CODEX ALIMENTARIUS COMMISSION

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Food and Agriculture Organization of the United Nations

World Health Organization

Viale delle Terme di Caracalla, 00153 Rome, Italy - Tel: (+39) 06 57051 - E-mail: codex@fao.org - www.codexalimentarius.org

Agenda Item 4 (a) **CX/FA 18/50/5**

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JOINT FAO/WHO FOOD STANDARDS PROGRAMME

CODEX COMMITTEE ON FOOD ADDITIVES

Fiftieth Session

ENDORSEMENT AND/OR REVISION OF MAXIMUM LEVELS FOR FOOD ADDITIVES AND PROCESSING AIDS IN CODEX STANDARDS

BACKGROUND

1. In accordance with the section concerning Relations between Commodity Committees and General Committees of the Codex Alimentarius Commission Procedural Manual, "*All provisions in respect of food additives (including processing aids) contained in Codex commodity standards should be referred to the Committee on Food Additives, preferably before the Standards have been advanced to Step 5 of the Procedure for the Elaboration of Codex Standards or before they are considered by the commodity committee concerned at Step 7, though such referral should not be allowed to delay the progress of the Standard to the subsequent Steps of the Procedure.".*

2. The following food additive and processing aids provisions of Codex standards have been submitted for endorsement since the 49th Session of the Codex Committee on Food Additives and are listed by:

(i) Technological function, INS number and food additive name;

(ii) Maximum level;

(iii) ADI (mg additive/kg body weight per day); and

(iv) Notes.

3. The following abbreviations have been used in the preparation of this paper:

INS **International Numbering System for food additives**. The INS (INS) is intended as a harmonised naming system for food additives as an alternative to the use of the specific name, which may be lengthy[1].

ADI **Acceptable Daily Intake.** An estimate of the amount of a substance in food or drinking-water, expressed on a body-weight basis, that can be ingested daily over a lifetime without appreciable risk (standard human = 60 kg)[2]. The ADI is listed in units of mg per kg of body weight.

ADI "Not Specified". A term applicable to a food substance of very low toxicity which, on the basis of the available data (chemical, biochemical, toxicological, and other), the total dietary intake of the substance arising from its use at the levels necessary to achieve the desired effect and from its acceptable background in food does not, in the opinion of JECFA, represent a hazard to health. For that reason, and for reasons stated in individual evaluations, the establishment of an acceptable daily intake expressed in numerical form is not deemed necessary. An additive meeting this criterion must be used within the bounds of good manufacturing practice, i.e., it should be technologically efficacious and should be used at the lowest level necessary to achieve this effect, it should not conceal inferior food quality or adulteration, and it should not create a nutritional imbalance[2].

ADI "Not Limited". A term no longer used by JECFA that has the same meaning as ADI "not specified"[2].

[1] *Class Names and the International Numbering System for Food Additives* (CXG 36-1989)

[2] JECFA Glossary of terms:
http://apps.who.int/iris/bitstream/10665/44065/13/WHO_EHC_240_13_eng_Annex1.pdf?ua=1

Temporary ADI. Used by JECFA when data are sufficient to conclude that use of the substance is safe over the relatively short period of time required to generate and evaluate further safety data, but are insufficient to conclude that use of the substance is safe over a lifetime. A higher-than-normal safety factor is used when establishing a temporary ADI and an expiration date is established by which time appropriate data to resolve the safety issue should be submitted to JECFA. The temporary ADI is listed in units of mg per kg of body weight[2].

Conditional ADI. A term no longer used by JECFA to signify a range above the "unconditional ADI" which may signify an acceptable intake when special problems, different patterns of dietary intake, and special groups of the population that may require consideration are taken into account[2].

No ADI allocated. There are various reasons for not allocating an ADI, ranging from a lack of information to data on adverse effects that call for advice that a food additive or veterinary drug should not be used at all. The report should be consulted to learn the reasons that an ADI was not allocated[2].

Acceptable[2].

Flavouring agents: Used to describe flavouring agents that are of no safety concern at current levels of intake and subsequent reports of meetings on food additives. If an ADI has been allocated to the agent, it is maintained unless otherwise indicated.

Enzyme preparations: Used to describe enzymes that are obtained from edible tissues of animals or plants commonly used as foods or are derived from microorganisms that are traditionally accepted as constituents of foods or are normally used in the preparation of foods. Such enzyme preparations are considered to be acceptable provided that satisfactory chemical and microbiological specifications can be established.

Food additives: Used on some occasions when present uses are not of toxicological concern or when intake is self-limiting for technological or organoleptic reasons.

Acceptable Level of Treatment. ADIs are expressed in terms of mg per kg of body weight per day. In certain cases, however, food additives are more appropriately limited by their levels of treatment. This situation occurs most frequently with flour treatment agents. It should be noted that the acceptable level of treatment is expressed as mg/kg of the commodity. This should not be confused with an ADI[2].

