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# COMMISSION IMPLEMENTING REGULATION (EU) 2017/2470

of 20 December 2017

establishing the Union list of novel foods in accordance with Regulation (EU) 2015/2283 of the European Parliament and of the Council on novel foods

(Text with EEA relevance)

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## **COMMISSION IMPLEMENTING REGULATION (EU) 2017/2470**

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(Text with EEA relevance)

## Article 1

### Union list of authorised novel foods

The Union list of novel foods authorised to be placed on the market within the Union as referred to in Article 6(1) of Regulation (EU) 2015/2283 is hereby established and set out in the Annex to this Regulation.

## Article 2

This Regulation shall enter into force on the twentieth day following that of its publication in the Official Journal of the European Union.

This Regulation shall be binding in its entirety and directly applicable in all Member States.

### ANNEX

## UNION LIST OF NOVEL FOODS

### Content of the list

- 1. The Union list shall consist of Tables 1 and 2.
- 2. Table 1 includes the authorised novel foods and contains the following information:
  - Column 1: Authorised novel food
  - Column 2: Conditions under which the novel food may be used. This column is further subdivided into two: Specified food category and Maximum levels
  - Column 3: Additional specific labelling requirements
  - Column 4: Other requirements
- 3. Table 2 includes the specifications on novel foods and contains the following information:
  - Column 1: Authorised novel food
  - Column 2: Specifications

Table 1: Authorised novel foods

Authorised novel food	ed novel food Conditions under which the novel food may be used		Additional specific labelling requirements	Other requirements
N-Acetyl-D-neuraminic acid	Specified food category	Maximum levels	The designation of the novel food on the labelling of the foodstuffs containing it shall be 'N-acetyl-D-neuraminic acid'	
	Infant and follow-on formulae as defined by Regulation (EU) No 609/2013 (¹)	0,05 g/L of reconstituted formula	Food supplements containing <i>N</i> -acetyl-D-neuraminic acid shall bear a statement that the food supplement should not be given to	
	Processed cereal-based foods and baby foods for infants and young children as defined by Regulation (EU) No 609/2013	0,05 g/kg for solid foods	infants, young children and children under 10 years of age where they consume breast milk or other foods with added <i>N</i> -acetyl-D-neuraminic acid within the same twenty four hour period.	
	Foods for special medical purposes for infants and young children as defined by Regulation (EU) No 609/2013	In accordance with the particular nutritional requirements of the infants and young children for whom the products are intended but in any case not higher than the maximum levels specified for the category mentioned in the table corresponding to the products.		
	Total diet replacement foods for weight control as defined by Regulation (EU) No 609/2013	0,2 g/L (drinks) 1,7 g/kg (bars)		
	Foods bearing statements on the absence or reduced presence of gluten in accordance with the requirements of Commission Implementing Regulation (EU) No 828/2014 (2)	1,25 g/kg		
	Unflavoured pasteurised and sterilised (including UHT) milk-based products	0,05 g/L		

Authorised novel food	Conditions under which the nove	el food may be used	Additional specific labelling requirements	Other requirements
	Specified food category	Maximum levels		
	Unflavoured fermented milk-based products, heat treated after fermentation, flavoured fermented milk products including heat-treated products	0,05 g/L (beverages) 0,4 g/kg (solids)		
	Dairy analogues, including beverage whiteners	0,05 g/L (beverages) 0,25 g/kg (solids)		
	Cereal bars	0,5 g/kg		
	Table top sweeteners	8,3 g/kg		
	Fruit and vegetable-based drinks	0,05 g/L		
	Flavoured drinks	0,05 g/L		
	Speciality coffee, tea, herbal and fruit infusions, chicory; tea, herbal and fruit infusions and chicory extracts; tea, plant, fruit and cereal preparations for infusions	0,2 g/kg		
	Food Supplements as defined in Directive 2002/46/EC (3)	300 mg/day for general population older than 10 years 55 mg/day for infants 130 mg/day for young children 250 mg/day for children between 3 to 10 years of age		
Adansonia digitata (Baobab) dried fruit pulp	Not specified		The designation of the novel food on the labelling of the foodstuffs containing it shall be 'Baobab fruit pulp'	

Authorised novel food	Conditions under which the nove	Conditions under which the novel food may be used  Additional specific labelling		Other requirements
	Specified food category	Maximum levels of DHA and EPA combined		
	Processed cereal-based food and baby food intended for infants and young children covered by Regulation (EU) No 609/2013	200 mg/100 ml		
	Foods intended to meet the expenditure of intense muscular effort, especially for sportsmen			
	Foods bearing statements on the absence or reduced presence of gluten in accordance with the requirements of Commission Implementing Regulation (EU) No 828/2014			
Antarctic Krill oil rich in phospholipids from Euphausia superba	Specified food category	Maximum levels of combined DHA and EPA	The designation of the novel food on the labelling of the foodstuffs containing it shall be 'Lipid extract from the crustacean	
Euphausia superoa	Dairy products except milk-based drinks	200 mg/100 g or for cheese products 600 mg/100 g	Antarctic Krill (Euphausia superba)'	
	Dairy analogues except drinks	200 mg/100 g or for analogues to cheese products 600 mg/100 g		
	Non-alcoholic beverages Milk-based drinks Dairy analogue drinks	80 mg/100 ml		
	Spreadable fat and dressings	600 mg/100 g		
	Cooking fats	360 mg/100 ml		
	Breakfast cereals	500 mg/100 g		
	Bakery products (breads, rolls and sweet biscuits)	200 mg/100 g		
	Nutrition bars/cereal bars	500 mg/100 g		

Authorised novel food	Conditions under which the novel food may be used		Additional specific labelling requirements	Other requirements
Argan oil from <i>Argania</i> spinosa	Specified food category	Maximum levels	The designation of the novel food on the labelling of the foodstuffs containing it shall	
•	As seasonings	Not specified	be 'Argan oil' and if used as seasoning 'Veg- etable oil only for seasoning' shall be mentioned on the label	
	Food Supplements as defined in Directive 2002/46/EC	In line with normal food use of vegetable oils	includica on the laber	
Astaxanthin-rich oleoresin from <i>Haemato-</i>	Specified food category	Maximum levels	The designation of the novel food on the labelling of the foodstuffs containing it shall	
coccus pluvialis algae	Food Supplements as defined in Directive 2002/46/EC	40-80 mg/day of oleoresin, resulting in ≤ 8 mg astaxanthin per day	be 'Astaxanthin'	
Basil seeds (Ocimum basilicum)	Specified food category	Maximum levels		
,	Fruit juice and fruit/vegetable blend beverages	3 g/200 ml for addition of whole basil seeds (Ocimum basilicum)		
Fermented black bean extract	Specified food category	Maximum levels	The designation of the novel food on the labelling of the foodstuffs containing it shall	
	Food Supplements as defined in Directive 2002/46/EC	4,5 g/day	be 'Fermented black bean (Soya) extract' or 'Fermented Soya extract'	
Bovine lactoferrin	Specified food category	Maximum levels	The designation of the novel food on the labelling of the foodstuffs containing it shall	
	Infant formula and follow-on formula as defined in Regulation (EU) No 609/2013 (ready to drink)	100 mg/100 ml	be 'Lactoferrin from cows' milk'	
	Foods on dairy basis intended for young children (ready to eat/drink)	200 mg/100 g		
	Processed cereal food (solid)	670 mg/100 g		

Authorised novel food	Conditions under which the nove	el food may be used	Additional specific labelling requirements	Other requirements
	Specified food category	Maximum levels		
	Foods for special medical purposes as defined in Regulation (EU) No 609/2013	Depending on the needs of the individual up to 3 g/day		
	Beverages based on milk	200 mg/100 g		
	Powdered drink mixes based on milk (ready to drink)	330 mg/100 g		
	Beverages based on fermented milk (including yoghurt drinks)	50 mg/100 g		
	Non-alcoholic drinks	120 mg/100 g		
	Products based on yoghurt	80 mg/100 g		
	Products based on cheese	2 000 mg/100 g		
	Ice cream	130 mg/100 g		
	Cakes and pastries	1 000 mg/100 g		
	Candies	750 mg/100 g		
	Chewing gum	3 000 mg/100 g		
Buglossoides arvensis seed oil	Specified food category	Maximum levels of stearidonic acid (STA)	The designation of the novel food on the labelling of the foodstuffs containing it shall be 'Refined <i>Buglossoides</i> oil'	
	Dairy products and analogues	250 mg/100 g	be Remied Bugiossolaes on	
		75 mg/100 g for drinks		
	Cheese and cheese products	750 mg/100 g		
	Butter and other fat and oil emulsions including spreads (not for cooking or frying purposes)	750 mg/100 g		

Authorised novel food	Conditions under which the nove	el food may be used	Additional specific labelling requirements	Other requirements
Chewing gum base (Methyl vinyl ether- maleic anhydride copolymer)	Specified food category	Maximum levels	The designation of the novel food on the labelling of the foodstuffs containing it shall	
	Chewing gum	2 %	be 'Gum base (including methyl vinyl ether- maleic anhydride copolymer)' or 'Gum base (including CAS No 9011-16-9)'	
Chia oil from Salvia hispanica	Specified food category	Maximum levels	The designation of the novel food on the labelling of the foodstuffs containing it shall	
mspuncu	Fats and oils	10 %	be 'Chia oil (Salvia hispanica)'	
	Pure chia oil	2 g/day		
	Food Supplements as defined in Directive 2002/46/EC	2 g/day		
Chia seeds (Salvia hisp-anica)	Specified food category	Maximum levels	2. Pre-packaged Chia (Salvia hispanica) seeds shall carry additional labelling to inform the consumer that the daily intake is no more than 15 g.	
unicu)	Bread products	5 % (whole or ground chia seeds)		
	Baked products	10 % whole chia seeds		
	Breakfast cereals	10 % whole chia seeds		
	Fruit, nut and seed mixes	10 % whole chia seeds		
	Fruit juice and fruit/vegetable blend beverages	15 g/day for addition of whole, mashed or ground chia seeds		
	Pre-packaged Chia seed as such	15 g/day whole chia seeds		
	Fruit spreads	1 % whole chia seeds		
	Yoghurt	1,3 g whole chia seeds per 100 g of yoghurt or 4,3 g whole chia seeds per 330 g of yoghurt (portion)		
	Sterilised ready to eat meals based on cereal grains, pseudocereals grains and/or pulses	5 % whole chia seeds		

Authorised novel food	Conditions under which the nove	el food may be used	Additional specific labelling requirements	Other requirements
Chitin-glucan from Aspergillus niger	Specified food category	Maximum levels	The designation of the novel food on the labelling of the foodstuffs containing it shall	
	Food Supplements as defined in Directive 2002/46/EC	5 g/day	be 'Chitin-glucan from Aspergillus niger'	
Chitin-glucan complex from Fomes fomentarius	Specified food category	Maximum levels	The designation of the novel food on the labelling of the foodstuffs containing it shall	
	Food Supplements as defined in Directive 2002/46/EC	5 g/day	be 'Chitin-glucan from Fomes fomentarius'	
Chitosan extract from fungi (Agaricus	Specified food category	Maximum levels	The designation of the novel food on the labelling of the foodstuffs containing it shall	
bisporus; Aspergillus niger)	Food Supplements as defined in Directive 2002/46/EC	In line with normal use in food supplements of chitosan from crustaceans	be 'Chitosan extract from Agaricus bisporus' or 'Chitosan extract from Aspergillus niger'	
Chondroitin sulphate	Specified food category	Maximum levels	The designation of the novel on the labelling of the foodstuff containing it shall be 'Chon-	
	Food supplements as defined in Directive 2002/46/EC for adult population, excluding pregnant and lactating women	1 200 mg/day	droitin sulphate derived from microbial fermentation and sulphation'	
Chromium Picolinate	Specified food category	Maximum levels of total chromium	The designation of the novel food on the labelling of the foodstuffs containing it shall	
	Foods covered by Regulation (EU) No 609/2013	250 μg/day	be 'Chromium Picolinate'	
	Foods fortified in accordance with Regulation (EC) No 1925/2006 (4)			
Cistus incanus L. Pandalis herb	Specified food category	Maximum levels	The designation of the novel food on the labelling of the foodstuffs containing it shall	
	Herbal infusions	Intended daily intake: 3 g herbs/day (2 cups/day)	be 'Cistus incanus L. Pandalis herb'	

Authorised novel food	Conditions under which the nove	el food may be used	Additional specific labelling requirements	Other requirements
Citicoline	Specified food category	Maximum levels	The designation of the novel food on the labelling of the foodstuffs containing it	
	Food Supplements as defined in Directive 2002/46/EC	500 mg/day	shall be 'Citicoline'  2. The labelling of foods containing citicoline shall bear a statement that the product is not intended to be consumed	
	Foods for special medical purposes as defined in Regulation (EU) No 609/2013	250 mg per serving and a maximum daily consumption level of 1 000 mg	by children	
Clostridium butyricum	Specified food category	Maximum levels	The designation of the novel food on the labelling of the foodstuffs	
	Food Supplements as defined in Directive 2002/46/EC	1,35 × 10 <sup>8</sup> CFU/day	containing it shall be 'Clostridium butyricum MIYAIRI 588 (CBM 588)' or 'Clostridium butyricum (CBM 588)'	
Extract of defatted cocoa powder	Specified food category	Maximum levels	Consumers shall be instructed not to consume more than 600 mg polyphenols corresponding	
	Nutrition bars	1 g/day and 300 mg polyphenols corresponding to not more than	to 1,1 g of extract of defatted cocoa powder per day	
	Milk based beverages	550 mg of extract of defatted cocoa powder in one portion of food (or food supplement)		
	Any other foods (including food supplements as defined in Directive 2002/46/EC) which have become established vehicles for functional ingredients and which are typically positioned for consumption by health conscious adults			
Low fat cocoa extract	Specified food category	Maximum levels	Consumers shall be instructed not to consume more than 600 mg of cocoa flavanols per day	
	Foods including food supplements as defined in Directive 2002/46/EC	730 mg per serving and around 1,2 g/day	, , , , , , , , , , , , , , , , , , ,	

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Authorised novel food	Conditions under which the nov	el food may be used	Additional specific labelling requirements	Other requirements
Coriander seed oil from Coriandrum sativum	Specified food category	Maximum levels	The designation of the novel food on the labelling of the foodstuffs containing it shall	
	Food Supplements as defined in Directive 2002/46/EC	600 mg/day	be 'Coriander seed oil'	
Crataegus pinnatifida dried fruit	Specified food category	Maximum levels	The designation of the novel food on the labelling of the foodstuffs containing it shall	
	Herbal infusions	In line with normal food use of Crataegus laevigata	be 'Crataegus pinnatifida dried fruit'	
	Jams and jellies in accordance with Directive 2001/113/EC (5)	Crumegno incregina		
	Compotes			
α-cyclodextrin	Not specified		The designation of the novel food on the labelling of the foodstuffs containing it shall be 'Alpha-cyclodextrin' or 'α-cyclodextrin'	
γ-cyclodextrin	Not specified		The designation of the novel food on the labelling of the foodstuffs containing it shall be 'Gamma-Cyclodextrin' or 'γ-Cyclodextrin'	
Extract of three herbal roots (Cynanchum	Specified food category	Maximum levels	The designation of the novel food on the labelling of the foodstuffs containing it shall	
wilfordii Hemsley, Phlomis umbrosa Turcz. and Angelica gigas Nakai)	Food Supplements as defined in Directive 2002/46/EC for adult population	175 mg/day	be 'extract of three herbal roots ( <i>Cynanchum wilfordii</i> Hemsley, <i>Phlomis umbrosa</i> Turcz. and <i>Angelica gigas</i> Nakai)'.	
			The labelling of food supplements containing the extract of mixture of the three herbal roots shall bear a statement in close proximity to the list of ingredients indicating that it should not be consumed by individuals with known celery allergy.	

Authorised novel food Conditions under which the novel		el food may be used	Additional specific labelling requirements	Other requirements
Dextran preparation produced by Leuco-	Specified food category	Maximum levels	The designation of the novel food on the labelling of the foodstuffs containing it shall	
nostoc mesenteroides	Bakery products	5 %	be 'Dextran'	
Diacylglycerol oil of plant origin	Specified food category	Maximum levels	The designation of the novel food on the labelling of the foodstuffs containing it shall	
	Cooking oils		be 'Diacylglycerol oil of plant origin (at least 80 % diacylglycerols)'	
	Fat spreads			
	Salad dressings			
	Mayonnaise			
	Meal replacement for weight control (as drinks)			
	Bakery products			
	Yoghurt type products			
Dihydrocapsiate (DHC)	Specified food category	Maximum levels	The designation of the novel food on the labelling of the foodstuffs containing it	
	Cereal bars	9 mg/100 g	shall be 'Dihydrocapsiate'  2. Food supplements containing synthetic dihydrocapsiate will be labelled as 'not intended for children up to 4,5 years'	
	Biscuits, cookies and crackers	9 mg/100 g		
	Rice based snacks	12 mg/100 g		
	Carbonated drinks, dilutable drinks, fruit juice based beverages	1,5 mg/100 ml		
	Vegetable drinks	2 mg/100 ml		
	Coffee based drinks, tea based drinks	1,5 mg/100 ml		

Authorised novel food	Conditions under which the nov	rel food may be used	Additional specific labelling requirements	Other requirements
	Specified food category	Maximum levels		
	Flavoured water - still	1 mg/100 ml		
	Precooked oatmeal cereal	2,5 mg/100 g		
	Other cereals	4,5 mg/100 g		
	Ice cream, dairy desserts	4 mg/100 g		
	Pudding mixes (ready to eat)	2 mg/100 g		
	Products based on yoghurt	2 mg/100 g		
	Chocolate confectionery	7,5 mg/100 g		
	Hard candy	27 mg/100 g		
	Sugar-free gum	115 mg/100 g		
	Whitener/creamer	40 mg/100 g		
	Sweeteners	200 mg/100 g		
	Soup (ready to eat)	1,1 mg/100 g		
	Salad dressing	16 mg/100 g		
	Vegetable protein	5 mg/100 g		
	Ready to eat meals	3 mg/meal		
	Meal replacements for weight control	3 mg/meal		
	Meal replacement for weight control (as drinks)	1 mg/100 ml		
	Food Supplements as defined in Directive 2002/46/EC	3 mg/single intake 9 mg/day		
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Authorised novel food	Conditions under which the novel food may be used		Additional specific labelling requirements	Other requirements
	Specified food category	Maximum levels		
	Non-alcoholic powdered drink mixes	14,5 mg/kg equivalent to 1,5 mg/ 100 ml		
Dried extract of <i>Lippia</i> citriodora from cell	Specified food category	Maximum levels	The designation of the novel food on the labelling of the foodstuffs containing it shall	
cultures	Food Supplements as defined in Directive 2002/46/EC	In line with normal use in food supplements of a similar extract from the leaves of <i>Lippia citriodora</i>	be 'dried extract of <i>Lippia citriodora</i> from cell cultures HTN®Vb'	
Echinacea angustifolia extract from cell	Specified food category	Maximum levels		
cultures	Food Supplements as defined in Directive 2002/46/EC	In line with normal use in food supplements of a similar extract from the root of <i>Echinacea angustifolia</i>		
Echium plantagineum oil	Specified food category	Maximum levels of stearidonic acid (STA)	The designation of the novel food on the labelling of the foodstuffs containing it shall be 'Refined echium oil'	
	Milk-based products and drinkable yoghurt products delivered in a single dose	250 mg/100 g; 75 mg/100 g for drinks	te Remied cemain on	
	Cheese preparations	750 mg/100 g		
	Spreadable fat and dressings	750 mg/100 g		
	Breakfast cereals	625 mg/100 g		
	Food supplements as defined in Directive 2002/46/EC	500 mg/day		
	Foods for special medical purposes as defined in Regulation (EU) No 609/2013	In accordance with the particular nutritional requirements of the persons for whom the products are intended		
	Total diet replacement for weight control as defined in Regulation (EU) No 609/2013 and meal replacements for weight control	250 mg/meal		

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	Authorised novel food	Conditions under which the nove	el food may be used	Additional specific labelling requirements	Other requirements
<u>M1</u>					
	Ecklonia cava phlorotannins	Food Supplements as defined in Directive 2002/46/EC intended for the general population, excluding children under the age of 12 years	Maximum levels  163 mg/day for adolescents from 12 to 14 years of age; 230 mg/day for adolescents above 14 years of age; 263 mg/day for adults.	The designation of the novel food on the labelling of the foodstuffs containing it shall be 'Ecklonia cava Phlorotannins'.  Food supplements containing Ecklonia cava phlorotannins shall bear the following statement:  (a) This food supplement should not be consumed by children/adolescents under the age of twelve/fourteen/eighteen (*) years.  (b) This food supplement should not be consumed by persons with thyroid disease or by persons who are aware of or have been identified as being at risk of developing thyroid disease.  (c) This food supplement should not be consumed if other food supplements containing iodine are also consumed.  (*) Depending on the age group the food supplement is intended for.	
▼ <u>B</u>	Epigallocatechin gallate as a purified extract from green tea leaves (Camellia sinensis)	Specified food category  Food Supplements as defined in Directive 2002/46/EC  Foods fortified in accordance with Regulation (EC) No 1925/2006	Maximum levels  150 mg of extract in one portion of food or food supplement	The labelling shall bear a statement that consumers should not consume more than 300 mg of extract per day	

