comments	Step	Justification/Comments
					2) Suggestion to increase level to 100 mg/kg colouring substance as for carotenoids Comment 1) Support for inclusion of Notes 4 and 16; 2) Support for exclusion of Notes 4 and 16

Carotenes, Beta-, (Vegetable), INS 160a(ii)					
The 41 st CCFA agreed to circulate for comment at Step 3 the following food additive provisions for vegetable beta-carotene in the GSFA.					
Food Cat No.	Food Category	Max Level	Comments	Step	Justification
01.4.4	Cream analogues	20 mg/kg	Note 180	3	Justification 1) Used to colour cream-like products; levels are enough to achieve the intended technological need 2) Cream substitute are consisting of a vegetable fat-water emulsion that are coloured. Colours are used to standardise the colour. A wide range of colours is equally justified and should be equally permitted. 3) Expressed as beta-carotene.
05.1.2	Cocoa mixes (syrops)	100 mg/kg	Note 180	3	Justification 1) Used to colour cocoa mixes (syrops); levels are enough to achieve the intended technological need Comment: Technological need questioned, mislead consumer
05.1.5	Imitation chocolate, chocolate substitute products	100 mg/kg	Note 180	3	Justification 1) Used to colour imitation chocolates; levels are enough to achieve the intended technological need
15.3	Snacks - fish based	100 mg/kg		3	Justification 1) Used to colour snacks; levels are enough to achieve the intended technological need 2) Restoration of colour which was destroyed during production; 3) To provide colour. Comment Support for 100 mg/kg for category 15.1, which is technical relevant.

CANTHAXANTHIN (INS 161G)

31. The 28th CAC has adopted one provision for the use of canthaxanthin in the GSFA.

32. The JECFA (1995) assigned an ADI of 0.03 mg/kg bw/d for canthaxanthin.

33. The 30th CCFAC requested that JECFA perform intake estimates for canthaxanthin based on the pending levels of maximum use in the GSFA and national food consumption data. The 53rd JECFA (1999) evaluated national intake assessments of canthaxanthin, which were based on data on poundage (disappearance), model diets, and individual dietary records. Intake estimates based on national regulatory or measured data, and combined with mean food intakes, did not exceed the ADI of 0-0.03 mg/kg bw. JECFA noted that the estimates of intake based on the assumption that canthaxanthin is used directly in all foods at the maximum levels proposed in the draft GSFA greatly exceed the ADI; however, JECFA also recognized that indirect exposure to canthaxanthin from its use as a colourant in animal feeds is the major source of canthaxanthin in food. Taking into account the conservative nature of the estimate using draft maximum GSFA levels as well as the knowledge that the draft GSFA proposed much broader use in food than occurs in countries in which canthaxanthin is used, JECFA concluded that use of canthaxanthin will not result in long-term intake that exceeds the ADI.

34. The following are the outstanding recommendations of the report of the eWG to the 40th CCFA.

Recommendation 1 -- Canthaxanthin, INS 161g						
The eWG to the 40 th CCFA recommended the adoption of the following food additive provisions for canthaxanthin in the GSFA.						
Food Cat No.	Food Category	Max Level		Comments	Step	Justification/Comments
01.1.2	Dairy-based drinks, flavoured and/or fermented (e.g., chocolate milk, cocoa, eggnog, drinking yoghurt, whey-based drinks)	15	mg/kg	Note 52	6	
01.6.1	Unripened cheese	15	mg/kg		6	
01.6.2	Ripened cheese	15	mg/kg		6	
01.6.4	Processed cheese	15	mg/kg		6	
01.6.5	Cheese analogues	15	mg/kg		6	
01.7	Dairy-based desserts (e.g., pudding, fruit or flavoured yoghurt)	15	mg/kg		6	
02.2.2	Emulsions containing less than 80% fat	15	mg/kg		6	
02.3	Fat emulsions mainly of type oil-in-water, including mixed and/or flavoured products based on fat emulsions	15	mg/kg		6	
02.4	Fat-based desserts excluding dairy-based dessert products of food category 01.7	15	mg/kg		6	
04.1.2.5	Jams, jellies and marmelades	200	mg/kg		6	
04.1.2.6	Fruit-based spreads (e.g., chutney) excluding products of food category 04.1.2.5	15	mg/kg		6	
04.1.2.9	Fruit-based desserts, including fruit-flavoured water-based desserts	15	mg/kg		6	
04.1.2.11	Fruit fillings for pastries	15	mg/kg		6	
04.2.2.2	Dried vegetables (including mushrooms and fungi, roots and tubers, pulses and legumes, and aloe vera), seaweeds, and nuts and seeds	10	mg/kg		6	
05.2	Confectionery including hard and soft candy, nougat, etc. other than food categories 05.1, 05.3 and 05.4	15	mg/kg		6	
05.4	Decorations (e.g., for fine bakery wares), toppings (non-fruit) and sweet sauces	15	mg/kg		6	
06.3	Breakfast cereals, including rolled oats	15	mg/kg		6	Adopt 15 mg/kg
06.3	Breakfast cereals, including rolled oats	50	mg/kg		3	
06.4.2	Dried pastas and noodles and like products	15	mg/kg		6	Justification Used in foods in category 06.4.2
06.4.3	Pre-cooked pastas and noodles and like products	15	mg/kg	Note 153	6	
06.5	Cereal and starch based desserts (e.g., rice pudding, tapioca pudding)	15	mg/kg		6	
07.0	Bakery wares	15	mg/kg		6	
08.3.1.1	Cured (including salted) non-heat treated processed comminuted meat, poultry, and game products	100	mg/kg	Note 118 ²⁶		
09.2.1	Frozen fish, fish fillets, and fish products, including mollusks, crustaceans, and echinoderms	35	mg/kg	Note 95	6	
09.2.4.1	Cooked fish and fish products	100	mg/kg		6	Justification Needed to correct / improve / enhance the colour of tomato based sauce used in products that will not affect the fish-meat colour in a high temperature process
09.2.5	Smoked, dried, fermented, and/or salted fish and fish products, including mollusks, crustaceans, and echinoderms	15	mg/kg	Note 22	6	
09.3.3	Salmon substitutes, caviar, and other fish roe products	15	mg/kg		6	
09.4	Fully preserved, including canned or fermented fish and fish products, including mollusks, crustaceans, and echinoderms	15	mg/kg		6	
10.4	Egg-based desserts (e.g., custard)	15	mg/kg		6	
11.3	Sugar solutions and syrups, also (partially) inverted, including treacle and molasses, excluding products of food category 11.1.3	15	mg/kg		6	Comment: No technological need. Such use is already permitted in 11.4
11.4	Other sugars and syrups (e.g., xylose, maple syrup, sugar toppings)	15	mg/kg		6	

²⁶ **Note 118:** Except for use in tocino (fresh, cured sausage) at 1 000 mg/kg.

Recommendation 1 -- Canthaxanthin, INS 161g						
The eWG to the 40 th CCFA recommended the adoption of the following food additive provisions for canthaxanthin in the GSFA.						
Food Cat No.	Food Category	Max Level		Comments	Step	Justification/Comments
12.2.2	Seasonings and condiments	20	mg/kg		6	
12.5.2	Mixes for soups and broths	30	mg/kg	Note 127	6	
12.6	Sauces and like products	100	mg/kg		6	
14.1.4.2	Non-carbonated water-based flavoured drinks, including punches and ades	5	mg/kg		6	Justification Canthaxanthin is in limited use in some juice drinks since it provides a different shade in the spectrum yellow-orange-red that is usually quite different from other carotenes. We believe that 5 mg/kg represents the current use levels in some juice drinks
14.1.4.3	Concentrates (liquid or solid) for water-based flavoured drinks	5	mg/kg	Note 127	6	Justification 1) Colour to improve organoleptic properties of food 2) Max limit in Brazil, Argentina, Uruguay and Paraguay legislation is 35 mg/kg. Used to stabilize nature identical colour
14.2.6	Distilled spirituous beverages containing more than 15% alcohol	5	mg/kg		6	Justification Stable colourant for alcoholic beverages
14.2.7	Aromatized alcoholic beverages (e.g., beer, wine and spirituous cooler-type beverages, low alcoholic refreshers)	5	mg/kg		3	
15.1	Snacks - potato, cereal, flour or starch based (from roots and tubers, pulses and legumes)	45	mg/kg		6	Justification Stable, nature-identical colour
16.0	Composite foods - foods that could not be placed in categories 01 - 15	80	mg/kg	Note 2	6	

Recommendation 2 — Canthaxanthin, INS 161g						
The eWG of the 40 th CCFA recommended further discussion of the following food additive provision for canthaxanthin in the GSFA.						
Food Cat No.	Food Category	Max Level		Comments	Step	Justification /Comments
05.3	Chewing gum	15	mg/kg		6	Justification 1) Canthaxanthin, as per other food colours used in chewing gum, belongs to a wide range of colouring agents which allow to adapt the colour to the best taste of consumer 2) Canthaxanthin is not used in a wide range of chewing gum products. Therefore, it is not consumed by a wide range of the population. Assuming a maximum level of use of 30 mg/kg, and a consumption of 3g per day and that during chewing 100% of the contained canthaxanthin is ingested; it would correspond to only 5% of the ADI. 3) Canthaxanthin is assigned a very low ADI and is only permitted for use in french sausage in EC.

GRAPE SKIN EXTRACT (INS 163(ii))

35. The 26th JECFA (1982) assigned an ADI of 2.5 mg/kg bw/d for grape skin extract.

36. The following are the outstanding recommendations of the report of the eWG to the 40th CCFA.

Recommendation 1 – Grape Skin Extracts, INS 163(ii)						
The eWG of the 40 th CCFA recommended discontinuation of further work on the following food additive provisions for grape skin extracts in the GSFA.						
Food Cat No.	Food Category	Max	Level	Comments	Step	Justification/Comment
01.6.1	Unripened cheese	1000	mg/kg		3	Justification No Technological Justification
01.6.2.1	Ripened cheese, includes rind	125	mg/kg		6	Justification No Technological Justification

Recommendation 2 - Grape Skin Extracts, INS 163(ii)						
The eWG of the 40 th CCFA recommended adoption of the following food additive provisions for grape skin extracts in the GSFA.						
Food Cat No.	Food Category	Max Level		Comments	Step	Justification/Comments
01.4	Cream (plain) and the like	1500	mg/kg		3	Justification
01.4.4	Cream analogues	150	mg/kg	Note 181²⁷		Adopt in subcategory 01.4.4 only. Consequential effect is to discontinue provision in broader food category 01.4 1) Colours are used to standardize the colour 2) Used to colour cream-like products; maximum level is enough to achieve the technological need 3) Use in cream/milk substitutes consisting of a vegetable fat-water emulsion that are coloured. 6) Already adopted colours for this category. Comment: 1) Doesn't support in either 01.4 or subcategory 01.4.4; mislead consumer, tech need questioned. 2) Supports maximum use of 150 mg/kg pigment which is needed.
01.5.2	Milk and cream powder analogues	150	mg/kg	Note 181	3	Justification 1) Used as a colour for milk-like products e.g. strawberry milk; maximum level is enough to achieve the technological need 2) Use in Cream/milk substitutes consisting of a vegetable fat-water emulsion that are coloured. 3) Colours are used to standardize the colour. 4) Already adopted colours for this category. Comment: Use may mislead consumer, technological need questioned
03.0	Edible ices, including sherbet and sorbet	1000	mg/kg		3	Adopt 100 mg/kg with Note 181 Justification
03.0	Edible ices, including sherbet and sorbet	100	mg/kg	Note 181	6	1) To provide colour (other colours are permitted) 2) Used for sherbets 3) 200 mg/kg pigment is needed to support the various flavour and types of products. A wide range of colours is equally justified and should be equally permitted Comment: ML high, child of 15 kg bw exceed ADI by consuming 37.5 g of edible ice
04.1.1.2	Surface-treated fresh fruit		GMP	Notes 4 & 16	6	Comment: Colours in fresh foods might be used as adulterants, mislead consumer
04.1.2.4	Canned or bottled (pasteurized) fruit	1500	mg/kg		3	Justification 1) Used to colour bottled fruit; maximum level is enough to achieve the technological need) 2) Fruits discolour during processing and storage. Therefore use as restoration of colour which was destroyed during heat processing.
04.1.2.8	Fruit preparations, including pulp, purees, fruit toppings and coconut milk	500	mg/kg	Notes 181 & 182	3	Justification 500 mg/kg pigment is needed to support the various flavour and types of products. A wide range of colours is equally justified and should be equally permitted Comment: Use may mislead consumer

²⁷ **Note 181:** Expressed as anthocyanin.

Recommendation 2 - Grape Skin Extracts, INS 163(ii)						
The eWG of the 40 th CCFA recommended adoption of the following food additive provisions for grape skin extracts in the GSFA.						
Food Cat No.	Food Category	Max Level		Comments	Step	Justification/Comments
04.2.2.3	Vegetables (including mushrooms and fungi, roots and tubers, pulses and legumes, and aloe vera) and seaweeds in vinegar, oil, brine, or soy sauce	100	mg/kg	Note 181	6	Justification To provide colour (other colours are permitted) Comment: Use may mislead consumer
04.2.2.5	Vegetable (including mushrooms and fungi, roots and tubers, pulses and legumes, and aloe vera), seaweed, and nut and seed purees and spreads (e.g., peanut butter)	100	mg/kg	Note 181	3	Justification 1) Used for vegetable purees. 2) To provide colour (other colours are permitted) 3) To improve organoleptic properties of food Comment: Use may mislead consumer
04.2.2.6	Vegetable (including mushrooms and fungi, roots and tubers, pulses and legumes, and aloe vera), seaweed, and nut and seed pulps and preparations (e.g., vegetable desserts and sauces, candied vegetables) other than food category 04.2.2.5	100	mg/kg	Notes 92 & 181	3	Justification 1) Used in vegetable origin desserts and sweet pickled vegetables. 2) To provide colour (other colours are permitted) 3) To improve organoleptic properties of food Comment: Excluding tomato-based sauces
05.2	Confectionery including hard and soft candy, nougat, etc. other than food categories 05.1, 05.3 and 05.4	500	mg/kg	Note 181	3	Justification Colour supports the various flavour and types of products. A wide range of colours is equally justified and should be equally permitted.
06.3	Breakfast cereals, including rolled oats	200	mg/kg		6	Justification 1) Used to colour breakfast cereals; maximum level is enough to achieve the technological need. 2) Colour supports the various flavour and types of products. A wide range of colours is equally justified and should be equally. 3) Support for max use of 200 mg/kg pigment. Comment: ADI may be exceeded
06.5	Cereal and starch based desserts (e.g., rice pudding, tapioca pudding)	200	mg/kg	Note 181	3	Comment: ADI may be exceeded
07.0	Bakery wares	1500	mg/kg		3	Justification Adopt in subcategories 07.1.2 and 07.1.4 only. Consequential effect is to discontinue provision in broader food category 07.0 1) Bakery products using coloured grapes are sold; maximum level is enough to achieve the technological need) 2) Colours required for to identify flavour. 07.1.2 – 1) Used for cracker products; maximum level is enough to achieve the technological need. 2) Colours required for to identify flavour. To provide colour. 3) 200 mg/kg pigment is needed 07.1.4 – 1) Used to colour croutons; maximum level is enough to achieve the technological need. 2) Colours required to identify flavour. 3) 200 mg/kg pigment is needed Comment: discontinue 07.0, 07.1.2, and 07.1.4, intake consideration, could exceed ADI
07.1.2	Crackers, excluding sweet crackers	200	mg/kg	Note 181	3	
07.1.4	Bread-type products, including bread stuffing and bread crumbs	200	mg/kg	Note 181	3	
08.1.1	Fresh meat, poultry, and game, whole pieces or cuts	5000	mg/kg	Notes 4 & 16	3	Justification Food category in which use of one or more colours is justified

Recommendation 2 - Grape Skin Extracts, INS 163(ii)						
The eWG of the 40 th CCFA recommended adoption of the following food additive provisions for grape skin extracts in the GSFA.						
Food Cat No.	Food Category	Max Level		Comments	Step	Justification/Comments
						Comment: 1) ML seems high 2) Colours in fresh foods might be used as adulterants, mislead consumer
08.1.2	Fresh meat, poultry, and game, comminuted	1000	mg/kg	Notes 4, 16, & 94 ²⁸	6	Justification Colour required to give a pleasant palatable appearance to a product Comment: Colours in fresh foods might be used as adulterants, mislead consumer
08.2	Processed meat, poultry, and game products in whole pieces or cuts	5000	mg/kg		3	Justification 1) To provide colour (other colours are permitted) 2) To improve organoleptic properties of food Comment: Add Note 16
08.3.1.1	Cured (including salted) non-heat treated processed comminuted meat, poultry, and game products	5000	mg/kg		3	Justification 1) To provide colour (other colours are permitted) 2) To improve organoleptic properties of food Comment: Add Note 16
08.3.1.2	Cured (including salted) and dried non-heat treated processed comminuted meat, poultry, and game products	5000	mg/kg	Note 16	3	Justification Colour required to give a pleasant palatable appearance to a product Comment: Add Note 16
08.3.1.3	Fermented non-heat treated processed comminuted meat, poultry, and game products	5000	mg/kg	Note 16	3	Justification Colour required to give a pleasant palatable appearance to a product Comment: Add Note 16
08.3.2	Heat-treated processed comminuted meat, poultry, and game products	5000	mg/kg	Note 16	3	Justification Colour required to give a pleasant palatable appearance to a product Comment: Add Note 16
08.3.3	Frozen processed comminuted meat, poultry, and game products	5000	mg/kg	Note 16	3	Justification Colour required to give a pleasant palatable appearance to a product Comment: Add Note 16
09.2.2	Frozen battered fish, fish fillets, and fish products, including mollusks, crustaceans, and echinoderms	500	mg/kg	Note 16	3	Justification Potentially used for fish products Comment: Use may mislead consumer
10.1	Fresh eggs	1500	mg/kg	Note 4	3	Justification Food category in which use of one or more colours is justified Comment: Colours in fresh foods might be used as adulterants, and may mislead consumer
14.1.3.2	Vegetable nectar	1500	mg/kg		3	Justification 1) Used for vegetable nectars; maximum level is enough to achieve the technological need 2) Vegetables discolour during processing and storage. Therefore use as restoration of colour which was destroyed during heat processing. 3) Support for max use of 150 mg/kg pigment which is needed 4) If the use is safe and the product is labelled in a truthful and non-misleading manner, this is sufficient

²⁸ **Note 94:** For use in loganiza (fresh, uncured sausage) only.