Good Manufacturing Practice (GMP) in the Use of Food Additives [3] means that:

- the quantity of the additive added to food does not exceed the amount reasonably required to accomplish its intended physical nutritional or other technical effect in food;
- the quantity of the additive that becomes a component of food as a result of its use in the manufacturing, processing or packaging of a food and which is not intended to accomplish any physical, or other technological effect in the food itself, is reduced to the extent reasonably possible;
- the additive is of appropriate food grade quality and is prepared and handled in the same way as a food ingredient. Food grade quality is achieved by compliance with the specifications as a whole and not merely with individual criteria in terms of safety.

[3] Procedural Manual of the Codex Alimentarius Commission (Definitions)

ENDORSEMENT AND/OR REVISION OF MAXIMUM LEVELS FOR FOOD ADDITIVES IN COMMODITY STANDARDS

The Committee **is invited to consider for endorsement** the food additive provisions (see Annex 1) forwarded by:

I. The 9th Session of the FAO/WHO Coordinating Committee for the Near East (REP17/NE) related to:

- Regional Standard for Doogh (adopted by CAC40 at Step 5/8 subject to endorsement of its food labelling and food additive provisions[4])

II. The Committee on Milk and Milk Products (working be correspondence) (CX/CAC17/40/3- Add.1, Annex 2) related to:

- Standard for Dairy Permeate Powders (adopted by CAC40 at Step 8 subject to endorsement of its food labelling, food additive and methods of analysis provisions[5])

[4] REP17/CAC para. 63 and Appendix III
[5] REP17/CAC para. 54 and Appendix III

I. CCNE9:

REGIONAL STANDARD FOR DOOGH (at Step 5/8) [6]

4. FOOD ADDITIVES[7]

<table>
<tr><th>INS No.</th><th>Name of the Food Additive</th><th>Maximum Level</th><th>ADI</th><th>Note</th></tr>
<tr><td colspan="2">4.1 Only those additives classes indicated in the Table below may be used for the product categories specified. Within each additive class, and where permitted according to the Table, only those individual additives listed may be used and only within the limits specified.

In accordance with Section 4.1 of the Preamble to the General Standard for Food Additives (CODEX STAN 192-1995), additional additives may be present in the flavoured doogh as a result of carry-over from non-dairy ingredients.

<table>
<tr><th rowspan="2">Additive class</th><th colspan="2">Heat treated doogh</th><th colspan="2">Un-heat treated doogh</th></tr>
<tr><th>Plain</th><th>Flavoured</th><th>Plain</th><th>Flavoured</th></tr>
<tr><td>Acidity Regulators</td><td>-</td><td>X</td><td>X</td><td>X</td></tr>
<tr><td>Carbonating agents</td><td>X</td><td>X</td><td>X</td><td>X</td></tr>
<tr><td>Colours</td><td>-</td><td>X</td><td>-</td><td>X</td></tr>
<tr><td>Emulsifiers</td><td>-</td><td>X</td><td>-</td><td>X</td></tr>
<tr><td>Flavour enhancers</td><td>-</td><td>X</td><td>-</td><td>X</td></tr>
<tr><td>Packaging gases</td><td>-</td><td>X</td><td>X</td><td>X</td></tr>
<tr><td>Preservatives</td><td>-</td><td>-</td><td>-</td><td>X</td></tr>
<tr><td>Stabilizers</td><td>X (a)</td><td>X</td><td>X</td><td>X</td></tr>
<tr><td>Sweeteners</td><td>-</td><td>X</td><td>-</td><td>X</td></tr>
<tr><td>Thickeners</td><td>X (a)</td><td>X</td><td>X</td><td>X</td></tr>
</table>
X = The use of additives belonging to the class is technologically justified. In the case of flavoured products, the additives are technologically justified in the dairy portion.

- = The use of additives belonging to the class is not technologically justified.

(a) Use is restricted to reconstitution and recombination and if permitted by national legislation in the country of sale to the final consumer</td><td></td><td>Text aligned with provisions of the Procedural Manual (Format for Codex Commodity Standards)

Doogh (plain, un-heat treated) is included in FC 01.2.1.1 “Fermented milks (plain), not heat-treated after fermentation”; doogh (plain, heat treated) is included in FC 01.2.1.2 “Fermented milks (plain), heat treated after fermentation”; and doogh (flavoured, heat treated and un-heat treated) is included in FC 01.1.4. “Flavoured fluid milk drinks”.