<b>▼</b> <u>B</u>					
	Authorised novel food	Conditions under which the nov	el food may be used	Additional specific labelling requirements	Other requirements
<b>▼</b> <u>M3</u>					
	L-ergothioneine	Specified food category	Maximum levels	The designation of the novel food on the labelling of the foodstuffs containing it shall	
		Alcohol-free beverages	0,025 g/kg	be 'L-ergothioneine'	
		Milk-based drinks	0,025 g/kg		
		'Fresh' milk products (*)	0,040 g/kg		
		Cereal bars	0,2 g/kg		
		Chocolate confectionery	0,25 g/kg		
		Food supplements as defined in Directive 2002/46/EC	30 mg/day for general population (excluding pregnant and lactating women)		
			20 mg/day for children older than 3 years		
		(*) When used in milk products L-ergothioneine may constituent	not replace in whole or in part, any milk		
<b>▼</b> <u>B</u>					
	Ferric Sodium EDTA	Specified food category	Maximum levels (expressed as anhydrous EDTA)	The designation of the novel food on the labelling of the foodstuffs containing it shall be 'Ferric Sodium EDTA'	
		Food supplements as defined in Directive 2002/46/EC	18 mg/day for children 75 mg/day for adults		
		Foods covered by Regulation (EU) No 609/2013	12 mg/100 g		
		Foods fortified in accordance with Regulation (EC) No 1925/2006			

Authorised novel food	Conditions under which the nove	el food may be used	Additional specific labelling requirements	Other requirements
			(c) a maximum of 120 mg of flavonoids per day should be consumed.  3. The amount of flavonoids in the final food shall be indicated on the labelling of the food containing it.	
Fucoidan extract from the seaweed Fucus vesi-	Specified food category	Maximum levels	The designation of the novel food on the labelling of the foodstuffs containing it shall	
culosus	Foods including food supplements as defined in Directive 2002/46/EC for the general population	250 mg/day	be 'Fucoidan extract from seaweed Fucus vesiculosus'.	
Fucoidan extract from the seaweed <i>Undaria</i>	Specified food category	Maximum levels	The designation of the novel food on the labelling of the foodstuffs containing it shall	
pinnatifida	Foods including food supplements as defined in Directive 2002/46/EC for the general population	250 mg/day	be 'Fucoidan extract from seaweed Undaria pinnatifida'	
2'-Fucosyllactose	Specified food category	Maximum levels	1. The designation of the novel food on the labelling of the foodstuffs containing it	
	Unflavoured pasteurised and sterilised (including UHT) milk-based products	1,2 g/l	shall be '2'-fucosyllactose'.  2. The labelling of food supplements	
	Unflavoured fermented milk-based products	1,2 g/l beverages	containing 2'-fucosyllactose shall bear a statement that the supplements should not be used if other foods with added 2'-fucosyllactose are consumed the same day.  3. The labelling of food supplements containing 2'-fucosyllactose intended for young children shall bear a statement that the supplements should not be used if breast milk or other foods with added 2'-fucosyllactose are consumed the same	
		19,2 g/kg products other than beverages		
	Flavoured fermented milk-based products including heat-treated products	1,2 g/l beverages		
	metading near treated products	19,2 g/kg products other than beverages		
	Dairy analogues, including beverage whiteners	1,2 g/l beverages	day.	
		12 g/kg for products other than beverages		
		400 g/kg for whitener		
	Cereal bars	12 g/kg		

Authorised novel food	Conditions under which the nov	el food may be used	Additional specific labelling requirements	Other requirements
	Specified food category	Maximum levels		
	Table-top sweeteners	200 g/kg		
	Infant formula as defined in Regulation (EU) No 609/2013	1,2 g/l alone or in combination with up to 0,6 g/l of lacto- <i>N</i> -neotetraose at a ratio of 2:1 in the final product ready for use, marketed as such or reconstituted as instructed by the manufacturer		
	Follow-on formula as defined in Regulation (EU) No 609/2013	1,2 g/l alone or in combination with up to 0,6 g/l of lacto- <i>N</i> -neotetraose at a ratio of 2:1 in the final product ready for use, marketed as such or reconstituted as instructed by the manufacturer		
	Processed cereal-based food and baby food for infants and young children as defined in Regulation (EU) No 609/2013	12 g/kg for products other than beverages		
		1,2 g/l for liquid food ready for use, marketed as such or reconstituted as instructed by the manufacturer		
	Milk-based drinks and similar products intended for young children	1,2 g/l for milk-based drinks and similar products added alone or in combination with up to 0,6 g/l lacto-N-neotetraose, at a ratio of 2:1 in the final product ready for use, marketed as such or reconstituted as instructed by the manufacturer		

Authorised novel food		Conditions under which the nove	el food may be used	Additional specific labelling requirements	Other requirements
Glucosamine NaCl	sulphate	Specified food category	Maximum levels		
		Food Supplements as defined in Directive 2002/46/EC	In line with normal food use of glucosamine from shell fish		
Guar Gum		Specified food category	Maximum levels	The designation of the novel food on the labelling of the foodstuffs containing it	
		Fresh dairy products such as yogurts, fermented milks, fresh cheeses and other dairy-based desserts.	1,5 g/100 g	shall be 'Guar Gum'.  2. A specific mention of the possible risks of digestive discomfort linked to the exposure of children aged under 8 to guar gum must be visible on the label of	
		Fruit or vegetable-based liquid foodstuffs (of the 'smoothie' variety)	1,8 g/100 g	any foodstuffs containing it.  For example, 'Excessive consumption of these products may cause digestive discomfort, especially for children under	
		Fruit or vegetable-based compotes	egetable-based compotes  3,25 g/100 g  8 years of age'.  3. In the case of products with the case of products with the case of products with the case of products.	8 years of age'.  3. In the case of products with two	
		Cereals accompanied by a dairy product, in packaging containing two compartments	10 g/100 g in the cereals  None in the accompanying dairy product  1 g/100 g in the product when ready to eat	compartments containing dairy and cereal products respectively, the instructions for use must clearly specify the need to mix the cereal and the dairy product before consumption, in order to take into account the potential risk of gastro-intestinal obstruction.	
Heat-treated milk products fermented with Bacteroides xylanisolvens		Specified food category	Maximum levels		
	unisolvens	Fermented milk products (in liquid, semi- liquid and spray-dried powder forms)			

Authorised novel food	Conditions under which the novel food may be used		Additional specific labelling requirements	Other requirements
Hydroxytyrosol	Specified food category	Maximum levels	The designation of the novel food on the labelling of the food products containing	
	Fish and vegetable oils, (except olive oils and olive pomace oils as defined in Part VIII of Annex VII of Regulation (EU) No 1308/2013 (6)), placed as such on the market	0,215 g/kg	shall be 'hydroxytyrosol'.  The labelling of the food products containing hydroxytyrosol shall bear the following statements:	
	Spreadable fats as defined in Part VII of Annex VII of Regulation (EU) No 1308/ 2013, placed as such on the market	0,175 g/kg	(a) This food product should not be consumed by children under the age of three years, pregnant women, and lactating women;	
			(b) This food product should not be used for cooking, baking or frying	
Ice Structuring Protein type III HPLC 12	Specified food category	Maximum levels	The designation of the novel food on the labelling of the foodstuffs containing it shall be 'Ice Structuring Protein'	
type III III EC 12	Edible ices	0,01 %		
Aqueous extracts of dried leaves of <i>Ilex</i>	Specified food category	Maximum levels	The designation of the novel food on the labelling of the foodstuffs containing it shall be 'Extracts of dried leaves of <i>Ilex guayusa</i> '	
guayusa	Herbal infusions	In line with normal use in herbal infusions and food supplements of a similar aqueous extract of dried leaves of <i>Ilex paraguariensis</i>		
	Food Supplements as defined in Directive 2002/46/EC			
Isomalto-oligosaccharide	Specified food category	Maximum levels	The designation of the novel food on the labelling of the foodstuffs containing it	
	Energy-Reduced Soft Drinks	6,5 %	shall be 'Isomaltooligosaccharide'.  2. Foods containing the novel ingredient	
	Energy Drinks	5,0 %	must be labelled as 'a source of glucose'.	
	Foods intended to meet the expenditure of intense muscular efforts, especially for sportsmen (including isotonic drinks)	6,5 %		
	Fruit Juices	5 %		

Authorised novel food	Conditions under which the nove	el food may be used	Additional specific labelling requirements	Other requirements
Lacto-N-neotetraose	Specified food category	Specified food category	The designation of the novel food on the labelling of the foodstuffs containing it	
	Unflavoured pasteurised and sterilised (including UHT) milk-based products	0,6 g/l	shall be 'Lacto- <i>N</i> -neotetraose'.  2. The labelling of food supplements containing lacto- <i>N</i> -neotetraose shall bear	
	Unflavoured fermented milk-based products	0,6 g/l for beverages 9,6 g/kg for products other than beverages	a statement that the supplements should not be used if other foods with added lacto-N-neotetraose are consumed the same day.  3. The labelling of food supplements containing lacto-N-neotetraose intended for young children shall bear a statement that the supplements should not be used if breast milk or other foods with added lacto-N-neotetraose are consumed the same day.	
	Flavoured fermented milk-based products including heat-treated products	0,6 g/l for beverages 9,6 g/kg for products other than beverages		1 t f 1
	Dairy analogues, including beverage whiteners	0,6 g/l for beverages 6 g/kg for products other than beverages 200 g/kg for whitener		
	Cereal bars	6 g/kg		
	Table-top sweeteners	100 g/kg		
	Infant formula as defined in Regulation (EU) No 609/2013	0,6 g/l in combination with up to 1,2 g/l of 2'-fucosyllactose at a ratio of 1:2 in the final product ready for use, marketed as such or reconstituted as instructed by the manufacturer		
	Follow-on formula as defined in Regulation (EU) No 609/2013	0,6 g/l in combination with up to 1,2 g/l of 2'-fucosyllactose at a ratio of 1: 2 in the final product ready for use, marketed as such or reconstituted as instructed by the manufacturer		

Authorised novel food	Conditions under which the nov	el food may be used	Additional specific labelling requirements	Other requirements
	Specified food category	Maximum levels		
	Processed cereal-based food and baby food for infants and young children as defined in Regulation (EU) No 609/2013	6 g/kg for products other than beverages 0,6 g/l for liquid food ready for use, marketed as such or reconstituted as instructed by the manufacturer		
	Milk-based drinks and similar products intended for young children	0,6 g/l for milk-based drinks and similar products added alone or in combination with 2'-O-fucosyllactose, at concentrations up to 1,2 g/l, at a ratio of 1:2 in the final product ready for use, marketed as such or reconstituted as instructed by the manufacturer		
	Foods for special medical purposes as defined in Regulation (EU) No 609/2013	In accordance with the particular nutritional requirements of the persons for whom the products are intended		
	Total diet replacement for weight control as defined in Regulation (EU) No 609/2013	2,4 g/l for drinks 20 g/kg for bars		
	Bread and pasta products bearing statements on the absence or reduced presence of gluten in accordance with the requirements of Commission Implementing Regulation (EU) No 828/2014	30 g/kg		
	Flavoured drinks	0,6 g/l		

Authorised novel food	Conditions under which the novel food may be used		Additional specific labelling requirements	Other requirements
	Specified food category	Maximum levels		
	Coffee, tea (excluding black tea), herbal and fruit infusions, chicory; tea, herbal and fruit infusions and chicory extracts; tea, plant, fruit and cereal preparations for infusions, as well as mixes and instant mixes of these products	4,8 g/l - the maximum level refers to the products ready to use		
	Food supplements as defined in Directive 2002/46/EC, excluding food supplements for infants	1,5 g/day for general population 0,6 g/day for young children		
Lucerne leaf extract from Medicago sativa	Specified food category	Maximum levels	The designation of the novel food on the labelling of the foodstuffs containing it shall	
	Food supplements as defined in Directive 2002/46/EC	be 'Lucerne (Medicago sativa) protei	be 'Lucerne (Medicago sativa) protein' or	
Lycopene	Specified food category	Maximum levels	The designation of the novel food on the labelling of the foodstuffs containing it shall	
	Fruit/vegetable juice-based drinks (including concentrates)	2,5 mg/100 g	be 'Lycopene'	
	Drinks intended to meet the expenditure of intense muscular effort especially for sportsmen	2,5 mg/100 g		
	Total diet replacement for weight control as defined in Regulation (EU) No 609/2013 and meal replacements for weight control	8 mg/meal		
	Breakfast cereals	5 mg/100 g		
	Fats and dressings	10 mg/100 g		

Authorised novel food	Conditions under which the nov	el food may be used	Additional specific labelling requirements	Other requirements
	Specified food category	Maximum levels		
	Soups other than tomato soups	1 mg/100 g		
	Bread (including crispy breads)	3 mg/100 g		
	Foods for special medical purposes as defined in Regulation (EU) No 609/2013	In accordance with the particular nutritional requirements of the persons for whom the products are intended		
	Food supplements as defined in Directive 2002/46/EC	15 mg/day		
Lycopene from Blakeslea trispora	Specified food category	Maximum levels	The designation of the novel food on the labelling of the foodstuffs containing it shall	
инѕроги	Fruit/vegetable juice-based drinks (including concentrates)	2,5 mg/100 g	be 'Lycopene'	
	Drinks intended to meet the expenditure of intense muscular effort especially for sportsmen	2,5 mg/100 g		
	Total diet replacement for weight control as defined in Regulation (EU) No 609/2013 and meal replacements for weight control	8 mg/meal		
	Breakfast cereals	5 mg/100 g		
	Fats and dressings	10 mg/100 g		
	Soups other than tomato soups	1 mg/100 g		
	Bread (including crispy breads)	3 mg/100 g		
	Foods for special medical purposes as defined in Regulation (EU) No 609/2013	In accordance with the particular nutritional requirements of the persons for whom the products are intended		
	Food supplements as defined in Directive 2002/46/EC	15 mg/day		

Authorised novel food	Conditions under which the nov	el food may be used	Additional specific labelling requirements	Other requirements
	Specified food category	Maximum levels of lycopene		
	Breakfast cereals	5 mg/100 g		
	Fats and dressings	10 mg/100 g		
	Soups other than tomato soups	1 mg/100 g		
	Bread (including crispy breads)	3 mg/100 g		
	Foods for special medical purposes as defined in Regulation (EU) No 609/2013	In accordance with the particular nutritional requirements of the persons for whom the products are intended		
Magnesium citrate malate	Specified food category	Maximum levels	The designation of the novel food on the labelling of the foodstuffs containing it shall	
	Food Supplements as defined in Directive 2002/46/EC		be 'Magnesium citrate malate'	
Magnolia Bark Extract	Specified food category	Maximum levels	The designation of the novel food on the labelling of the foodstuffs containing it shall be 'Magnolia Bark Extract'	
	Mints (confectionary products)	0,2 % for breath freshening		
	Chewing gum	purposes. Based on a 0,2 % maximum incorporation level and a maximum gum/mint size of 1,5 g each, each gum or mint serving will contain no more than 3 mg of magnolia bark extract.		
Maize-germ oil high in unsaponifiable matter	Specified food category	Maximum levels	The designation of the novel food on the labelling of the foodstuffs containing it shall	
unsaponinasie mattei	Food Supplements as defined in Directive 2002/46/EC	2 g/day	be 'Maize-germ oil extract'	
	Chewing gum	2 %		

Authorised novel food	Conditions under which the nov	el food may be used	Additional specific labelling requirements	Other requirements
Methylcellulose	Specified food category	Maximum levels	The designation of the novel food on the	Methylcellulose is not to be used in foods
	Edible ices	2 %	labelling of the foodstuffs containing it shall be 'Methylcellulose'	specially prepared for
	Flavoured drinks			young children
	Flavoured or unflavoured fermented milk products			
	Cold desserts (dairy, fat, fruit, cereal, eggbased products)			
	Fruit preparations (pulps, purees or compotes)			
	Soups and broths			
(6S)-5-methyltetrahy- drofolic acid, gluco- samine salt	Specified food category	Maximum levels	The designation of the novel food on the labelling of the foodstuffs containing it shall be '(6S)-5-methyltetrahydrofolic acid, glucosamine salt' or '5MTHF-glucosamine'	
	Food Supplements as defined in Directive 2002/46/EC as a source of folate			
Monomethylsilanetriol (Organic Silicon)	Specified food category	Maximum levels of silicon	The designation of the novel food on the labelling of the food supplements containing	
(Organic Sincon)	Food Supplements as defined in Directive 2002/46/EC for adult population (in liquid form)	10,40 mg/day	it shall be 'Organic silicon (monomethylsil- anetriol)'	
Mycelial extract from	Specified food category	Maximum levels	The designation of the novel food on the	
Shiitake mushroom (Lentinula edodes)	Bread products	2 ml/100 g	labelling of the foodstuffs containing it shall be 'extract from the mushroom	
	Soft drinks	0,5 ml/100 ml	Lentinula edodes' or 'extract from Shiitake mushroom'	
	Ready prepared meals	2,5 ml per meal		
	Foods based on yoghurt	1,5 ml/100 ml		
	Food supplements as defined in Directive 2002/46/EC	2,5 ml per day dose		

Authorised novel food	Conditions under which the nove	el food may be used	Additional specific labelling requirements	Other requirements
Noni fruit juice (Morinda citrifolia)	Specified food category	Maximum levels	The designation of the novel food on the labelling of the foodstuffs containing it shall be 'Noni juice' or 'Juice of <i>Morinda citrifolia</i> '	
(Morinaa Euryolaa)	Pasteurised fruit and fruit nectar based drinks	30 ml with one serving (up to 100 % noni juice) or 20 ml twice a day, not more than 40 ml per day		
Noni fruit juice powder (Morinda citrifolia)	Food supplements as defined in Directive 2002/46/EC	6,6 g/day (equivalent to 30 ml of noni juice)	The designation of the novel food on the labelling of the foodstuffs containing it shall be 'Noni juice powder' or 'Juice powder of Morinda citrifolia'	
Noni fruit puree and concentrate (Morinda	Specified food category	Maximum levels	The designation of the novel food on the labelling of the foodstuffs containing it shall be:  For fruit puree:  'Morinda citrifolia fruit puree' or 'Noni fruit puree'  For fruit concentrate:  'Morinda citrifolia fruit concentrate' or 'Noni fruit concentrate'	
citrifolia)		Fruit puree		
	Candy/confectionery	45 g/100 g		
	Cereal bars	53 g/100 g		
	Powdered nutritional drink mixes (dry weight)	53 g/100 g		
	Carbonated beverages	11 g/100 g		
	Ice cream & sorbet	31 g/100 g		
	Yoghurt	12 g/100 g		
	Biscuits	53 g/100 g		
	Buns, cakes and pastries	53 g/100 g		
	Breakfast cereals (wholegrain)	88 g/100 g		
	Jams and jellies in accordance with Directive 2001/113/EC	133 g/100 g Based on pre-processing quantity to produce final 100 g product		
	Sweet spreads, fillings and icings	31 g/100 g		

Authorised nove	el food	Conditions under which the nov	el food may be used	Additional specific labelling requirements	Other requirements
		Specified food category	Maximum levels		
		Savoury sauces, pickles, gravies and condiments	88 g/100 g		
		Food Supplements as defined in Directive 2002/46/EC	26 g/day		
			Fruit concentrate		
		Candy/Confectionery	10 g/100 g		
		Cereal bars	12 g/100 g		
		Powdered nutritional drink mixes (dry weight)	12 g/100 g		
		Carbonated beverages	3 g/100 g		
		Ice cream & sorbet	7 g/100 g		
		Yoghurt	3 g/100 g		
		Biscuits	12 g/100 g		
		Buns, cakes and pastries	12 g/100 g		
		Breakfast cereals (wholegrain)	20 g/100 g		
		Jams and jellies in accordance with Directive 2001/113/EC	30 g/100 g		
		Sweet spreads, fillings and icings	7 g/100 g		
		Savoury sauces, pickles, gravies and condiments	20 g/100 g		
		Food Supplements as defined in Directive 2002/46/EC	6 g/day		
Noni leaves (Morinda citrifolia)	Specified food category	Maximum levels	1. The designation of the novel food on the		
	For the preparation of infusions	A cup of infusion to be consumed shall not be prepared with more than 1 g of dried and roasted leaves of <i>Morinda citrifolia</i>	labelling of the foodstuffs containing it shall be 'Noni leaves' or 'leaves of <i>Morinda citrifolia</i> '.  2. Instructions shall be given to the consumer that a cup of infusion should not be prepared with more than 1 g of dried and roasted leaves of <i>Morinda citrifolia</i> .		