Recommendation 2 - Grape Skin Extracts, INS 163(ii)						
The eWG of the 40 th CCFA recommended adoption of the following food additive provisions for grape skin extracts in the GSFA.						
Food Cat No.	Food Category	Max Level		Comments	Step	Justification/Comments
						to ensure consumer protection. 5) The US has established safe conditions of use for grape skin extract in still and carbonated drinks and ades, beverage bases, and alcoholic beverages. Comment: No technological need
14.1.3.4	concentrates for vegetable nectar	1500	mg/kg	Note 127	3	Justification 1) Used for vegetable nectar concentrates; maximum level is enough to achieve the technological need. 2) Vegetables discolour during processing and storage. Therefore use as restoration of colour which was destroyed during heat processing. 3) Support for max use of 150 mg/kg pigment which is needed 4) If the use is safe and the product is labelled in a truthful and non-misleading manner, this is sufficient to ensure consumer protection. The US has established safe conditions of use for grape skin extract in still and carbonated drinks and ades, beverage bases, and alcoholic beverages. Comment: No technological need
14.2.1	Beer and malt beverages	300	mg/kg	Note 181	3	
14.2.3.2	Sparkling and semi-sparkling grape wines	1500	mg/kg		3	Justification 1) Used for sparkling grape wines; maximum level is enough to achieve the technological need); 2) Colour is used to provide colour. 3) support for max use of 300 mg/kg pigment which is needed); 4) If the use is safe and the product is labeled in a truthful and non-misleading manner, this is sufficient to ensure consumer protection. The US has established safe conditions of use for grape skin extract in still and carbonated drinks and ades, beverage bases, and alcoholic beverages. 5) In the OIV standard on Oenological Practices, no colours may be used in grape wines (category 14.2.3). Their inclusion in these categories does not seem technologically justified and could mislead consumers. If we consider the proposal listed in CL 2007/28-FA (page14), grape skin extract is considered as an enocyanin, only referenced by the INS number (INS 163ii). Nevertheless, in the wine making process, the grape skin extract is permitted for tannin effect purposes, but not as a colouring agent.
14.2.3.3	Fortified grape wine, grape liquor wine, and sweet grape wine	1500	mg/kg		3	Justification 1) Used for sweet grape wine; maximum level is enough to achieve the technological need 2) Support for max use of 300 mg/kg pigment which is needed); 3) If the use is safe and the product is labelled in a truthful and non-misleading manner, this is sufficient

Recommendation 2 - Grape Skin Extracts, INS 163(ii)						
The eWG of the 40 th CCFA recommended adoption of the following food additive provisions for grape skin extracts in the GSFA.						
Food Cat No.	Food Category	Max Level		Comments	Step	Justification/Comments
						to ensure consumer protection. The US has established safe conditions of use for grape skin extract in still and carbonated drinks and ades, beverage bases, and alcoholic beverages. 4) In the OIV standard on Oenological Practices, no colours may be used in grape wines (category 14.2.3). Their inclusion in these categories does not seem technologically justified and could mislead consumers. If we consider the proposal listed in CL 2007/28-FA (page14), grape skin extract is considered as an enocyanin, only referenced by the INS number (INS 163ii). Nevertheless, in the wine making process, the grape skin extract is permitted for tannin effect purposes, but not as a colouring agent.
14.2.6	Distilled spirituous beverages containing more than 15% alcohol	300	mg/kg	Note 181	3	

Recommendation 3 - Grape Skin Extracts, INS 163(ii)						
The eWG of the 40 th CCFA recommended further discussion of the following food additive provisions for grape skin extract in the GSFA.						
Food Cat No.	Food Category	Max Level		Comments	Step	Justification/Comments
04.1.2.7	Candied fruit	1500	mg/kg		3	Comment ML 1500 mg/kg seems high – consumption by children might exceed ADI
09.2.4.2	Cooked mollusks, crustaceans, and echinoderms	1000	mg/kg		3	Comment 1) ML 1000 mg/kg seems high – consumption by children might exceed 2) Technological need for high ML questioned, (child of 15 kg would exceed ADI by consuming 37 g of mollusc/crustacean)
16.0	Composite foods - foods that could not be placed in categories 01 - 15	1500	mg/kg		3	Comment 1) Used for composite food; maximum level is enough to achieve the technological need. 2) Used for complex food which are not covered by the other categories. 3) Colour used to improve the organoleptic properties of food 4) If provisions are proposed for category 16, the products must be fully defined and the additive uses restricted to these products. In the vast majority of cases products can be covered by other food categories or as composite products (and therefore subject to carry over provisions)
16.0	Composite foods - foods that could not be placed in categories 01 - 15	10	mg/kg		6	

Grape Skin Extracts, INS 163(ii)						
The 41st CCFA agreed to circulate for comment at Step 3 the following food additive provisions for grape skin extracts in the GSFA.						
Food Cat No.	Food Category	Max Level		Comments	Step	Justification
05.1.2	Cocoa mixes (syrups)	200	mg/kg	Note 181	3	Justification 1) Used for cocoa mixtures; maximum level is enough to achieve the technological need 2) Colour supports the various flavour and types of products. A wide range of colours is equally justified and should be equally permitted. 3) Support for max use of 200 mg/kg pigment.

Grape Skin Extracts, INS 163(ii)						
The 41st CCFA agreed to circulate for comment at Step 3 the following food additive provisions for grape skin extracts in the GSFA.						
Food Cat No.	Food Category	Max Level		Comments	Step	Justification
						Comment: Use may mislead consumer
05.1.3	Cocoa-based spreads, incl. fillings	200	mg/kg	Note 181	3	Justification 1) Used for fillings; maximum level is enough to achieve the technological need 2) Colour supports the various flavour and types of products. A wide range of colours is equally justified and should be equally permitted. 3) Support for max use of 200 mg/kg pigment. Comment: Use may mislead consumer
05.1.4	Cocoa and chocolate products	200	mg/kg	Note 181 & 183	3	Justification 1) Used for chocolate products; maximum level is enough to achieve the technological need 2) Colour supports the various flavour and types of products. A wide range of colours is equally justified and should be equally permitted. 3) Support for max use of 200 mg/kg pigment. 4) The current eWG recommendation is to adopt 500 mg/kg for Category 5.2 (Hard and Soft Candy, Marzipan and Nougats). The candies under 5.2 would fall into category 5.1.4 when covered with chocolate. Examples of these products include chocolate covered mints (e.g. Dark Chocolate Covered Altoids), chocolate covered gummy bears, chocolate covered marzipan, chocolate covered nougat, etc. Therefore, the same use level of grape skin extract that is allowed in 5.2 should be permitted for candies under 5.1.4 Cocoa and Chocolate. Comments: 1) Use may mislead consumer. 2) Inconsistencies between non-standardized chocolate product among 05.1.4 & 05.2, 05.4 - recommends CCFA ensure provisions for use of colour additive in non-standardized chocolate products are consistent with approach for use of colours in other confections without compromising colour limitations in Codex Standard for Chocolate and chocolate products. 3) Request that no actions be taken to limit level of colours in 5.1.4 or create disparity with 5.2 but also do not effect chocolate meeting Codex Standard 87.
15.3	Snacks - fish based	500	mg/kg		3	Justification 1) Used to colour snacks; maximum level is enough to achieve the technological need. 2) Us to restore colour which was destroyed during production.

IRON OXIDES (INS 172(i), 172(ii), 172(iii))

37. The 28th CAC has adopted several provisions in the GSFA for the use of iron oxides.

38. The 23rd JECFA (1979) assigned an ADI of 0.5 mg/kg bw/d for iron oxides (172(i), 172(ii), 172(iii)).

39. The 30th CCFA requested that JECFA perform intake assessments for iron oxides based on the pending levels of use in the GSFA and national food consumption data. The 53rd JECFA (1999) concluded that it is unlikely that intake of iron oxides would exceed the ADI of 0-0.5 mg/kg bw.

The following are the outstanding recommendations of the report of the eWG to the 40th CCFA.

Recommendation 1 - Iron Oxides, INS 172(i), 172(ii), 172(iii)						
The eWG of the 40 th CCFA recommended the adoption the following food additive provisions for iron oxides in the GSFA.						
Food Cat No.	Food Category	Max Level		Comments	Step	Justification/Comments
01.6.1	Unripened cheese		GMP		6	Justification Codex Stan 221 contains provisions for other colours Comment:

Recommendation 1 - Iron Oxides, INS 172(i), 172(ii), 172(iii)						
The eWG of the 40 th CCFA recommended the adoption the following food additive provisions for iron oxides in the GSFA.						
Food Cat No.	Food Category	Max Level		Comments	Step	Justification/Comments
						Rind not expected on unripened cheese, intake concerns.
04.2.2.6	Vegetable (including mushrooms and fungi, roots and tubers, pulses and legumes, and aloe vera), seaweed, and nut and seed pulps and preparations (e.g., vegetable desserts and sauces, candied vegetables) other than food category 04.2.2.5	300	mg/kg	Note 92	6	Justification To improve organoleptic properties of food Comment: Excluding tomato-based sauce
09.3.4	Semi-preserved fish and fish products, including mollusks, crustaceans, and echinoderms (e.g., fish paste), excluding products of food categories 09.3.1 - 09.3.3	50	mg/kg		3	Comment: Add Note 95
09.4	Fully preserved, including canned or fermented fish and fish products, including mollusks, crustaceans, and echinoderms	50	mg/kg		6	Comment: Add Note 95
14.1.3.2	Vegetable nectar	100	mg/kg		6	Justification To improve organoleptic properties of food Comment: No technological need/justification. These are similar to fruit nectars, in which colours are not justified
14.1.3.4	Concentrates for vegetable nectar	100	mg/kg	Note 127	6	Justification To improve organoleptic properties of food Comment No technological need/justification. These are similar to fruit nectars, in which colours are not justified

Recommendation 2 - Iron Oxides, INS 172(i), 172(ii), 172(iii)						
The eWG of the 40 th CCFA recommended further discussion of the following food additive provisions for iron oxides in the GSFA.						
Food Cat No.	Food Category	Max Level		Comments	Step	Justification/Comments
05.1.3	Cocoa-based spreads, including fillings		GMP		6	Justification 1) Food category in which use of one or more colours is justified 2) Provision requires a numeric level of use instead of level consistent with good manufacturing practice (GMP), because of a numerical ADI Comment Additional information; numerical level needed to achieve technological effect and justification
10.4	Egg-based desserts (e.g., custard)		GMP		6	Justification 1) To provide colour (other colours are permitted) 2) Provision requires a numeric level of use instead of level consistent with good manufacturing practice (GMP), because of a numerical ADI for this group of colours. 3) suggest ML of 150 mg/kg Comment Additional information; numerical level needed to achieve technological effect and justification
12.4	Mustards		GMP		6	Justification

Recommendation 2 - Iron Oxides, INS 172(i), 172(ii), 172(iii)						
The eWG of the 40 th CCFA recommended further discussion of the following food additive provisions for iron oxides in the GSFA.						
Food Cat No.	Food Category	Max Level		Comments	Step	Justification/Comments
12.7	Salads (e.g., macaroni salad, potato salad) and sandwich spreads excluding cocoa- and nut-based spreads of food categories 04.2.2.5 and 05.1.3		GMP		6	1) To provide colour (other colours are permitted). 2) To improve organoleptic properties of food Comment Provision requires a numeric level of use instead of level consistent with good manufacturing practice (GMP), because of a numerical ADI for this group of colours.
13.3	Dietetic foods intended for special medical purposes (excluding products of food category 13.1)		GMP		6	Justification To provide colour (other colours are permitted). Comment Provision requires a numeric level of use instead of level consistent with good manufacturing practice (GMP), because of a numerical ADI for this group of colours.
13.4	Dietetic formulae for slimming purposes and weight reduction		GMP		6	
13.5	Dietetic foods (e.g., supplementary foods for dietary use) excluding products of food categories 13.1 - 13.4 and 13.6		GMP		6	

PART II – MISCELLANEOUS

GENERAL CONSIDERATIONS

40. Outstanding recommendations for provisions for the use of food additives include the following:

INS	Food additive	INS	Food Additive
200 – 203	Sorbates	459	<i>beta</i> -Cyclodextrin
214, 218	<i>para</i> -Hydroxybenzoates	474	Sucroglycerides
234	Nisin	484	Stearyl citrate
304, 305	Ascorbyl esters	952(i), (ii), (iv)	Cyclamates
310	Propyl gallate	954(i)-(iv)	Saccharins
338, 339i-iii, 340i-iii, 341i-iii, 342i-ii, 343i-ii, 450i-iii, 450v-vii, 451i-ii, 452i-v, 542	Phosphates	955	Sucralose (Trichlorogalactosucrose)
442	Ammonium salts of phosphatidic acid	962	Aspartame-acesulfame salt

SORBATES (INS 200-203)

41. The 29th JECFA (1985) assigned a group ADI of 25 mg/kg bw for sorbates.

42. The Codex Class Names and International Numbering System for Food Additives (CAC/GL 36-1989) associates the technological purpose preservative with sorbates.

Recommendation 1 – Sorbates, INS 200-203						
The eWG for the 41 st CCFA recommended discontinuation of the following food additive provisions for sorbates in the GSFA.						
Food Cat No.	Food Category	Max Level		Comments	Step	Justification/Comments
04.1.2.4	Canned or bottled (pasteurized) fruit	1,000	mg/kg	Note 42 ²⁹	6	Justification Canned fruit is already preserved (no technological need)
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	1,000	mg/kg	Note 42	6	Justification Canned product is already preserved Comment Sorbates are needed in some products (e.g., pickled peppers)

Recommendation 2 – Sorbates, INS 200-203						
The eWG of the 41 st CCFA recommended adoption of the following food additive provisions for sorbates in the GSFA.						
Food Cat No.	Food Category	Max Level		Comments	Step	Justification/Comments
01.1.2	Dairy-based drinks, flavoured and/or fermented (e.g., chocolate milk, cocoa, eggnog, drinking yoghurt, whey-based drinks)	300	mg/kg	Note 42	6	

²⁹ **Note 42:** As sorbic acid.

Recommendation 2 – Sorbates, INS 200-203						
The eWG of the 41 st CCFA recommended adoption of the following food additive provisions for sorbates in the GSFA.						
Food Cat No.	Food Category	Max Level		Comments	Step	Justification/Comments
01.2.1	Fermented milks (plain)	300	mg/kg	Note 42	6	Comment Codex Stan 243-2003 does not allow for the use of preservatives in plain fermented milks.
01.2.2	Renneted milk (plain)	1,000	mg/kg	Note 42	6	
02.4	Fat-based desserts excluding dairy-based dessert products of food category 01.7	1,000	mg/kg	Note 42	6	
03.0	Edible ices, including sherbet and sorbet	1,000	mg/kg	Note 42	6	Comment No need of preservatives in frozen technology
04.1.2.1	Frozen Fruit	1,000	mg/kg	Note 42	6	Comment 1) Freezing provides adequate preservation, no need for chemical preservatives
04.1.2.7	Candied fruit	1,000	mg/kg	Note 42	6	Justification Used in glazed fruit to top Gammon and in cake mix.
04.1.2.9	Fruit-based desserts, including fruit-flavoured waterbased desserts	1,000	mg/kg	Note 42	6	
04.2.2.7	Fermented vegetable (including mushrooms and fungi, roots and tubers, pulses and legumes, and aloe vera) and seaweed products, excluding fermented soybean products of food categories 06.8.6, 06.8.7, 12.9.1, 12.9.2.1 and 12.9.2.3	1,000	mg/kg	Note 42	6	Comment Industry in Canada has indicated a technological need for use of sorbates in this Category at 1000 mg/kg
04.2.2.8	Cooked or fried vegetables (including mushrooms and fungi, roots and tubers, pulses and legumes, and aloe vera), and seaweeds	2,000	mg/kg	Note 42	6	Comment Use should only be in potato dough and pre-fried potato slices
05.1.1	Cocoa mixes (powders) and cocoa mass/cake	1,500	mg/kg	Note 42	6	
05.1.2	Cocoa mixes (syrops)	1,000	mg/kg	Note 42	6	
05.1.3	Cocoa-based spreads, including fillings	1,500	mg/kg	Note 42	6	
05.4	Decorations (e.g., for fine bakery wares), toppings (non-fruit) and sweet sauces	1,000	mg/kg	Note 42	6	Comment Recommend a level of 1,500 mg/kg. Micro stability of low acid toppings is not achieved at 1,000 mg/kg.
06.2	Flours and starches (including soybean powder)	1,000	mg/kg	Note 42	6	Comment No technological justification, use .level would result in high intake in a basic foodstuff
06.5	Cereal and starch based desserts (e.g., rice pudding, tapioca pudding)	1,000	mg/kg	Note 42	6	
08.4	Edible casings (e.g., sausage casings)	GMP		Note 42	6	Justification For use in collagen based casings with a water activity greater than 0.6
13.6	Food supplements	2,000	mg/kg	Note 42	6	Comment Only support for use in food supplements supplied in liquid form
14.1.2.2	Vegetable juice	1,000	mg/kg	Note 42	6	Justification Adopt based on corresponding levels established for fruit juices and nectars; add notes 91 and 122 for consistency with notes for fruit juices and nectars.
14.1.2.4	Concentrates for vegetable juice	1,000	mg/kg	Note 42	6	Justification Adopt based on corresponding levels established for fruit juices and nectars; add notes 91, 122 and 127 for consistency with notes for fruit juices and nectars.