All Table 3 food additives (with ADI not specified or not limited) can be used in products covered by FC 01.1.4 at GMP level. FCs 01.2.1.1 and 01.2.1.2 are included in the Annex to Table 3 of the GSFA, and provisions in Tables 1 and 2 govern the use of Table 3 additives in these FCs.</td></tr>
</table>

[6] REP17/NE, App. III

[7] Food additives with functional classes carbonating agents, colours, emulsifiers, flavour enhancers, preservatives, stabilizers and thickeners and sweeteners and their MLs included in the standard are identical to those included in the *Standard for Fermented Milks* (CXS 243-2003) except nisin (INS 234) and magnesium dihydrogen diphosphate (INS 450(ix)).

INS No.	Name of the Food Additive	Maximum Level	ADI	Note
Acidity regulators (for all doogh, except plain heat treated doogh)				
270	Lactic acid, L-, D- and DL-	GMP	"Not limited" for lactic acid and its salts (23rd JECFA, 1979)	Included in GSFA Table 3. In GSFA there is no provision in FC 01.2.1.1.
Carbonating agents (for all doogh)				
290	Carbon dioxide	GMP	"Not specified" (49th JECFA, 1985)	Included in GFSA Table 3. In GSFA there is no provision in FCs 01.2.1.1 and 01.2.1.2.
Colours (for all doogh, except plain heat treated and plain un-heat treated doogh)				
100(i)	Curcumin	100 mg/kg	0-3 mg/kg bw (61st JECFA, 2003)	In GSFA FC 01.1.4: 150 mg/kg, with Note 402 "For use in products conforming to the *Standard for Fermented Milk*s (CXS 243- 2003) at 100 mg/kg".
101(i)	Riboflavin, synthetic	300 mg/kg	Group ADI of 0-0.5 mg/kg bw for riboflavin from *Bacillus subtilis*, synthetic riboflavin and riboflavin-5-phosphate (51st JECFA 1998)	In GSFA FC 01.1.4: 300 mg/kg.
101(ii)	Riboflavin 5'-phosphate, sodium			
102	Tartrazine		0-10 mg/kg bw (82th JECFA, 2016)	
104	Quinoline yellow	150 mg/kg	Temporary ADI of 0-3 mg/kg bw (82th JECFA, 2016)	In GSFA FC 01.1.4: 10 mg/kg.
110	Sunset yellow FCF	300 mg/kg	0-4 mg/kg bw (74th JECFA, 2011)	In GSFA FC 01.1.4: 300 mg/kg.
120	Carmines	150 mg/kg	Group ADI of 0-5 mg/kg bw for carmines, as ammonium carmine or the equivalent of Ca, K and Na salts (55th JECFA, 2000)	In GSFA FC 01.1.4: 150 mg/kg.
122	Azorubine (Carmoisine)		0-4 mg/kg bw (27th JECFA, 1983)	
124	Ponceau 4R (Cochineal red A)		0-4 mg/kg bw (74th JECFA, 2011)	
129	Allura red AC	300 mg/kg	0-7 mg/kg bw (82th JECFA, 2016)	In GSFA FC 01.1.4: 300 mg/kg.

INS No.	Name of the Food Additive	Maximum Level	ADI	Note
132	Indigotine	100 mg/kg	0-5 mg/kg bw (18th JECFA, 1974)	In GSFA FC 01.1.4: 300 mg/kg, with Note 402 "For use in products conforming to the *Standard for Fermented Milk*S (CXS 243- 2003) at 100 mg/kg".
133	Brilliant blue FCF	150 mg/kg	0-12.5 mg/kg bw (13th JECFA, 1969)	In GSFA FC 01.1.4: 150 mg/kg.
141(i)	Chlorophylls, copper complexes	500 mg/kg	0-15 mg/kg bw (13th JECFA, 1969)	In GSFA FC 01.1.4: 50 mg/kg, with Note 190 "Except for use in fermented milk drinks at 500 mg/kg".
141(ii)	Chlorophylls, copper complexes, sodium and potassium salts		0-15 mg/kg bw (22nd JECFA, 1978)	
143	Fast green FCF	100 mg/kg	0-25 mg/kg bw (30th JECFA, 1986)	In GSFA FC 01.1.4: 100 mg/kg.
150b	Caramel II – sulphite caramel	150 mg/kg	0-160 mg/kg bw (55th JECFA, 2000)	In GSFA FC 01.1.4: 2000 mg/kg with Note 400 "For use in products conforming to the *Standard for Fermented Milk*s (CXS 243- 2003) at 150 mg/kg".
150c	Caramel III – ammonia caramel	2000 mg/kg	0-200 mg/kg bw (0-150 mg/kg bw on solids basis) (29th JECFA, 1985)	In GSFA FC 01.1.4: 2000 mg/kg.
150d	Caramel IV – sulphite ammonia caramel	2000 mg/kg	0-200 mg/kg bw (0-150 mg/kg bw on solids basis) (29th JECFA, 1985)	In GSFA FC 01.1.4: 2000 mg/kg.
151	Brilliant black (Black PN)	150 mg/kg	0-1 mg/kg bw (25th JECFA, 1981)	In GSFA FC 01.1.4: 150 mg/kg.
155	Brown HT	150 mg/kg	0-1.5 mg/kg bw (28th JECFA, 1984)	In GSFA FC 01.1.4: 150 mg/kg.
160a(i)	Carotene, beta-, synthetic	100 mg/kg	Group ADI of 0-5 mg/kg bw for beta carotene, synthetic and from *Blakeslea trispora* (18th JECFA, 1974)	In GSFA FC 01.1.4": 150 mg/kg, with Note 402 "For use in products conforming to the *Standard for Fermented Milk*s (CXS 243- 2003) at 100 mg/kg".
160e	Carotenal, beta-apo-8'-		Group ADI of 0-5 mg/kg bw expressed as the sum of carotenoids including β-carotene, β-apo-8'-carotenal, and the methyl and ethyl esters of β-apo-8'-carotenoic acid (18th JECFA, 1974)	
160f	Carotenic acid, methyl or ethyl ester, beta-apo-8'-			