Authorised novel food	Conditions under which the nov	el food may be used	Additional specific labelling requirements	Other requirements
Noni fruit powder (Morinda citrifolia)	Specified food category	Maximum levels	The designation of the novel food on the labelling of the foodstuffs containing it shall	
, ,	Food Supplements as defined in Directive 2002/46/EC	2,4 g per/day	be 'Morinda citrifolia fruit powder' or 'Noni fruit powder'	
Odontella aurita micro- algae	Specified food category	Maximum levels	The designation of the novel food on the labelling of the foodstuffs containing it shall	
	Flavoured pasta	1,5 %	be 'Odontella aurita microalgae'	
	Fish soups	1 %		
	Marine terrines	0,5 %		
	Broth preparations	1 %		
	Crackers	1,5 %		
	Frozen breaded fish 1,5 %			
Oil enriched with phytosterols/phytost-anols	Specified food category	Maximum levels of phytosterols/phytost- anols	In accordance with Annex III.5 to Regulation (EU) No 1169/2011	
	Spreadable fats as defined in Annex VII, Part VII, Appendix II points B and C, of Regulation (EU) No 1308/2013, and excluding cooking and frying fats and spreads based on butter or other animal fat  Milk based products, such as products based on semi-skimmed and skimmed milk products, possibly with the addition of fruits and/or cereals, products based on fermented milk such as yoghurt and cheese based products (fat content ≤ 12 g per 100 g), where possibly the milk fat has been reduced and the fat or protein has been partly or fully replaced by vegetable fat or protein  Soya drinks	The products containing the novel food ingredient shall be presented in such a manner that they can be easily divided into portions that contain either a maximum of 3 g (in case of one portion per day) or a maximum of 1 g (in case of three portions per day) of added phytosterols/phytostanols.      The amount of phytosterols/phytostanols added to a container of beverages shall not exceed 3 g.      Salad dressings, mayonnaise and spicy sauces shall be packed as single portions.		
	Salad dressings, mayonnaise and spicy sauces			

Authorised novel food		Conditions under which the nove	el food may be used	Additional specific labelling requirements	Other requirements
Oil extracted fro	om	Specified food category	Maximum levels of DHA and EPA combined	The designation of the novel food on the labelling of the foodstuffs containing it shall be 'Squid oil'.	
	I	Dairy products except milk-based beverages	200 mg/100 g or for cheese products 600 mg/100 g	be squid on .	
	I	Dairy analogues except drinks	200 mg/100 g or for analogues to cheese products 600 mg/100 g		
	5	Spreadable fat and dressings	600 mg/100 g		
	I	Breakfast cereals	500 mg/100 g		
	I	Bakery products (breads and bread rolls)	200 mg/100 g		
	(	Cereal bars	500 mg/100 g		
		Non-alcoholic beverages (including milk-based beverages)	60 mg/100 ml		
		Food Supplements as defined in Directive 2002/46/EC	3 000 mg/day for general population 450 mg/day for pregnant and lactating women		
		Foods for special medical purposes as defined in Regulation (EU) No 609/2013	In accordance with the particular nutritional requirements of the persons for whom the products intended		
	\ \	Total diet replacement for weight control defined in Regulation (EU) No 609/2013 and meal replacements for weight control	200 mg/meal		
Pasteurised fruit-based preparations produced using high-pressure treatment		Specified food category	Maximum levels	The wording 'pasteurised by high-pressure treatment' shall be displayed next to the	
	ire   1	Types of fruit: apple, apricot, banana, blackberry, blueberry, cherry, coconut, fig, grape, grapefruit, mandarin, mango, melon, peach, pear, pineapple, prune, raspberry, rhubarb, strawberry		name of the fruit preparations as such and in any product in which it is used	

Authorised novel food	Conditions under which the nov	el food may be used	Additional specific labelling requirements	Other requirements
Phosphated maize starch	Specified food category	Maximum levels	The designation of the novel food on the labelling of the foodstuffs containing it shall	
	Baked bakery products	15 %	be 'Phosphated maize starch'	
	Pasta			
	Breakfast cereals			
	Cereal bars			
Phosphatidylserine from fish phospholipids	Specified food category	Maximum levels of phosphatidylserine	The designation of the novel food on the labelling of the foodstuffs containing it shall	
nsii piiospiionpius	Beverages based on yoghurt	50 mg/100 ml	be 'Fish phosphatidylserine'	
	Powders based on milk powders	3 500 mg/100 g (equivalent to 40 mg/100 ml ready to drink)		
	Foods based on yoghurt	80 mg/100 g		
	Cereal bars	350 mg/100 g		
	Chocolate based confectionary	200 mg/100 g		
	Foods for special medical purposes as defined in Regulation (EU) No 609/2013	In compliance with Regulation (EU) No 609/2013		
	Food supplements as defined in Directive 2002/46/EC	300 mg/day		
Phosphatidylserine from soya phospholipids	Specified food category	Maximum levels of phosphatidylserine	The designation of the novel food on the labelling of the foodstuffs containing it shall	
soya phospholipids	Beverages based on yoghurt	50 mg/100 ml	be 'Soya phosphatidylserine'	
	Powders based on milk powder	3,5 g/100 g (equivalent to 40 mg/ 100 ml ready to drink)		
	Foods based on yoghurt	80 mg/100 g		
	Cereal bars	350 mg/100 g		
			. '	

Authorised novel food	Conditions under which the nove	el food may be used	Additional specific labelling requirements	Other requirements
Phytosterols/phytost- anols	Specified food category	Maximum levels	In accordance with Annex III.5 of Regulation (EU) No 1169/2011	
	Rice drinks	They shall be presented in such a manner that they can be easily		
	Rye bread with flour containing $\geq 50 \%$ rye (wholemeal rye flour, whole or cracked rye kernels and rye flakes) and $\leq 30 \%$ wheat; and with $\leq 4 \%$ added sugar but no fat added.	g (in case of 1 portion/day) or a maximum of 1 g (in case of 3 portions/day) of added phytosterols/phytostanols.  The amount of phytosterols/phytostanols added to a container of beverages shall not exceed 3 g.  Salad dressings, mayonnaise and spicy sauces shall be packed as single portions	contain either a maximum of 3 g (in case of 1 portion/day) or a maximum of 1 g (in case of 3 portions/day) of added phytosterols/phytostanols.  The amount of phytosterols/phytostanols added to a container of beverages shall not exceed 3 g.  Salad dressings, mayonnaise and spicy sauces shall be packed as	
	Salad dressings, mayonnaise and spicy sauces.			
	Soya drink			
	Milk type products, such as semi-skimmed and skimmed milk type products, possibly with the addition of fruits and/or cereals, where possibly the milk fat has been reduced, or where milk fat and/or protein has been partly or fully replaced by vegetable fat and/or protein.			
	Products based on fermented milk such as yoghurt and cheese type products (fat content < 12 % per 100 g), where possibly the milk fat has been reduced, or where milk fat and/or protein has been partly or fully replaced by vegetable fat and/or protein			
	Spreadable fats as defined in Annex VII, Part VII, Appendix II points B and C, of Regulation (EU) No 1308/2007, and excluding cooking and frying fats and spreads based on butter or other animal fat.			

Authorised novel food	Conditions under which the nov	el food may be used	Additional specific labelling requirements	Other requirements
Rapeseed Protein	As a vegetable protein source in foods except in infant formula and follow-on formula		The designation of the novel food on the labelling of the foodstuffs containing it shall be 'Rapeseed protein'.      Any foodstuff containing 'rapeseed protein' shall bear a statement that this ingredient may cause allergic reaction to consumers who are allergic to mustard and products thereof. Where relevant, this statement shall appear in close proximity to the list of ingredients.	
Trans-resveratrol	Specified food category  Food Supplements as defined in Directive 2002/46/EC for adult population (capsule or tablet form)	Maximum levels  150 mg/day	The designation of the novel food on the labelling of the food supplements containing it shall be ' <i>Trans</i> -resveratrol'.      The labelling of food supplements containing trans-resveratrol shall bear a statement that people using medicines should only consume the product under medical supervision.	
Trans-resveratrol (microbial source)	Specified food category  Food supplements as defined in Directive 2002/46/EC	In line with normal use in food supplements of resveratrol extracted from Japanese knotweed (Fallopia japonica)	The designation of the novel food on the labelling of the food supplements containing it shall be 'Trans-resveratrol'.  The labelling of food supplements containing trans-resveratrol shall bear a statement that people using medicines should only consume the product under medical supervision.	

Authorised novel food	Conditions under which the nove	el food may be used	Additional specific labelling requirements	Other requirements
Rooster comb extract	Specified food category	Maximum levels	The designation of the novel food on the	
	Milk-based drinks	40 mg/100 g or mg/100 ml	labelling of the foodstuffs containing it shall be 'Rooster comb extract' or 'Cockerel comb extract'	
	Milk based fermented drinks	80 mg/100 g or mg/100 ml	- Cockerel comb extract	
	Yoghurt-type products	65 mg/100 g or mg/100 ml		
	Fromage frais	110 mg/100 g or mg/100 ml		
Sacha Inchi oil from	Specified food category	Maximum levels	The designation of the novel food on the	
Plukenetia volubilis	As for linseed oil	In line with normal food use of linseed oil	labelling of the foodstuffs containing it shall be 'Sacha inchi oil ( <i>Plukenetia volubilis</i> )'	
Salatrims	Specified food category	Maximum levels	1. The designation of the novel food on the	
	Bakery products and confectionary		labelling of the foodstuffs containing it shall be 'reduced energy fat (salatrims)'.	
			2. There shall be a statement that excessive consumption may lead to gastro-intestinal disturbance.	
			3. There shall be a statement that the products are not intended for use by children.	
Schizochytrium sp. oil rich in DHA and EPA	Specified food category	Maximum levels of DHA and EPA combined	The designation of the novel food on the labelling of the foodstuffs containing it shall be 'DHA and EPA-rich oil from the	
	Food Supplements as defined in Directive 2002/46/EC for adult population excluding pregnant and lactating women	3 000 mg/day	microalgae Schizochytrium sp.'	
	Food Supplements as defined in Directive 2002/46/EC for pregnant and lactating women	450 mg/day		
	Foods for special medical purposes as defined in Regulation (EU) No 609/2013	In accordance with the particular nutritional requirements of the persons for whom the products are intended		

Authorised novel food	Conditions under which the nov	el food may be used	Additional specific labelling requirements	Other requirements
	Specified food category	Maximum levels of DHA and EPA combined		
	Total diet replacement for weight control as defined in Regulation (EU) No 609/2013 and meal replacements for weight control	250 mg/meal		
	Milk-based drinks and similar products intended for young children	200 mg/100 g		
	Processed cereal based food and baby food for infants and young children as defined in Regulation (EU) No 609/2013			
	Foods intended to meet the expenditure of intense muscular effort, especially for sportsmen			
	Foods bearing statements on the absence or reduced presence of gluten in accordance with the requirements of Commission Implementing Regulation (EU) No 828/2014			
	Bakery Products (Breads, Rolls and Sweet Biscuits)	200 mg/100 g		
	Breakfast Cereals	500 mg/100 g		
	Cooking Fats	360 mg/100 g		
	Dairy Analogues except drinks	600 mg/100 g for cheese; 200 mg/ 100 g for soy and imitation milk products (excluding drinks)		
	Dairy Products except milk-based drinks	600 mg/100 g for cheese; 200 mg/ 100 g for milk products (including milk, fromage frais and yoghurt products; excluding drinks)		

Authorised novel food	Conditions under which the nove	el food may be used	Additional specific labelling requirements	Other requirements
	Specified food category	Maximum levels of DHA and EPA combined		
	Non-alcoholic Beverages (including dairy analogue and milk-based drinks)	80 mg/100 g		
	Cereal/Nutrition Bars	500 mg/100 g		
	Spreadable Fats and Dressings	600 mg/100 g		
Schizochytrium sp. (ATCC PTA-9695) oil	Specified food category	Maximum levels of DHA	The designation of the novel food on the labelling of the foodstuffs containing	
	Dairy products except milk-based drinks	200 mg/100 g or for cheese products 600 mg/100 g	it shall be 'Oil from the microalgae Schizo- chytrium sp. (ATCC PTA-9695)'	
	Dairy analogues except drinks	200 mg/100 g or for analogues to cheese products 600 mg/100 g		
	Spreadable fats and dressings	600 mg/100 g		
	Breakfast cereals	500 mg/100 g		
	Food Supplements as defined in Directive 2002/46/EC	250 mg DHA/day for general population		
		450 mg DHA/day for pregnant and lactating women		
	Total diet replacement for weight control as defined in Regulation (EU) No 609/2013 and meal replacements for weight control	250 mg/meal		

Authorised novel food	Conditions under which the nov	el food may be used	Additional specific labelling requirements	Other requirements
Schizochytrium sp. oil	Specified food category	Maximum levels of DHA	The designation of the novel food on the labelling of the foodstuffs containing	
	Dairy products except milk-based drinks	200 mg/100 g or for cheese products 600 mg/100 g	it shall be 'Oil from the microalgae Schizo- chytrium sp.'	
	Dairy analogues except drinks	200 mg/100 g or for analogues to cheese products 600 mg/100 g		
	Spreadable fats and dressings	600 mg/100 g		
	Breakfast cereals	500 mg/100 g		
	Food Supplements as defined in Directive 2002/46/EC	250 mg DHA/day for general population		
		450 mg DHA/day for pregnant and lactating women		
	Total diet replacement for weight control as defined in Regulation (EU) No 609/2013 and meal replacements for weight control	250 mg/meal		
	Milk-based drinks and similar products intended for young children	200 mg/100 g		
	Processed cereal-based foods and baby foods for infants and young children as defined in Regulation (EU) No 609/2013			
	Foods intended to meet the expenditure of intense muscular effort, especially for sportsmen			
	Foods bearing statements on the absence or reduced presence of gluten in accordance with the requirements of Commission Implementing Regulation (EU) No 828/2014			
	Foods for special medical purposes as defined in Regulation (EU) No 609/2013	In accordance with the particular nutritional requirements of the persons for whom the products are intended		

Authorised novel food	Conditions under which the nove	el food may be used	Additional specific labelling requirements	Other requirements
	Specified food category	Maximum levels of DHA		
	Foods for special medical purposes as defined in Regulation (EU) No 609/2013	In accordance with the particular nutritional requirements of the persons for whom the products are intended		
	Bakery products (breads, rolls and, sweet biscuits)	200 mg/100 g		
	Cereal bars	500 mg/100 g		
	Cooking fats	360 mg/100 g		
	Non-alcoholic beverages (including dairy analogue and milk-based drinks)	80 mg/100 ml		
	Infant formula and follow-on formula as defined in Regulation (EU) No 609/2013	In accordance with Regulation (EU) No 609/2013		
	Processed cereal-based foods and baby foods for infants and young children as defined in Regulation (EU) No 609/2013	200 mg/100 g		
Fermented soybean extract	Specified food category	Maximum levels	The designation of the novel food on the labelling of the foodstuffs containing it	
	Food Supplements as defined in Directive 2002/46/EC (capsules, tablets or powder form) intended for the adult population, excluding pregnant and lactating women	100 mg/day	shall be 'Fermented soybean extract'.  2. The labelling of food supplements containing fermented soybean extract shall bear a statement that persons taking medication should only consume the product under medical supervision.	

Authorised novel food	Conditions under which the nove	el food may be used	Additional specific labelling requirements	Other requirements
Spermidine-rich wheat germ extract ( <i>Triticum</i> <i>aestevium</i> )	Specified food category	Maximum levels	The designation of the novel food on the labelling of the food supplements containing	
	Food Supplements as defined in Directive 2002/46/EC intended for the adult population	Equivalent of max. 6 mg/day spermidine	it shall be 'spermidine-rich wheat germ extract'	
Sucromalt	Specified food category	Maximum levels	The designation of the novel food on the labelling of the foodstuffs containing it	
	Not specified		shall be 'Sucromalt'.  2. The designation of the novel food on the labelling shall be accompanied by indi-	
			cation that the product is a source of glucose and fructose.	
Sugar cane fibre	Specified food category	Maximum levels		
	Bread	8 %		
	Bakery goods	5 %		
	Meat and muscle products	3 %		
	Seasonings and spices	3 %		
	Grated cheeses	2 %		
	Special diet foods	5 %		
	Sauces	2 %		
	Beverages	5 %		
Sunflower oil extract	Specified food category	Maximum levels	The designation of the novel food on the labelling of the foodstuffs containing it shall	
	Food Supplements as defined in Directive 2002/46/EC	1,1 g/day	be 'Sunflower oil extract'	

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Authorised novel food	Conditions under which the nov	rel food may be used	Additional specific labelling requirements	Other requirements
Dried <i>Tetraselmis chuii</i> microalgae	Specified food category	Maximum levels	The designation of the novel food on the labelling of the foodstuffs containing it shall	
	Sauces	20 % or 250 mg/day	be 'Dried microalgae <i>Tetraselmis chuii</i> ' or 'Dried microalgae <i>T. chuii</i> '	
	Special salts	1 %	Food supplements containing dried	
	Condiment	250 mg/day	microalgae <i>Tetraselmis chuii</i> shall bear the following statement: 'Contains negligible amounts of iodine'	
	Food Supplements as defined in Directive 2002/46/EC	250 mg/day	amounts of fodine	
Therapon barcoo/ Scortum	Intended use identical to that of the salmon, na products and dishes, including cooked, raw, sn			
D-Tagatose	Specified food category	Maximum levels	1. The designation of the novel food on the labelling of the foodstuffs containing it	
	Not specified		shall be 'D-Tagatose'.	
			2. The labelling of any product where the level of D-Tagatose exceeds 15 g per serving and all beverages containing greater than 1 % D-Tagatose (as consumed) shall bear a statement 'excessive consumption may produce laxative effects'.	
Faxifolin-rich extract	Specified food category	Maximum levels	The designation of the novel food on the	
	Yogurt plain/Yogurt with fruits (*)	0,020 g/kg	labelling of the foodstuffs containing it shall be 'taxifolin-rich extract'	
		, , ,		
	Kephir (*)	0,008 g/kg		
	Buttermilk (*)	0,005 g/kg		
	Milk powder (*)	0,052 g/kg		
	Cream (*)	0,070 g/kg		
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Authorised novel food	Conditions under which the nove	el food may be used	Additional specific labelling requirements	Other requirements
	Specified food category	Maximum levels		
	Sour cream (*)	0,050 g/kg		
	Cheese (*)	0,090 g/kg		
	Butter (*)	0,164 g/kg		
	Chocolate confectionery	0,070 g/kg		
	Non-alcoholic beverages	0,020 g/l		
	Food supplements as defined in Directive 2002/46/EC intended for the general population, excluding infants, young children, children and adolescents younger than 14 years	100 mg/day		
	(*) When used in milk products Taxifolin-rich extract milk constituent	t may not replace in whole or in part, any		
Trehalose	Specified food category	Maximum levels	The designation of the novel food on the labelling of the foodstuffs containing it	
	Not specified		shall be 'Trehalose' and shall be displayed on the labelling of the product as such or in the list of ingredients of foodstuffs containing it.	
			2. The designation of the novel food on the labelling shall be accompanied by indication that the 'Trehalose is a source of glucose'.	

Authorised novel food	Conditions under which the nove	el food may be used	Additional specific labelling requirements	Other requirements
UV-treated mushrooms (Agaricus bisporus)	Specified food category	Maximum levels of vitamin $D_2$		
	Mushrooms (Agaricus bisporus)	$10~\mu g$ of vitamin $D_2/100~g$ fresh weight	<ol> <li>The designation on the label of the novel food as such or of the foodstuffs containing it shall be 'UV-treated mushrooms (<i>Agaricus bisporus</i>)'.</li> <li>The designation on the label of the novel food as such or of the foodstuffs containing it shall be accompanied by indication that a 'controlled light treatment was used to increase vitamin D levels' or 'UV treatment was used to increase vitamin D<sub>2</sub> levels'.</li> </ol>	
UV-treated baker's yeast (Saccharomyces cerevisiae)	Specified food category	Maximum levels of vitamin $D_2$	The designation of the novel food on the labelling of the foodstuffs containing it shall be 'Vitamin D yeast' or 'Vitamin D <sub>2</sub> yeast'	
Suc	Yeast-leavened breads and rolls	5 μg of vitamin D <sub>2</sub> /100 g	oc vitaliili B yeast of vitaliili B2 yeast	
	Yeast-leavened fine bakery wares	5 μg of vitamin D <sub>2</sub> /100 g		
	Food Supplements as defined in Directive 2002/46/EC	5 μg of vitamin D <sub>2</sub> /day		
UV-treated bread	Specified food category	Maximum levels of vitamin $D_2$	The designation on the label of the novel food shall be accompanied by 'contains vitamin D produced by UV-treatment'	
	Yeast leavened bread and rolls (without toppings)	3 μg vitamin D <sub>2</sub> /100 g	vitainin D produced by Ov-treatment	

Authorised novel food	Conditions under which the nov	el food may be used	Additional specific labelling requirements	Other requirements
UV-treated milk	Specified food category	Maximum levels of vitamin $D_3$	The designation on the label of the novel food shall be 'UV-treated'.	
	Pasteurised whole milk as defined in Regulation (EU) No 1308/2013 to be consumed as such	5-32 μg/kg for general population excluding infants	2. Where UV-treated milk contains an amount of vitamin D that is considered significant in accordance with Point 2 of Part A of Annex XIII to Regulation (EU)	
	Pasteurised semi-skimmed milk as defined in Regulation (EU) No 1308/2013 to be consumed as such	1-15 μg/kg for general population excluding infants	No 1169/2011 of the European Parliament and of the Council, the designation for the labelling shall be accompanied by 'contains vitamin D produced by UV-treatment' or 'milk containing vitamin D resulting from UV-treatment'.	
Vitamin K <sub>2</sub> (menaquinone)	To be used in compliance with Directive 2002/4 and/or Regulation (EC) No 1925/2006	16/EC, Regulation (EU) No 609/2013	The designation of the novel food on the labelling of the foodstuffs containing it shall be 'Menaquinone' or 'Vitamin K <sub>2</sub> '	
Wheat bran extract	Specified food category	Maximum levels	The designation of the novel food on the labelling of the foodstuffs containing it shall	The 'Wheat Bran Extract' may not be introduced
	Beer and substitutes	0,4 g/100 g	food supp Nor	onto the market as a food supplement or food supplement ingredient.
	Ready to eat cereals	9 g/100 g		Nor may it be added to infant formula.
	Dairy products	2,4 g/100 g		
	Fruit and vegetable juices	0,6 g/100 g		
	Soft drinks	0,6 g/100 g		
	Meat preparations	2 g/100 g		

Authorised novel food	Conditions under which the nov	el food may be used	Additional specific labelling requirements	Other requirements
Yeast beta-glucans	Specified food category	Maximum levels of pure beta-glucans from yeast (Saccharomyces cervisiae)	The designation of the novel food on the labelling of the foodstuffs containing it shall be 'Yeast (Saccharomyces cerevisiae) beta-	
	Food supplements as defined in Directive 2002/46/EC, excluding food supplements for infants and young children	1,275 g/day for children older than 12 years and general adult popu- lation	glucans'	
		0,675 g/day for children younger than 12 years		
	Total diet replacement for weight control as defined in Regulation (EU) No 609/2013	1,275 g/day		
	Food for special medical purposes as defined in Regulation (EU) No 609/2013, excluding food for special medical purposes intended for infants and young children	1,275 g/day		
	Beverages based on fruit and/or vegetable juices including concentrate and dehydrated juices	1,3 g/kg		
	Fruit-flavoured drinks	0,8 g/kg		
	Cocoa beverages preparation powder	38,3 g/kg (powder)		
	Other beverages	0,8 g/kg (ready to drink)		
		7 g/kg (powder)		
	Cereal bars	6 g/kg		
	Breakfast cereals	15,3 g/kg		
	Wholegrain and high fibre instant hot breakfast cereals	1,5 g/kg		
	Cookie-type biscuits	6,7 g/kg		

Authorised novel food	Conditions under which the nov	el food may be used	Additional specific labelling requirements	Other requirements
	Specified food category	Maximum levels of pure beta-glucans from yeast (Saccharomyces cervisiae)		
	Cracker-type biscuits	6,7 g/kg		
	Milk based beverages	3,8 g/kg		
	Fermented milk products	3,8 g/kg		
	Milk product analogues	3,8 g/kg		
	Dried milk/milk powder	25,5 g/kg		
	Soups and soup mixes	0,9 g/kg (ready to eat)		
		1,8 g/kg (condensed)		
		6,3 g/kg (powder)		
	Chocolate and confectionery	4 g/kg		
	Protein bars and powders	19,1 g/kg		
	Jam, marmalade and other fruit spreads	11,3 g/kg		
Zeaxanthin	Specified food category	Maximum levels	The designation of the novel food on the labelling of the foodstuffs containing it shall	
	Food Supplements as defined in Directive 2002/46/EC	2 mg/day	be 'synthetic zeaxanthin'	
Zinc L-pidolate	Specified food category	Maximum levels	The designation of the novel food on the labelling of the foodstuffs containing it shall	
	Foods covered by Regulation (EU) No 609/2013	3 g/day	be 'Zinc L-pidolate'	
	Milk based drinks and similar products intended for young children			
	Meal replacement for weight control			

Authorised novel food	Conditions under which the nove	el food may be used	Additional specific labelling requirements	Other requirements
	Specified food category	Maximum levels		
	Foods intended to meet the expenditure of intense muscular effort, especially for sportsmen			
	Food bearing statement on the absence or reduced presence of gluten in accordance with the requirements of Commission Implementing Regulation (EU) No 828/2014  Food Supplements as defined in Directive 2002/46/EC			
(l) Population (EU) No 600/20	013 of the European Parliament and of the Council of I	2 June 2012 on food intended for infants	and young shildren food for special medical accessor	and total dist rankscoment for

<sup>(1)</sup> Regulation (EU) No 609/2013 of the European Parliament and of the Council of 12 June 2013 on food intended for infants and young children, food for special medical purposes, and total diet replacement for weight control and repealing Council Directive 92/52/EEC, Commission Directives 96/8/EC, 1999/21/EC, 2006/125/EC and 2006/141/EC, Directive 2009/39/EC of the European Parliament and of the Council and Commission Regulations (EC) No 41/2009 and (EC) No 953/2009 (OJ L 181, 29.6.2013, p. 35).