Recommendation 2 – Sorbates, INS 200-203						
The eWG of the 41 st CCFA recommended adoption of the following food additive provisions for sorbates in the GSFA.						
Food Cat No.	Food Category	Max Level		Comments	Step	Justification/Comments
14.1.3.2	Vegetable nectar	1,000	mg/kg	Note 42	6	Justification Adopt based on corresponding levels established for fruit juices and nectars; add notes 91 and 122 for consistency with notes for fruit juices and nectars
14.1.3.4	Concentrates for vegetable nectar	1,000	mg/kg	Note 42	6	Justification Adopt based on corresponding levels established for fruit juices and nectars; add notes 91, 122 and 127 for consistency with notes for fruit juices and nectars.
14.2.6	Distilled spirituous beverages containing more than 15% alcohol	600	mg/kg	Note 42	6	

Recommendation 3 – Sorbates, INS 200-203						
The eWG of the 41 st CCFA recommended further discussion of the following food additive provisions for sorbates in the GSFA.						
Food Cat No.	Food Category	Max Level		Comments	Step	Justification/Comments
01.1.1	Milk and buttermilk (plain)	1,000	mg/kg	Note 42	6	Comments Not necessary in basic products such as these, other physical preservation methods are adequate (e.g. pasteurisation, UHT)
01.6.1	Unripened cheese	3,000	mg/kg	Note 42	6	Comment 1) Industry in Canada has indicated a technological need for sorbates at 3000 mg/kg. However, in the Codex Standard 221-2001, for Unripened Cheese including Fresh Cheese there is a provision for 1000 mg/k 2) Support use level of 3,000 mg/kg which is needed to prevent mould growth.
01.6.2	Ripened cheese	3,000	mg/kg	Note 42	6	Comment 1) Industry in Canada has indicated a technological need for sorbates at 3000 mg/kg. However, in the Codex Standard A-6-1978, amended in 2006, Cheese, there is a provision for 1000 mg/kg 2) suggest adding Note 3: surface treatment only 3) ML is 1000 mg/kg in CODEX STAN 283
01.6.4	Processed cheese	3,000	mg/kg	Note 42	6	Comment 1) Consistent with the Codex Standard A-8(b)-1978 for Processed Cheese, also in Canada industry has indicated a technological need for sorbates at this level of use. 2) ML 3,000 mg/kg is necessary as anti-moulding agent for higher pH products
01.6.5	Cheese analogues	3,000	mg/kg	Note 42	6	Comment Add note "surface treatment only"

Recommendation 3 – Sorbates, INS 200-203						
The eWG of the 41 st CCFA recommended further discussion of the following food additive provisions for sorbates in the GSFA.						
Food Cat No.	Food Category	Max Level		Comments	Step	Justification/Comments
01.7	Dairy-based desserts (e.g., pudding, fruit or flavoured yoghurt)	1,000	mg/kg	Note 42	6	Comments 1) Not necessary in heat treated products as the heat treatment provides adequate preservation. Add note "Only for non-heat treated dairy based desserts" 2) ML 1000 mg/kg necessary in dairy based desserts independent of heat treatment; suggest adding a note: "use only allowed in heat treated flavoured fermented milk" (STAN 243)
04.1.2.2	Dried fruit	2,000	mg/kg	Note 42	6	Comment 1) ML seems high. A ML of 1000 mg/kg seems sufficient to achieve the technological function 2) Necessary in rehydrated/soft fruit, but not in standard fruit
04.1.2.5	Jams, jellies, marmelades	1,000	mg/kg	Note 42	6	Comment 1) In the past, industry in Canada has indicated a technological need for use of sorbates in this Category at 1000 mg/kg 2) Add note "only in low-sugar jams" 3) Used at ML of 1000 mg/kg in all jams.
04.1.2.8	Fruit preparations, including pulp, purees, fruit toppings and coconut milk	1,500	mg/kg	Note 42	6	Comment 1) ML seems high. A ML of 1000 mg/kg sufficient to achieve the technological function 2) This additive functions as preservative and the level is necessary to achieve the intended technical need.
04.2.2.3	Vegetables (including mushrooms and fungi, roots and tubers, pulses and legumes, and aloe vera), and seaweeds in vinegar, oil, brine, or soybean sauce	2,000	mg/kg	Note 42	6	Comment Industry in Canada has indicated a technological need for use of sorbates in this Category at 1000 mg/kg
04.2.2.5	Vegetable (including mushrooms and fungi, roots and tubers, pulses and legumes, and aloe vera), seaweed, and nut and seed purees and spreads (e.g., peanut butter)	2,000	mg/kg	Note 42	6	Comment Industry in Canada has indicated a technological need for use of sorbates in this Category at 1000 mg/kg
04.2.2.6	Vegetable (including mushrooms and fungi, roots and tubers, pulses and legumes, and aloe vera), seaweed, and nut and seed pulps and preparations (e.g., vegetable desserts and sauces, candied vegetables) other than food category 04.2.2.5	2,000	mg/kg	Note 42	6	Comment Industry in Canada has indicated a technological need for use of sorbates in this Category at 1000 mg/kg
05.1.4	Cocoa and chocolate products	1,000	mg/kg	Note 42	6	Comment Sorbates are not allowed in standardized cocoa or chocolate products (as per the Codex Standard)
05.2	Confectionery including hard and soft candy, nougats, etc. other than food categories 05.1, 05.3 and 05.4	2,000	mg/kg	Note 42	6	Comment 1) ML seems high. A ML of 1500 mg/kg seems sufficient to achieve the technological function 2) 1500 mg/kg is required for technical application in products
06.4.2	Dried pastas and noodles and like products	2,000	mg/kg	Note 42	6	Justification Consistent with Codex Standard for Noodles Comment No additives are necessary in dried pasta

Recommendation 3 – Sorbates, INS 200-203						
The eWG of the 41 st CCFA recommended further discussion of the following food additive provisions for sorbates in the GSFA.						
Food Cat No.	Food Category	Max Level		Comments	Step	Justification/Comments
06.4.3	Pre-cooked pastas and noodles and like products	2,000	mg/kg	Note 42	6	Justification Consistent with Codex Standard for Noodles Comment Add note "only in noodles"
07.0	Bakery wares	2,000	mg/kg	Note 42	6	Comment 1) industry in Canada has indicated a technological need for use of sorbates in this Category at 1000 mg/kg 2) Add note "Only pre-packed sliced bread and rye bread and partially cooked bakery wares and energy reduced bakery wares"
08.2	Processed meat, poultry, and game products in whole pieces or cuts	2,000	mg/kg	Note 42	6	Comment 1) Add note "for surface treatment of dried meat products" 2) Used in Biltong snapsticks
08.3	Processed comminuted meat, poultry, and game products	2,000	mg/kg	Note 42	6	Comment Add note "for surface treatment of dried meat products"
09.2.5	Smoked, dried, fermented, and/or salted fish and fish products, including mollusks, crustaceans, and echinoderms	2,000	mg/kg	Note 42	6	Comment Industry in Canada has indicated a technological need for use of sorbates in this Category at 1000 mg/kg
09.3	Semi-preserved fish and fish products, including mollusks, crustaceans, and echinoderms	2,000	mg/kg	Note 42	6	Comment Industry in Canada has indicated a technological need for use of sorbates in this Category at 1000 mg/kg
11.6	Table-top sweeteners, including those containing high-intensity sweeteners	1,000	mg/kg	Note 42	6	Comment Add note "liquid products only"
12.4	Mustards	1,500	mg/kg	Note 42	6	Comment 1) ML seems high. A ML of 1000 mg/kg seems sufficient to achieve the technological function 2) Technological purpose questioned
12.5	Soups and broths	1,500	mg/kg	Note 42	6	Comment 1) Codex Standard for Bouillons and Consommés allows maximum 500 mg/kg 2) ML seems high. A ML of 500 mg/kg seems sufficient to achieve the technological function
12.6.1	Emulsified sauces (e.g., mayonnaise, salad dressing)	3,350	mg/kg	Note 42	6	Comment 1) Industry in Canada has indicated a technological need for use of sorbates in this Category at 3,350 mg/kg 2) ML seems high. A ML of 2000 mg/kg seems sufficient to achieve the technological function 3) Used in Snoek pate at 3350 mg/kg
12.6.2	Non-emulsified sauces (e.g., ketchup, cheese sauce, cream sauce, brown gravy)	2,000	mg/kg	Note 42	6	Comment 1) ML seems high. A ML of 1000 mg/kg seems sufficient to achieve the technological function 2) The Additive functions as a preservative and the maximum use level of 1000mg/kg is safe and necessary to achieve the intended purpose.

Recommendation 3 – Sorbates, INS 200-203						
The eWG of the 41 st CCFA recommended further discussion of the following food additive provisions for sorbates in the GSFA.						
Food Cat No.	Food Category	Max Level		Comments	Step	Justification/Comments
12.6.3	Mixes for sauces and gravies	2,000	mg/kg	Note 42	6	Comment ML seems high. A ML of 1000 mg/kg seems sufficient to achieve the technological function
12.6.4	Clear sauces (e.g., fish sauce)	2,000	mg/kg	Note 42	6	Comment 1) ML seems high. A ML of 1000 mg/kg seems sufficient to achieve the technological function 2) The Additive functions as a preservative and the maximum use level of 1000 mg/kg is safe and necessary to achieve the intended purpose.
13.5	Dietetic foods (e.g., supplementary foods for dietary use) excluding products of food categories 13.1 - 13.4 and 13.6	2,000	mg/kg	Note 42	6	ML seems high. A ML of 1500 mg/kg seems sufficient to achieve the technological function
14.1.4.1	Carbonated water-based flavoured drinks	1,000	mg/kg	Note 42	6	Comment 1) Industry in Canada has indicated a technological need for use of sorbates in this Category at 1000 mg/kg 2) ML seems high. A ML of 300 mg/kg sufficient to achieve the technological function 3) Suggest collapsing the subcategories into 14.1.4. Although 1000 mg/kg is permitted in some countries, the current use levels typically do not exceed 500 mg/kg as sorbic acid due to inadequate solubility and sensory concerns at higher use levels.
14.1.4.2	Non-carbonated water-based flavoured drinks, including punches and ades	1,000	mg/kg	Note 42	6	Comment 1) Industry in Canada has indicated a technological need for use of sorbates in this Category at 1000 mg/kg 2) ML seems high. A ML of 300 mg/kg sufficient to achieve the technological function 3) Collapse into 14.1.4
14.1.4.3	Concentrates (liquid or solid) for water-based flavoured drinks	1,500	mg/kg	Note 42	6	Comment 1) ML seems high. A ML of 300 mg/kg sufficient to achieve the technological function, add note 127. 2) Collapse into 14.1.4. If CCFA decides to continue to maintain the subcategories, we suggest including Note 127 (As served to the consumer) in 14.1.4.3.
14.1.5	Coffee, coffee substitutes, tea, herbal infusions, and other hot cereal and grain beverages, excluding cocoa	1,000	mg/kg	Note 42	6	Comment 1) Set ML to 600 mg/kg. Add note "Only in liquid tea concentrates and liquid fruit and herbal infusion concentrates" 2) Set ML to 500 mg/kg due to solubility concerns at higher use levels. 3) Add Note 160 (For use in ready-to-drink products and premixes for ready-to-drink products only)

Recommendation 3 – Sorbates, INS 200-203						
The eWG of the 41 st CCFA recommended further discussion of the following food additive provisions for sorbates in the GSFA.						
Food Cat No.	Food Category	Max Level		Comments	Step	Justification/Comments
14.2.2	Cider and perry	1,000	mg/kg	Note 42	6	Comment 1) Industry in Canada has indicated that 500 mg/kg is technologically sufficient for these foods 2) ML seems high. A ML of 300 mg/kg sufficient to achieve the technological function
14.2.3	Grape wines	2,000	mg/kg	Note 42	6	Comment 1) Industry in Canada has indicated that 500 mg/kg is technologically sufficient for these foods 2) ML seems high. A ML of 200 mg/kg sufficient to achieve the technological function
14.2.4	Wines (other than grape)	1,000	mg/kg	Note 42	6	Comment 1) Industry in Canada has indicated that 500 mg/kg is technologically sufficient for these foods 2) 200 mg/kg adequate for tech need
14.2.5	Mead	1,000	mg/kg	Note 42	6	Comment ML seems high. A ML of 200 mg/kg seems sufficient to achieve the technological function
14.2.7	Aromatized alcoholic beverages (e.g., beer, wine and spirituous cooler-type beverages, low alcoholic refreshers)	500	mg/kg	Note 42	6	Comment 1) Industry in Canada has indicated a technological need for use of sorbates in this Category at 500 mg/kg 2) Level of 200 mg/kg adequate

Sorbates, INS 200-203						
The following provisions were included in the GSFA at Step 3 by the 41 st CCFA.						
Food Cat No.	Food Category	Max Level		Comments	Step	Justification provided
12.9.1	Fermented soybean paste (e.g., miso)	1,000	mg/kg	Note 42	3	To prevent development of expansion gas due to re-fermentation by yeast that may damage a package
12.9.2.1	Fermented soybean sauce	1,000	mg/kg	Note 42	3	Proposed use level to function as a preservative
12.9.2.3	Other soybean sauces	1,000	mg/kg	Note 42	3	Proposed use level to function as a preservative

HYDROXYBENZOATES, PARA- (INS 214, 218)

43. The 17th JECFA (1973) assigned a group ADI of 10 mg/kg bw for para-hydroxybenzoates.

44. The Codex Class Names and International Numbering System for Food Additives (CAC/GL 36-1989) associates the technological purpose preservative with para-hydroxybenzoates.

Recommendation 1 – Hydroxybenzoates, para-, INS 214, 218						
The eWG of the 41 st CCFA recommended discontinuation of the following food additive provisions for para-hydroxybenzoates in the GSFA.						
Food Cat No.	Food Category	Max Level		Comments	Step	Justification/Comment
04.1.1.2	Surface-treated fresh fruit	12	mg/kg	Note 27 ³⁰	6	
13.6	Food supplements	2000	mg/kg	Note 27	3	

Recommendation 2 – Hydroxybenzoates, para-, INS 214, 218						
The eWG of the 41 st CCFA recommended adoption of the following food additive provisions for para-hydroxybenzoates in the GSFA.						
Food Cat No.	Food Category	Max Level		Comments	Step	Justification/Comment
01.6.4	Processed cheese	300	mg/kg	Note 27	6	

³⁰ **Note 27:** As para-hydroxybenzoic acid.