INS No.	Name of the Food Additive	Maximum Level	ADI	Note
160a(iii)	Carotenes, *beta*-, *Blakeslea trispora*		Group ADI with β - carotene (synthetic) of 0-5 mg/kg bw (57th JECFA, 2001)	
160a(ii)	Carotenes, beta-, vegetable	600 mg/kg	ADI "acceptable", provided the level of use does not exceed the level normally found in vegetables (41st JECFA, 1993)	In GSFA FC 01.1.4: 1000 mg/kg, with Note 401 “For use in products conforming to the *Standard for Fermented Milk*s (CXS 243- 2003) at 600 mg/kg”.
160b(i)	Annatto extract, bixin-based	20 mg/kg as bixin	0 – 12 mg/kg bw for bixin and 0 – 0.6 mg/kg for norbixin and its disodium and dipotassium salts (67th JECFA, 2006)	In GSFA FC 01.1.4: 20 mg/kg.
160b(ii)	Annatto extract, norbixin-based	20 mg/kg as norbixin	0 – 12 mg/kg bw for bixin and 0 – 0.6 mg/kg for norbixin and its disodium and dipotassium salts (67th JECFA, 2006)	In GSFA FC 01.1.4: 10 mg/kg.
160d	Lycopenes	30 mg/kg as pure lycopene	“Not specified” for lycopene from all sources (71st JECFA, 2009)	In GSFA lycopene, synthetic (INS 160d(i)), lycopene, tomato (INS 160d(ii)) and lycopene, blakeslea trispora (INS 160d(iii)) are included in Table 3.
161b(i)	Lutein from *Tagetes erecta*	150 mg/kg	Group ADI of 0 - 2 mg/kg bw for lutein from *T. erecta* and synthetic zeaxanthin (63rd JECFA, 2004)	In GSFA FC 01.1.4: 100 mg/kg, with Note 400 “For use in products conforming to the *Standard for Fermented Mil*ks (CXS 243- 2003) at 150 mg/kg”.
161h(i)	Zeaxanthin, synthetic	150 mg/kg		In GSFA FC 01.1.4: 100 mg/kg, with Note 400 “For use in products conforming to the *Standard for Fermented Milks* (CXS 243- 2003) at 150 mg/kg”.
163(ii)	Grape skin extract	100 mg/kg	0-2.5 mg/kg bw (26th JECFA, 1982)	In GSFA FC 01.1.4: 100 mg/kg, with Note 402 “For use in products conforming to the *Standard for Fermented Milks* (CXS 243- 2003) at 100 mg/kg”.
172(i)	Iron oxide, black		0-0.5 mg/kg bw (53rd JECFA, 1999)	In GSFA FC 01.1.4”: 20 mg/kg with Note 402 “For use in products conforming to the *Standard for Fermented Milks* (CXS 243- 2003) at 100 mg/kg”.
172(ii)	Iron oxide, red			
172(iii)	Iron oxide, yellow			
Emulsifiers (for all doogh, except plain heat and plain un-heat treated doogh)				
432	Polyoxyethylene (20) sorbitan monolaurate	3000 mg/kg	0-25 mg/kg bw (17th JECFA, 1973)	In GSFA FC 01.1.4: 3000 mg/kg.