<sup>(2)</sup> Commission Implementing Regulation (EU) No 828/2014 of 30 July 2014 on the requirements for the provision of information to consumers on the absence or reduced presence of gluten in food (OJ L 228, 31.7.2014, p. 5).

<sup>(3)</sup> Directive 2002/46/EC of the European Parliament and of the Council of 10 June 2002 on the approximation of the laws of the Member States relating to food supplements (OJ L 183, 12.7.2002, p. 51).

<sup>(4)</sup> Regulation (EC) No 1925/2006 of the European Parliament and of the Council of 20 December 2006 on the addition of vitamins and minerals and of certain other substances to foods (OJ L 404, 30.12.2006, p. 26)

<sup>(5)</sup> Council Directive 2001/113/EC of 20 December 2001 relating to fruit jams, jellies and marmalades and sweetened chestnut purée intended for human consumption (OJ L 10, 12.1.2002, p. 67)

<sup>(</sup>e) Regulation (EU) No 1308/2013 of the European Parliament and of the Council of 17 December 2013 establishing a common organisation of the markets in agricultural products and repealing Council Regulation (EEC) No 922/72. (EEC) No 234/79. (EC) No 1037/2001 and (EC) 1234/2007 (OJ L 347, 20.12.2013, p. 671).

Authorised Novel Food	Specification
N-Acetyl-D-neuraminic	Description:
acid	N-Acetyl-D-neuraminic acid is a white to off-white crystalline powder
	Definition:
	Chemical name:
	IUPAC names:
	N-Acetyl-D-neuraminic acid (dihydrate)
	5-Acetamido-3,5-dideoxy-D-glycero-D-galacto-non-2-ulopyranosonic acid (dihydrate),
	Synonyms:
	Sialic acid (dihydrate)
	Chemical formula:
	$C_{11}H_{19}NO_9$ (acid)
	$C_{11}H_{23}NO_{11} (C_{11}H_{19}NO_9 * 2H_2O) (dihydrate)$
	Molecular mass:
	309,3 Da (acid)
	345,3 (309,3 + 36,0) (dihydrate)
	CAS No.:
	131-48-6 (free acid)
	50795-27-2 (dihydrate)
	Specifications:
	Description: white to off-white crystalline powder
	pH (20 °C, 5 % solution): 1,7 – 2,5
	N-Acetyl-D-neuraminic acid (dihydrate): > 97,0 %
	Water (dihydrate calculates to $10.4 \%$ ): $\leq 12.5 \%$ (w/w)
	Ash, sulphated: $< 0.2 \%$ (w/w)
	Acetic acid (as free acid and/or sodium acetate): < 0,5 % (w/w)
	Heavy Metals:
	Iron: < 20,0 mg/kg
	Lead: < 0,1 mg/kg

Authorised Novel Food	Specification
	Residual proteins: < 0,01 % (w/w)
	Residual solvents:
	2-Propanol: < 0,1 % (w/w)
	Acetone: $< 0.1 \% \text{ (w/w)}$
	Ethyl acetate: $< 0.1 \%$ (w/w)
	Microbiological criteria:
	Salmonella: Absence in 25 g
	Aerobic mesophilic total count: < 500 CFU/g
	Enterobacteriaceae: Absence in 10 g
	Cronobacter (Enterobacter) sakazakii: Absence in 10 g
	Listeria monocytogenes: Absence in 25 g
	Bacillus cereus: < 50 CFU/g
	Yeasts: < 10 CFU/g
	Moulds: < 10 CFU/g
	Residual endotoxins: < 10 EU/mg
	CFU: Colony Forming Units; EU: Endotoxin Units.
Adansonia digitata	Description/Definition:
(Baobab) dried fruit pulp	The Baobab ( <i>Adansonia digitata</i> ) fruits are harvested from trees. The hard shells are cracked open and the pulp is separated from the seeds and the shell. This is milled, separated into coarse and fine lots (particle size 3 to 600 $\mu$ ) and then packaged.
	Typical nutritional components:
	Moisture (loss on drying) (g/100 g): 4,5-13,7
	Protein (g/100 g): 1,8-9,3
	Fat (g/100 g): 0-1,6
	Total carbohydrate (g/100 g): 76,3-89,5
	Total sugars (as glucose): 15,2-36,5
	Sodium (mg/100 g): 0,1-25,2
	Analytical specifications:
	Foreign matter: Not more than 0,2 %
	Moisture (loss on drying) (g/100 g): 4,5-13,7
	Ash (g/100 g): 3,8-6,6

Authorised Novel Food	Specification		
Ajuga reptans extract from cell cultures	Description/Definition: Hydroalcoholic extract from <i>Ajuga reptans</i> L. tissue cultures which is substantially equivalent to extracts from flowering aerial parts of <i>Ajuga reptans</i> obtained by traditional cultures.		
L-Alanyl-L-Glutamine	Description/Definition:		
	L-Alanyl-L-Glutamine is produced by fermentation with a genetically modified strain of <i>Escherichia coli</i> . During the fermentation process, the ingredient is secreted into the growth medium from which it is subsequently separated and purified to a concentration of > 98 %.		
	Appearance: White crystalline powder		
	Purity: > 98 %		
	Infrared spectroscopy: Conformity with ref. standard		
	Appearance of solution: Colourless and clear		
	Assay (dry basis): 98-102 %		
	Related substances (each): $\leq 0.2 \%$		
	Residue on ignition: $\leq 0.1 \%$		
	Loss on drying: $\leq 0.5 \%$		
	Optical rotation: + 9,0 - + 11,0°		
	pH (1 %; H <sub>2</sub> O): 5,0-6,0		
	Ammonium (NH <sub>4</sub> ): $\leq 0.020 \%$		
	Chloride (Cl): ≤ 0,020 %		
	Sulphate (SO <sub>4</sub> ): $\leq 0,020 \%$		
	Microbiological criteria:		
	Escherichia coli: Absence/g		
Algal oil from the	Description/Definition:		
microalgae <i>Ulkenia</i> sp.	Oil from the micro-algae <i>Ulkenia</i> sp.		
	Acid value: ≤ 0,5 mg KOH/g		
	Peroxide value (PV): $\leq 5.0$ meq/kg oil		
	Moisture and volatiles: ≤ 0,05 %		
	Unsaponifiables: ≤ 4,5 %		
	Trans-fatty acids: ≤ 1,0 %		
	DHA content: ≥ 32 %		

Authorised Novel Food	Specification
Allanblackia seed oil	Description/Definition:
	Allanblackia seed oil is obtained from the seeds of the allanblackia species: A. floribunda (synonymous with A. parviflora) and A. stuhlmannii.
	Composition of fatty acids:
	Lauric acid (C12:0): < 1,0 %
	Myristic acid (C14:0): < 1,0 %
	Palmitic acid (C16:0): < 2,0 %
	Palmitoleic acid (C16:1): < 1,0 %
	Stearic acid (C18:0): 45-58 %
	Oleic acid (C18:1): 40-51 %
	Linoleic acid (C18:2): < 1,0 %
	γ-Linolenic acid (C18:3): < 1,0 %
	Arachidic acid (C20:0): < 1,0 %
	Free fatty acids: max 0,1 %
	Characteristics:
	Trans fatty acids: max 0,5 %
	Peroxide value: max 0,8 meq/kg
	Iodine value: < 46 g/100 g
	Unsaponifiable matter: max 1,0 %
	Saponification value: 185-198 mg KOH/g
Aloe macroclada Baker	Description/Definition:
leaf extract	Powdered gel extract derived from the leaves of <i>Aloe macroclada</i> Baker which is substantially equivalent to the same gel derived from Aloe vera L. Burm. leaves.
	Ash: 25 %
	Dietary fibres: 28,6 %
	Fat: 2,7 %
	Moisture: 4,7 %
	Polysaccharides: 9,5 %
	Protein: 1,63 %
	Glucose: 8,9 %

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Authorised Novel Food	Specification
Antarctic Krill oil from Euphausia superba	Description/Definition:  To produce lipid extract from Antarctic Krill ( <i>Euphausia superba</i> ) deep-frozen crushed krill or dried krill meal is subjected to lipid extraction with an approved extraction solvent (under Directive 2009/32/EC). Proteins and krill material are removed from the lipid extract by filtration. The extraction solvents and residual water are removed by evaporation.  Saponification value: ≤ 230 mg KOH/g  Peroxide value (PV): ≤ 3 meq O ₂/kg oil  Moisture and volatiles: ≤ 3 % or 0,6 expressed as water activity at 25 °C  Phospholipids: 35-50 %  Trans-fatty acids: ≤ 1 %  EPA (eicosapentaenoic acid): ≥ 9 %  DHA (docosahexaenoic acid): ≥ 5 %
Antarctic Krill oil rich in phospholipids from Euphausia superba	Description/Definition:  Oil rich in phospholipids is produced from Antarctic krill ( <i>Euphausia superba</i> ) by repeated solvent washings with an approved solvent (under Directive 2009/32/EC) to increase phospholipid content of the oil. Solvents are removed from the final product by evaporation.  Saponification value: ≤ 230 mg KOH/g  Peroxide value (PV): ≤ 3 meq O₂/kg oil  Oxidative stability: All food products containing Antarctic Krill oil rich in phospholipids from <i>Euphausia superba</i> should demonstrate oxidative stability by appropriate and recognised national/international test methodology (e.g. AOAC).  Moisture and volatiles: ≤ 3 % or 0,6 expressed as water activity at 25 °C  Phospholipids: ≥ 60 %  Trans-fatty acids: ≤ 1 %  EPA (eicosapentaenoic acid): ≥ 9 %  DHA (docosahexaenoic acid): ≥ 5 %
Arachidonic acid-rich oil from the fungus  Mortierella alpina	Description/Definition:  The clear yellow arachidonic acid-rich oil is obtained by fermentation of the non-genetically modified strains IS-4, I49-N18 and FJRK-MA01 of the fungus <i>Mortierella alpina</i> using a suitable liquid. The oil is then extracted from the biomass and purified.  Arachidonic acid: ≥ 40 % by weight of the total fatty acid content  Free fatty acids: ≤ 0,45 % of the total fatty acid content  Trans fatty acids: ≤ 0,5 % of the total fatty acid content  Unsaponifiable matter: ≤ 1,5 %

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Authorised Novel Food	Specification
	Peroxide value: ≤ 5 meq/kg Anisidin value: ≤ 20 Acid value: ≤ 1,0 KOH/g Moisture: ≤ 0,5 %
Argan oil from Argania spinosa	Description/Definition:  Argan oil is the oil obtained by cold pressing of the almond like kernels of the fruits of <i>Argania spinosa</i> (L.) Skeels. Kernels may be roasted prior to pressing, but with no direct contact with a flame.  Composition:  Palmitic acid (C16:0): 12-15 %  Stearic acid (C18:0): 5-7 %  Oleic acid (C18:1): 43-50 %  Linoleic acid (C18:2): 29-36 %  Unsaponifiable matter: 0,3-2 %  Total sterols: 100-500 mg/100 g  Total tocopherols: 16-90 mg/100 g  Oleic acidity: 0,2-1,5 %  Peroxide value: < 10 meq O <sub>2</sub> /kg
Astaxanthin-rich oleoresin from Haematococcus pluvialis algae	Description/Definition:  Astaxanthin is a carotenoid produced by <i>Haematococcus pluvialis</i> algae. Production methods for the growth of the algae are variable; using closed systems exposed to sunlight or strictly controlled illuminated light alternatively open ponds may be used. The algal cells are harvested and dried; the oleoresin is extracted using either super critical CO <sub>2</sub> or a solvent (ethyl acetate). The Astaxanthin is diluted and standardized to 2,5 %, 5,0 %, 7,0 %, 10 %, 15 % or 20 % using olive oil, safflower oil, Sunflower oil or MCT (Medium Chain Triglycerides).  Composition of the Oleoresin:  Fat: 42,2- 99 %  Protein: 0,3-4,4 %  Carbohydrate: 0-52,8 %  Fibre: < 1,0 %  Ash: 0,0-4,2 %  Specification of Carotenoids w/w%  Total Astaxanthins: 2,9-11,1 %

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Authorised Novel Food	Specification
	9-cis-astaxanthin: 0,3-17,3 % 13-cis-astaxanthin: 0,2-7,0 % Astaxanthin monoesters: 79,8-91,5 % Astaxanthin diesters: 0,16-19,0 % B-Carotene: 0,01-0,3 % Lutein: 0-1,8 % Canthaxanthin: 0-1,30 %
	Microbiological criteria:  Total aerobic bacteria: < 3 000 CFU/g  Yeast and Moulds: < 100 CFU/g  Coliforms: < 10 CFU/g  E. coli: Negative  Salmonella: Negative  Staphylococcus: Negative
Basil seeds (Ocimum basilicum)	Description/Definition:  Basil (Ocimum basilicum L.) belongs to the family 'Lamiaceae' within the order 'Lamiales'. Post-harvest the seeds are cleaned mechanically. Flowers, leaves and other parts of the plant are removed. Highest level of purity of Basil seeds has to be ensured by filtering (optical, mechanical). Production process of fruit juice and fruit/vegetable blend beverages containing Basil seeds (Ocimum basilicum L.) includes seed pre-hydration and pasteurisation steps. Microbiological controls and monitoring systems are in place.  Dry Matter: 94,1 %  Protein: 20,7 %  Fat: 24,4 %  Carbohydrate: 1,7 %  Dietary Fibre 40,5 % (Method: AOAC 958.29)  Ash: 6,78 %
Fermented black bean extract	Description/Definition:  Fermented black bean extract (Touchi extract) is a fine light-brown protein-rich powder obtained by water extraction of small soybeans ( <i>Glycine max (L.) Merr.</i> ) fermented with <i>Aspergillus oryzae</i> . The extract contains an α-glucosidase inhibitor.  Characteristics:  Fat: ≤ 1,0 %

Authorised Novel Food

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	Protein: ≥ 55 %
	Water: $\leq 7.0 \%$
	Ash: $\leq 10\%$
	Carbohydrate: ≥ 20 %
	a-glucosidase inhibitory activity: IC50 min 0,025 mg/ml
	Soy isoflavone: $\leq 0.3 \text{ g/}100 \text{ g}$
Bovine lactoferrin	Description/Definition:
	Bovine lactoferrin is a protein that occurs naturally in cows' milk. It is an iron-binding glycoprotein of approximately 77 kDa and consists of a single polypeptide chain of 689 amino acids.
	Production process: Bovine lactoferrin is isolated from skimmed milk or cheese whey via ion exchange and subsequent ultra-filtration steps. Finally it is dried by freeze drying or spraying and the large particles are sieved out. It is a virtually odourless, light pinkish powder.
	Physical-Chemical properties of Bovine lactoferrin:
	Moisture: < 4,5 %
	Ash: < 1,5 %
	Arsenic: < 2,0 mg/kg
	Iron: < 350 mg/kg
	Protein: > 93 %
	of which bovine lactoferrin: > 95 %
	of which other proteins: < 5,0 %
	pH (2 % solution, 20 °C): 5,2-7,2
	Solubility (2 % solution, 20 °C): complete
Puologoidas amangis saad	Description (Definition)
Buglossoides arvensis seed oil	Description/Definition:  Refined Productions aid is extracted from the cools of Productions amongs (L.) LM Johnst
	Refined Buglossoides oil is extracted from the seeds of <i>Buglossoides arvensis</i> (L.) I.M.Johnst Alpha-linolenic acid: ≥ 35 % w/w of total fatty acids
	Stearidonic acid: ≥ 15 % w/w of total fatty acids
	Linoleic acid: ≥ 8,0 % w/w of total fatty acids
	Trans fatty acids: $\leq 2.0$ % w/w of total fatty acids
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Specification

Authorised Novel Food

	Asid values < 0.6 mg VOU/g
	Acid value: ≤ 0,6 mg KOH/g
	Peroxide value: $\leq 5.0 \text{ meq } O_2/kg$
	Unsaponifiable content: ≤ 2,0 %
	Protein content (total nitrogen): ≤ 10 μg/ml
	Pyrrolizidine alkaloids: Not detectable with a detection limit of 4,0 μg/kg
Calanus finmarchicus oil	Description/Definition:
	The novel food is ruby coloured, slightly viscous oil with a slight shellfish odour extracted from the crustacean (marine zooplankton) <i>Calanus finmarchicus</i> . The ingredient consists primarily of wax esters (> 85 %) with minor amounts of triglycerides and other neutral lipids.
	Specifications:
	Water: < 1,0 %
	Wax esters: > 85 %
	Total fatty acids: > 46 %
	Eicosapentaenoic acid (EPA): > 3,0 %
	Docosahexaenoic acid (DHA): > 4,0 %
	Total fatty alcohols: > 28 %
	C20:1 n-9 fatty alcohol: > 9,0 %
	C22:1 n-11 fatty alcohol: > 12 %
	Trans fatty acids: < 1,0 %
	Astaxanthinesters: < 0,1 %
	Peroxide value: < 3,0 meq. O <sub>2</sub> /kg
Chewing gum base	Description/Definition:
(monomethoxypoly-	The novel food ingredient is a synthetic polymer (Patent number WO2006016179). It consists of branched polymers of monomethoxypolyethylene glycol
ethylene glycol)	(MPEG) grafted onto polyisoprene-graft-maleic anhydride (PIP-g-MA), and unreacted MPEG (less than 35 % by weight).
	White to off-white colour.
	CAS No.: 1246080-53-4
	Characteristics:
	Moisture: < 5,0 %