Recommendation 2 – Hydroxybenzoates, para-, INS 214, 218						
The eWG of the 41 st CCFA recommended adoption of the following food additive provisions for para-hydroxybenzoates in the GSFA.						
Food Cat No.	Food Category	Max Level		Comments	Step	Justification/Comment
01.7	Dairy-based desserts (e.g., pudding, fruit or flavoured yoghurt)	120	mg/kg	Note 27	6	Comment Only allowed in flavoured fermented milks heat treated after fermentation per CODEX STAN 243.
02.2.2	Fat spreads, dairy fat spreads and blended spreads	300	mg/kg	Note 27	6	
02.3	Fat emulsions mainly of type oil-in-water, including mixed and/or flavoured products based on fat emulsions	300	mg/kg	Note 27	6	
03.0	Edible ices, including sherbet and sorbet	1000	mg/kg	Note 27	6	Comment No need of preservatives and antioxidants in frozen technology.
04.1.2.2	Dried fruit	800	mg/kg	Note 27	6	
04.1.2.3	Fruit in vinegar, oil, or brine	800	mg/kg	Note 27	6	
04.1.2.6	Fruit-based spreads (e.g., chutney) excluding products of food category 04.1.2.5	1000	mg/kg	Note 27	6	
04.1.2.7	Candied fruit	1000	mg/kg	Note 27	6	
04.1.2.8	Fruit preparations, including pulp, purees, fruit toppings and coconut milk	800	mg/kg	Note 27	6	
04.1.2.9	Fruit-based desserts, including fruit-flavoured water-based desserts	800	mg/kg	Note 27	6	
04.1.2.10	Fermented fruit products	800	mg/kg	Note 27	6	
04.1.2.11	Fruit fillings for pastries	800	mg/kg	Note 27	6	
04.2.1.2	Surface-treated fresh vegetables (including mushrooms and fungi, roots and tubers, pulses and legumes, and aloe vera), seaweeds, and nuts and seeds	12	mg/kg	Note 27	6	Comment Request technological need, seems too low for efficacy
04.2.1.3	Peeled, cut or shredded fresh vegetables (including mushrooms and fungi, roots and tubers, pulses and legumes, and aloe vera), seaweeds, and nuts and seeds	12	mg/kg	Note 27	6	Comment Request technological need, seems too low for efficacy
04.2.2.3	Vegetables (including mushrooms and fungi, roots and tubers, pulses and legumes, and aloe vera), and seaweeds in vinegar, oil, brine, or soybean sauce	1000	mg/kg	Note 27	6	
04.2.2.5	Vegetable (including mushrooms and fungi, roots and tubers, pulses and legumes, and aloe vera), seaweed, and nut and seed purees and spreads (e.g., peanut butter)	1000	mg/kg	Note 27	6	
04.2.2.6	Vegetable (including mushrooms and fungi, roots and tubers, pulses and legumes, and aloe vera), seaweed, and nut and seed pulps and preparations (e.g., vegetable desserts and sauces, candied vegetables) other than food category 04.2.2.5	1000	mg/kg	Note 27	6	
04.2.2.7	Fermented vegetable (including mushrooms and fungi, roots and tubers, pulses and legumes, and aloe vera) and seaweed products, excluding fermented soybean products of food categories 06.8.6, 06.8.7, 12.9.1, 12.9.2.1 and 12.9.2.3	300	mg/kg	Note 27	6	
05.1.1	Cocoa mixes (powders) and cocoa mass/cake	700	mg/kg	Note 27	6	
05.1.3	Cocoa-based spreads, including fillings	300	mg/kg	Note 27	6	

Recommendation 2 – Hydroxybenzoates, para-, INS 214, 218						
The eWG of the 41 st CCFA recommended adoption of the following food additive provisions for para-hydroxybenzoates in the GSFA.						
Food Cat No.	Food Category	Max Level		Comments	Step	Justification/Comment
05.2	Confectionery including hard and soft candy, nougats, etc. other than food categories 05.1, 05.3 and 05.4	1000	mg/kg	Note 27	6	Comment 1000 mg/kg is sufficient for technical application in products
05.4	Decorations (e.g., for fine bakery wares), toppings (non-fruit) and sweet sauces	300	mg/kg	Note 27	6	
07.2	Fine bakery wares (sweet, salty, savoury) and mixes	300	mg/kg	Note 27	6	
08.2.1.2	Cured (including salted) and dried non-heat treated processed meat, poultry, and game products in whole pieces or cuts		GMP	Notes 3 ³¹ & 27	6	
08.3.1.2	Cured (including salted) and dried non-heat treated processed comminuted meat, poultry, and game products		GMP	Notes 3 & 27	6	
08.4	Edible casings (e.g., sausage casings)	36	mg/kg	Note 27	6	
09.3	Semi-preserved fish and fish products, including mollusks, crustaceans, and echinoderms	1000	mg/kg	Note 27	6	
11.4	Other sugars and syrups (e.g., xylose, maple syrup, sugar toppings)	100	mg/kg	Note 27	6	
12.3	Vinegars	100	mg/kg	Note 27	6	Comment Preservative not required in products with minimum 5% acetic acid.
12.4	Mustards	300	mg/kg	Note 27	6	
12.6	Sauces and like products	1000	mg/kg	Note 27	6	
14.1.4	Water-based flavoured drinks, including "sport," "energy," or "electrolyte" drinks and particulated drinks	500	mg/kg	Note 27	6	Comment While p-hydroxybenzoates are permitted for use at 1000 mg/kg in some countries, they are rarely used in acidic water-based flavoured drinks since benzoate and sorbate are the preferred preservatives. To our knowledge, current use levels do not exceed 500 mg/kg so we would propose adopting 500 mg/kg.
14.1.5	Coffee, coffee substitutes, tea, herbal infusions, and other hot cereal and grain beverages, excluding cocoa	450	mg/kg	Notes 27 & 160 ³²	6	
14.2.1	Beer and malt beverages	200	mg/kg	Note 27	6	
14.2.2	Cider and perry	200	mg/kg	Note 27	6	
14.2.3	Grape wines	50	mg/kg	Note 27	6	
14.2.4	Wines (other than grape)	200	mg/kg	Note 27	6	
14.2.5	Mead	200	mg/kg	Note 27	6	
14.2.7	Aromatized alcoholic beverages (e.g., beer, wine and spirituous cooler-type beverages, low alcoholic refreshers)	1000	mg/kg	Note 27	6	
15.2	Processed nuts, including coated nuts and nut mixtures (with e.g., dried fruit)	300	mg/kg	Note 27	6	

³¹ **Note 3:** Surface treatment.

³² **Note 160:** For use in ready-to-drink products and pre-mixes for ready-to-drink products only.

Group 3 – Hydroxybenzoates, para-, INS 214, 218						
The eWG of the 41 st CCFA recommended further discussion of the following food additive provisions for para-hydroxybenzoates in the GSFA.						
Food Cat No.	Food Category	Max Level		Comments	Step	Justification/Comment
01.6.2	Ripened cheese	500	mg/kg	Note 27	6	Comments Not permitted in the various Cheese related commodity standards (Stan A-6-1978; Stan 276-1973; Stan 274-1969; Stan 272-1968; Stan 271-1968; Stan 270-1968; Stan 269-1967; Stan 267-1966; Stan-1966; Stan 266-1966; Stan 264-1966, Stan 263-1966; Stan 277-1973
04.1.2.1	Frozen fruit	800	mg/kg	Note 27	6	Comments No technological need for use of preservatives in frozen fruit. The freezing provides adequate preservation
04.1.2.4	Canned or bottled (pasteurized) fruit	800	mg/kg	Note 27	6	Comments There is no technological need. The preservative function is ensured by pasteurization process
04.1.2.5	Jams, jellies, marmelades	1000	mg/kg	Note 27	6	Comments Except for low-sugar jams, there is no technological justification to add p-hydroxybenzoate as the sugar ensures the preservative function
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	300	mg/kg	Note 27	6	Comments Questions the technological need for such a preservative in foodstuffs that are stable after heat treatment
05.3	Chewing gum	1500	mg/kg	Note 27	6	Comment 1) The technical justification for the use of preservatives in chewing gum has already been endorsed by the Codex Committee on Food Additives in 2005, when a level of 1500 mg/kg was adopted for benzoates in chewing gum in the GSFA. Hydroxybenzoates are often used in complement and/or as a substitute to sorbates and benzoates. In the EU, op-hydroxybenzoates (INS 214, 215, 218, 219) are authorised in confectionery products (excluding chocolate) singly or in combination with the other preservatives (benzoates and sorbates) at 1500 mg/kg. 2) 1000 mg/kg is sufficient for technical application in products

NISIN (INS 234)

45. The 12th JECFA (1968) assigned an ADI of 33,000 U/kg bw for nisin.

46. The Codex Class Names and International Numbering System for Food Additives (CAC/GL 36-1989) associates the technological purpose preservative with nisin.

47. Nisin preparation is the commercially-available form of nisin. At the 68th JECFA (2007), the name of the additive “nisin” was changed to “nisin preparation” to clarify that the preparation also includes sodium chloride and several different types of nisin (WHO TRS 947 (2007) pp. 54-55). One gram of nisin preparation contains 1,000,000 International Units (IU) of nisin (see specifications in JECFA Monographs 4 (2007)). Available information indicates that a typical nisin preparation contains 2.5 % nisin. As there is 0.025 µg nisin per IU, nisin preparation also contains 0.025 µg nisin per IU (i.e., (2.5 g nisin/100 g nisin preparation) x (1 g nisin preparation/1,000,000 IU)). The JECFA ADI of 33,000 IU/kg bw refers to nisin

(WHO TRS 430 (1969), pp. 33-35). Therefore, to compare this ADI with the use levels in the GSFA, which are reported as nisin, the ADI should be converted to the mg/kg bw basis. The GSFA (Note 28) provides this calculation: $(33,000 \text{ IU nisin/kg bw}) \times (0.025 \text{ } \mu\text{g nisin/IU}) \times (1 \text{ mg}/1000 \text{ } \mu\text{g}) = 0.825 \text{ mg/kg bw}$. Therefore, both the JECFA ADI and use levels in the GSFA are on the “nisin” reporting basis.

48. Since the JECFA ADI and the use levels in the GSFA are on the “nisin” reporting basis, it is **proposed** that the current Note 28 be revised **to clarify this**:

Revised Note 28: As Nisin. Nisin preparation (as defined in the JECFA specifications monograph for “Nisin Preparation”) typically contains 2.5 percent nisin. The maximum use level “as nisin” can be converted to a maximum use level for nisin preparation by dividing by 0.025. The ADI of 33,000 IU nisin/kg bw is equivalent to 0.825 mg/kg bw $[(33,000 \text{ IU nisin/kg bw}) \times (0.025 \text{ } \mu\text{g nisin}/\text{IU}) \times (1 \text{ mg}/1000 \text{ } \mu\text{g})]$.

Recommendation 1 – Nisin, INS 234						
The eWG of the 41 st CCFA recommended discontinuation of the following food additive provisions for nisin in the GSFA.						
Food Cat No.	Food Category	Max Level		Comments	Step	Justification/Comment
01.1	Milk and dairy-based drinks	500	mg/kg	Note 28 ³³	3	Comment Should not be discontinued – approved in milk products in certain Middle eastern countries at GMP and in China at 500 mg/kg as salt.
01.2	Fermented and renneted milk products (plain), excluding food category 01.1.2 (dairy-based drinks)	500	mg/kg	Note 28	3	Comment There is no technological need.
01.3	Condensed milk and analogues (plain)	500	mg/kg	Note 28	3	Comment There is no technological need.
01.4	Cream (plain) and the like	500	mg/kg	Note 28	3	Comment 1) There is no technological need. 2) Permitted in 01.4.2 at 10 mg/kg as nisin in ANZ, EU and other countries.
01.5	Milk powder and cream powder and powder analogues (plain)	500	mg/kg	Note 28	3	
01.6.1	Unripened cheese	500	mg/kg	Note 28	3	Comment The level of 12.5 mg/kg is technologically adequate. With a ML of 500 mg/kg, a child who would eat a portion of 25 g would reach the ADI
01.6.2	Ripened cheese	500	mg/kg	Note 28	3	Comment The level of 12.5 mg/kg is technologically adequate. With a ML of 500 mg/kg, a child who would eat a portion of 25 g would reach the ADI
01.6.4	Processed cheese	500	mg/kg	Note 28	3	Comment The ML is far too high. Level of 12.5 mg/kg is technologically adequate
01.6.5	Cheese analogues	500	mg/kg	Note 28	3	
01.6.5	Cheese analogues	12.5	mg/kg	Note 28	6	
01.7	Dairy-based desserts (e.g., pudding, fruit or flavoured yoghurt)	500	mg/kg	Note 28	3	
01.8.1	Liquid whey and whey products, excluding whey cheeses	500	mg/kg	Note 28	3	
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		GMP	Note 28	6	Comment 1) There is no technological need 2) Nisin controls outgrowth of heat resistant bacterial spores. Many of these vegetable products cannot be processed under full heat sterilization regimes without destroying their organoleptic and nutritive qualities

³³ **Note 28:** ADI conversion: if a typical preparation contains 0.025 $\mu\text{g}/\text{U}$, then the ADI of 33 000 U/kg bw becomes: $[(33\ 000 \text{ U/kg bw}) \times (0.025 \text{ } \mu\text{g}/\text{U}) \times (1 \text{ mg}/1000 \text{ } \mu\text{g})] = 0.825 \text{ mg/kg bw}$.

Recommendation 1 – Nisin, INS 234						
The eWG of the 41 st CCFA recommended discontinuation of the following food additive provisions for nisin in the GSFA.						
Food Cat No.	Food Category	Max Level		Comments	Step	Justification/Comment
07.2	Fine bakery wares (sweet, salty, savoury) and mixes	250	mg/kg	Note 28	6	Comment Suggest revision; 6.25 mg/kg as nisin required to produce desired preservative effect. Use permitted in several countries at 6.25 mg/kg.
12.5.1	Ready-to-eat soups and broths, including canned, bottled, and frozen		GMP	Note 28	6	Comment Used in minimally processed, refrigerated soups to prevent spoilage of products that cannot be processed under full heat sterilization regimes without destroying their organoleptic and nutritive qualities.

Recommendation 2 – Nisin, INS 234						
The eWG of the 41 st CCFA recommended adoption of the following food additive provisions for nisin in the GSFA.						
Food Cat No.	Food Category	Max Level		Comments	Step	Justification/Comment
01.6.1	Unripened cheese	12.5	mg/kg	Note 28	6	Comment Broadly used in the manufacturing of cheese: inhibits spore germination and growth of clostridium, bacillus or listeria. For the latter, no alternative method allowed to reach the same level of safety
06.5	Cereal and starch based desserts (e.g., rice pudding, tapioca pudding)	3	mg/kg	Note 28	6	Comment Only for use in Semolina, tapioca puddings and similar products.

Recommendation 3 – Nisin, INS 234						
The eWG of the 41 st CCFA recommended further discussion of the following food additive provisions for nisin in the GSFA.						
Food Cat No.	Food Category	Max Level		Comments	Step	Justification/Comment
01.6.4	Processed cheese	250	mg/kg	Note 28	6	Comment 1) The ML is far too high. Level of 12.5 mg/kg is technologically adequate 2) National legislation exists for use as an antimicrobial in pasteurized process cheese spreads (including those containing fruits, vegetables or meats) at a level of 250 mg/kg
08.0	Meat and meat products, including poultry and game	500	mg/kg	Note 28	3	Comment 1) More information needed on the use of nisin in the general Category 8.0 "Meat and meat products" because the adoption of the provision would allow the use of a preservative in fresh meat products. 2) Revise to subcategory provisions 08.1.2, 08.2 and 08.3
10.2.1	Liquid egg products		GMP	Note 28	3	

ASCORBYL ESTERS (INS 304, 305)

49. The 17th JECFA (1973) assigned a group ADI of 1.25 mg/kg bw for ascorbyl esters.

50. The Codex Class Names and International Numbering System for Food Additives (CAC/GL 36-1989) associates the technological purpose antioxidant with ascorbyl esters.

Recommendation 1 – Ascorbyl Esters, INS 304, 305						
The eWG of the 41 st CCFA recommended adoption of the following food additive provisions for ascorbyl esters in the GSFA.						
Food Cat No.	Food Category	Max Level		Comments	Step	Justification/Comment
01.6.1	Unripened cheese	500	mg/kg	Note 10 ³⁴	3	

Recommendation 2 – Ascorbyl Esters, INS 304, 305						
The eWG of the 41 st CCFA recommended further discussion of the following food additive provisions for ascorbyl esters in the GSFA.						
Food Cat No.	Food Category	Max Level		Comments	Step	Justification/Comment
06.4.3	Pre-cooked pastas and noodles and like products	500	mg/kg	Note 10	3	Comment 1) Consistent with the Standard 249-2006 (Instant Noodles) as antioxidants at a maximum level of 500 mg/kg singly or in combination as ascorbyl stearate. 2) Only in noodle but not in pre-cooked pasta 3) Do not support "only in noodle" as fried, pre-cooked pasta may have tech need for antioxidant
06.4.3	Pre-cooked pastas and noodles and like products	20	mg/kg	Note 10	Adopted	

PROPYL GALLATE (INS 310)

51. The 46th JECFA (1996) assigned an ADI of 1.4 mg/kg bw for propyl gallate.

52. The Codex Class Names and International Numbering System for Food Additives (CAC/GL 36-1989) associates the technological purpose antioxidant with propyl gallate.

Recommendation 1 – Propyl Gallate, INS 310						
The eWG of the 41 st CCFA recommended revocation of the following food additive provision for propyl gallate in the GSFA.						
Food Cat No.	Food Category	Max Level		Comments	Step	Justification provided to eWG
06.4.3	Pre-cooked pastas and noodles and like products	100	mg/kg	Notes 15 ³⁵ & 130 ³⁶	Adopted	Justification Consequential effect of recommendation to adopt provision in food category 06.4.3 at Step 3.

Recommendation 2 – Propyl Gallate, INS 310						
The eWG of the 41 st CCFA recommended adoption of the following food additive provision for propyl gallate in the GSFA.						
Food Cat No.	Food Category	Max Level		Comments	Step	Justification/Comment
06.4.3	Pre-cooked pastas and noodles and like products	200	mg/kg	Notes 15 & 130	3	Justification Consistent with Codex STAN 249-2006 (Instant Noodles): provision for the use of propyl gallate as an antioxidant at a maximum level of 200 mg/kg singly or in combination with TBHQ, BHA, or BHT. Comment No technological justification for use in pre-cooked pastas.

Recommendation 3 – Propyl Gallate, INS 310						
The eWG of the 41 st CCFA recommended further discussion of the following food additive provisions for propyl gallate in the GSFA.						
Food Cat No.	Food Category	Max Level		Comments	Step	Justification/Comment
12.5	Soups and broths	200	mg/kg	Notes 15 & 130	3	Justification

³⁴ **Note 10:** As ascorbyl stearate.

³⁵ **Note 15:** Fat or oil basis.

³⁶ **Note 130:** Singly or in combination: butylated hydroxyanisole (INS 320), butylated hydroxytoluene (INS 321), tertiary butylated hydroxyquinone (INS 319), and propyl gallate (INS 310).