INS No.	Name of the Food Additive	Maximum Level	ADI	Note
433	Polyoxyethylene (20) sorbitan monooleate		0-25 mg/kg bw (17th JECFA, 1973)	
434	Polyoxyethylene (20) sorbitan monopalmitate		0-25 mg/kg bw (17th JECFA, 1973)	
435	Polyoxyethylene (20) sorbitan monostearate		0-25 mg/kg bw (17th JECFA, 1973)	
436	Polyoxyethylene (20) sorbitan tristearate		0-25 mg/kg bw (17th JECFA, 1973)	
472e	Diacetyltartaric and fatty acid esters of glycerol	10000 mg/kg	0-50 mg/kg bw (61st JECFA, 2003)	In GSFA FC 01.1.4: 5,000 mg/kg, with Note 399 “For use in products conforming to the *Standard for Fermented Milks* (CXS 243- 2003) at 10000 mg/kg”.
473	Sucrose esters of fatty acids	5000 mg/kg	0-30 mg/kg bw (73rd JECFA, 2010)	In GSFA FC 01.1.4: 5000 mg/kg.
474	Sucroglycerides	5000 mg/kg	0-30 mg/kg bw, group ADI for sucrose esters of fatty acids and sucroglycerides (49th JECFA, 1997)	In GSFA FC 01.1.4: 5000 mg/kg.
475	Polyglycerol esters of fatty acids	2000 mg/kg	0-25 mg/kg bw (35th JECFA, 1989)	In GSFA FC 01.1.4: 2000 mg/kg.
477	Propylene glycol esters of fatty acids	5000 mg/kg	0-25 mg/kg bw (17th JECFA, 1973)	In GSFA FC 01.1.4: 5000 mg/kg
481(i)	Sodium stearoyl lactylate	10000 mg/kg	0-20 mg/kg bw (17th JECFA, 1973)	In GSFA FC 01.1.4: 1000 mg/kg for stearoyl lactylates.
482(i)	Calcium stearoyl lactylate	10000 mg/kg	0-20 mg/kg bw (17th JECFA, 1973)	
491	Sorbitan monostearate	5000 mg/kg	Group ADI of 0-25 mg/kg bw as the sum of sorbitan esters of lauric, oleic, palmitic and stearic acids (26th JECFA, 1982)	In GSFA FC 01.1.4: 5000 mg/kg, for sorbitan esters of fatty acids
492	Sorbitan tristearate			
493	Sorbitan monolaurate			
494	Sorbitan monooleate			
495	Sorbitan monopalmitate			
900a	Polydimethylsiloxane	50 mg/kg	0–1.5 mg/kg bw (80th JECFA, 2011)	In GSFA there is no provision in FC 01.1.4.

INS No.	Name of the Food Additive	Maximum Level	ADI	Note
Flavour enhancers (for all doogh, except plain heat and plain un-heat treated doogh)				
580	Magnesium gluconate	GMP	Group ADI "Not specified" for gluconodelta-lactone and gluconates (51st JECFA, 1998)	Included in GSFA Table 3.
620	Glutamic acid, (L+)-		Group ADI “not specified” for glutamic acid and its Ammonium, Ca, K, Mg & Na salts (31st JECFA, 1987)	
621	Monosodium L-glutamate			
622	Monopotassium L-glutamate			
623	Calcium di-L-glutamate			
624	Monoammonium L-glutamate			
625	Magnesium di-L-glutamate			
626	Guanylic acid, 5”-			
627	Disodium 5”-guanylate-		Group ADI “not specified” for 5’guanylic acid and its Ca & Na salts (18th JECFA, 1974)	
628	Dipotassium 5”-guanylate-		Group ADI “not specified” for guanylic acid and its Ca, K & Na salts (29th JECFA, 1985)	
629	Calcium 5”-guanylate		Group ADI “not specified” for 5’guanylic acid and its Ca & Na salts (18th JECFA, 1974)	
630	Inosinic acid, 5”-		Group ADI “not specified” for inosinic acid and its Ca, K and Na salts (29th JECFA, 1985)	
631	Disodium 5”-inosinate			
632	Dipotassium 5”-inosinate			
633	Calcium 5”-inosinate			
634	Calcium 5”-ribonucleotides-		“Not specified” (18th JECFA, 1974)	
635	Disodium 5”-ribonucleotides-		“Not specified” (18th JECFA, 1974)	
636	Maltol		0-1 mg/kg bw (25th JECFA, 1981)	In GSFA there is no provision in FC 01.1.4.