Specification

Authorised Novel Food	Specification
	Aluminium: < 3,0 mg/kg
	Lithium: < 0,5 mg/kg
	Nickel: < 0,5 mg/kg
	Residual anhydride: < 15 μmol/g
	Polydispersity index: < 1,4
	Isoprene: < 0,05 mg/kg
	Ethylene oxide: < 0,2 mg/kg
	Free maleic anhydride: < 0,1 %
	Total oligomeres (less than 1 000 Dalton): ≤ 50 mg/kg
	Ethylene glycol: < 200 mg/kg
	Diethylene glycol: < 30 mg/kg
	Monoethylene glycol methyl ether: < 3,0 mg/kg
	Diethylene glycol methyl ether: < 4,0 mg/kg
	Triethylene glycol methyl ether: < 7,0 mg/kg
	1,4-Dioxane: < 2,0 mg/kg
	Formaldehyde: < 10 mg/kg
Chewing gum base (Methyl vinyl ether-maleic	Description/Definition:
anhydride copolymer)	Methyl vinyl ether-maleic anhydride copolymer is an anhydrous copolymer of methyl vinyl ether and maleic anhydride.
,	Free-flowing, white to white-off powder
	CAS No: 9011-16-9
	Purity:
	Assay value: At least 99,5 % in dry matter
	Specific viscosity (1 % MEK): 2-10
	Residual methyl vinyl ether: ≤ 150 ppm  Residual maleic anhydride: ≤ 250 ppm
	Acetaldehyde: ≤ 500 ppm
	Methanol: ≤ 500 ppm
	Dilauroyl peroxide: ≤ 15 ppm
	Total heavy metals: $\leq 10$ ppm
	Town hearty means 10 ppm
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Authorised Novel Food	Specification
	Microbiological criteria:  Total aerobic plate count: ≤ 500 CFU/g  Mould/yeast: ≤ 500 CFU/g  Escherichia coli: Negative to test  Salmonella: Negative to test  Staphylococcus aureus: Negative to test  Pseudomonas aeruginosa: Negative to test
Chia oil from Salvia hispanica	Description/Definition:  Chia oil is produced from Chia (Salvia hispanica L.) seeds (99,9 % pure) by cold-pressing. No solvents are used and, once pressed, the oil is held in decantation tanks and a filtration process employed to remove impurities. It can also be produced by extraction with supercritical CO₂.  Production process:  Produced by cold pressing. No solvents are used and, once pressed, the oil is held in decantation tanks and a filtration process employed to remove impurities. Acidity expressed as oleic acid: ≤ 2,0 %  Peroxide value: ≤ 10 meq/kg  Insoluble impurities: ≤ 0,05 %  Alpha linolenic acid: ≥ 60 %  Linoleic acid: 15-20 %
Chia seeds (Salvia hisp-anica)	Description/Definition: Chia (Salvia hispanica L.) is a summer annual herbaceous plant belonging to the Labiatae family. Post-harvest the seeds are cleaned mechanically. Flowers, leaves and other parts of the plant are removed. Dry matter: 90-97 % Protein: 15-26 % Fat: 18-39 % Carbohydrate (*): 18-43 % Crude Fibre (**): 18-43 % Ash: 3-7 %  (*) Carbohydrates include the fibre value (EU: carbohydrates are available = sugar + starch) (**) Crude fibre is the part of fibre made mainly of indigestible cellulose, pentosans and lignin

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Authorised Novel Food	Specification
	Production process:  Production process of fruit juices and fruit juice blends beverages, containing Chia seeds, includes seed pre-hydration and pasteurisation steps. Microbiological controls and monitoring systems are in place.
Chitin-glucan from Aspergillus niger	Description/Definition: Chitin-glucan is obtained from the mycelium of <i>Aspergillus niger</i> ; it is a slightly yellow, odourless, free-flowing powder. It has a dry matter content of 90 % or more. Chitin-glucan is composed largely of two polysaccharides: — chitin, composed of repeating units of N-acetyl-D-glucosamine (CAS No: 1398-61-4), — beta (1, 3)-glucan, composed of repeating units of D-glucose (CAS No: 9041-22-9). Loss on drying: ≤ 10 % Chitin-glucan: ≥ 90 % Ratio of chitin to glucan: 30:70 to 60:40 Ash: ≤ 3,0 % Lipids: ≤ 1,0 % Proteins: ≤ 6,0 %
Chitin-glucan complex from Fomes fomentarius	Description/Definition:  Chitin-glucan complex is obtained from the cell walls of the fruit bodies of the fungus <i>Fomes fomentarius</i> . It consists primarily of two polysaccharides:  — Chitin, composed of repeating units of N-acetyl-D-glucosamine (CAS No: 1398-61-4);  — Beta-(1,3)(1,6)-D-glucan, composed of repeating units of D-glucose (CAS No: 9041-22-9).  The production process consists of several steps, including: cleaning, reduction in size and grinding, softening in water and heating in an alkaline solution, washing, drying. No hydrolysis is applied during the production process.  Appearance: Powder, odourless, flavourless, brown  Purity:  Moisture: ≤ 15 %  Ash: ≤ 3,0 %  Chitin-glucan: ≥ 90 %  Ratio of chitin to glucan: 70:20  Total carbohydrates, excluding glucans: ≤ 0,1 %

	Proteins: ≤ 2,0 %
	Lipids: ≤ 1,0 %
	Melanins: ≤ 8,3 %
	Additives: None
	pH: 6,7-7,5
	Heavy metals:
	Lead (ppm): ≤ 1,00
	Cadmium (ppm): $\leq 1,00$
	Mercury (ppm): $\leq 0.03$
	Arsenic (ppm): $\leq 0.20$
	Microbiological criteria:
	Total mesophilic bacteria: $\leq 10^3/g$
	Yeast and moulds: $\leq 10^3/g$
	Coliforms at 30 °C: $\leq 10^3/g$
	$E. \ coli: \leq 10/g$
	Salmonella and other pathogenic bacteria: Absence/25 g
Chitosan extract from	Description/Definition:
fungi (Agaricus bisporus;	The chitosan extract (containing mainly poly(D-glucosamine)) is obtained from stems of Agaricus bisporus or from the mycelium of Aspergillus niger.
Aspergillus niger)	The patented production process consists of several steps, including: extraction and deacetylation (hydrolysis) in alkaline medium, solubilisation in acidic medium, precipitation in alkaline medium, washing and drying.
	Synonym: Poly(D-glucosamine)
	Chitosan CAS number: 9012-76-4
	Chitosan formula: $(C_6H_{11}NO_4)_n$
	Appearance: fine free-flowing powder
	Aspect: Off –white to slightly brownish
	Odour: Odourless
	Purity:
	Chitosan content (% w/w dry weight): 85
	Glucan content (% w/w dry weight): ≤ 15
	Loss on drying (% w/w dry weight): ≤ 10
	Viscosity (1 % in 1 % acetic acid): 1-15

Chromium Picolinate	Description/Definition: Chromium picolinate is a reddish free-flowing powder, slightly soluble in water at pH 7. The salt is also soluble in polar organic solvents. Chemical name: tris(2pyridinecarboxylato-N,O)chromium(III) or 2-pyridinecarboxylic acid chromium(III) salt CAS No.: $14639-25-9$ Chemical formula: $Cr(C_6H_4NO_2)_3$ Chemical characteristics: Chromium Picolinate: $\geq 95\%$ Chromium (III): $12-13\%$ Chromium (VI): not detected Water: $\leq 4,0\%$
Cistus incanus L. Pandalis herb	Description:  Cistus incanus L. Pandalis herb; species belonging to the Cistaceae family and native to the Mediterranean region, Chalkidiki Peninsula.  Composition:  Moisture: 9–10 g/100 g herbs  Protein: 6,1 g/100 g herbs  Fat: 1,6 g/100 g herbs  Carbohydrates: 50,1 g/100 g herbs  Fiber: 27,1 g/100 g herbs  Minerals: 4,4 g/100 g herbs
	Sodium: 0,18 g Potassium: 0,75 g Magnesium: 0,24 g Calcium: 1,0 g Iron: 65 mg  Vitamin B1: 3,0 μg Vitamin B2: 30 μg Vitamin B6: 54 μg Vitamin C: 28 mg Vitamin A: less than 0,1 mg

Authorised Novel Food	Specification
	Vitamin E: 40–50 mg
	Alpha-Tocopherol: 20–50 mg
	Beta and Gamma-Tocopherols: 2–15 mg
	Delta-Tocopherol: 0,1–2 mg
Citicoline	Citicoline (synthetic)
	Description/Definition:
	Citicoline is composed of cytosine, ribose, pyrophosphate and choline.
	White crystalline powder
	Chemical name: Choline cytidine 5'-pyrophosphate, Cytidine 5'-(trihydrogen diphosphate) P'-[2-(trimethylammonio)ethyl]ester inner salt
	Chemical formula: C <sub>14</sub> H <sub>26</sub> N <sub>4</sub> O <sub>11</sub> P <sub>2</sub>
	Molecular weight: 488,32 g/mol
	CAS No.: 987-78-0
	pH (sample solution of 1 %): 2,5-3,5
	Purity:
	Assay value: ≥ 98 % of dry matter
	Loss on drying (100 °C for 4 hours): $\leq 5.0$ %
	Ammonium: ≤ 0,05 %
	Arsenic: Not more than 2 ppm
	Free phosphoric acids: ≤ 0,1 %
	5'-Cytidylic acid: ≤ 1,0 %
	Microbiological criteria:
	Total plate count: $\leq 10^3$ CFU/g
	Yeast and moulds: $\leq 10^2 \text{ CFU/g}$
	Escherichia coli: Absence in 1 g
	Citicoline (microbial source)
	Description/Definition:
	It is produced by fermentation using a genetically modified strain of E. coli (BCT19/p40k)
	The specification on citicoline from the microbial source is identical to the authorised synthetic citicoline.

Authorised Novel Food	Specification			
Clostridium butyricum	Description/Definition:			
	Clostridium butyricum (CBM-588) is a Gram-positive, spore-forming, obligate anaerobic, non-pathogenic, non-genetically modified bacterium. Depository number FERM BP-2789			
	Microbiological criteria:			
	Total viable aerobic count: $\leq 10^3$ CFU/g			
	Escherichia coli: Not detected in 1 g			
	Staphylococcus aureus: Not detected in 1 g			
	Pseudomonas aeruginosa: Not detected in 1 g			
	Yeast and moulds: $\leq 10^2 \text{ CFU/g}$			
Extract of defatted cocoa	Cocoa (Theobroma cacao L.) Extract			
powder	Appearance: Dark brown powder free of visible impurities			
	Physical and chemical properties:			
	Polyphenol content: Min 55,0 % GAE			
	Theobromine content: Max 10,0 %			
	Ash content: Max 5,0 %			
	Moisture content: Max 8,0 %			
	Bulk density: 0,40-0,55 g/cm <sup>3</sup>			
	pH: 5,0-6,5			
	Residual solvent: Max 500 ppm			
Low fat cocoa extract	Low fat Cocoa (Theobroma cacao L.) extract			
	Appearance: Dark red to purple powder			
	Cocoa extract, concentrate: Min 99 %			
	Silicon dioxide (technological aid): Max 1,0 %			
	Cocoa flavanols: Min. 300 mg/g			
	(-) Epicatechin: Min. 45 mg/g			
	Loss on drying: Max. 5,0 %			

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Authorised Novel Food	Specification
Coriander seed oil from	Description/Definition:
Coriandrum sativum	Coriander seed oil is an oil containing glycerides of fatty acids that is produced from the seeds of the coriander plant Coriandrum sativum L.
	Slight yellow colour, bland taste
	CAS No.: 8008-52-4
	Composition of fatty acids:
	Palmitic acid (C16:0): 2-5 %
	Stearic acid (C18:0): < 1,5 %
	Petroselinic acid (cis-C18:1(n-12)): 60-75 %
	Oleic acid (cis-C18:1 (n-9)): 8-15 %
	Linoleic acid (C18:2): 12-19 %
	$\alpha$ -Linolenic acid (C18:3): $< 1,0 \%$
	Trans fatty acids: ≤ 1,0 %
	Purity:
	Refractive index (20°C): 1,466-1,474
	Acid value: $\leq 2.5$ mg KOH/g
	Peroxide value: ≤ 5,0 meq/kg
	Iodine value: 88-110 units
	Saponification value: 186-200 mg KOH/g
	Unsaponifiable matter: ≤ 15 g/kg
Crataegus pinnatifida	Description/Definition:
dried fruit	Dried fruits of Crataegus pinnatifida species belonging to the Rosaceae family and native to north China and Korea.
	Composition:
	Dry matter: 80 %
	Carbohydrates: 55 g/kg fresh weight
	Fructose: 26,5–29,3 g/100 g
	Glucose: 25,5–28,1 g/100 g
	Vitamin C: 29,1 mg/100 g fresh weight
	Sodium: 2,9 g/100 g fresh weight
	Compotes are products obtained by thermal processing of the edible part of one or several species of fruits, whole or in pieces, sieved or not, without significant concentration. Sugars, water, cider, spices and lemon juice may be used.

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### α-cyclodextrin

Authorised Novel Food

# **Description/Definition:**

A non-reducing cyclic saccharide consisting of six  $\alpha$ -1,4-linked D-glucopyranosyl units produced by the action of cyclodextrin glucosyltransferase (CGTase, EC 2.4.1.19) on hydrolyzed starch. Recovery and purification of  $\alpha$ -cyclodextrin may be carried out using one of the following procedures: precipitation of a complex of  $\alpha$ -cyclodextrin with 1-decanol, dissolution in water at elevated temperature and re-precipitation, steam-stripping of the complexant, and crystallisation of  $\alpha$ -cyclodextrin from the solution; or chromatography with ion-exchange or gel filtration followed by crystallisation of  $\alpha$ -cyclodextrin from the purified mother liquor; or membrane separation methods such as ultra-filtration and reverse osmosis: Description: Virtually odourless, white or almost white crystalline solid.

Specification

Synonyms: α-cyclodextrin, α-dextrin, cyclohexaamylose, cyclomaltohexaose, α-cycloamylase

Chemical name: Cyclohexaamylose

CAS No.: 10016-20-3

Chemical formula: (C<sub>6</sub>H<sub>10</sub>O<sub>5</sub>)<sub>6</sub>

Formula weight: 972,85 Assay: ≥ 98 % (dry basis)

**Identification:** 

Melting range: Decomposes above 278 °C

Solubility: Freely soluble in water; very slightly soluble in ethanol Specific rotation: [α]D 25: Between + 145° and +151° (1% solution)

Chromatography: The retention time for the major peak in a liquid chromatogram of the sample corresponds to that for  $\alpha$ -cyclodextrin in a chromatogram of reference  $\alpha$ -cyclodextrin (available from *Consortium für Elektrochemische Industrie GmbH, München, Germany or Wacker Biochem Group, Adrian, MI, USA*) using the conditions described in the METHOD OF ASSAY

#### **Purity:**

Water: ≤ 11 % (Karl Fischer Method) Residual complexant: ≤ 20 mg/kg

(1-decanol)

Reducing substances:  $\leq 0.5 \%$  (as glucose)

Sulphated ash:  $\leq 0.1 \%$ Lead:  $\leq 0.5 \text{ mg/kg}$ 

## Method of assay:

Determine by liquid chromatography using the following conditions:

Sample solution: Weigh accurately about 100 mg of test sample into a 10 ml volumetric flask and add 8 ml of deionised water. Dissolve the sample completely using an ultra-sonification bath (10-15 min) and dilute to the mark with purified deionised water. Filter through a 0,45-micrometer filter

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Authorised Novel Food	Specification
	Reference solution: Weigh accurately about 100 mg of α-cyclodextrin into a 10 ml volumetric flask and add 8 ml of deionised water. Dissolve the sample completely using an ultra-sonification bath and dilute to the mark with purified deionised water.
	Chromatography: Liquid chromatograph equipped with a refractive index detector and an integrating recorder.
	Column and packing: Nucleosil-100-NH <sub>2</sub> (10 µm) (Macherey & Nagel Co. Düren, Germany) or similar
	Length: 250 mm
	Diameter: 4 mm
	Temperature: 40 °C
	Mobile phase: acetonitrile/water (67/33, v/v)
	Flow rate: 2,0 ml/min
	Injection volume: 10 μl
	Procedure: Inject the sample solution into the chromatograph, record the chromatogram, and measure the area of the $\alpha$ -CD peak. Calculate the percentage of cyclodextrin in the test sample as follows:
	% $\alpha$ -cyclodextrin (dry basis) = 100 × (AS/AR) (WR/WS)
	where
	As and AR are the areas of the peaks due to $\alpha$ -cyclodextrin for the sample solution and reference solution, respectively. Ws and WR are the weights (mg) of the test sample and reference $\alpha$ -cyclodextrin, respectively, after correcting for water content.
evclodextrin	Description/Definition:
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	A non-reducing cyclic saccharide consisting of eight α-1,4-linked D-glucopyranosyl units produced by the action of cyclodextrin glucosyltransferase (CGTast EC 2.4.1.19) on hydrolysed starch. Recovery and purification of γ-cyclodextrin may be carried out by precipitation of a complex of γ-cyclodextrin with ε cyclohexadecen-1-one, dissolution of the complex with water and n-decane, steam-stripping of the aqueous phase and recovery of gamma-CD from the solution by crystallisation.
	Virtually odourless, white or almost white crystalline solid
	Synonyms: $\gamma$ -cyclodextrin, $\gamma$ -dextrin, cyclooctaamylose, cyclomaltooctaose, $\gamma$ -cycloamylase
	Chemical name: Cyclooctaamylose
	CAS number: 17465-86-0
	Chemical formula: $(C_6H_{10}O_5)_8$
	Chemical formula: $(C_6H_{10}O_5)_8$ Assay: $\geq 98\%$ (dry basis)
	Assay: ≥ 98 % (dry basis)

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	Authorised Novel Food	Specification
		Specific rotation: [α]D 25: between + 174° and + 180° (1 % solution)
		Purity:
		Water: ≤ 11 %
		Residual complexant (8-cyclohexadecen-1-one (CHDC)): ≤ 4 mg/kg
		Residual solvent (n-decane): ≤ 6 mg/kg
		Reducing substances: ≤ 0,5 % (as glucose)
		Sulphated ash: ≤ 0,1 %
<u>M4</u>		
	Extract of three herbal	Description/Definition:
	roots (Cynanchum wilfordii Hemsley, Phlomis	The mixture of the three herbal roots is yellowish brown fine powder produced by hot-water extraction, concentration by evaporation, and spray drying
	umbrosa Turcz. and	Composition of the extract of mixture of the 3 herbal roots:
	Angelica gigas Nakai)	Cynanchum wilfordii root: 32,5 % (w/w)
		Phlomis umbrosa root: 32,5 % (w/w)
		Angelica gigas root: 35,0 % (w/w)
		Specifications:
		Loss on drying: NMT 100 mg/g
		Assay:
		Cinnamic acid: 0,012 – 0,039 mg/g
		Shanzhiside methyl ester: 0,20 – 1,55 mg/g
		Nodakenin: 3,35 – 10,61 mg/g
		Methoxsalen: < 3 mg/g
		Phenols: 13,0 – 40,0 mg/g
		Coumarins: 13,0 – 40,0 mg/g
		Iridoids: 13,0 – 39,0 mg/g
		Saponins: 5,0 – 15,5 mg/g
		Nutritive components:
		Carbohydrates: 600 – 880 mg/g
		Proteins: 70 – 170 mg/g
		Fats: < 4 mg/g

Authorised Novel Food	Specification
	Microbiological parameters:
	Total viable plate count: < 5 000 CFU/g
	Total mould and yeast: < 100 CFU/g
	Coliform bacteria: < 10 CFU/g
	Salmonella: Negative/25 g
	Escherichia coli: Negative/25 g
	Staphylococcus aureus: Negative/25 g
	Heavy metals:
	Lead: < 0,65 mg/kg
	Arsenic: < 3,0 mg/kg
	Mercury: < 0,1 mg/kg
	Cadmium: < 1,0 mg/kg
	CFU: Colony Forming Units
Dextran preparation	1. Powdered form:
produced by Leuconostoc	Carbohydrates: 60 % with: (Dextran: 50 %, Mannitol: 0,5 %, Fructose: 0,3 %, Leucrose: 9,2 %)
mesenteroides	Protein: 6,5 %
	Lipid: 0,5 %
	Lactic acid: 10 %
	Ethanol: traces
	Ash: 13 %
	Moisture: 10 %
	2. Liquid form:
	Carbohydrates: 12 % with: (Dextran: 6,9 %, Mannitol: 1,1 %, Fructose: 1,9 %, Leucrose: 2,2 %)
	Protein: 2,0 %
	Lipid: 0,1 %
	Lactic acid: 2,0 %
	Ethanol: 0,5 %
	Ash: 3,4 %
	Moisture: 80 %

Authorised Novel Food	Specification	
Diacylglycerol oil of plant	Description/Definition:	
origin	Manufactured from glycerol and fatty acids derived from edible vegetable oils, in particular from soybean oil (Glycine max) or rapeseed oil (Brassica campestris, Brassica napus) using a specific enzyme.	
	Acylglycerol Distribution:	
	Diacylglycerols (DAG): ≥ 80 %	
	1,3-Diacylglycerols (1,3-DAG): $\geq 50 \%$	
	Triacylglycerols (TAG): ≤ 20 %	
	Monoacylglycerols (MAG): ≤ 5,0 %	
	Fatty Acid Composition (MAG, DAG, TAG):	
	Oleic acid (C18:1): 20-65 %	
	Linoleic acid (C18:2): 15-65 %	
	Linolenic acid (C18:3): ≤ 15 %	
	Saturated fatty acids: ≤ 10 %	
	Others:	
	Acid value: $\leq 0.5$ mg KOH/g	
	Moisture and volatile: $\leq 0.1 \%$	
	Peroxide value: ≤ 1,0 meq/kg	
	Unsaponifiables: ≤ 2,0 %	
	Trans fatty acids≤ 1,0 %	
	MAG = monoacylglycerols, DAG = diacylglycerols, TAG = triacylglycerols	
Dihydrocapsiate (DHC)	Description/Definition:	
	Dihydrocapsiate is synthesised by enzyme-catalysed esterification of vanillyl alcohol and 8-methylnonanoic acid. Following the esterification dihydrocapsiate is extracted with n-hexane.	
	Viscous to colourless to yellow liquid	
	Chemical formula: C <sub>18</sub> H <sub>28</sub> O <sub>4</sub>	
	CAS No: 205687-03-2	
	Physical-chemical properties:	
	Dihydrocapsiate: > 94 %	
	8-Methylnonanoic acid: < 6,0 %	
	Vanillyl acohol: < 1,0 %	
	Other synthesis related substances: < 2,0 %	