Recommendation 3 – Propyl Gallate, INS 310						
The eWG of the 41 st CCFA recommended further discussion of the following food additive provisions for propyl gallate in the GSFA.						
Food Cat No.	Food Category	Max Level		Comments	Step	Justification/Comment
12.5.2	Mixes for soups and broths	200	mg/kg	Notes 15 & 130	Adopted	Consistent with Codex STAN 117-1981 (Bouillons and Consommés): provision for the use of propyl gallate as an antioxidant at a maximum level of 200 mg/kg singly or in combination with TBHQ, BHA, or BHT. Comment This additive is not technologically necessary in all soups, its antioxidant function is only needed in powdered and dehydrated products covered by category 12.5.2.

PHOSPHATES (INS 338, 339i-iii, 340i-iii, 341i-iii, 342i-ii, 343i-ii, 450i-iii, 450v-vii, 451i-ii, 452i-v, 542)

53. The 29th JECFA (1985) assigned a group MTDI (maximum tolerable daily intake) of 70 mg/kg bw, as phosphorus, for phosphates.

54. The Codex Class Names and International Numbering System for Food Additives (CAC/GL 36-1989) associates the technological purposes acidity regulator, sequestrant, emulsifier, texturizing agent, stabilizer, and moisture-retention agent with phosphates.

Recommendation 1 – Phosphates, INS 338, 339i-iii, 340i-iii, 341i-iii, 342i-ii, 343i-ii, 450i-iii, 450v-vii, 451i-ii, 452i-v, 542						
The eWG of the 41 st CCFA recommended discontinuation of the following food additive provision for phosphates in the GSFA.						
Food Cat No.	Food Category	Max Level		Comments	Step	Justification provided to eWG
09.1.1	Fresh Fish	GMP		Note 33	6	Comment Not needed in fresh fish (only necessary when fish is frozen to prevent drip loss)

Recommendation 2 – Phosphates, INS 338, 339i-iii, 340i-iii, 341i-iii, 342i-ii, 343i-ii, 450i-iii, 450v-vii, 451i-ii, 452i-v, 542						
The eWG of the 41 st CCFA recommended adoption of the following food additive provisions for phosphates in the GSFA.						
Food Cat No.	Food Category	Max Level		Comments	Step	Justification/Comment
01.1.2	Dairy-based drinks, flavoured and/or fermented (e.g., chocolate milk, cocoa, eggnog, drinking yoghurt, whey-based drinks)	1,320	mg/kg	Notes 33 & 88 ³⁷	6	Comment 2500 mg/kg necessary to stabilize the protein matrix in whey-based products
01.3.1	Condensed milk (plain)	880	mg/kg	Notes 33, 34 ³⁸ , & 88	6	
01.3.2	Beverage whiteners	22,000	mg/kg	Notes 33 & 88	6	
01.5.1	Milk powder and cream powder (plain)	4,400	mg/kg	Notes 33 & 88	6	
01.6.4	Processed cheese	14,050	mg/kg	Note 33	6	
01.6.5	Cheese analogues	13,200	mg/kg	Note 33	6	
02.1.2	Vegetable oils and fats	220	mg/kg	Notes 33 & 88	6	
02.1.3	Lard, tallow, fish oil, and other animal fats	220	mg/kg	Notes 33 & 88	6	
04.1.2.3	Fruit in vinegar, oil, or brine	2,200	mg/kg	Note 33	3	
04.2.2.2	Dried vegetables (including mushrooms and fungi, roots and tubers, pulses and legumes, and aloe vera), seaweeds, and nuts and seeds	5,000	mg/kg	Notes 33 & 76 ³⁹	6	
04.2.2.3	Vegetables (including mushrooms and fungi, roots and tubers, pulses and legumes, and aloe vera), and seaweeds in vinegar, oil, brine, or soybean sauce	2,200	mg/kg	Note 33	6	

³⁷ **Note 88:** Carryover from the ingredient.

³⁸ **Note 34:** Anhydrous basis.

³⁹ **Note 76:** Use in potatoes only.

Recommendation 2 – Phosphates, INS 338, 339i-iii, 340i-iii, 341i-iii, 342i-ii, 343i-ii, 450i-iii, 450v-vii, 451i-ii, 452i-v, 542 The eWG of the 41 st CCFA recommended adoption of the following food additive provisions for phosphates in the GSFA.						
Food Cat No.	Food Category	Max Level		Comments	Step	Justification/Comment
04.2.2.5	Vegetable (including mushrooms and fungi, roots and tubers, pulses and legumes, and aloe vera), seaweed, and nut and seed purees and spreads (e.g., peanut butter)	2,200	mg/kg	Notes 33 & 76	6	
04.2.2.6	Vegetable (including mushrooms and fungi, roots and tubers, pulses and legumes, and aloe vera), seaweed, and nut and seed pulps and preparations (e.g., vegetable desserts and sauces, candied vegetables) other than food category 04.2.2.5	2,200	mg/kg	Notes 33	6	
04.2.2.8	Cooked or fried vegetables (including mushrooms and fungi, roots and tubers, pulses and legumes, and aloe vera), and seaweeds	2,200	mg/kg	Notes 33 & 76	6	Comment Only for processed potato products
05.1.3	Cocoa-based spreads, including fillings	2,200	mg/kg	Notes 33 & 88	6	
05.3	Chewing gum	44,000	mg/kg	Note 33	6	Comment The use of phosphates in chewing gum does not raise safety concerns as phosphates are part of the nutrient source of Phosphorous to human bodies. Phosphates play an important role in a wide range of chewing gum and they are also specifically used with calcium in specialized chewing gum.
06.2.1	Flours	11,900	mg/kg	Note 33	6	Comment 1) Revise ML to 2500 mg/kg (except in self-raising flour) 2) Used as raising agent in self raising flour, and various cakes
06.6	Batters (e.g., for breading or batters for fish or poultry)	5,600	mg/kg	Note 33	3	
08.2.2	Heat-treated processed meat, poultry, and game products in whole pieces or cuts	3,100	mg/kg	Note 33	6	
08.4	Edible casings (e.g., sausage casings)	1,100	mg/kg	Notes 33 & 88	6	Question regarding use of Note 88 – carryover from what ingredient?
09.3.1	Fish and fish products, including mollusks, crustaceans, and echinoderms, marinated and/or in jelly	2,200	mg/kg	Note 33	3	
09.3.2	Fish and fish products, including mollusks, crustaceans, and echinoderms, pickled and/or in brine	2,200	mg/kg	Note 33	6	
09.3.3	Salmon substitutes, caviar, and other fish roe products	2,200	mg/kg	Note 33	6	
10.2.3	Dried and/or heat coagulated egg products	GMP		Note 33	6	
10.3	Preserved eggs, including alkaline, salted, and canned eggs	1,000	mg/kg	Note 33	6	
12.1.2	Salt Substitutes	4,400	mg/kg	Note 33	6	
12.2.2	Seasonings and condiments	4,400	mg/kg	Note 33	3	
12.4	Mustards	1,320	mg/kg	Note 33	6	
12.5.1	Ready-to-eat soups and broths, including canned, bottled, and frozen	1,320	mg/kg	Note 33	6	

Recommendation 2 – Phosphates, INS 338, 339i-iii, 340i-iii, 341i-iii, 342i-ii, 343i-ii, 450i-iii, 450v-vii, 451i-ii, 452i-v, 542 The eWG of the 41 st CCFA recommended adoption of the following food additive provisions for phosphates in the GSFA.						
Food Cat No.	Food Category	Max Level		Comments	Step	Justification/Comment
12.5.2	Mixes for soups and broths	6,600	mg/kg	Note 33	6	Comment Revise ML to 10 000 mg/kg; is tech needed for dry soups that are high in fat, protein, dairy (cream/creamer/whey) content and reconstituted by the addition of milk and water. Product is cooked up and fat must remain stable after cooking
14.2.1	Beer and malt beverages	440	mg/kg	Notes 33 & 88	6	Question use of note 88
14.2.2	Cider and perry	880	mg/kg	Notes 33 & 88	6	Comment Question use of Note 88
14.2.3	Grape wines	440	mg/kg	Notes 33 & 88	6	
14.2.4	Wines (other than grape)	440	mg/kg	Notes 33 & 88	6	

Recommendation 3 – Phosphates, INS 338, 339i-iii, 340i-iii, 341i-iii, 342i-ii, 343i-ii, 450i-iii, 450v-vii, 451i-ii, 452i-v, 542 The eWG of the 41 st CCFA recommended further discussion of the following food additive provisions for phosphates in the GSFA.						
Food Cat No.	Food Category	Max Level		Comments	Step	Justification/Comment
01.1.1	Milk and buttermilk (plain)	1,500	mg/kg	Notes 33 & 88	3	Comment 1) In the past, industry in Canada has indicated that the use of monoammonium phosphate in uncultured buttermilk at 270 ppm expressed as phosphorus is technologically sufficient. 2) Only in UHT and sterilised milk. In addition the ML should be lowered to 400 mg/kg which is sufficient to achieve the technological function. 3) Question use of note 88 4) support ML of 1500 mg/kg for UHT goat milk to stabilize calcium due to higher temperatures
01.2	Fermented and renneted milk products (plain), excluding food category 01.1.2 (dairy-based drinks)	2,200	mg/kg	Notes 33 & 88	3	Comment 1) Should be lowered to 1000 mg/kg (as P) according to the proposal set out in alinorm 08/31/11 appendix VI to be adopted by the 31st session of the Codex Alimentarius Commission (CL 2008/02-MMP) 2) Question use of note 88 3) Level of 1,000 mg/kg as phosphorus in CODEX STAN 243 – Fermented milks
01.4	Cream (plain) and the like	2,200	mg/kg	Notes 33 & 88	6	Comment 1) A value of 1100 mg/kg (as P) has been proposed by the ALINORM 08/31/11 Appendix V for creams and prepared creams 2) Used to stabilize prepared cream in products such as chocolate mousse. 3) ML of 2000 mg/kg as phosphate (880 mg/kd as phosphorus) in CODEX STAN 288 for Cream
01.6.1	Unripened cheese	10,000	mg/kg	Note 33	6	Comment 1) 1000 mg/kg (as P) seems sufficient to achieve the technological function (Stan 273-1968; STAN 275-1973). 2) Reduce maximum level to 3500 mg/kg, as referenced in the Codex Standard 221 (2001) for Unripened Cheese-

Recommendation 3 – Phosphates, INS 338, 339i-iii, 340i-iii, 341i-iii, 342i-ii, 343i-ii, 450i-iii, 450v-vii, 451i-ii, 452i-v, 542 The eWG of the 41 st CCFA recommended further discussion of the following food additive provisions for phosphates in the GSFA.						
Food Cat No.	Food Category	Max Level		Comments	Step	Justification/Comment
01.6.2	Ripened cheese	880	mg/kg	Note 33	6	Comment Not permitted in any of the Commodity standards related to cheese products
01.7	Dairy-based desserts (e.g., pudding, fruit or flavoured yoghurt)	10,500	mg/kg	Note 33	3	Comment 1) A ML of 1500 mg/kg (as P) seems sufficient to achieve the technological function 2) Used to stabilize prepared cream (chocolate mousse) 3) Add note stating “a level of 1000 mg/kg as phosphorus for flavoured fermented milks (CODEX STAN 243)
01.8.1	Liquid whey and whey products, excluding whey cheeses	880	mg/kg	Note 33	6	Comment 1) Industry in Canada has indicated a technological need for use of calcium phosphate, tribasic, in liquid whey, as a carrier for benzoyl peroxide but at lower levels than that proposed here. 2) ML of 1320 necessary to stabilize higher protein liquid whey used for further processing into whey protein concentrates
02.4	Fat-based desserts excluding dairy-based dessert products of food category 01.7	7,000	mg/kg	Note 33	6	Comment A ML of 1500 mg/kg (as P) seems sufficient to achieve the technological function
03.0	Edible ices, including sherbet and sorbet	12,000	mg/kg	Note 33	6	Comment 1) A ML of 500 mg/kg (as P) seems sufficient to achieve the technological function 2) Recommends reducing the maximum value to 7500
04.1.2.1	Frozen fruit	200	mg/kg	Note 33	6	Comment 1) Technological need is not recognized in such products 2) Maximum level be raised to 350 mg/kg, as such a limit is needed to get proper water activation and stabilize the colour throughout the shelf-life of such foods.
04.1.2.2	Dried fruit	10	mg/kg	Note 33	6	Comment 1) Technological need is not recognized in such products 2) Maximum level be raised to 500 mg/kg, as such a limit is needed to get proper water activation and stabilize the colour throughout the shelf-life of such foods.
04.1.2.4	Canned or bottled (pasteurized) fruit	200	mg/kg	Note 33	6	Comment Questions the technological need.
04.1.2.5	Jams, jellies, marmalades	530	mg/kg	Note 33	6	Comment Questions the technological need.
04.1.2.7	Candied fruit	10	mg/kg	Note 33	6	Comment Revise maximum level to 350 mg/kg, such a limit is needed to get proper water activation and stabilize the colour throughout the shelf-life of such foods.
04.1.2.8	Fruit preparations, including pulp, purees, fruit toppings and coconut milk	7,000	mg/kg	Note 33	6	Comment ML of 400 mg/kg (as P) seems sufficient to achieve the technological function

Recommendation 3 – Phosphates, INS 338, 339i-iii, 340i-iii, 341i-iii, 342i-ii, 343i-ii, 450i-iii, 450v-vii, 451i-ii, 452i-v, 542 The eWG of the 41 st CCFA recommended further discussion of the following food additive provisions for phosphates in the GSFA.						
Food Cat No.	Food Category	Max Level		Comments	Step	Justification/Comment
04.1.2.9	Fruit-based desserts, including fruit-flavoured waterbased desserts	7,000	mg/kg	Note 33	6	Comment ML of 1500 mg/kg (as P) seems sufficient to achieve the technological function
04.1.2.11	Fruit fillings for pastries	7,000	mg/kg	Note 33	6	Comment ML seems excessive-
04.2.1.3	Peeled, cut or shredded fresh vegetables (including mushrooms and fungi, roots and tubers, pulses and legumes, and aloe vera), seaweeds, and nuts and seeds	5,600	mg/kg	Notes 33 & 76	6	Comment Add note “only in processed potato products”
04.2.2.1	Frozen vegetables (including mushrooms and fungi, roots and tubers, pulses and legumes, and aloe vera), seaweeds, and nuts and seeds	5,000	mg/kg	Notes 33 & 76	6	Comment Add note “only in processed potato products”
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	2,200	mg/kg	Note 33	6	Comment Technological need questioned as Phosphates are primarily used as water-retention agents-
04.2.2.7	Fermented vegetable (including mushrooms and fungi, roots and tubers, pulses and legumes, and aloe vera) and seaweed products, excluding fermented soybean products of food categories 06.8.6, 06.8.7, 12.9.1, 12.9.2.1 and 12.9.2.3	2,200	mg/kg	Notes 33 & 76	6	Comment Technological need questioned as Phosphates are primarily used as water-retention agents
05.1.1	Cocoa mixes (powders) and cocoa mass/cake	6,000	mg/kg	Notes 33 & 88	6	Comment 1) Not permitted in the Commodity standard on cocoa powder Stan 105- 1981 2) questions use of note 88
05.1.4	Cocoa and chocolate products	2,200	mg/kg	Note 33	6	Comment 1) Phosphates have technological function as emulsifier and the level is necessary to achieve the intended use. 2) Not permitted in the Commodity standard on chocolate products Stan 87-1981
05.2	Confectionery including hard and soft candy, nougats, etc. other than food categories 05.1, 05.3 and 05.4	2,200	mg/kg	Note 33	6	Comment 10,000 mg/kg is required for technical application in hard and soft candy products.
05.4	Decorations (e.g., for fine bakery wares), toppings (non-fruit) and sweet sauces	7,000	mg/kg	Note 33	6	Comment ML of 1500 mg/kg (as P) seems sufficient to achieve the technological function
06.1	Whole, broken, or flaked grain, including rice	440	mg/kg	Note 33	6	Comment 1) Technological need questioned in this basic product 2) For Anti- Caking Aid, higher levels of approximately 4000 mg/kg may be required
06.2.2	Starches	6,200	mg/kg	Note 33	3	Comment More information requested
06.4.1	Fresh pastas and noodles and like products	2,000	mg/kg	Note 33	3	Comment Need in fresh pasta not recognized
06.4.2	Dried pastas and noodles and like products	2,200	mg/kg	Note 33	3	Comment Need in dried pasta not recognized
06.4.3	Pre-cooked pastas and noodles and like products	2,200	mg/kg	Note 33	3	Comment 1) Technological need as emulsifier and the maximum level is necessary to achieve the intended function. 2) Add note “ only in noodles”