INS No.	Name of the Food Additive	Maximum Level	ADI	Note
637	Ethyl maltol		0-2 mg/kg bw (18th JECFA, 1974)	In GSFA there is no provision in FC 01.1.4.
Packaging gas (for all doogh, except plain heat treated doogh)				There is no food additive listed for this functional class in the standard.
Preservatives (only in flavoured un-heat treated doogh)				
200	Sorbic acid	1000 mg/kg as sorbic acid	Group ADI 0-25 mg/kg bw for sorbic acid and its Ca, K, & Na salts (17th JECFA, 1973)	In GSFA FC 01.1.4: 1000 mg/kg, with Note 220 "For use in flavoured products heat treated after fermentation only".
201	Sodium sorbate			
202	Potassium sorbate			
203	Calcium sorbate			
210	Benzoic acid	300 mg/kg as benzoic acid	Group ADI of 0-5 mg/kg bw for benzoic acid and its salts (27th JECFA, 1983)	In GSFA there is no provision in FC 01.1.4
211	Sodium benzoate			
212	Potassium benzoate			
213	Calcium benzoate			
234	Nisin	12 mg/kg	0–2 mg/kg bw (77th JECFA, 2013)	In GSFA FC 01.1.4: 12 mg/kg, with Note 403 "Excluding fermented milks and drinks not heat-treated after fermentation".
Stabilizers and Thickeners (for all doogh)				
170(i)	Calcium carbonate	GMP	"Not limited" (9th JECFA, 1965)	Included in GSFA Table 3. In GSFA FC 01.2.1.2: GMP. In GSFA there is no provision in FC 01.2.1.1.
331(iii)	Trisodium citrate		"Not limited" (17th JECFA, 1973)	
338	Phosphoric acid	1000 mg/kg, singly or in combination, as phosphorus	Group MTDI of 70 mg/kg bw, as phosphorus from all food sources (29th JECFA, 1985)	In GSFA FC 01.1.4.: 1500 mg/kg, with Note 398 "For use in products conforming to the *Standard for Fermented Milks (*CXS 243- 2003) at 1000 mg/kg". In GSFA FCs 01.2.1.1 and 01.2.1.2: 1000mg/kg
339(i)	Sodium dihydrogen phosphate			
339(ii)	Disodium hydrogen phosphate			
339(iii)	Trisodium phosphate			
340(i)	Potassium dihydrogen phosphate			
340(ii)	Dipotassium hydrogen phosphate			
340(iii)	Tripotassium phosphate			
341(i)	Monocalcium dihydrogen phosphate			
341(ii)	Calcium hydrogen phosphate			
341(iii)	Tricalcium orthophosphate			

INS No.	Name of the Food Additive	Maximum Level	ADI	Note
342(i)	Ammonium dihydrogen phosphate			
342(ii)	Diammonium hydrogen phosphate			
343(i)	Monomagnesium phosphate			
343(ii)	Magnesium hydrogen phosphate			
343(iii)	Trimagnesium phosphate			
450(i)	Disodium diphosphate			
450(ii)	Trisodium diphosphate			
450(iii)	Tetrasodium diphosphate			
450(v)	Tetrapotassium diphosphate			
450(vi)	Dicalcium diphosphate			
450(vii)	Calcium dihydrogen diphosphate			
450(ix)	Magnesium dihydrogen diphosphate			
451(i)	Pentasodium triphosphate			
451(ii)	Pentapotassium triphosphate			
452(i)	Sodium polyphosphate			
452(ii)	Potassium polyphosphate			
452(iii)	Sodium calcium polyphosphate			
452(iv)	Calcium polyphosphate			
452(v)	Ammonium polyphosphate			
542	Bone phosphate			
400	Alginic acid	GMP	"Not specified" (39th JECFA, 1992)	Included in GSFA Table 3. In GSFA FC 01.2.1.2: GMP. In GSFA there is no provision in FC 01.2.1.1.
401	Sodium alginate		"Not specified" (39th JECFA, 1992)	Included in GSFA Table 3. In GSFA FCs 01.2.1.1 and 01.2.1.2: GMP.
402	Potassium alginate		"Not specified" (39th JECFA, 1992)	Included in GSFA Table 3. In GSFA FC 01.2.1.2: GMP. In GSFA there is no provision in FC 01.2.1.1.
403	Ammonium alginate		"Not specified" (39th JECFA, 1992)	

INS No.	Name of the Food Additive	Maximum Level	ADI	Note
404	Calcium alginate		"Not specified"(39th JECFA, 1992)	
405	Propylene glycol alginate		0-70 mg/kg bw (41st JECFA, 1993)	In GSFA FC 01.1.4.: 1300 mg/kg, with Note XS243 "Excluding products conforming to the *Standard for Fermented Milks* (CXS 243-2003)". In GSFA FCs 01.2.1.1 and 01.2.1.2: 5000mg/kg.
406	Agar		"Not limited" (17th JECFA, 1973)	Included in GSFA Table 3. In GSFA FCs 01.2.1.1 and 01.2.1.2: GMP.
407	Carrageenan		Group ADI "not specified" for carrageenan and processed Eucheuma seaweed (57th JECFA, 2001)	Included in GSFA Table 3. In GSFA FCs 01.2.1.1 and 01.2.1.2: GMP.
407a	Processed euchema seaweed (PES)			
410	Carob bean gum		"Not specified" (25th JECFA, 1981)	
412	Guar gum		"Not specified" (19th JECFA, 1975)	
413	Tragacanth gum		"Not specified"(29th JECFA, 1985)	Included in GSFA Table 3. In GSFA FC 01.2.1.2: GMP. In GSFA there is no provision in FC 01.2.1.1.
414	Gum Arabic (Acacia gum)		"Not specified" (35th JECFA, 1989)	Included in GSFA Table 3. In GSFA FCs 01.2.1.1 and 01.2.1.2: GMP.
415	Xanthan gum		"Not specified" (30th JECFA, 1986)	
416	Karaya gum		"Not specified"(33rd JECFA, 1988)	Included in GSFA Table 3. In GSFA FC 01.2.1.1: 200mg/kg. In GSFA FC 01.2.1.2: GMP.
417	Tara gum		"Not specified"(30th JECFA, 1986)	Included in GSFA Table 3. In GSFA FCs 01.2.1.1 and 01.2.1.2: GMP.
418	Gellan gum		"Not specified" (37th JECFA, 1990)	
425	Konjac flour		"Not specified"(46th JECFA, 1996)	
440	Pectins		"Not specified"(25th JECFA, 1981)	