	Authorised Novel Food	Specification	
	Dried extract of <i>Lippia</i> citriodora from cell cultures	Description/Definition: Dried extract of cell cultures HTN <sup>®</sup> Vb of <i>Lippia citriodora</i> (Palau) Kunth.	
	Echinacea angustifolia extract from cell cultures	Extract of the roots of <i>Echinacea angustifolia</i> obtained from tissue culture plant which is substantially equivalent to a root extract from <i>Echinacea angustifolia</i> obtained in ethanol-water titrated to 4 % echinacoside.	
	Echium plantagineum oil	Description/Definition:	
Echium oil is the pale yellow product obtained by refining oil extracted from the seeds of <i>Echium plantagineum</i> L. Stearidonic acid: acids  Trans fatty acids: $\leq 2.0 \%$ (w/w of total fatty acids)		Echium oil is the pale yellow product obtained by refining oil extracted from the seeds of <i>Echium plantagineum</i> L. Stearidonic acid: ≥ 10 % w/w of total fatty	
		Trans fatty acids: ≤ 2,0 % (w/w of total fatty acids)	
		Acid value: ≤ 0,6 mg KOH/g	
		Peroxide value: $\leq 5.0 \text{ meq } O_2/\text{kg}$	
		Unsaponifiable content: ≤ 2,0 %	
		Protein content (total nitrogen): ≤ 20 μg/ml Pyrrolizidine alkaloids: Not detectable with a detection limit 4,0 μg/kg	
		1 yrronzianie ankarotas. 1701 decetatore with a decetion mint 4,50 µg/kg	
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	Ecklonia cava phlorot-	Description/Definition:	
	annins	Ecklonia cava phlorotannins are obtained via alcohol extraction from the edible marine alga Ecklonia cava. The extract is a dark brown powder, rich in phlorotannins, polyphenolic compounds found as secondary metabolites in certain brown algae species.	
Characteristics/Compositio		Characteristics/Composition	
		Phlorotannin content: 90 ± 5 %	
		Antioxidant activity: > 85 %	
		Moisture: < 5 %	
Ash: < 5 %  Microbiological criteria:  Total viable cell count: < 3 000 CFU/g  Mould/yeast: < 300 CFU/g  Coliforms: Negative to test			
		Coliforms: Negative to test	
		Salmonella spp.: Negative to test	
		Staphylococcus aureus: Negative to test	

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	Authorised Novel Food	Specification
		Heavy metals and Halogens:
		Lead: < 3,0 mg/kg
		Mercury: < 0,1 mg/kg
		Cadmium: < 3,0 mg/kg
		Arsenic: < 25,0 mg/kg
		Inorganic Arsenic: < 0,5 mg/kg
		Iodine: 150,0-650,0 mg/kg
		CFU: Colony Forming Units
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	Epigallocatechin gallate as a purified extract from	Description/Definition:
	green tea leaves (Camellia sinensis)	A highly purified extract from the leaves of green tea (Camellia sinensis (L.) Kuntze) in the form of a fine, off-white to pale pink powder. It is composed of a minimum of 90 % epigallo-catechin gallate (EGCG), and has a melting point between approx. 210 and 215 °C
	,	Appearance: off-white to pale pink powder
		Chemical name: polyphenol (-) epigallocatechin-3-gallate
		Synonyms: epigallocatechin gallate (EGCG)
		CAS No.: 989-51-5
		INCI name: epigallocatechin gallate
		Molecular mass: 458,4 g/mol
		Loss on drying: max 5,0 %
		Heavy metals:
		Arsenic: max 3,0 ppm
		Lead: max 5,0 ppm
		Assay:
		Min. 94 % EGCG (on dry material)
		max. 0,1 % caffeine
		Solubility: EGCG is fairly soluble in water, ethanol, methanol and acetone

Addionsed Novel Food		Specification	
L-ergothioneine	Definition		
	Chemical name (IUPAC): (2S)-3-(2-thioxo-2,3-dih	ydro-1 <i>H</i> -imidazol-4-yl)-2-(trimethylammonio)-Propanoate	
	Chemical formula: C <sub>9</sub> H <sub>15</sub> N <sub>3</sub> O <sub>2</sub> S		
	Molecular mass: 229,3 Da		
	CAS No.: 497-30-3		
	Parameter	Specification	Method
	Appearance	White powder	Visual
	Optical rotation	$[\alpha]_D \geq (+) \ 122^{\circ} \ (c = 1, \ H_2O)^{a)}$	Polarimetry
	Chemical purity	≥ 99,5 %	HPLC [Eur. Ph. 2.2.29]
		≥ 99,0 %	1H-NMR
	Identification	Compliant with the structure	1H-NMR
		C: $47,14 \pm 0,4 \%$	Elemental analysis
		H: $6.59 \pm 0.4 \%$	
		N: $18,32 \pm 0,4 \%$	
	Total residual solvents	[Eur. Ph. 01/2008:50400]	Gas chromatography
	(methanol, ethyl acetate, isopropanol, ethanol)	< 1 000 ppm	[Eur. Ph. 01/2008:20424]
	Loss on drying	Internal standard < 0,5 %	[Eur. Ph. 01/2008:20232]
	Impurities	< 0,8 %	HPLC/GPC or 1H-NMR
	Heavy metals <sup>b) c)</sup>		
	Lead	< 3,0 ppm	ICP/AES
	Cadmium	< 1,0 ppm	(Pb, Cd)
			Atomic fluorescence (Hg)
	Mercury	< 0,1 ppm	

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	Microbiological specifications <sup>b)</sup>		
	Total viable aerobic count (TVAC)	$\leq 1 \times 10^3 \text{ CFU/g}$	[Eur. Ph. 01/2011:50104]
	Total yeast and mould count (TYMC)	$\leq 1 \times 10^2 \text{ CFU/g}$	
	Escherichia coli	Absence in 1 g	
		n nuclear magnetic resonance; HPLC: high-performance liquid class atomic emission spectroscopy; CFU: colony-forming units.	hromatography; GPC: gel permeation
	a) Lit. $[\alpha]_D = (+) 126,6^{\circ} (c = 1, H_2O)$		
	b) Analyses conducted on each batch		
	c) Maximum levels in accordance with Regulation (I	EC) No 1881/2006	
Ferric Sodium EDTA	Description/Definition:		
	Ferric Sodium EDTA (ethylenediaminetetraacetic acid) It is freely soluble in water.	is an odourless free-flowing, yellow to brown powder with a chen	nical purity of more than 99 % (w/w).
	Chemical formula: C <sub>10</sub> H <sub>12</sub> FeN <sub>2</sub> NaO <sub>8</sub> · 3H <sub>2</sub> O		
	Chemical characteristics:		
	pH of 1 % solution: 3,5-5,5		
	Iron: 12,5-13,5 %		
	Sodium: 5,5 %		
	Water: 12,8 %		
	Organic matter (CHNO): 68,4 %		
	EDTA: 65,5-70,5 %		
	Water insoluble matter: ≤ 0,1 %		
	Nitrilo-triacetic acid: ≤ 0,1 %		
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Authorised Novel Food	Specification	
Ferrous ammonium phos-	Description/Definition:	
phate	Ferrous ammonium phosphate is a grey/green fine powder, practically insoluble in water and soluble in dilute mineral acids.	
	CAS No.: 10101-60-7	
	Chemical formula: FeNH <sub>4</sub> PO <sub>4</sub>	
	Chemical characteristics:	
	pH of 5 % suspension in water: 6,8-7,8	
	Iron (total): $\geq 28\%$	
	Iron (II): 22-30 % (w/w)	
	Iron (III): $\leq 7.0 \%$ (w/w)	
	Ammonia: 5-9 % (w/w)	
	Water: ≤ 3,0 %	
Fish peptides from	Description/Definition:	
Sardinops sagax	The novel food ingredient is a peptide mixture, which is obtained by an alkaline protease-catalysed hydrolysis of fish ( <i>Sardinops sagax</i> ) muscle, subsequent isolation of the peptide fraction by column chromatography, concentration under vacuum and spray drying.	
	Yellowish white powder	
	Peptides (*) (short chain peptides, dipeptides and tripeptides with a molecular weight of less than 2 kDa): ≥ 85 g/100 g	
	Val-Tyr (dipeptide): 0,1-0,16 g/100 g	
	Ash: $\leq 10 \text{ g}/100 \text{ g}$	
	Moisture: $\leq 8 \text{ g/}100 \text{ g}$	
	(*) Kjeldahl method	
Flavonoids from	Description/Definition:	
Glycyrrhiza glabra	Flavonoids derived from the roots or rootstock of <i>Glycyrrhiza glabra</i> L. are extracted with ethanol followed by further extraction of this ethanolic extract with medium-chain triglycerides. It is a dark-brown coloured liquid, containing 2,5 % to 3,5 % of glabridin.	
	Moisture: < 0,5 %	
	Ash: < 0,1 %	
	Peroxide value: < 0,5 meq/kg	

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Authorised Novel Food	Specification	
	Glabridin: 2,5-3,5 % of fat	
	Glycyrrhizinic acid: < 0,005 %	
	Fat including polyphenol-type substances: ≥ 99 %	
	Protein: < 0,1 %	
	Carbohydrates: not detectable	
Fucoidan extract from the	Description/Definition:	
seaweed Fucus vesiculosus	Fucoidan from the seaweed <i>Fucus vesiculosus</i> is extracted using aqueous extraction in acidic solution and filtration processes without the use of organic solvents. The resulting extract is concentrated and dried to yield the fucoidan extract with the following specifications:	
	Off-white to brown powder	
	Odour and Taste: Bland odour and taste	
	Moisture: < 10 % (105 °C for 2 hours)	
	pH value: 4,0-7,0 (1 % suspension at 25 °C)	
	Heavy metals:	
	Arsenic (inorganic): < 1,0 ppm	
	Cadmium: < 3,0 ppm	
	Lead: < 2,0 ppm	
	Mercury: < 1,0 ppm	
	Microbiological criteria:	
	Total aerobic microbial count: < 10 000 CFU/g	
	Yeast and mould count: < 100 CFU/g	
	Total enterobacteria count: Absence/g	
	Escherichia coli: Absence/g	
	Salmonella: Absence/10 g	
	Staphylococcus aureus: Absence/g	
	Composition of the two permitted types of extracts, based on the level of fucoidan:	

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Authorised Novel Food	Specification		
	Extract 1:		
	Fucoidan: 75-95 %		
	Alginate: 2,0-5,5 %		
	Polyphloroglucinol: 0,5-15 %		
	Mannitol: 1-5 %		
	Natural salts/Free Minerals: 0,5-2,5 %		
	Other carbohydrates: 0,5-1,0 %		
	Protein: 2,0-2,5 %		
	Extract 2:		
	Fucoidan: 60-65 %		
	Alginate: 3,0-6,0 %		
	Polyphloroglucinol: 20-30 %		
	Mannitol: < 1,0 %		
	Natural salts/Free Minerals: 0,5-2,0 %		
	Other carbohydrates: 0,5-2,0 %		
	Protein: 2,0-2,5 %		
Fucoidan extract from the	Description/Definition:		
seaweed <i>Undaria pinna-</i> tifida	Fucoidan from seaweed <i>Undaria pinnatifida</i> is extracted using aqueous extraction in acidic solution and filtration processes without the use of organic solvents. The resulting extract is concentrated and dried to yield the fucoidan extract with the following specifications:		
	Off-white to brown powder		
	Odour and Taste: Bland odour and taste		
	Moisture: < 10 % (105 °C for 2 hours)		
	pH value: 4,0-7,0 (1 % suspension at 25 °C)		
	Heavy metals:		
	Arsenic (inorganic): < 1,0 ppm		
	Cadmium: < 3,0 ppm		

Authorised Novel Food	Specification
	Lead: < 2,0 ppm
	Mercury: < 1,0 ppm
	Microbiology:
	Total aerobic microbial count: < 10 000 CFU/g
	Yeast and mould count: < 100 CFU/g
	Total enterobacteria count: Absence/g
	Escherichia coli: Absence/g
	Salmonella: Absence/10 g
	Staphylococcus aureus: Absence/g
	Composition of the two permitted types of extracts, based on the level of fucoidan:
	Extract 1:
	Fucoidan: 75-95 %
	Alginate: 2,0-6,5 %
	Polyphloroglucinol: 0,5-3,0 %
	Mannitol: 1-10 %
	Natural salts/Free Minerals: 0,5-1,0 %
	Other carbohydrates: 0,5-2,0 %
	Protein: 2,0-2,5 %
	Extract 2:
	Fucoidan: 50-55 %
	Alginate: 2,0-4,0 %
	Polyphloroglucinol: 1,0-3,0 %
	Mannitol: 25-35 %
	Natural salts/Free Minerals: 8-10 %
	Other carbohydrates: 0,5-2,0 %
	Protein: 1,0-1,5 %

Authorised Novel Food	Specification
2'-Fucosyllactose	Definition:
(synthetic)	Chemical name: $\alpha$ -l-Fucopyranosyl- $(1\rightarrow 2)$ - $\beta$ -d-galactopyranosyl- $(1\rightarrow 4)$ -d-glucopyranose
	Chemical formula: C <sub>18</sub> H <sub>32</sub> O <sub>15</sub>
	CAS No: 41263-94-9
	Molecular weight: 488,44 g/mol
	Description:
	2'- fucosyllactose is a white to off-white powder that is produced by a chemical synthesis process and is isolated by crystallisation.
	Purity:
	2'-Fucosyllactose: ≥ 95 %
	D-Lactose: $\leq 1,0 \text{ w/w }\%$
	L-Fucose: $\leq 1.0 \text{ w/w } \%$
	Difucosyl-d-lactose isomers: ≤ 1,0 w/w %
	2'-Fucosyl-d-lactulose: ≤ 0,6 w/w %
	pH (20 °C, 5 % solution): 3,2-7,0
	Water (%): $\leq 9.0 \%$
	Ash, sulphated: ≤ 0,2 %
	Acetic acid: ≤ 0,3 %
	Residual solvents (methanol, 2-propanol, methyl acetate, acetone): ≤ 50,0 mg/kg singly, ≤ 200,0 mg/kg in combination)
	Residual proteins: ≤ 0,01 %
	Heavy Metals:
	Palladium: ≤ 0,1 mg/kg
	Nickel: $\leq 3.0 \text{ mg/kg}$
	Microbiological criteria:
	Aerobic mesophilic bacteria total count: ≤ 500 CFU/g
	Yeasts and Moulds: ≤ 10 CFU/g
	Residual endotoxins: ≤ 10 EU/mg

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Authorised Novel Food	Specification		
2'-Fucosyllactose (microbial source)	Definition: Chemical name: α-L-Fucopyranosyl-(1 $\rightarrow$ 2)-β-D-galactopyranosyl-(1 $\rightarrow$ 4)-D-glucopyr Chemical formula: $C_{18}H_{32}O_{15}$ CAS No: 41263-94-9 Molecular weight: 488,44 g/mol	anose	
	Source: Genetically modified strain of <i>Escherichia coli</i> K-12	Source: Genetically modified strain of <i>Escherichia coli</i> BL21	
	Description: 2'-Fucosyllactose is a white to off-white crystalline powder that is produced by a microbial process. 2'-Fucosyllactose is isolated by crystallisation. Purity:	Description:  2'-Fucosyllactose is a white to off white powder and the liquid concentrate (45 % ± 5 % w/v) aqueous solution is a colourless to slight yellow clear aqueous solution. 2'-Fucosyllactose is produced by	
	2'-Fucosyllactose: $\geq 94 \%$ D-Lactose: $\leq 3,0 \%$ L-Fucose: $\leq 1,0$	a microbiological process. 2'-Fucosyllactose is isolated by spray drying.  Purity:  2'-Fucosyllactose: ≥ 90 %	
	Difucosyl-D-lactose: ≤ 1,0 % 2'-Fucosyl-D-lactulose: ≤ 1,0 % pH (20 °C, 5 % solution): 3,2-5,0	Lactose: ≤ 5,0 % Fucose: ≤ 3,0 % 3-Fucosyllactose: ≤ 5,0 % Fucosylgalactose: ≤ 3,0 %	
	Water: ≤ 5,0 % Ash, sulphated: ≤ 1,5 % Acetic acid: ≤ 1,0 %	Difucosyllactose: $\leq 5,0\%$ Glucose: $\leq 3,0\%$ Galactose: $\leq 3,0\%$	
	Residual proteins: $\le 0.01$ % Microbiological criteria: Aerobic mesophilic bacteria total count: $\le 500$ CFU/g	Water: ≤ 9,0 % (powder)  Ash, sulphated: ≤ 0,5 % (powder and liquid)  Residual proteins: ≤ 0,01 % (powder and liquid)	
	Yeasts: ≤ 10 CFU/g  Moulds: ≤ 100 CFU/g  Endotoxins: ≤ 10 EU/mg	Heavy Metals:  Lead: ≤ 0,02 mg/kg (powder and liquid);  Arsenic: ≤ 0,2 mg/kg (powder and liquid)	

Authorised Novel Food	Specification		
		Cadmium: $\leq 0,1$ mg/kg (powder and liquid)  Mercury: $\leq 0,5$ mg/kg (powder and liquid)  Microbiological criteria:  Total plate count: $\leq 10^4$ CFU/g (powder), $\leq 5000$ CFU/g (liquid)  Yeasts and Moulds: $\leq 100$ CFU/g (powder); $\leq 50$ CFU/g (liquid)  Enterobacteriaceae/Coliforms: absence in 11 g (powder and liquid)  Salmonella: negative/100 g (powder), negative/200 ml (liquid)  Cronobacter: negative/100 g (powder), negative/200 ml (liquid)  Endotoxins: $\leq 100$ EU/g (powder), $\leq 100$ EU/ml (liquid)  Aflatoxin M1: $\leq 0,025$ μg/kg (powder and liquid)	
Galacto-oligosaccharide	Description/Definition: Galacto-oligosaccharide is produced from milk lactose by an enzymatic process us and Bacillus circulans. GOS: min 46 % Dry Matter (DM) Lactose: max 40 % DM Glucose: max 22 % DM Galactose: min 0,8 % DM Ash: max 4,0 % DM Protein: max 4,5 % DM Nitrite: max. 2 mg/kg	sing β-galactosidases from Aspergillus oryzae, Bifidobacterium bifidum	
Glucosamine HCl from Aspergillus niger and genetically modified strain of E. Coli K12	White crystalline odourless powder Molecular formula: $C_6H_{13}NO_5$ · HCl Relative molecular mass: 215,63 g/mol D-Glucosamine HCl 98,0-102,0 % of reference standard (HPLC) Specific rotation + 70,0° - + 73,0°		

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Specification
White crystalline odourless powder  Molecular formula: (C <sub>6</sub> H <sub>14</sub> NO <sub>5</sub> ) <sub>2</sub> SO <sub>4</sub> · 2KCl  Relative molecular mass: 605,52 g/mol  D-Glucosamine Sulphate 2KCl 98,0-102,0 % of reference standard (HPLC)  Specific Rotation + 50,0° to + 52,0°
White crystalline odourless powder  Molecular formula: (C <sub>6</sub> H <sub>14</sub> NO <sub>5</sub> ) <sub>2</sub> SO <sub>4</sub> · 2NaCl  Relative molecular mass: 573,31 g/mol  D-Glucosamine HCl: 98-102 % of reference standard (HPLC)  Specific Optical Rotation: + 52° - + 54°
Description/Definition:  Native guar gum is the ground endosperm of seeds from natural strains of guar <i>Cyamopsis tetragonolobus</i> L. Taub. ( <i>Leguminosae</i> family). It consists of a high molecular weight polysaccharide, primarily composed of galactopyranose and mannopyranose units combined through glycosidic linkages, which may be described chemically as a galactomannan (galactomannan content not less than 75 %).  Appearance: White to yellowish powder  Molecular weight: Between 50 000 – 8 000 000 Daltons  CAS number: 9000-30-0  EINECS Number: 232-536-8  Purity: As specified by Commission Regulation (EU) No 231/2012 laying down specifications for food additives listed in Annexes II and III to Regulation (EC) No 1333/2008 of the European Parliament and of the Council (¹) & by Commission Implementing Regulation (EU) 2015/175 of 5 February 2015 laying down special conditions applicable to the import of guar gum originating in or consigned from India due to contamination risks by pentachlorophenol and dioxins (²).  Physico-chemical properties:  Powder  Shelf-life: 2 years

Authorised Novel Food	Specification			
	Average diameter of particles: 60-70 µmMoisture: Max 15 %			
	Viscosity (*) at 1 hour —			
	Viscosity (*) at 2 hours: Min 3 600 mPa.s			
	Viscosity (*) at 24 hours: Min 4 000 mPa.s			
	Solubility: Soluble in hot and cold water			
	pH for 10g/L, at 25 °C - 6-7,5			
	Flakes			
	Useful life: 1 year			
	Colour: White/off white with absence or minimal presence of black spots			
	Odour: Light			
	Average diameter of particles: 1-10 mm			
	Moisture: Max 15 %			
	Viscosity (*) at 1 hour: Min 3 000 mPa.s			
	Viscosity (*) at 2 hours —			
	Viscosity(*) at 24 hours —			
	Solubility - Soluble in hot and cold water			
	pH for 10g/L, at 25 °C - 5-7,5			
	(*) The measurements of viscosity are carried out under the following conditions: 1 %, 25 °C, 20 rpm			
Heat-treated milk	Description/Definition:			
products fermented with Bacteroides xylanisolvens	Heat-treated fermented milk products are produced with <i>Bacteroides xylanisolvens</i> (DSM 23964) as starter culture.			
	Semi-skimmed milk (between 1,5 % and 1,8 % fat) or skimmed milk (0,5 % fat or less) is pasteurised or ultra-heat-treated before starting the fermentation with <i>Bacteroides xylanisolvens</i> (DSM 23964). The resulting fermented milk product is homogenised and then heat-treated to inactivate <i>Bacteroides xylanisolvens</i> (DSM 23964). The final product does not contain viable cells of <i>Bacteroides xylanisolvens</i> (DSM 23964) (*).			
	(*) Modified DIN EN ISO 21528-2.			