Recommendation 3 – Phosphates, INS 338, 339i-iii, 340i-iii, 341i-iii, 342i-ii, 343i-ii, 450i-iii, 450v-vii, 451i-ii, 452i-v, 542 The eWG of the 41 st CCFA recommended further discussion of the following food additive provisions for phosphates in the GSFA.						
Food Cat No.	Food Category	Max Level		Comments	Step	Justification/Comment
06.5	Cereal and starch based desserts (e.g., rice pudding, tapioca pudding)	7,000	mg/kg	Note 33	6	Comment ML of 1500 mg/kg (as P) seems sufficient to achieve the technological function
07.0	Bakery wares	9,300	mg/kg	Note 33	6	Comment 1) Basic foodstuff highly consumed. Technological need questioned for all products within this category 2) Used as raising agent in self-raising flour
08.1.1	Fresh meat, poultry, and game, whole pieces or cuts	1,100	mg/kg	Note 33	6	Comment 1) Industry has indicated a technological need for use of phosphates in fresh solid cut meat and poultry (with a defined minimum percent protein content) 2) This additive is not needed in unprocessed fresh meat
08.2.1	Non-heat treated processed meat, poultry, and game products in whole pieces or cuts	2,200	mg/kg	Note 33	6	Comment 1) This additive is not needed in unprocessed fresh meat 2) Used in processed meats, even when not heat treated (e.g., marinated meat)
09.2.1	Frozen fish, fish fillets, and fish products, including mollusks, crustaceans, and echinoderms	2,200	mg/kg	Note 33	6	Comment 1) Add note “excluding fish products” 2) Only in unprocessed fish, frozen and deep frozen
09.2.2	Frozen battered fish, fish fillets, and fish products, including mollusks, crustaceans, and echinoderms	2,200	mg/kg	Note 33	6	Comment Add note “excluding fish products”
09.2.3	Frozen minced and creamed fish products, including mollusks, crustaceans, and echinoderms	2,200	mg/kg	Note 33	6	Comment Add note “only in frozen mollusk and crustacean”
09.2.4.1	Cooked fish and fish products	2,200	mg/kg	Note 33	6	Comment Add note “ only in surimi, fish and crustacean paste”
09.2.4.2	Cooked mollusks, crustaceans, and echinoderms	2,200	mg/kg	Note 33	6	Comment Add note “only in frozen mollusk and crustacean”
09.2.5	Smoked, dried, fermented, and/or salted fish and fish products, including mollusks, crustaceans, and echinoderms	2,200	mg/kg	Note 33	3	Comment Add note “only in fish paste”
09.3.4	Semi-preserved fish and fish products, including mollusks, crustaceans, and echinoderms (e.g., fish paste), excluding products of food categories 09.3.1 - 09.3.3	2,200	mg/kg	Note 33	6	Comment Add note “only in crustacean and fish paste”
09.4	Fully preserved, including canned or fermented fish and fish products, including mollusks, crustaceans, and echinoderms	2,200	mg/kg	Note 33	6	Comment Reduce ML to 400 mg/kg and add note “only in surimi and canned crustacean products”:-
10.4	Egg-based desserts (e.g., custard)	7,000	mg/kg	Note 33	6	Comment ML of 1000 mg/kg (as P) seems sufficient to achieve the technological function
12.2.1	Herbs and spices		GMP	Note 33	6	Comment Replace GMP by a numerical level of use

Recommendation 3 – Phosphates, INS 338, 339i-iii, 340i-iii, 341i-iii, 342i-ii, 343i-ii, 450i-iii, 450v-vii, 451i-ii, 452i-v, 542 The eWG of the 41 st CCFA recommended further discussion of the following food additive provisions for phosphates in the GSFA.						
Food Cat No.	Food Category	Max Level		Comments	Step	Justification/Comment
12.6	Sauces and like products	8,000	mg/kg	Note 33	6	Comment 1) Level seems higher then technologically necessary 2) ML of 50 000 is technologically needed for dry sauces that are high in fat, protein, dairy (cream / creamer / whey) content and reconstituted by the addition of milk and water. Product are either instant or is cooked up and must remain stable after cooking and storing in a fridge.
12.7	Salads (e.g., macaroni salad, potato salad) and sandwich spreads excluding cocoa- and nut-based spreads of food categories 04.2.2.5 and 05.1.3		GMP	Note 33	6	Comment Needs appropriate numerical level
13.2	Complementary foods for infants and young children	2,200	mg/kg	Note 33	6	Comment 1) INS 339) is used as an acidity regulator and its use is consistent with the criteria in Section 3.2 of the GSFA Preamble. 2) If this provision is to be consistent with the Codex Standard 074-1981, rev. 2006, Processed Cereal-Based Foods for Infants and Young Children, the proposed level would be higher since 4400 mg/kg as phosphorus is stipulated in the Standard
13.6	Food supplements	2,200	mg/kg	Note 33	6	Comment Phosphates 340, 341, and 343 supply nutrients, either as potassium phosphate, calcium phosphate, or magnesium phosphate. Maximum level should be revised to GMP, to meet the nutritional requirements of the particular country/region.
14.1.2.2	Vegetable juice	2,500	mg/kg	Notes 33 & 88	6	Comment 1) Suggests harmonizing with the permitted level of 1000 mg/kg in fruit juices and nectars 2) reduce level to 1000 mg/kg and add notes 40 and 122 for consistency with provisions for fruit juices and nectars
14.1.2.4	Concentrates for vegetable juice	2,500	mg/kg	Notes 33 & 88	6	Comment 1) Suggests 1000 mg/kg 2) reduce level to 1000 mg/kg and add notes 40, 122 and 127 for consistency with provisions for fruit juices and nectars
14.1.3.2	Vegetable nectar	2,500	mg/kg	Notes 33 & 88	6	Comment Reduce level to 1000 mg/kg and add notes 40 and 122 for consistency with provisions for fruit juices and nectars
14.1.3.4	Concentrates for vegetable nectar	2,500	mg/kg	Notes 33 & 88	6	Comment Reduce level to 1000 mg/kg and add notes 40, 122 and 127 for consistency with provisions for fruit juices and nectars-

Recommendation 3 – Phosphates, INS 338, 339i-iii, 340i-iii, 341i-iii, 342i-ii, 343i-ii, 450i-iii, 450v-vii, 451i-ii, 452i-v, 542 The eWG of the 41 st CCFA recommended further discussion of the following food additive provisions for phosphates in the GSFA.						
Food Cat No.	Food Category	Max Level		Comments	Step	Justification/Comment
14.1.4	Water-based flavoured drinks, including "sport," "energy," or "electrolyte" drinks and particulated drinks	12,000	mg/kg	Note 33	6	Comment 1) ML seems very excessive. A ML of 500 mg/kg (as P) seems sufficient to achieve the technological function 2) We believe that the proposed ML is based on phosphates and not expressed as phosphorus (P, Note 33). Suggest adopting 3000 mg/kg as phosphorus (Note 33) based on the technological need of INS 452i. For all other phosphates, a maximum level of 1000 mg/kg as P would be sufficient 3) Maximum level should be changed to GMP, to meet the nutritional requirements of a particular country/region.
14.1.5	Coffee, coffee substitutes, tea, herbal infusions, and other hot cereal and grain beverages, excluding cocoa	880	mg/kg	Note 33	6	Comment Add note: "Only for coffee based drinks for vending machine, instant tea and instant herbal infusions"
14.2.7	Aromatized alcoholic beverages (e.g., beer, wine and spirituous cooler-type beverages, low alcoholic refreshers)	12,000	mg/kg	Notes 33 & 88	6	Justification This level, 12000 mg/kg, of phosphates is needed due to specific yeast growing conditions of the aromatized alcoholic beverage.
16.0	Composite foods - foods that could not be placed in categories 01 - 15	2,000	mg/kg	Note 33	6	Comment 1) Foodstuffs should be clearly defined 2) The amount of phosphate needed depends on the specific food application. The maximum level should be changed to GMP, to meet the nutritional requirements of the particular country/region. 3) INS 341iii at ML 4366 mg/kg as anticaking agent for dehydrated composite foods

Phosphates, INS 338, 339i-iii, 340i-iii, 341i-iii, 342i-ii, 343i-ii, 450i-iii, 450v-vii, 451i-ii, 452i-v, 542 The following provisions were included in the GSFA at Step 3 by the 41 st CCFA.						
Food Cat No.	Food Category	Max Level		Comments	Step	Justification/Comment
06.8.1	Soybean-based beverages	1,300	mg/kg	Note 33 ⁴⁰	3	
06.8.2	Soybean-based beverage film	35,000	mg/kg	Note 33	3	
06.8.3	Soybean curd (tofu)	35,000	mg/kg	Note 33	3	
06.8.4	Semi-dehydrated soybean curd	35,000	mg/kg	Note 33	3	
06.8.5	Dehydrated soybean curd (kori tofu)	35,000	mg/kg	Note 33	3	
06.8.6	Fermented soybeans (e.g., natto, tempe)	35,000	mg/kg	Note 33	3	
06.8.7	Fermented soybean curd	35,000	mg/kg	Note 33	3	
08.1.2	Fresh meat, poultry, and game, comminuted	2,200	mg/kg	Note 33	6	
12.9	Soybean-based seasonings and condiments	35,000	mg/kg	Note 33	3	
12.10	Protein products other than from soybeans	35,000	mg/kg	Note 33	3	

AMMONIUM SALTS OF PHOSPHATIDIC ACID (INS 442)

55. The 18th JECFA (1974) assigned an ADI of 30 mg/kg bw for ammonium salts of phosphatidic acid.

⁴⁰ **Note 33:** As phosphorus.

56. The Codex Class Names and International Numbering System for Food Additives (CAC/GL 36-1989) associates the technological purpose emulsifier with ammonium salts of phosphatidic acid.

Recommendation 1 – Ammonium Salts of Phosphatidic Acid, INS 442						
The eWG of the 41 st CCFA recommended adoption of the following food additive provisions for ammonium salts of phosphatidic acid in the GSFA.						
Food Cat No.	Food Category	Max Level		Comments	Step	Justification/Comment
01.7	Dairy-based desserts (e.g., pudding, fruit or flavoured yoghurt)	5000	mg/kg		6	Justification Consistent with Codex STAN 243-2003 (Fermented Milks (Flavoured, Heat Treated and Non-heat Treated): the use of additives belonging to the class "emulsifiers" is technologically justified in flavoured fermented milks and flavoured fermented milks heat treated after fermentation. Use is justified in the dairy portion. Comment Suggest adding note: INS 442 is not listed in Section 4 of CODEX STAN 243- Fermented Milks
03.0	Edible ices, including sherbet and sorbet	7500	mg/kg		6	

Recommendation 2 – Ammonium Salts of Phosphatidic Acid, INS 442						
The eWG of the 41 st CCFA recommended further discussion of the following food additive provisions for ammonium salts of phosphatidic acid in the GSFA.						
Food Cat No.	Food Category	Max Level		Comments	Step	Justification/Comment
01.1.2	Dairy-based drinks, flavoured and/or fermented (e.g., chocolate milk, cocoa, drinking yoghurt, whey-based drinks)		GMP		6	Comment As there is a numerical ADI, the ML should be numerical.
01.4	Cream (plain) and the like		GMP		6	Justification Consistent with the list of Food Additives of the Codex Standard for creams and prepared Creams (N08-2008), as adopted by the 31 st Session of the CAC Comment 1) As there is a numerical ADI, the ML should be numerical. 2) INS 442 is not allowed in the Codex Standard for cream and prepared creams (Codex Stan A-9-1976, rev 1-20033)
04.2.2.3	Vegetables (including mushrooms and fungi, roots and tubers, pulses and legumes, and aloe vera), and seaweeds in vinegar, oil, brine, or soybean sauce		GMP		6	Comment 1) As there is a numerical ADI, the ML should be numerical. 2) Technological need of INS 442, as emulsifier in such products, is questioned.
07.1.1	Breads and rolls		GMP		6	Comment As there is a numerical ADI, the ML should be numerical.

CYCLODEXTRIN, BETA- (INS 459)

57. The 44th JECFA (1995) assigned an ADI of 5 mg/kg bw for beta-cyclodextrin.

58. The Codex Class Names and International Numbering System for Food Additives (CAC/GL 36-1989) associates the technological purposes stabilizer, binder, and carrier with beta-cyclodextrin.

Recommendation 1 – Cyclodextrin, beta-, INS 459						
The eWG of the 41 st CCFA recommended adoption of the following food additive provisions for beta-cyclodextrin in the GSFA.						
Food Cat No.	Food Category	Max Level		Comments	Step	Justification/Comment
06.4.3	Pre-cooked pastas and noodles and like products	1000	mg/kg	Note 153 ⁴¹	3	Justification Consistent with the Codex Standard 249-2006, Instant Noodles Comment For use in noodles only, not needed in pasta

SUCROGLYCERIDES (INS 474)

59. The 49th JECFA (1997) assigned an ADI of 30 mg/kg bw for sucroglycerides.

60. The Codex Class Names and International Numbering System for Food Additives (CAC/GL 36-1989) associates the technological purpose emulsifier with sucroglycerides.

Recommendation 1 – Sucroglycerides, INS 474						
The eWG for the 41 st CCFA recommended adoption of the following food additive provisions for sucroglycerides in the GSFA.						
Food Cat No.	Food Category	Max Level		Comments	Step	Justification/Comment
01.3.2	Beverage whiteners	20000	mg/kg		6	
02.2.2	Fat spreads, dairy fat spreads and blended spreads	10000	mg/kg	Note 102 ⁴²	6	Justification Consistent with Codex STAN 253-2006 (Dairy Fat Spreads) and Codex STAN 256-2007; provision for use as an emulsifier at 10000 mg/kg, and, in dairy fat spreads, for baking purposes only. Comment 1) For baking purposes only. 2) Delete note limiting use for baking purposes only
13.6	Food supplements		GMP		6	
14.1.4	Water-based flavoured drinks, including "sport," "energy," or "electrolyte" drinks and particulated drinks	5000	mg/kg	Note A ⁴³	6	Comment 1) Sucroglycerides are permitted for use at 5000 mg/kg in many countries, such as the ECMS, in non-alcoholic coconut, almond and aniseed-based drinks. At lower use levels in soft drinks (200 mg/kg), they also can be used as 1) alternate stabilisers, 2) to provide cloudiness in citrus drinks and 3) as substitutes or extenders of gum arabic. 2) Revise with Note "Only in non-alcoholic aniseed-based, coconut and almond drinks."
14.2.7	Aromatized alcoholic beverages (e.g., beer, wine and spirituous cooler-type beverages, low alcoholic refreshers)	5000	mg/kg		6	

STEARYL CITRATE (INS 484)

61. The 17th JECFA (1973) assigned an ADI of 50 mg/kg bw for stearyl citrate.

62. The Codex Class Names and International Numbering System for Food Additives (CAC/GL 36-1989) associates the technological purposes emulsifier and sequestrant with stearyl citrate.

Recommendation 1 - Stearyl Citrate, INS 484						
The eWG for the 41 st CCFA recommended adoption of the following food additive provisions for stearyl citrate in the GSFA.						
Food Cat No.	Food Category	Max Level		Comments	Step	Justification/Comment
02.2.2	Fat spreads, dairy fat spreads and blended spreads	100	mg/kg	Note 15	3	Comment 1) Industry in Canada has indicated a technological need for this additive in margarine at this level of use 2) Not listed in CODEX STAN

⁴¹ **Note 153:** For use in instant noodles only.

⁴² **Note 102:** For use in fat emulsions for baking purposes only.

⁴³ **Note A:** For use in non-alcoholic aniseed-based, coconut and almond drinks only.

Recommendation 1 - Stearyl Citrate, INS 484						
The eWG for the 41 st CCFA recommended adoption of the following food additive provisions for stearyl citrate in the GSFA.						
Food Cat No.	Food Category	Max Level		Comments	Step	Justification/Comment
						253-2006, Dairy fat spreads

CYCLAMATES (INS 952 I, II, IV)

63. The 26th JECFA (1982) assigned an ADI of 11 mg/kg bw for cyclamates expressed as cyclamic acid.

64. The Codex Class Names and International Numbering System for Food Additives (CAC/GL 36-1989) associates the technological purpose sweetener with cyclamates.

65. The 40th CCFA requested that JECFA perform intake estimates based on four maximum use levels (250, 500, 750, and 1 000 mg/kg) for cyclamates in beverages covered by 14.1.4. The 71st JECFA (2009) concluded that, of the four maximum use levels, only the lowest level of 250 mg/kg was not likely to lead to dietary exposures exceeding the ADI for high consumers, including children. Moreover it was noted that a maximum use level of 350 mg/kg also resulted in dietary exposures for high consumers, including children, which were less than the ADI.

Recommendation 1 - Cyclamates, INS 952 i, ii, iv						
The 41 st CCFA agreed to circulate for comments the following provision for cyclamates in the GSFA.						
Food Cat No.	Food Category	Max Level		Comments	Step	Justification/Comments
14.1.4.1	Carbonated water-based flavoured drinks	1500	mg/kg	Note 17 ⁴⁴	6	<p>Justification:</p> <p>1) An ML of 250 mg/kg is not technologically feasible and would require significant product reformulations in many countries where cyclamate is permitted.</p> <p>2) The technical effect of cyclamate decreases below 400 ppm.</p> <p>3) The optimum sweetness in three component mixtures is reached at use levels of about 400-600, while two component mixtures with saccharin require higher use levels.</p> <p>Comment:</p> <p>1) An ML of 1500 mg/kg is too high, ADI of 11 mg/kg bw/d will be exceeded by 60 kg adult drinking ½ liter soft drink</p> <p>2) ML of 1500 mg/kg too high, ADI exceeded by child 15 kg bw drinking 150 ml</p> <p>3) Supports listing in broader category 14.1.4.</p> <p>4) Cyclamates are used in beverages in many countries to provide a synergistic blend with saccharin where saccharin use is limited by regulation.</p> <p>5) MLs of cyclamates vary by country due to consumption patterns, preference and a need for heat stable sweeteners in warm climates. Cyclamates are used in traditional drinks.</p>
14.1.4.2	Non-carbonated water-based flavoured drinks, including punches and ades	1500	mg/kg	Note 17	6	
14.1.4.3	Concentrates (liquid or solid) for water-based flavoured drinks	1000	mg/kg	Notes 17 & 127 ⁴⁵	3	<p>Comment</p> <p>1) Used in drink concentrates</p> <p>2) JECFA intake assessment scheduled for 71st meeting</p>

SACCHARINS (INS 954 i - iv)

66. The 41st JECFA (1993) assigned an ADI of 5 mg/kg bw for saccharins.

⁴⁴ Note 17: As cyclamic acid.