INS No.	Name of the Food Additive	Maximum Level	ADI	Note
459	Cyclodextrin, *-beta*	5 mg/kg	0-5 mg/kg bw (44th JECFA, 1995)	In GSFA there is provision in FCs 01.2.1.1, 01.2.1.2, and 01.1.4.
460(i)	Microcrystalline cellulose (Cellulose gel)	GMP	Group ADI 'Not specified' for modified celluloses (35th JECFA, 1989)	Included in GSFA Table 3. In GSFA FCs 01.2.1.1 and 01.2.1.2: GMP.
460(ii)	Powdered cellulose			
461	Methyl cellulose			Included in GSFA Table 3. In GSFA FC 01.2.1.2: GMP. In GSFA there is no provision in FC 01.2.1.1.
463	Hydroxypropyl cellulose			
464	Hydroxypropyl methyl cellulose			
465	Methyl ethyl cellulose			
466	Sodium carboxymethyl cellulose (Cellulose gum)			Included in GSFA Table 3. In GSFA FCs 01.2.1.1 and 01.2.1.2: GMP.
467	Ethyl hydroxyethyl cellulose			Included in GSFA Table 3. In GSFA there is provision in FCs 01.2.1.1, 01.2.1.2.
468	Cross-linked sodium carboxymethyl cellulose (Cross-linked cellulose gum)			
469	Sodium carboxymethyl cellulose, enzymatically hydrolyzed (Cellulose gum, enzymatically hydrolyzed)			
470(i)	Salts of myristic, palmitic and stearic acids with ammonia, calcium, potassium and sodium		"Not specified" (33rd JECFA, 1988)	Included in GSFA Table 3. In GSFA FC 01.2.1.2: GMP. In GSFA there is no provision in FC 01.2.1.1.
470(ii)	Salts of oleic acid with calcium, potassium and sodium		"Not specified" (33rd JECFA, 1988)	
471	Mono- and di- glycerides of fatty acids		"Not limited" (17th JECFA, 1973)	Included in GSFA Table 3. In GSFA FCs 01.2.1.1 and 01.2.1.2: GMP.
472a	Acetic and fatty acid esters of glycerol		"Not limited" (17th JECFA, 1973)	Included in GSFA Table 3. In GSFA FC 01.2.1.2: GMP. In GSFA there is no provision in FC 01.2.1.1.
472b	Lactic and fatty acid esters of glycerol		"Not limited" (17th JECFA, 1973)	
472c	Citric and fatty acid esters of glycerol		"Not limited" (17th JECFA, 1973)	
508	Potassium chloride		Group ADI 'not limited' for hydrochloric acid and its ammonium, Mg, K salts (23rd JECFA, 1979)	Included in GSFA Table 3. In GSFA there is provision in FCs 01.2.1.1, 01.2.1.2.