Authorised Novel Food	Specification
Hydroxytyrosol	Description/Definition:
	Hydroxytyrosol is a pale yellow viscous liquid obtained by chemical synthesis
	Molecular formula: C <sub>8</sub> H <sub>10</sub> O <sub>3</sub>
	Molecular weight: 154,6 g/mol
	CAS No: 10597-60-1
	Moisture ≤ 0,4 %
	Odour: Characteristic
	Taste: Slightly bitter
	Solubility (water): Miscible with water
	pH: 3,5-4,5
	Refractive Index: 1,571-1,575
	Purity:
	Hydroxytyrosol: ≥ 99 %
	Acetic acid: ≤ 0,4 %
	Hydroxytyrosol acetate: ≤ 0,3 %
	Sum of homovanillic acid, iso-homovanilic acid, and 3-methoxy-4hydroxyphenylglycol: ≤ 0,3 %
	Heavy Metals
	Lead: $\leq 0.03$ mg/kg
	Cadmium: ≤ 0,01 mg/kg
	Mercury: $\leq 0.01 \text{ mg/kg}$
	Residual Solvents
	Ethyl acetate: ≤ 25,0 mg/kg
	Isopropanol: ≤ 2,50 mg/kg
	Methanol: $\leq 2,00 \text{ mg/kg}$
	Tetrahydrofuran: ≤ 0,01 mg/kg

Ice Structuring Prot	Description/Definition:		
type III HPLC 12	The Ice Structuring Protein (ISP) preparation is a light-brown liquid produced by submerged fermentation of a genetically-modified strain of food-grade baker's yeast (Saccharomyces cerevisiae) in which a synthetic gene for the ISP has been inserted into the yeast's genome. The protein is expressed and secreted into the growth medium where it is separated from the yeast cells by micro-filtration and concentrated by ultra-filtration. As a result, the yeast cells are not transferred into the ISP preparation as such or under an altered form. The ISP preparation consists of native ISP, glycosylated ISP and proteins and peptides from the yeast and sugars as well as acids and salts commonly found in food. The concentrate is stabilised with 10 mM citric acid buffer.		
	Assay: ≥ 5 g/l active ISP		
	pH: 2,5-3,5		
	Ash: $\leq 2.0 \%$		
	DNA: Not detectable		
Aqueous extract of o			
leaves of <i>Ilex guayus</i>	Dark brown liquid. Aqueous extracts of dried leaves of <i>Ilex guayusa</i> .		
	Composition:		
	Protein: < 0,1 g/100 ml		
	Fat: < 0,1 g/100 ml		
	Carbohydrate: 0,2–0,3 g/100 ml		
	Total sugars: < 0,2 g/100 ml		
	Caffeine: 19,8–57,7 mg/100 ml		
	Theobromine: 0,14–2,0 mg/100 ml		
	Chlorogenic acids: 9,9–72,4 mg/100 ml		
Isomalto-oligosaccha	ride Powder:		
	Solubility (water) (%): > 99		
	Glucose (% dry basis): $\leq 5.0$		
	Isomaltose + DP3 to DP9 (% dry basis): ≥ 90		
	Moisture (%): $\leq 4.0$		
	Sulphated ash $(g/100 g)$ : $\leq 0.3$		

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Authorised Novel Food	Specification	
	Heavy metals: Lead (mg/kg): $\leq 0.5$ Arsenic (mg/kg): $\leq 0.5$ Syrup: Dried solids (g/100 g): $> 75$ Glucose (% dry basis): $\leq 5.0$ Isomaltose + DP3 to DP9 (% dry basis): $\geq 90$	
	pH: 4 - 6 Sulphated ash $(g/100 \text{ g})$ : $\leq 0.3$	
	Heavy metals: Lead (mg/kg): $\leq 0.5$ Arsenic (mg/kg): $\leq 0.5$	
Isomaltulose	Description/Definition:  A reducing disaccharide that consists of one glucose and one fructose moiety linked by an alpha-1,6-glycosidic bond. It is obtained from sucrose by an enzymatic process. The commercial product is the monohydrate. Appearance: Virtually odourless, white or almost white crystals with a sweet taste Chemical name: 6-O-α-D-glucopyranosyl-D-fructofuranose, monohydrate CAS No.: 13718-94-0 Chemical formula: C <sub>12</sub> H <sub>22</sub> O <sub>11</sub> · H <sub>2</sub> O Structural formula  OH  OH  OH  OH  OH  OH  OH  OH  OH  O	

Formula weight: 360,3 (monohydrate)

Authorised Novel Food	Specification
	Purity:
	Assay: $\geq 98\%$ on the dry basis
	Loss on drying: $\leq 6.5\%$ (60 °C, 5 hours)
	Heavy metals:
	Lead: $\leq 0.1 \text{ mg/kg}$
	Determine using an atomic absorption technique appropriate to the specified level. The selection of sample size and method of sample preparation may be based on the principles of the method described in FNP 5 (*), 'Instrumental methods'
	(*) Food and Nutrition Paper 5 Rev. 2 — Guide to specifications for general notices, general analytical techniques, identification tests, test solutions and other reference materials (JECFA), 1991, 322 pp., English, ISBN 92-5-102991-1.
Lactitol	Description/Definition:
	Crystalline powder or colourless solution manufactured via catalytic hydrogenation of lactose. Crystalline products occur in anhydrous, monohydrate and dihydrate forms. Nickel is used as a catalyst.
	Chemical name: 4-O-β-D-Galactopyranosyl-D-glucitol
	Chemical formula: C <sub>12</sub> H <sub>24</sub> O <sub>11</sub>
	Molecular weight: 344,31 g/mol
	CAS No: 585-86-4
	Purity:
	Solubility (in water): Very soluble in water
	Specific rotation [ $\alpha$ ] D20 = + 13° to + 16°
	Assay: ≥ 95 % d.b (d.b - expressed on the dry weight basis)
	Water: ≤ 10,5 %
	Other polyols: $\leq 2.5 \%$ d.b
	Reducing sugars: ≤ 0,2 % d.b
	Chlorides: ≤ 100 mg/kg d.b
	Sulphates: ≤ 200 mg/kg d.b
	Sulphated ash: $\leq 0.1 \%$ d.b
	Nickel: $\leq 2.0 \text{ mg/kg d.b}$
	Arsenic: ≤ 3,0 mg/kg d.b
	Lead: $\leq 1,0$ mg/kg d.b

Lacto-N-neotetraose	Definition:
	Definition.
(synthetic)	Chemical name: $\beta$ -d-Galactopyranosyl- $(1\rightarrow 4)$ -2-acetamido-2-deoxy- $\beta$ -d-glucopyranosyl- $(1\rightarrow 3)$ - $\beta$ -d-galactopyranosyl- $(1\rightarrow 4)$ -d-glucopyranose
	Chemical formula: C <sub>26</sub> H <sub>45</sub> NO <sub>21</sub>
	CAS No: 13007-32-4
	Molecular weight: 707,63 g/mol
	Description:
	Lacto-N-neotetraose is a white to off-white powder. Produced by a chemical synthesis process and is isolated by crystallisation.
	Purity:
	Assay (water free): ≥ 96 %
	D-Lactose: ≤ 1,0 %
	Lacto-N-triose II: ≤ 0,3 %
	Lacto-N-neotetraose fructose isomer: ≤ 0,6 %
	pH (20 °C, 5 % solution): 5,0-7,0
	Water: ≤ 9,0 %
	Ash, sulphated: $\leq 0.4 \%$
	Acetic acid: $\leq 0.3 \%$
	Residual solvents (methanol, 2-propanol, methyl acetate, acetone): ≤ 50 mg/kg singly, ≤ 200 mg/kg in combination
	Residual proteins: ≤ 0,01 %
	Palladium: $\leq 0.1 \text{ mg/kg}$
	Nickel: ≤ 3,0 mg/kg
	Microbiological criteria:
	Aerobic mesophilic bacteria total count: ≤ 500 CFU/g
	Yeasts: ≤ 10 CFU/g
	Moulds: $\leq 10 \text{ CFU/g}$
	Residual endotoxins: ≤ 10 EU/mg
Lacto-N-neotetraose	Definition:
(microbial source)	Chemical name: $\beta$ -d-Galactopyranosyl- $(1\rightarrow 4)$ -2-acetamido-2-deoxy- $\beta$ -d-glucopyranosyl- $(1\rightarrow 3)$ - $\beta$ -d-galactopyranosyl- $(1\rightarrow 4)$ -d-glucopyranose
	Chemical formula: C <sub>26</sub> H <sub>45</sub> NO <sub>21</sub>
	CAS No: 13007-32-4
	Molecular weight: 707,63 g/mol

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	Source:
	Genetically modified strain of Escherichia coli K-12
	Description:
	Lacto-N-neotetraose is a white to off-white crystalline powder that is produced by a microbiological process. Lacto-N-neotetraose is isolated by crystallisation.
	Purity:
	Assay (water free): ≥ 92 %
	D-Lactose: ≤ 3,0 %
	Lacto-N-triose II: ≤ 3,0 %
	para-Lacto-N-neohexaose: ≤ 3,0 %
	Lacto-N-neotetraose fructose isomer: ≤ 1,0 %
	pH (20 °C, 5 % solution): 4,0-7,0
	Water: ≤ 9,0 %
	Ash, sulphated: ≤ 0,4 %
	Residual solvents (methanol): ≤ 100 mg/kg
	Residual proteins: ≤ 0,01 %
	Microbiological criteria:
	Aerobic mesophilic bacteria total count: ≤ 500 CFU/g
	Yeasts: $\leq 10 \text{ CFU/g}$
	Moulds: ≤ 10 CFU/g
	Residual endotoxins: ≤ 10 EU/mg
Lucerne leaf extract from Medicago sativa	Description/Definition:
meaicago sauva	The Lucerne ( <i>Medicago sativa</i> L.) is processed within 2 hours after harvest. It is chopped and crushed. By passing through an oleaginous-type press, the Lucerne provides a fibrous residue and press juice (10 % of dry matter). The dry matter of this juice contains about 35 % of crude protein. The press juice (pH
	5,8-6,2) is neutralised. Preheating and vapour injection allows coagulation of proteins associated with carotenoid and chlorophyll pigments. The protein
	precipitate is separated by centrifugation and thereafter dried. After adding ascorbic acid the Lucerne protein concentrate is granulated and stored in inert
	gas or in cold storage.
	Composition:
	Protein: 45-60 %
	Fat: 9-11 %
	Free carbohydrates (soluble fibre): 1-2 %

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	Polysaccharides (insoluble fibre): 11-15 % including cellulose: 2-3 % Minerals: 8-13 % Saponins: ≤ 1,4 % Isoflavones: ≤ 350 mg/kg Coumestrol: ≤ 100 mg/kg Phytates: ≤ 200 mg/kg L-canavanine: ≤ 4,5 mg/kg
Lycopene	Description/Definition:  Synthetic lycopene is produced by the Wittig condensation of synthetic intermediates commonly used in the production of other carotenoids used in food. Synthetic lycopene consists of $\geq 96$ % lycopene and minor quantities of other related carotenoid components. Lycopene is presented either as a powder in a suitable matrix or an oily dispersion. The colour is dark red or red-violet. Antioxidative protection has to be assured. Chemical name: Lycopene  CAS No.: 502-65-8 (all-trans lycopene)  Chemical formula: $C_{40}H_{56}$ Formula weight: 536,85 Da
Lycopene from Blakeslea trispora	<b>Description/Definition:</b> The purified lycopene from <i>Blakeslea trispora</i> consists of $\geq$ 95 % lycopene and $\leq$ 5 % other carotenoids. It is presented either as a powder in a suitable matrix or an oily dispersion. The colour is dark red or red-violet. Anti-oxidative protection has to be assured. Chemical name: Lycopene CAS No.: 502-65-8 (all trans lycopene) Chemical formula: C <sub>40</sub> H <sub>56</sub> Formula weight: 536,85 Da
Lycopene from tomatoes	Description/Definition:  The purified lycopene from tomatoes ( <i>Lycopersicon esculantum</i> L.) consists of $\geq$ 95 % lycopene and $\leq$ 5 % other carotenoids. It is presented either as a powder in a suitable matrix or an oily dispersion. The colour is dark red or red-violet. Anti-oxidative protection has to be assured. Chemical name: Lycopene  CAS No.: 502-65-8 (all trans lycopene)  Chemical formula: $C_{40}H_{56}$ Formula weight: 536,85 Da

Lycopene oleoresin from tomatoes	Description/Definition: Lycopene oleoresin from tomatoes is obtained by solvent extraction of ripe tomatoes ( <i>Lycopersicon esculentum Mill.</i> ) with subsequent removal of the solvent. It is a red to dark brown viscous, clear liquid.  Total lycopene: 5-15 %  Thereof trans-lycopene: 90-95 %  Total carotenoids (calculated as lycopene): 6,5-16,5 %  Other carotenoids: 1,75 %  (Phytoene/phytofluene/β-carotene): (0,5-0,75/0,4-0,65/0,2-0,35 %)  Total tocopherols: 1,5-3,0 %  Unsaponifiable matter: 13-20 %  Total fatty acids: 60-75 %  Water (Karl Fischer): ≤ 0,5 %
Magnesium citrate malate	Description/Definition:  Magnesium citrate malate is a white to yellowish-white, amorphous powder.  Chemical formula: $Mg_5(C_6H_5O_7)_2(C_4H_4O_5)_2$ Chemical name: Pentamagnesium di-(2-hydroxybutanedioate)-di-(2-hydroxypropane-1,2,3-tricarboxylate)  CAS No.: 1259381-40-2  Molecular weight: 763,99 Daltons (anhydrous)  Solubility: Freely soluble in water (about 20 g in 100 ml)  Description of the physical state: Amorphous powder  Assay magnesium: 12,0-15,0 %  Loss on drying (120 °C/4 hours): ≤ 15 %  Colour (solid): White to yellowish-white  Colour (20 % aqueous solution): Clear solution  pH (20 % aqueous solution): Clear solution  pH (20 % aqueous solution): Approx. 6,0  Impurities:  Chloride: ≤ 0,05 %  Sulphate: ≤ 0,05 %  Sulphate: ≤ 0,05 %  Arsenic: ≤ 3,0 ppm  Lead: ≤ 2,0 ppm  Cadmium: ≤ 1 ppm  Mercury: ≤ 0,1 ppm

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Magnolia Bark Extract	Description/Definition:  Magnolia bark extract is obtained from the bark of the plant <i>Magnolia officinalis</i> L. and produced with supercritical carbon dioxide. The bark is washed and oven dried to reduce moisture content before being crushed and extracted with supercritical carbon dioxide. The extract is dissolved in medical-grade ethanol and re-crystallised to yield magnolia bark extract.  Magnolia bark extract is mainly composed of two phenolic compounds, magnolol and honokiol. Appearance: Light brownish powder  Purity:  Magnolol: ≥ 85,2 %  Honokiol: ≥ 0,5 %  Magnolol & Honokiol: ≥ 94 %  Total Eudesmol: ≤ 2 %  Moisture: 0,50 %  Heavy metals:  Arsenic (ppm): ≤ 0,5  Methyl eugenol (ppm): ≤ 0,5  Methyl eugenol (ppm): ≤ 2,0  Total Alkaloid (ppm): ≤ 100
Maize-germ oil high in unsaponifiable matter	Description/Definition:  Maize-germ oil high in unsaponifiable matter is produced by vacuum distillation and it is different from refined maize-germ oil in the concentration of the unsaponifiable fraction (1,2 g in refined maize-germ oil and 10 g in 'maize-germ oil high in unsaponifiable matter').  Purity:  Unsaponifiable matter: > 9,0 g/100 g  Tocopherols: ≥ 1,3 g/100 g  α-tocopherol (%): 10-25 %  β-tocopherol (%): < 3,0 %  γ-tocopherol (%): < 3,0 %  Sterols, triterpenic alcohols, methylsterols: > 6,5 g/100 g  Fatty acids in triglycerides: palmitic acid: 10,0-20,0 %  stearic acid: < 3,3 % oleic acid: 20,0-42,2 %

	linoleic acid: 34,0-65,6 %
	linolenic acid: < 2,0 %
	Acid value: ≤ 6,0 mg KOH/g
	Peroxide value: $\leq 10 \text{ mEq O}_2/\text{kg}$
	Heavy metals:
	Iron (Fe): $< 1500 \mu g/kg$
	Copper (Cu): < 100 µg/kg
	Impurities:
	Polycyclic aromatic hydrocarbons (PAH) Benzo(a)pyrene: < 2 μg/kg
	Treatment with active carbon is required to ensure that polycyclic aromatic hydrocarbons (PAH) are not enriched in the production of 'maize-germ oil high ir unsaponifiable matter'
Methylcellulose	Description/Definition:
	Methyl cellulose is cellulose obtained directly from natural strains of fibrous plant material and partially etherified with methyl groups.
	Chemical name: Methyl ether of cellulose
	Chemical formula: The polymers contain substituted anhydroglucose units with the following general formula:
	C <sub>6</sub> H <sub>7</sub> O <sub>2</sub> (OR1)(OR2)(OR3) where R1, R2, R3 each may be one of the following:
	- H
	- CH <sub>3</sub> or
	- CH2CH3
	Molecular weight: Macromolecules: from about 20 000 (n about 100) up to about 380 000 g/mol (n about 2 000)
	Assay: Content not less than 25 % and not more than 33 % of methoxyl groups (-OCH <sub>3</sub> ) and not more than 5 % of hydroxyethoxyl groups (-OCH <sub>2</sub> CH <sub>2</sub> OH)
	Slightly hygroscopic white or slightly yellowish or greyish odourless and tasteless, granular or fibrous powder.
	Solubility: Swelling in water, producing a clear to opalescent, viscous, colloidal solution. Insoluble in ethanol, ether and chloroform. Soluble in glacial acetic acid.
	Purity:
	Loss on drying: ≤ 10 % (105 °C, 3 hours)
	Sulphated Ash: $\leq 1.5$ % determined at $800 \pm 25$ °C
	pH: $\geq 5.0$ and $\leq 8.0$ (1 % colloidal solution)
	Heavy metals:
	Arsenic: ≤ 3,0 mg/kg
	Lead: $\leq 2.0 \text{ mg/kg}$
	Mercury: ≤ 1,0 mg/kg
	Cadmium: ≤ 1,0 mg/kg

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6S)-5-methyltetrahy-	Description/Definition:
drofolic acid, glucosamine salt	Chemical name: N-[4-[[[(6S)-2-amino-1,4,5,6,7,8-hexahydro-5-methyl-4-oxo-6-pteridinyl]methyl]amino]benzoyl]-L-glutamic acid, glucosamine salt
	Chemical formula: C <sub>32</sub> H <sub>51</sub> N <sub>9</sub> O <sub>16</sub>
	Molecular weight: 817,80 g/mol (anhydrous)
	CAS No.: 1181972-37-1
	Appearance: Creamy to light-brown powder
	Purity:
	Diastereoisomeric purity: At least 99 % of (6S)-5-methyltetrahydrofolic acid
	Glucosamine assay: 34-46 % in dry basis
	5-Methyltetrahydrofolic acid assay: 54-59 % in dry basis
	Water: ≤8,0 %
	Heavy metals:
	Lead: $\leq 2.0$ ppm
	Cadmium: ≤ 1,0 ppm
	Mercury: $\leq 0.1$ ppm
	Arsenic: $\leq 2.0$ ppm
	Boron: ≤ 10 ppm
	Microbiological criteria:
	Total aerobic microbial count: ≤ 100 CFU/g
	Yeasts and moulds: ≤ 100 CFU/g
	Escherichia coli: Absence in 10 g
Monomethylsilanetriol (Organic Silicon)	Description/Definition:
	Chemical name: Silanetriol, 1-methyl-
	Chemical formula: CH <sub>6</sub> O <sub>3</sub> Si
	Molecular weight: 94,14 g/mol
	CAS No: 2445-53-6
	Purity:
	Organic Silicon (monomethylsilanetriol) preparation (aqueous solution):
	Acidity (pH): 6,4-6,8

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	Heavy metals: Lead: $\leq 1,0~\mu g/l$ Mercury: $\leq 1,0~\mu g/l$ Cadmium: $\leq 1,0~\mu g/l$ Arsenic: $\leq 3,0~\mu g/l$ Solvents: Methanol: $\leq 5,0~m g/k g$ (residual presence)		
Mycelial extract from Shiitake mushroom (Len- tinula edodes)	Description/Definition:  The novel food ingredient is a sterile aqueous extract obtained from the mycelium of <i>Lentinula edodes</i> cultivated in a submerged fermentation. It is a light brown, slightly turbid liquid.  Lentinan is a β-(1-3) β-(1-6)-D-glucan which has a molecular weight of approximately 5 × 10 <sup>5</sup> Daltons, a degree of branching of 2/5 and a triple helical tertiary structure.  Purity/Composition of the mycelial extract from <i>Lentinula edodes</i> :  Moisture: 98 %  Dry matter: 2 %  Free glucose: < 20 mg/ml  Total protein (*): < 0,1 mg/ml  N-containing constituents (**): < 10 mg/ml  Lentinan: 0,8 - 1,2 mg/ml  (*) Bradford method  (**) Kjeldahl method		
Noni fruit juice (Morinda citrifolia)	Description/Definition: Noni fruits (fruits of Morinda citrifolia L.) are pressed. The obtained juice is pasteurised. An optional fermentation step before or after the pressing may occur. Rubiadin: ≤ 10 μg/kg Lucidin: ≤ 10 μg/kg		
Noni fruit juice powder (Morinda citrifolia)	Description/Definition: Seeds and skin of the sun-dried fruits of <i>Morinda citrifolia</i> are separated. The obtained pulp is filtered to separate juice from the flesh. Desiccation of the produced juice occurs in one or two ways:  Either by atomisation using maize maltodextrins, this mixture is obtained by keeping the rates of inflow of the juice and maltodextrins constant  Or by zeodratation or drying and then mixing with an excipient, this process allows the juice to be dried initially and then mixed with maltodextrins (same amount as used in atomisation).		