⁴⁵ Note 127: As served to the consumer.

67. The Codex Class Names and International Numbering System for Food Additives (CAC/GL 36-1989) associates the technological purpose sweetener with saccharins.

Recommendation 1 - Saccharins, INS 954 i-iv						
The following food additive provisions for saccharins in the GSFA were recommended for adoption by the eWG of the 39 th CCFA (CX/FA 07/39/09 part 1) and were listed in FA/40 INF 01. However, these two provisions were unintentionally omitted from the report of the eWG of the 40 th CCFA.						
Food Cat No.	Food Category	Max Level		Comments	Step	Justification/Comments
12.7	Salads (e.g., macaroni salad, potato salad) and sandwich spreads excluding cocoa- and nut-based spreads of food categories 04.2.2.5 and 05.1.3	200	mg/kg	Notes 161 ⁴⁶ & 166 ⁴⁷	6	Justification Some vegetable salads falling in this category contain some vinegar the taste of which has to be mellowed as discussed for category 12.3 vinegar Comment Technological need questioned
14.1.3.4	Concentrates for vegetable nectar	300	mg/kg	Notes 127 & 161	6	

Saccharins, INS 954 i-iv						
The following provisions were included in the GSFA at Step 3 by the 41 st CCFA						
Food Cat No.	Food Category	Max Level		Comments	Step	Justification/Comments
12.9.1	Fermented soybean paste (e.g., miso)	200	mg/kg		3	
12.9.2.1	Fermented soybean sauce	500	mg/kg		3	

SUCRALOSE (INS 955)

68. The 37st JECFA (1990) assigned an ADI of 15 mg/kg bw for sucralose.

69. The Codex Class Names and International Numbering System for Food Additives (CAC/GL 36-1989) associates the technological purpose sweetener with sucralose.

Sucralose, INS 955						
The 41 st CCFA agreed to circulate for comment at Step 3 the following food additive provisions for sucralose in the GSFA.						
Food Cat No.	Food Category	Max Level		Comments	Step	Justification/Comments
01.5.2	Milk and cream powder analogues	400	mg/kg		3	

Sucralose, INS 955						
The following provisions were included in the GSFA at Step 3 by the 41 st CCFA						
Food Cat No.	Food Category	Max Level		Comments	Step	Justification/Comments
06.8.1	Soybean-based beverages	400	mg/kg		3	Justification To sweeten soybean-based beverages. This level is needed to sweeten the products which are consumed as is.

ASPARTAME-ACESULFAME SALT (INS 962)

70. The 55th JECFA (2000) concluded that the aspartame and acesulfame moieties are covered by the ADIs for aspartame (40 mg/kg bw) and acesulfame potassium (acesulfame K) (15 mg/kg bw).

71. The Codex Class Names and International Numbering System for Food Additives (CAC/GL 36-1989) associates the technological purpose sweetener with aspartame-acesulfame salt.

72. The report of the eWG to the 39th CCFA noted that the proposed draft acceptable maximum use levels for these provisions are currently expressed in the GSFA in terms of aspartame-acesulfame salt or equivalents of aspartame or acesulfame K.⁴⁸ Because JECFA concluded that the aspartame and acesulfame moieties in aspartame-acesulfame salt are included in the ADIs established for aspartame (INS 951) and acesulfame K (INS 950), the equivalent level of aspartame and acesulfame K from the use of the double salt should not exceed the individual maximum use level for aspartame or for acesulfame K.

⁴⁶ **Note 161:** Subject to national legislation of the importing country aimed, in particular, at consistency with Section 3.2 of the Preamble.

⁴⁷ **Note 166:** For milk-based sandwich spreads only.

⁴⁸ CX/FA 07/39/9.

73. The *ad hoc* Working Group on the GSFA to the 40th CCFA recommended, and the Committee agreed, to examine the provisions for the aspartame-acesulfame salt in order to ensure that these provisions are consistent with those for aspartame and for acesulfame K and are reported on a consistent basis.⁴⁹ As part of its mandate, the eWG established by the 40th CCFA was requested to develop recommendations for ensuring consistency between the provisions for aspartame-acesulfame salt and those for aspartame and for acesulfame K.⁵⁰

74. The eWG to the 41st CCFA considered an Options Paper that contained four approaches to resolve the issue of the reporting basis for aspartame-acesulfame salt.⁵¹ Based upon the comments to the Options Paper, the eWG to the 41st CCFA recommended that the CCFA agree to the approach presented in para. 29 of CX/FA 09/41/6, namely: (i) to revise the text of Notes 113⁵² and 119⁵³ as recommended, and (ii) to add new notes (i.e., Notes 188⁵⁴ and 191⁵⁵) to all of the provisions for acesulfame K and aspartame, in order to ensure that combined use of aspartame-acesulfame salt and aspartame or acesulfame K would not lead to exceeding the maximum levels established for these sweeteners.⁵⁶ The 41st CCFA agreed with these recommendations.⁵⁷

75. The 41st CCFA put forward a total of 16 aspartame-acesulfame salt provisions for adoption.

76. The following are the remaining proposed draft (Step 3) food additive provisions for aspartame-acesulfame salt presented in CX/FA 09/41/6. The provisions have been updated to correct errors to maximum use levels and notes that were not consistent with the approach outlined in the box above.

77. The *ad hoc* Working Group on the GSFA to the 39^h CCFA agreed that sweeteners are technologically justified in the food categories⁵⁸ that are highlighted in gray.

Recommendation 1 – Aspartame-Acesulfame Salt, INS 962						
The eWG for the 41 st CCFA recommended that the following food additive provisions for aspartame-acesulfame salt be included in the GSFA at Step 3 .						
Food Cat No.	Food Category	Max Level		Comments	Step	Justification
14.1.3.1	Fruit nectar	350	mg/kg	Note 113		Both aspartame and acesulfame K have established maximum levels in this category in the GSFA. If the key components of the salt are permitted in a food category, there should be no reason to prevent the use of the salt of them
14.1.3.3	Concentrates for fruit nectar	350	mg/kg	Note 113 & Note 127		

Recommendation 2 - Aspartame-Acesulfame Salt, INS 962						
The eWG for the 41 st CCFA recommended adoption of the following food additive provisions for aspartame-acesulfame salt in the GSFA.						
Food Cat No.	Food Category	Max Level		Comments	Step	Justification provided to eWG
03.0	Edible ices, including sherbet and sorbet	1,000	mg/kg	Note 119 & Note 161	3	

⁴⁹ ALINORM 08/31/12, para 72.

⁵⁰ ALINORM 08/31/12, para 78.

⁵¹ The Options Paper was made available to all members of the eWG on the electronic forum and is not included in this report.

⁵² **Note 113:** Use level reported as acesulfame potassium equivalents (the reported maximum level can be converted to an aspartame-acesulfame salt basis by dividing by 0.44). Combined use of aspartame-acesulfame salt with individual acesulfame potassium or aspartame should not exceed the individual maximum levels for acesulfame potassium or aspartame (the reported maximum level can be converted to aspartame equivalents by dividing by 0.68).

⁵³ **Note 119:** Use level reported as aspartame equivalents (the reported maximum level can be converted to an aspartame-acesulfame salt basis by dividing by 0.64). Combined use of aspartame-acesulfame salt with individual aspartame or acesulfame potassium should not exceed the individual maximum levels for aspartame or acesulfame potassium (the reported maximum level can be converted to aspartame equivalents by dividing by 0.68).

⁵⁴ **Note 188:** Not to exceed the maximum use level for acesulfame potassium (INS 950) singly or in combination with aspartame-acesulfame salt (INS 962).

⁵⁵ **Note 191:** Not to exceed the maximum use level for aspartame (INS 951) singly or in combination with aspartame-acesulfame salt (INS 962).

⁵⁶ **N.B.:** Notes 188 and 191, which the 41st CCFA agreed to add to all provisions for acesulfame potassium and aspartame respectively, are relevant only in food categories that also contain provisions for the aspartame-acesulfame salt. It is therefore suggested that the Committee consider removing Notes 188 and 191 from acesulfame potassium and aspartame provisions in the GSFA which do not have a corresponding aspartame-acesulfame salt provision.

⁵⁷ ALINORM 09/32/12, para 95.

⁵⁸ 39th CCFA, CRD 1 App. V.

Recommendation 2 - Aspartame-Acesulfame Salt, INS 962						
The eWG for the 41 st CCFA recommended adoption of the following food additive provisions for aspartame-acesulfame salt in the GSFA.						
Food Cat No.	Food Category	Max Level		Comments	Step	Justification provided to eWG
04.1.2.6	Fruit-based spreads (e.g., chutney) excluding products of food category 04.1.2.5	1,000	mg/kg	Note 119 & Note 161	3	
06.3	Breakfast cereals, including rolled oats	1,000	mg/kg	Note 119 & Note 161	3	
10.4	Egg-based desserts (e.g., custard)	350	mg/kg	Note 113	3	
11.6	Table-top sweeteners, including those containing high-intensity sweeteners	GMP			3	
12.4	Mustards	350	mg/kg	Note 119 & Note 161	3	
12.5	Soups and broths	110	mg/kg	Note 113 & Note 161	3	
12.7	Salads (e.g., macaroni salad, potato salad) and sandwich spreads excluding cocoa- and nut-based spreads of food categories 04.2.2.5 and 05.1.3	350	mg/kg	Note 119 & Note 161	3	
13.3	Dietetic foods intended for special medical purposes (excluding products of food category 13.1)	500	mg/kg	Note 113	3	
13.6	Food supplements	2000	mg/kg	Note 113	3	
14.1.4	Water-based flavoured drinks, including "sport," "energy," or "electrolyte" drinks and particulated drinks	600	mg/kg	Note 119 & Note 161		
15.0	Ready-to-eat savouries	500	mg/kg	Note 119 & Note 161	3	

Recommendation 4 – Aspartame-Acesulfame Salt, INS 962						
The eWG for the 41 st CCFA recommended further discussion of the following food additive provisions for aspartame-acesulfame salt in the GSFA.						
Food Cat No.	Food Category	Max Level		Comments	Step	Justification/Comment
01.2	Fermented and renneted milk products (plain), excluding food category 01.1.2 (dairy-based drinks)	500	mg/kg	Note 113	3	Comments 1) The 40th CCFA agreed to discontinue work for Aspartame in 01,2. In order to be coherent, the same logic should apply for INS 962 2) The Codex Standard for Fermented Milks does not allow the use of sweeteners in plain fermented milks (heat-treated and non-heat treated). Also, there is no existing provision in the GSFA for the use of aspartame in food Category 01. 3) Industry has indicated a technological need for ace-K at 500 ppm in beverages in general.
01.3.2	Beverage whiteners	2,000	mg/kg	Note 113	3	Comment The use could mislead the consumer
01.4.4	Cream analogues	1,000	mg/kg	Note 119	3	Comment The use could mislead the consumer
01.5.2	Milk and cream powder analogues	1,000	mg/kg	Note 113	3	Comment The use could mislead the consumer
01.6.5	Cheese analogues	350	mg/kg	Note 113	3	Comment The use could mislead the consumer
02.3	Fat emulsions mainly of type oil-in-water, including mixed and/or flavoured products based on fat emulsions	1,000	mg/kg	Note 119	3	Comment The use could mislead the consumer, add note 161.

Recommendation 4 – Aspartame-Acesulfame Salt, INS 962						
The eWG for the 41 st CCFA recommended further discussion of the following food additive provisions for aspartame-acesulfame salt in the GSFA.						
Food Cat No.	Food Category	Max Level		Comments	Step	Justification/Comment
04.1.2.1	Frozen fruit	500	mg/kg	Note 113	3	Comment The use could mislead the consumer, add note 161,
04.1.2.2	Dried fruit	500	mg/kg	Note 113	3	Comment 1) There are existing provisions in the GSFA for the use of aspartame and acesulfame K in Food Category 04.1.2.2. Proposes revising the proposed ML to 500 mg/kg with the inclusion of Note 113 to reflect the ML for Acesulfame K in this Food Category. 2) The use could mislead the consumer
04.1.2.3	Fruit in vinegar, oil, or brine	200	mg/kg	Note 113 & Note 161	3	Comment The use could mislead the consumer
04.1.2.7	Candied fruit	500	mg/kg	Note 113	3	Comment Add Note 116
04.1.2.10	Fermented fruit products	350	mg/kg	Note 113	3	Comment Add Note 116
04.1.2.11	Fruit fillings for pastries	350	mg/kg	Note 113	3	Comment 1) Industry in Canada has indicated a technological need for ace-K in this Category at a maximum level of 1000 mg/kg. Revise ML to 1000 mg/kg, consistent with Cat. 4.1.25 and 4.1.2.6, Jams and spreads 2) Add Note 116
04.1.2.12	Cooked fruit	500	mg/kg	Note 113	3	Comment Technical need questioned
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	350	mg/kg	Note 113	3	Comment Technical need questioned
04.2.2.5	Vegetable (including mushrooms and fungi, roots and tubers, pulses and legumes, and aloe vera), seaweed, and nut and seed purees and spreads (e.g., peanut butter)	1,000	mg/kg	Note 119	3	Comment 1) Industry in Canada has Indicated a technological need for aspartame at 2000 mg/kg in this Category. It is noted that there is provision at step 6 in the GSFA for aspartame with a ML of 3000 mg/kg in this food category. 2) Add note 161
04.2.2.7	Fermented vegetable (including mushrooms and fungi, roots and tubers, pulses and legumes, and aloe vera) and seaweed products, excluding fermented soybean products of food categories 06.8.6, 06.8.7, 12.9.1, 12.9.2.1 and 12.9.2.3	1,000	mg/kg	Note 113	3	Comment Add note 161
05.1.2	Cocoa mixes (syrops)	350	mg/kg	Note 113	3	Comment Add notes 97 and 161 for consistency with acesulfame potassium provision.
05.1.3	Cocoa-based spreads, including fillings	1,000	mg/kg	Note 113 & Note 161	3	Comment Industry in Canada has indicated a technological need for ace-K at 2500 mg/kg in confectionery.
05.1.4	Cocoa and chocolate products	500	mg/kg	Note 113 & Note 161	3	Comment Industry in Canada has indicated a technological need for ace-K at 2500 mg/kg in confectionery.

Recommendation 4 – Aspartame-Acesulfame Salt, INS 962						
The eWG for the 41 st CCFA recommended further discussion of the following food additive provisions for aspartame-acesulfame salt in the GSFA.						
Food Cat No.	Food Category	Max Level		Comments	Step	Justification/Comment
05.3	Chewing gum	5,000	mg/kg	Note 113 & Note 161	3	Comment The technological justification for such a high level is requested. A ML of 2000 mg/kg expressed as Acesulfame K should be sufficient to reach the desired effect.
05.4	Decorations (e.g., for fine bakery wares), toppings (non-fruit) and sweet sauces	500	mg/kg	Note 113	3	Comment Industry in Canada has indicated a technological need for ace-K at 1000 mg/kg in this Category.
06.5	Cereal and starch based desserts (e.g., rice pudding, tapioca pudding)	350	mg/kg	Note 113 & Note 161	3	Comment Industry in Canada has indicated a technological need for ace-K at 1000 mg/kg in desserts in general
07.1	Bread and ordinary bakery wares	1,000	mg/kg	Note 113	3	Comment 1) Possible intake will exceed ADI due to high consumption of such basic foodstuffs 2) Industry in Canada has indicated a technological need for ace-K in this Category.
11.4	Other sugars and syrups (e.g., xylose, maple syrup, sugar toppings)	1,000	mg/kg	Note 113	3	Comment Use could mislead consumer
12.2.2	Seasonings and condiments	2,000	mg/kg	Note 119	3	Comment 1) Industry in Canada has indicated a technological need for aspartame at 2000 mg/kg, not ace-K, in condiments. 2) No technological need. The use could mislead the consumer 3) Add note 161
12.3	Vinegars	2,000	mg/kg	Note 113	3	Comment 1) No technological need. 2) The use could mislead the consumer, 3) Add note 161
14.1.2.2	Vegetable juice	1360	mg/kg		3	Comment 1) Technological justification for such a high level is required. A ML of 350 mg expressed as Acesulfame K is sufficient to reach the desired effect. 2) There are no existing provisions in the GSFA for the use of aspartame or acesulfame K in food Category 14.1.2.2, this provision should be discontinued.
14.1.2.4	Concentrates for vegetable juice	3,100	mg/kg	Note 127	3	Comment 1) Technological justification for such a high level is required. A ML of 350 mg expressed as Acesulfame K is sufficient to reach the desired effect. 2) There are no existing provisions in the GSFA for the use of aspartame or acesulfame K in food Category 14.1.2.4, this provision should be discontinued.
14.1.3.4	Concentrates for vegetable nectar	350	mg/kg	Note 113 & Note 127	3	Comment Add note 161
14.1.5	Coffee, coffee substitutes, tea, herbal infusions, and other hot cereal and grain beverages, excluding cocoa	600	mg/kg	Note 119	3	Comment Use could mislead the consumer

Recommendation 4 – Aspartame-Acesulfame Salt, INS 962						
The eWG for the 41 st CCFA recommended further discussion of the following food additive provisions for aspartame-acesulfame salt in the GSFA.						
Food Cat No.	Food Category	Max Level		Comments	Step	Justification/Comment
14.2.1	Beer and malt beverages	790	mg/kg	Note 113 & Note 161	3	Comment 1) The ML is too high. A ML of 350 mg/kg (as expressed as AcK) should be sufficient to reach the desire effect 2) There are no existing provisions in the GSFA for the use of aspartame or acesulfame K in food Category 14.2.1, the provision should be discontinued
14.2.2	Cider and perry	790	mg/kg	Note 113	3	Comment 1) The ML is too high. A ML of 350 mg/kg (as expressed as AcK) should be sufficient to reach the desire effect. 2) There are no existing provisions in the GSFA for the use of aspartame or acesulfame K in food Category 14.2.2, the provision should be discontinued.
14.2.4	Wines (other than grape)	1,080	mg/kg	Note 113	3	Comment 1) The use could mislead the consumer 2) There are no existing provisions in the GSFA for the use of aspartame or acesulfame K in food Category 14.2.4, the provision should be discontinued.
14.2.7	Aromatized alcoholic beverages (e.g., beer, wine and spirituous cooler-type beverages, low alcoholic refreshers)	350	mg/kg	Note 113	3	

APPENDIX

The use of colours in the food categories listed in the table below is technologically justified. The use of colours in other food categories should be considered on a case-by-case basis. The list of food categories in this Appendix is intended to be used as a working document during the CCFA's discussions of food additive colours.