INS No.	Name of the Food Additive	Maximum Level	ADI	Note
509	Calcium chloride		"Not limited" (17th JECFA, 1973)	Included in GSFA Table 3. In GSFA there is provision in FCs 01.2.1.1, 01.2.1.2.
511	Magnesium chloride		"Not limited" (23rd JECFA, 1979)	Included in GSFA Table 3. In GSFA FC 01.2.1.2: GMP. In GSFA there is no provision in FC 01.2.1.1.
1200	Polydextrose		"Not specified" (31st JECFA, 1987)	
1400	Dextrins, roasted starch			Included in GSFA Table 3. In GSFA FCs 01.2.1.1 and 01.2.1.2: GMP.
1401	Acid treated starch			
1402	Alkaline treated starch			
1403	Bleached starch			
1404	Oxidized starch			
1405	Starches, enzyme treated			
1410	Mono starch phosphate			
1412	Distarch phosphate			
1413	Phosphated distarch phosphate		"Not specified" (26th JECFA, 1982)	
1414	Acetylated distarch phosphate			
1420	Starch acetate			
1422	Acetylated distarch adipate			
1440	Hydroxypropyl starch			
1442	Hydroxypropyl distarch phosphate			Included in GSFA Table 3. In GSFA FC 01.2.1.1: GMP. In GSFA there is no provision in FC 01.2.1.2.
1450	Starch sodium octenyl succinate			Included in GSFA Table 3. In GSFA FCs 01.2.1.1 and 01.2.1.2: GMP.
1451	Acetylated oxidized starch		"Not specified"(57th JECFA, 2001)	Included in GSFA Table 3. In GSFA there is provision in FCs 01.2.1.1, 01.2.1.2.
Sweeteners[(a)] (for all doogh, except plain heat treated and plain un-heat treated doogh)				
420	Sorbitol	GMP	"Not specified" (26th JECFA, 1982)	Included in GSFA Table 3.

INS No.	Name of the Food Additive	Maximum Level	ADI	Note
421	Mannitol		"Not specified" (30th JECFA, 1986)	
950	Acesulfame potassium	350 mg/kg	0-15 mg/kg bw (37th JECFA, 1990)	In GSFA FC 01.1.4: 350 mg/kg.
951	Aspartame	1000 mg/kg	0-40 mg/kg bw (25th JECFA, 1981)	In GSFA FC 01.1.4: 600 mg/kg, with Note 405 "For use in energy-reduced products or products with no added sugar conforming to the *Standard for Fermented Milks* (CXS 243-2003) at 1000 mg/kg".
952	Cyclamates	250 mg/kg	Group ADI of 0-11 mg/kg bw for cyclamic acid and its calcium and sodium salts (as cyclamic acid) (26th JECFA, 1982)	In GSFA FC 01.1.4: 250 mg/kg.
953	Isomalt (Hydrogenated isomaltulose)	GMP	"Not specified"(29th JECFA, 1985)	Included in GSFA Table 3.
954	Saccharin	100 mg/kg	0-5 mg/kg bw for saccharin and its Ca, K, Na salts (41st JECFA, 1993)	In GSFA FC 01.1.4: 80 mg/kg, with Note 406 "For use in energy-reduced products or products with no added sugar conforming to the *Standard for Fermented Milks* (CXS 243-2003) at 100 mg/kg".
955	Sucralose (Trichlorogalactosucrose)	400 mg/kg	0-15 mg/kg bw (37th JECFA, 1990)	In GSFA FC 01.1.4: 300 mg/kg, with Note 404 "For use in energy-reduced products or products with no added sugar conforming to the *Standard for Fermented Milks* (CXS 243-2003) at 400 mg/kg".
956	Alitame	100 mg/kg	0-1 mg/kg bw (46th JECFA, 1996)	In GSFA FC 01.1.4: 100 mg/kg.
961	Neotame	100 mg/kg	0-2 mg/kg bw (61st JECFA, 2003)	In GSFA FC 01.1.4: 20 mg/kg.
962	Aspartame-acesulfame salt	350 mg/kg on an acesulfame potassium equivalent basis	The ADIs for aspartame 0-40 mg/kg bw (25th JECFA, 1981) and 0-15 mg/kg bw for acesulfame K (37th JECFA, 1990) cover the aspartame and acesulfame moieties of the salt.	In GSFA FC 01.1.4: 350 mg/kg.
964	Polyglycitol syrup	GMP	Group ADI "not specified" for polyglycitol and maltitol syrups (51st JECFA, 1998)	Included in GSFA Table 3.

INS No.	Name of the Food Additive	Maximum Level	ADI	Note
965	Maltitols		"Not specified' (41st JECFA, 1993)	
966	Lactitol		"Not specified" (27th JECFA, 1983)	
967	Xylitol		"Not specified" (27th JECFA, 1983)	
968	Erythritol		"Not specified" (53rd JECFA, 1999)	
(a) The use of sweeteners is limited to milk-and milk derivative-based products energy reduced or with no added sugar.				
4.2 FLAVOURINGS The flavourings used in doogh covered by this standard should comply with the *Guidelines for the Use of Flavourings* (CXG 66-2008).				Text aligned with provisions of the Procedural Manual (Format for Codex Commodity Standards)

II. CCMMP

STANDARD FOR DAIRY PERMEATE POWDERS (at Step 8)[8]

Food additives	Note
4. FOOD ADDITIVES 4.1 The use of food additives is not permitted for dairy permeate powders covered by this standard.	For info only.
4.2 Processing aids The processing aids used in products covered by this standard shall comply with the *Guidelines on Substances used as Processing Aids* (CXG 75-2010).	For info only.

[8] CX/CAC 17/40/3 Add. 1 and REP17/CAC para. 54