Appendix		
GSFA Categories in which the use of one or more colours is technologically justified		
FCS No.	Title	Justification
01.1.2	Dairy-based drinks, flavoured and/or fermented (e.g., chocolate milk, cocoa, eggnog, drinking yoghurt, whey-based drinks)	Include because the CCMMP is revising the standard for fermented milk drinks that will likely contain provisions for colours.
01.3.2	Beverage whiteners	Include because there are adopted provisions for colours in these GSFA food categories
01.4.4	Cream analogues	
01.5.2	Milk and cream powder analogues	
01.6.1	Unripened cheese	
01.6.2	Ripened cheese	Include because CODEX STANs 275-1973, A-6-1978, 221-2001 and the draft mozzarella standard contain provisions for colours
01.6.2.1	Ripened cheese, includes rind	
01.6.2.2	Rind of ripened cheese	
01.6.2.3	Cheese powder (for reconstitution; e.g., for cheese sauces)	Include because there are adopted provisions for colours in this GSFA food category
01.6.4	Processed cheese	Include because CODEX STANs A-8(a)-1978, A-8(b)-1978 and A-8(c)-1978 contains provisions for colours that apply to these food categories
01.6.4.1	Plain processed cheese	
01.6.4.2	Flavoured processed cheese, including containing fruit, vegetables, meat, etc.	
01.6.5	Cheese analogues	Include because there are provisions for colours adopted for this GSFA food category
01.7	Dairy-based desserts (e.g., pudding, fruit or flavoured yoghurt)	
02.1.3	Lard, tallow, fish oil, and other animal fats	Include because CODEX STAN 19-1978 contains provisions for colours that apply to this food category
02.2.1	Emulsions containing at least 80% fat	Add at request of European Commission
02.2.1.1 ⁵⁹	Butter and concentrated butter	Include because CODEX STAN 1-1985 contains provisions for colours that apply to this food category
02.2.1.2	Margarine and similar products	Include because CODEX STAN 256-2007 contains provisions for colours and there are adopted provisions for colours in these GSFA food categories
02.2.1.3	Blends of butter and margarine	
02.2.2	Emulsions containing less than 80% fat	
02.3	Fat emulsions mainly of type oil-in-water, including mixed and/or flavoured products based on fat emulsions	
02.4	Fat-based desserts excluding dairy-based dessert products of food category 01.7	
03.0	Edible ices, including sherbet and sorbet	
04.1.1.2	Surface-treated fresh fruit	Include with Notes 4 ⁶⁰ and 16 ⁶¹
04.1.2.2	Dried fruit	Include because of the following justification: due to the effect of temperature during processing and storage affecting the discolouration of the dried fruit. Dried fruit will lose original natural flesh colour in processing and aging
04.1.2.3	Fruit in vinegar, oil, or brine	Include because there are adopted provisions for colours in this GSFA food category
04.1.2.4	Canned or bottled (pasteurized) fruit	Include because CODEX STANs 60-1981, 61-1985, 78-1981, 99-1981, 159-1987, and 242-2003 all contain provisions for colours that apply to this food category
04.1.2.5	Jams, jellies, marmalades	Include because CODEX STANs 79-1981 and 80-1981 contain provisions for colours and there are adopted provisions for colours in these GSFA food categories
04.1.2.6	Fruit-based spreads (e.g., chutney) excluding products of food category 04.1.2.5	
04.1.2.7	Candied fruit	
04.1.2.8	Fruit preparations, including pulp, purees, fruit toppings and coconut milk	
04.1.2.9	Fruit-based desserts, incl. fruit-flavoured water-based desserts	
04.1.2.10	Fermented fruit products	
04.1.2.11	Fruit fillings for pastries	
04.1.2.12	Cooked fruit	

⁵⁹ CX/FA 08/40/6 proposes to revise the GSFA food category system. If endorsed by the CCFA, food categories 02.2.1.1, 02.2.1.2 and 02.2.1.3 would be deleted.

⁶⁰ **Note 4:** For decoration, stamping, marking or branding the product.

⁶¹ **Note 16:** for use in glaze, coatings or decorations for fruit, vegetables, meat or fish.

Appendix		
GSFA Categories in which the use of one or more colours is technologically justified		
FCS No.	Title	Justification
04.2.1.2	Surface-treated fresh vegetables (including mushrooms and fungi, roots and tubers, pulses and legumes, and aloe vera), seaweeds, and nuts and seeds	Include with Notes 4 and 16
04.2.2.2	Dried vegetables, (including mushrooms and fungi, roots and tubers, pulses and legumes, and aloe vera), seaweeds, and nuts and seeds	Include because of the following justification: due to the effect of temperature during processing and storage affecting the discolouration of the dried fruit. Dried fruit will lose original natural flesh colour in processing and aging
04.2.2.3	Vegetables (including mushrooms and fungi, roots and tubers, pulses and legumes, and aloe vera), and seaweeds in vinegar, oil, brine, or soy sauce	Include because CODEX STANs 55-1981, 58-1981, 81-1981, and 115-1981 contain provisions for colours and there are adopted provisions for colours in these GSFA food categories
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	
04.2.2.5	Vegetable, (including mushrooms and fungi, roots and tubers, pulses and legumes, and aloe vera), seaweed, and nut and seed purees and spreads (e.g., peanut butter)	
04.2.2.6	Vegetable, (including mushrooms and fungi, roots and tubers, pulses and legumes, and aloe vera), seaweed, and nut and seed pulps and preparations (e.g., vegetable desserts and sauces, candied vegetables) other than food category 04.2.2.5	
04.2.2.7	Fermented vegetable (including mushrooms and fungi, roots and tubers, pulses and legumes, and aloe vera) and seaweed products, excluding fermented soybean products of food category 12.10	
04.2.2.8	Cooked or fried vegetables (including mushrooms and fungi, roots and tubers, pulses and legumes, and aloe vera), and seaweeds	
05.1.2	Cocoa mixes (syrups)	
05.1.3	Cocoa-based spreads, incl. fillings	
05.1.4	Cocoa and chocolate products	
05.1.5	Imitation chocolate, chocolate substitute products	
05.2	Confectionery including hard and soft candy, nougats, etc. other than food categories 05.1, 05.3, and 05.4	
05.2.1	Hard candy	
05.2.2	Soft candy	
05.2.3	Nougats and marzipans	
05.3	Chewing gum	
05.4	Decorations (e.g., for fine bakery wares), toppings (non-fruit), and sweet sauces	
06.1	Whole, broken, or flaked grain, including rice	Include with Note 184 ⁶²
06.3	Breakfast cereals, including rolled oats	Include because CODEX STANs 55-1981, 58-1981, 81-1981, and 115-1981 contain provisions for colours and there are adopted provisions for colours in these GSFA food categories
06.4.3	Pre-cooked pastas and noodles and like products	Include because CODEX STAN 249-206 (Instant Noodles) contains colour provisions
06.5	Cereal and starch based desserts (e.g., rice pudding, tapioca pudding)	Include because there are adopted provisions for colours in these GSFA food categories
06.6	Batters (e.g., for breading or batters for fish or poultry)	
06.7	Pre-cooked or processed rice products, including rice cakes (Oriental type only)	
06.8	Soybean products (excluding soybean products of food category 12.9 and fermented soybean products of food category 12.10)	
07.1.2	Crackers, excluding sweet crackers	Include because there are adopted provisions for colours in these GSFA food categories
07.1.4	Bread-type products, including bread stuffing and bread crumbs	
07.2	Fine bakery wares (sweet, salty, savoury) and mixes	
07.2.1	Cakes, cookies and pies (e.g., fruit-filled or custard types)	
07.2.2	Other fine bakery products (e.g., doughnuts, sweet rolls, scones, and muffins)	
07.2.3	Mixes for fine bakery wares (e.g., cakes, pancakes)	
08.1	Fresh meat, poultry and game	Include with Notes 4 & 16
08.1.1	Fresh meat, poultry and game, whole pieces or cuts	
08.1.2	Fresh meat, poultry and game, comminuted	

⁶² **Note 184:** For use in nutrient coated rice grains only.

Appendix		
GSFA Categories in which the use of one or more colours is technologically justified		
FCS No.	Title	Justification
08.2	Processed meat, poultry, and game products in whole pieces or cuts	Include with Note 16
08.2.1	Non-heat treated processed meat, poultry, and game products in whole pieces or cuts	
08.2.1.1	Cured (including salted) non-heat treated processed meat, poultry, and game products in whole pieces or cuts	
08.2.1.2	Cured (including salted) and dried non-heat treated processed meat, poultry, and game products in whole pieces or cuts	
08.2.1.3	Fermented non-heat treated processed meat, poultry, and game products in whole pieces or cuts	
08.2.2	Heat-treated processed meat, poultry, and game products in whole pieces or cuts	
08.2.3	Frozen processed meat, poultry, and game products in whole pieces or cuts	
08.3	Processed comminuted meat, poultry, and game products	
08.3.1	Non-heat treated processed comminuted meat, poultry, and game products	
08.3.1.1	Cured (including salted) non-heat treated processed comminuted meat, poultry, and game products	
08.3.1.2	Cured (including salted) and dried non-heat treated processed comminuted meat, poultry, and game products	
08.3.1.3	Fermented non-heat treated processed comminuted meat, poultry, and game products	
08.3.2	Heat-treated processed comminuted meat, poultry, and game products	
08.3.3	Frozen processed comminuted meat, poultry, and game products	
08.4	Edible casings (e.g., sausage casings)	
09.1	Fresh fish and fish products, including mollusks, crustaceans, and echinoderms	Include with Notes 4 & 16
09.1.1	Fresh fish	
09.1.2	Fresh mollusks, crustaceans and echinoderms	
09.2	Processed fish and fish products, including mollusks, crustaceans, and echinoderms	Include because there are adopted provisions for colours in this GSFA food category
09.2.1	Frozen fish, fish fillets, and fish products, including mollusks, crustaceans, and echinoderms	Include with Note 95 ⁶³
09.2.2	Frozen battered fish, fish fillets and fish products, including mollusks, crustaceans, and echinoderms	Include with Note 16
09.2.3	Frozen minced and creamed fish products, including mollusks, crustaceans, and echinoderms	Include with Note 95
09.2.4	Cooked and/or fried fish and fish products, including mollusks, crustaceans, and echinoderms	Include because there are adopted provisions for colours in this GSFA food category
09.2.4.1	Cooked fish and fish products	Include with Note 95
09.2.4.2	Cooked mollusks, crustaceans, and echinoderms	Include because there are adopted provisions for colours in this GSFA food category
09.2.4.3	Fried fish and fish products, including mollusks, crustaceans, and echinoderms	Include with Note 16
09.2.5	Smoked, dried, fermented, and/or salted fish and fish products, including mollusks, crustaceans, and echinoderms	Include because there are adopted provisions for colours in these GSFA food categories
09.3	Semi-preserved fish and fish products, including mollusks, crustaceans, and echinoderms	Include with Note 16
09.3.1	Fish and fish products, including mollusks, crustaceans, and echinoderms, marinated and/or in jelly	
09.3.2	Fish and fish products, including mollusks, crustaceans, and echinoderms, pickled and/or in brine	
09.3.3	Salmon substitutes, caviar, and other fish roe products	Include because there are adopted provisions for colours in this GSFA food category
09.3.4	Semi-preserved fish and fish products, including mollusks, crustaceans, and echinoderms (e.g., fish paste), excluding products of food categories 09.3.1 - 09.3.3	Include because there are adopted provisions for colours in this GSFA food category
09.4	Fully preserved, including canned or fermented fish and fish products, including mollusks, crustaceans, and echinoderms	Include with Note 95
10.1	Fresh eggs	Include with Note 4
10.3	Preserved eggs, including alkaline, salted, and canned eggs	Include with Note 4 (For decoration stamping, marking or branding the product)
10.4	Egg-based desserts (e.g., custard)	Include because there are adopted provisions for colours in this GSFA food category
11.4	Other sugars and syrups (e.g., xylose, maple syrup, sugar toppings)	

⁶³ **Note 95:** For use in surimi and fish roe products only.

Appendix			
GSFA Categories in which the use of one or more colours is technologically justified			
FCS No.	Title	Justification	
12.2.2	Seasonings and condiments	Include because CODEX STAN 117-1981 contains provisions for colours and there are adopted provisions for colours in this GSFA food category	
12.3	Vinegars		
12.4	Mustards		
12.5	Soups and broths		
12.5.1	Ready-to-eat soups and broths, including canned, bottled, and frozen		
12.5.2	Mixes for soups and broths		
12.6	Sauces and like products		
12.6.1	Emulsified sauces (e.g., mayonnaise, salad dressing)		
12.6.2	Non-emulsified sauces (e.g., ketchup, cheese sauce, cream sauce, brown gravy)		
12.6.3	Mixes for sauces and gravies		
12.6.4	Clear sauces (e.g., fish sauce)		
12.7	Salads (e.g., macaroni salad, potato salad) and sandwich spreads excluding cocoa-and nut-based spreads of food categories 04.2.2.5 and 05.1.3		
12.9	Protein products		Include because there are adopted provisions for colours in this GSFA food category
12.9.1	Soybean protein products		
12.9.1.1	Soybean beverage		
12.9.1.2	Soybean beverage film		
12.9.1.3	Other soybean protein products (including non-fermented soy sauce)		
12.9.2	Fresh bean curd (tofu)		
12.9.3	Semi-dehydrated bean curd		
12.9.3.1	Thick gravy-stewed semi-dehydrated bean curd		
12.9.3.2	Deep fried semi-dehydrated bean curd		
12.9.3.3	Semi-dehydrated bean curd, other than food categories 12.9.3.1 and 12.9.3.2		
12.9.4	Dehydrated bean curd (kori tofu)		
12.9.5	Other protein products		
12.10	Fermented soybean products		
12.10.1	Fermented soybeans (e.g., natto)		
12.10.2	Fermented soybean curd (soybean cheese)		
12.10.3	Fermented soybean paste (e.g., miso)		
12.10.4	Fermented soy sauce		
13.3	Dietetic foods intended for special medical purposes (excluding products of food category 13.1)	Include because there are adopted provisions for colours in this GSFA food category	
13.4	Dietetic formulae for slimming purposes and weight reduction		
13.5	Dietetic foods (e.g., supplementary foods for dietary use) excluding products of food categories 13.1- 13.4 and 13.6		
13.6	Food supplements		
14.1.4	Water-based flavoured drinks, including "sport," "energy," or "electrolyte" drinks and particulated drinks		
14.1.4.1	Carbonated water-based flavoured drinks		
14.1.4.2	Non-carbonated water-based flavoured drinks, including punches and ades		
14.1.4.3	Concentrates (liquid or solid) for water-based flavoured drinks		
14.1.5	Coffee, coffee substitutes, tea, herbal infusions, and other hot cereal and grain beverages, excluding cocoa		Include based on the following justifications. 1) Caramel colour, flavours and caffeine are dried on maltodextrin, which is added to dried coffee, in order to make an extended mix which is used as a coffee substitute in Russia (e.g. by the Russian military). 2) This category includes canned coffees that are served hot. The use of caramel colour is technologically justified in such products due to a specific manufacturing method (retort sterilization) that may change the colour during processing. Caramel colour is added to provide a consistent colour of the product that is expected by consumers. Such coffees are widely marketed in Japan. Include with Note 160 ⁶⁴
14.2.1	Beer and malt beverages		Include because there are adopted provisions for colours in this GSFA food category
14.2.2	Cider and perry		
14.2.3.3	Fortified grape wine, grape liquor wine, and sweet grape wine		
14.2.4	Wines (other than grape)		
14.2.6	Distilled spirituous beverages containing more than 15% alcohol		
14.2.7	Aromatized alcoholic beverages (e.g., beer, wine and		

⁶⁴ **Note 160:** For use in ready-to-drink products and pre-mixes for ready-to-drink products only.

Appendix		
GSFA Categories in which the use of one or more colours is technologically justified		
FCS No.	Title	Justification
	spirituous cooler-type beverages, low-alcoholic refreshers)	
15.0	Ready-to-eat savouries	
15.1	Snacks - potato, cereal, flour or starch based (from roots and tubers, pulses and legumes)	
15.2	Processed nuts, including coated nuts and nut mixtures (with e.g., dried fruit)	
15.3	Snacks - fish based	