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Noni fruit puree and concentrate (Morinda	Description/Definition:  The fruits of <i>Morinda citrifolia</i> are harvested by hand. Seeds and skin may be separated mechanically from the pureed fruits. After pasteurisation, the puree is		
citrifolia)	packaged in aseptic containers and stored under cold conditions.		
	Morinda citrifolia concentrate is prepared from M. citrifolia puree by treatment with pectinolytic enzymes (50-60 °C for 1-2 h). Then the puree is heated to inactivate the pectinases and then immediately cooled. The juice is separated in a decanter centrifuge. Afterwards the juice is collected and pasteurised, prior to being concentrated in a vacuum evaporator from a brix of 6 to 8 to a brix of 49 to 51 in the final concentrate.		
	Composition:		
	Puree:		
	Moisture: 89-93 %		
	Protein: < 0,6 g/100 g		
	Fat: $\leq 0.4 \text{ g}/100 \text{ g}$		
	Ash: $< 1.0 \text{ g}/100 \text{ g}$		
	Total carbohydrates: 5-10 g/100 g		
	Fructose: 0,5-3,82 g/100 g		
	Glucose: 0,5-3,14 g/100 g		
	Dietary fibre: < 0,5-3 g/100 g		
	5,15-dimethylmorindol (*): $\leq 0,254  \mu \text{g/ml}$		
	Lucidin (*): Not detectable		
	Alizarin (*): Not detectable Rubiadin (*): Not detectable		
	Concentrate:		
	Moisture: 48-53 %		
	Protein: 3-3,5 g/100 g		
	Fat: < 0,04 g/100 g		
	Ash: 4,5-5,0 g/100 g		
	Total carbohydrates: 37-45 g/100 g		
	Fructose: 9-11 g/100 g		
	Glucose: 9-11 g/100 g		
	Dietary fibre: 1,5-5,0 g/100 g		
	5,15-dimethylmorindol (*): $\leq 0,254  \mu \text{g/ml}$		
	(*) By an HPLC-UV method developed and validated for the analysis of anthraquinones in <i>Morinda citrifolia</i> puree and concentrate. Limits of detection: 2,5 ng/ml (5,15 dimethylmorindol); 50,0 ng/ml (lucidin); 6,3 ng/ml (alizarin) and 62,5 ng/ml (rubiadin).		

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Authorised Novel Food	Description/Definition:  After cutting, the leaves of <i>Morinda citrifolia</i> are subject to drying and roasting steps. The product has a particle size ranging from broken leaves to coarse powder with fines. It is of greenish brown to brown colour.  Purity/Composition:  Moisture: < 5,2 %  Protein: 17- 20 %  Carbohydrate: 55-65 %  Ash: 10-13 %  Fat: 4-9 %  Oxalic acid: < 0,14 %  Tannic acid: < 2,7 %  5,15-dimethylmorindol: < 47 mg/kg  Rubiadin: non detectable, ≤ 10 µg/kg  Lucidin: non detectable, ≤ 10 µg/kg		
Noni leaves (Morinda citrifolia)			
Noni fruit powder (Morinda citrifolia)	Description/Definition:  Noni fruit powder is made from pulped noni ( <i>Morinda citrifolia L</i> .) fruits by freeze-drying. Fruits are pulped and seeds are removed. After freeze-drying during which water is removed from noni fruits, the remaining noni pulp is milled to a powder and encapsulated.  Purity/Composition  Moisture: 5,3-9 %  Protein: 3,8-4,8 g/100 g  Fat: 1-2 g/100 g  Ash: 4,6-5,7 g/100 g  Total carbohydrates: 80-85 g/100 g  Fructose: 20,4-22,5 g/100 g  Glucose: 22-25 g/100 g  Dietary fibre: 15,4-24,5 g/100 g  5,15-dimethylmorindol (*): ≤ 2,0 μg/ml  (*) By an HPLC-UV method developed and validated for the analysis of anthraquinones in <i>Morinda citrifolia</i> fruit powder. Limits of detection: 2,5 ng/ml (5,15 dimethylmorindol)		
Odontella aurita micro- algae	Silicon: 3,3 % Crystalline silica: max 0,1-0,3 % as impurity		

Authorised Novel Food	Specification		
Oil enriched with phytosterols/phytostanols	Description/Definition: Oil enriched with phytosterols/phytostanols is composed of an oil fraction and a phytosterol fraction. Acylglycerol Distribution: Free fatty acids (expressed as oleic acid): ≤ 2,0 % Monoacylglycerols (MAG): ≤ 10 % Diacylglycerols (DAG): ≤ 25 % Triacylglycerols (TAG): Making up the balance Phytosterol fraction:  β-sitosterol: ≤ 80 % β-sitostanol: ≤ 15 % campestanol: ≤ 5,0 % stigmasterol: ≤ 30 % brassicasterol ≤ 3,0 % other sterols/stanols: ≤ 3,0 % other sterols/stanols: ≤ 3,0 % Others: Moisture and volatile: ≤ 0,5 % Peroxide value: < 5,0 meq/kg Trans fatty acids: ≤ 1 % Contamination/Purity (GC-FID or equivalent method) of phytosterols/phytostanols: Phytosterols and phytostanols extracted from sources other than vegetable oil suitable for food have to be free of contaminants, best ensured by a purity of more than 99 %.		
Oil extracted from squids	Acid value: $\leq 0.5$ KOH/g oil Peroxide value: $\leq 5$ meq $O_2$ /kg oil p-Anisidine value: $\leq 20$ Cold test at 0 °C: $\leq 3$ hours Moisture: $\leq 0.1$ % (w/w) Unsaponifiable matter: $\leq 5.0$ % Trans fatty acids: $\leq 1.0$ % Docosahexaeonic acid: $\geq 20$ % Eicosapentaenoic acid: $\geq 10$ %		

Authorised Novel Food	Specification		
Pasteurised fruit-based preparations produced	Parameter	Target	Comments
using high-pressure treatment	Fruit storage before high-pressure treatment	Minimum 15 days at – 20 °C	Fruit harvested and stored in conjunction with good/hygienic agricultural and manufacturing practices
	Fruit added	40 % to 60 % of thawed fruit	Fruit homogenised and added to other ingredients
	pН	3,2 to 4,2	
	° Brix	7 to 42	Assured by added sugars
	$a_{ m w}$	< 0,95	Assured by added sugars
	Final storage	60 days maximum at + 5 °C maximum	Equivalent to storage regimen for conventionally processed product
Phosphated maize starch	Description/Definition:  Phosphated maize starch (phosphated distarch phosphate) is a chemically modified resistant starch derived from high amylose starch by combining chemical treatments to create phosphate cross-links between carbohydrate residues and esterified hydroxyl groups.  The novel food ingredient is a white or nearly white powder.  CAS No: 11120-02-8  Chemical formula: (C <sub>6</sub> H <sub>10</sub> O <sub>5</sub> ) <sub>n</sub> [(C <sub>6</sub> H <sub>9</sub> O <sub>5</sub> ) <sub>2</sub> PO <sub>2</sub> H]x [(C <sub>6</sub> H <sub>9</sub> O <sub>5</sub> )PO <sub>3</sub> H <sub>2</sub> ]y  n = number of glucose units; x, y = degrees of substitution  The chemical characteristics of phosphated distarch phosphate:  Loss on drying: 10-14 %  pH: 4,5-7,5  Dietary fibre: ≥ 70 %  Starch: 7-14 %  Protein: ≤ 0,8 %  Lipids: ≤ 0,8 %  Residual bound phosphorus: ≤ 0,4 % (as phosphorus) 'high amylose maize' as source		

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Authorised Novel Food	Description/Definition:  The novel food ingredient is yellow to brown powder. Phosphatidylserine is obtained from fish phospholipids by an enzymatic transphosphorylation with the amino acid L-serine.  Specification of the phosphatidylserine product manufactured from fish phospholipids:  Moisture: < 5,0 % Phospholipids: ≥ 75 % Phosphatidylserine: ≥ 35 % Glycerides: < 4,0 % Free L-serine: < 1,0 % Tocopherols: < 0,5 % (¹) Peroxide value: < 5,0 meq O₂/kg (¹) Tocopherols may be added as antioxidants according to Commission Regulation (EU) No 1129/2011		
Phosphatidylserine from fish phospholipids			
Phosphatidylserine from soya phospholipids	Description/Definition:  The novel food ingredient is off-white to light yellow powder. It is also available in liquid form with a clear brown to orange colour. The liquid form contains medium chain triacylglycerides (MCT) as a carrier. It contains lower levels of Phosphatidylserine due to the fact that it includes significant amounts of oil (MCT).  Phosphatidylserine from soya phospholipids is obtained through enzymatic transphosphatidylation of high-phosphatidylcholine soybean lecithin with the amino acid L-serine. Phosphatidylserine consists of a glycerophosphate skeleton conjugated with two fatty acids and L-serine via a phosphodiester linkage.  Characteristics of Phosphatidylserine from soya phospholipids:  Powder form:  Moisture: < 2,0 %  Phospholipids: ≥ 85 %  Phospholipids: ≥ 61 %  Glycerides: < 2,0 %  free L-serine: < 1,0 %  Tocopherols: < 0,3 %  Phytosterols: < 0,2 %  Liquid form:  Moisture: < 2,0 %  Phospholipids: ≥ 25 %  Phospholipids: ≥ 25 %  Phospholipids: ≥ 25 %		

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	Glycerides: not applicable free L-serine: < 1,0 % Tocopherols: < 0,3 % Phytosterols: < 0,2 %			
Phospholipid product containing equal amounts of phosphatidylserine and phosphatidic acid	Description/Definition:  The product is manufactured through enzymatic conversion of soy lecithin. The phospholipid product is a highly concentrated, yellow-brown powder form of phosphatidylserine and phosphatidic acid at an equal level.  Specification of the product:  Moisture: ≤ 2,0 %  Total phospholipids: ≥ 70 %  Phosphatidylserine: ≥20 %  Phosphatidic acid: ≥ 20 %  Glycerides: ≤ 1,0 %  Free L-serine: ≤ 1,0 %  Tocopherols: ≤ 0,3 %  Phytosterols: ≤ 2,0 %  Silicon dioxide is used with a maximum content of 1,0 %			
Phospholipides from egg yolk	85 % and 100 % pure Phospholipides from egg yolk			
Phytoglycogen	Description: White to off-white powder which is an odourless, colourless, flavourless polysaccharide derived from non-GM sweet corn using conventional food processing techniques  Definition: Glucose polymer (C <sub>6</sub> H <sub>12</sub> O <sub>6</sub> )n with linear linkages of α(1 – 4) glycosidic bonds branched every 8 to 12 glucose units by α(1 – 6) glycosidic bonds  Specifications: Carbohydrates: 97 %  Sugars: 0,5 %  Fibre: 0,8 %  Fat: 0,2 %  Protein: 0,6 %			

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Phytosterols/phytostanols	Description/Definition: Phytosterols and phytostanols are sterols and stanols that are extracted from plants and may be presented as free sterols and stanols or esterified with food grade fatty acids.  Composition (with GC-FID or equivalent method): β-sitosterol: < 81 % β-sitostanol: < 35 % campesterol: < 40 % campestanol: < 15 % stigmasterol: < 30 % brassicasterol: < 3,0 % other sterols/stanols: < 3,0 % Contamination/Purity (GC-FID or equivalent method): Phytosterols and phytostanols extracted from sources other than vegetable oil suitable for food have to be free of contaminants, best ensured by a purity of more than 99 % of the phytosterol/phytostanol ingredient.			
Plum kernel oil	Description/Definition: Plum kernel oil is a vegetable oil obtained by cold pressing of plum ( <i>Prunus domestica</i> ) kernels.  Composition: Oleic acid (C18:1): 68 % Linoleic acid (C18:2): 23 % γ-Tocopherol:80 % of total tocopherols β-Sitosterol: 80-90 % of total sterols Triolein: 40-55 % of triglycerides Cyanhydric acid: maximum 5 mg/kg oil			
Potato proteins (coagulated) and hydrolysates thereof	Dry substance: ≥ 800 mg/g  Protein (N * 6,25): ≥ 600 mg/g (dry substance)  Ash: ≤ 400 mg/g (dry substance)  Glycoalkaloid (total): ≤ 150 mg/kg  Lysinoalanine (total): ≤ 500 mg/kg  Lysinoalanine (free): ≤ 10 mg/kg			
Prolyl oligopeptidase (enzyme preparation)	Specification of the enzyme: Systematic name: Prolyl oligopeptidase			

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	Synonyms: Prolyl endopeptidase, proline-specific endopeptidase, endoprolylpeptidaseMolecular weight: 66 kDa
	Enzyme Commission number: EC 3.4.21.26
	CAS number: 72162-84-6
	Source: A genetically modified strain of Aspergillus niger (GEP-44)
	Description:
	Prolyl oligopeptidase is available as an enzyme preparation containing approximately 30 % maltodextrin.
	Specifications of the enzyme preparation of prolyl oligopeptidase:
	Activity: > 580 000 PPI (*)/g (> 34,8 PPU (**)/g)
	Appearance: Microgranulate Colour: Off-white to orange yellowish. The colour may change from batch to batch
	Dry Matter: > 94 %
	Gluten: < 20 ppm
	Heavy metals:
	Lead: $\leq 1.0 \text{ mg/kg}$
	Arsenic: $\leq 1.0 \text{ mg/kg}$
	Cadmium: $\leq 0.5 \text{ mg/kg}$
	Mercury: $\leq 0.1 \text{ mg/kg}$
	Microbiological criteria:
	Total aerobic plate count: $\leq 10^3$ CFU/g
	Total yeasts and moulds: $\leq 10^2 \text{ CFU/g}$
	Sulphite reducing anaerobes: ≤ 30 CFU/g
	Enterobacteriaceae: < 10 CFU/g
	Salmonella: Absence in 25 g
	Escherichia coli: Absence in 25 g
	Staphylococcus aureus: Absence in 10 g
	Pseudomonas aeruginosa: Absence in 10 g
	Listeria monocytogenes: Absence in 25 g
	Antimicrobial activity: Absent
	Mycotoxins: Below limits of detection: Aflatoxin B1, B2, G1, G2 (< 0,25 μg/kg), total Aflatoxins (< 2,0 μg/kg), Ochratoxin A (< 0,20 μg/kg), T-2 Toxin (< 5 μg/
	μg/kg), Zearalenone (< 2,5 μg/kg), Fumonisin B1 and B2 (< 2,5 μg/kg)
	(*) PPI – Protease Picomole International
	(**) PPU – Prolyl Peptidase Units or Proline Protease Units

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Protein extract from pig kidneys	<b>Description/Definition:</b> The protein extract is obtained from homogenised pig kidneys through a combination of salt precipitation and high speed centrifugation. The obtained precipitate contains essentially proteins with 7 % of the enzyme diamine oxidase (enzyme nomenclature E.C. 1.4.3.22) and is resuspended in a physiologic buffer system. The obtained pig kidney extract is formulated as encapsulated enteric coated pellets to reach the active sites of digestion.
	Basic Product: Specification: pig kidney protein excerpt with natural content of Diamin oxidase (DAO): Physical condition: liquid
	Colour: brownish Appearance: slightly turbid solution pH value: 6,4-6,8
	Enzymatic activity: > 2 677 kHDU DAO/ml (DAO REA (DAO Radioextractionassay)) Microbiological criteria:
	Brachyspira spp.: negative (Real Time PCR) Listeria monocytogenes: negative (Real Time PCR) Staphylococcus aureus: < 100 CFU/g
	Influenza A: negative (Reverse Transcription Real Time PCR)  Escherichia coli: < 10 CFU/g
	Total aerobic microbiological count: < 10 <sup>5</sup> CFU/g Yeasts/moulds count: < 10 <sup>5</sup> CFU/g
	Salmonella: Absence/10g Bile salt resistant enterobacteriaceae: < 10 <sup>4</sup> CFU/g  Final product:
	Specification pig kidney protein excerpt with natural content of DAO (E.C. 1.4.3.22) in an enteric coated formulation: Physical condition: solid
	Colour: yellow gray Appearance: micropellets Enzymatic activity: 110-220 kHDU DAO/g pellet (DAO REA (DAO Radioextractionassay))
	Acid stability 15 min 0,1M HCl followed by 60 min Borat pH=9,0: > 68 kHDU DAO/g pellet (DAO REA (DAO Radioextractionassay)) Humidity: < 10 %
	Staphylococcus aureus: < 100 CFU/g  Escherichia coli: < 10 CFU/g  Total aerobic microbiological count: < 10 <sup>4</sup> CFU/g

	Total combined yeasts/moulds count: < 10 <sup>3</sup> CFU/g Salmonella: Absence/10g Bile salt resistant enterobacteriaceae: < 10 <sup>2</sup> CFU/g
Rapeseed oil high in insaponifiable matter	Description/Definition:  'Rapeseed oil high in unsaponifiable matter' is produced by vacuum distillation and it is different from refined rapeseed oil in the concentration of the unsaponifiable fraction (1 g in refined rapeseed oil and 9 g in 'rapeseed oil high in unsaponifiable matter'). There is a minor reduction of triglycerides containing monounsaturated and polyunsaturated fatty acids.  Purity:  Unsaponifiable matter: > 7,0 g/100 g Tocopherols: > 0,8 g/100 g α-tocopherol (%): 30-50 % γ-tocopherol (%): 30-50 % δ-tocopherol (%): 50-70 % δ-tocopherol (%): 50-70 % δ-tocopherol (%): < 6,0 % Sterols, triterpenic alcohols, methylsterols: > 5,0 g/100 g  Fatty acids in triglycerides: palmitic acid: 3-8 % stearic acid: 0,8-2,5 % oleic acid: 50-70 % linoleic acid: 15-28 % linoleic acid: 6-14 % erucic acid: < 2,0 % Acid value: ≤ 6,0 mg KOH/g Peroxide value: ≤ 10 mEq O₂/kg  Heavy metals: Iron (Fe): < 1 000 μg/kg Copper (Cu): < 100 μg/kg Impurities: Polycyclic aromatic hydrocarbons (PAH) Benzo(a)pyrene: < 2 μg/kg

Rapeseed Protein	Definition:
	Rapeseed protein is an aqueous protein-rich extract from rapeseed press cake originating from non-genetically modified Brassica napus L. and Brassica rapa L.
	Description:
	White to off-white, spray dried powder
	Total protein: ≥ 90 %
	Soluble protein: ≥ 85 %
	Moisture: ≤ 7,0 %
	Carbohydrates: ≤ 7,0 %
	Fat: ≤ 2,0 %
	$Ash: \leq 4.0 \%$
	Fibre: ≤ 0,5 %
	Total glucosinolates: ≤ 1 mmol/kg
	Purity:
	Total phytate: ≤ 1,5 %
	Lead: $\leq 0.5 \text{ mg/kg}$
	Microbiological criteria:
	Yeast and mould count: ≤ 100 CFU/g
	Aerobic bacteria count: ≤ 10 000 CFU/g
	Total coliform count: ≤ 10 CFU/g
	Escherichia coli: Absence in 10 g
	Salmonella: Absence in 25 g
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Trans-resveratrol	Description/Definition:
	Synthetic Trans-resveratrol is off-white to beige crystals.
	Chemical name: 5-[(E)-2-(4-hydroxyphenyl)ethenyl]benzene-1,3-diol Chemical formula: C <sub>14</sub> H <sub>12</sub> O <sub>3</sub>
	Molecular weight: $228,25$ Da
	CAS No: 501-36-0
	Purity:
	Trans-resveratrol: $\geq 98 \%-99 \%$
	Total by-products (related substances): $\leq 0.5\%$
	Any single related substance: $\leq 0.1\%$
	Thy single related substance. 2 0,1 70

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Sulphated ash: ≤ 0,1 %	
Loss on drying: ≤ 0,5 %	
Heavy metals:	
Lead: ≤ 1,0 ppm	
Mercury: ≤ 0,1 ppm	
Arsenic: ≤ 1,0 ppm	
Impurities:	
Diisopropylamine: ≤ 50 mg/kg	
Microbial source: A genetically modified strain of Saccharomyces cerevisiae	
Appearance: Off-white to slight yellow powder	
Particle size: 100 % less than 62,23 μm	
Trans-resveratrol content: Min. 98 % w/w (dry weight basis)	
Ash: Max. 0,5 % w/w	
Moisture: Max. 3 % w/w	
Rooster comb extract Description/Definition:	
Rooster comb extract is obtained from Gallus gallus by enzymatic hydrolysis of rooster comb and by subsequent filtration, concentration	
steps. The principal constituents of rooster comb extract are the glycosaminoglycans hyaluronic acid, chondroitin sulphate A and dermatan	n sulphate (chondroitin
sulphate B). White or almost white hygroscopic powder.  Hyaluronic acid: 60-80 %	
Chondroitin sulphate A: $\leq 5.0 \%$	
Dermatan sulphate (chondroitin sulphate B): $\leq 25 \%$	
pH: 5,0-8,5	
Purity:	
Chlorides: $\leq 1.0 \%$	
Nitrogen: ≤ 8,0 %	
Loss on drying: (105 °C for 6 hours): $\leq 10 \%$	
Heavy metals:	
Mercury: $\leq 0.1 \text{ mg/kg}$	
Arsenic: ≤ 1,0 mg/kg	
Cadmium: ≤ 1,0 mg/kg	
Chromium: ≤ 10 mg/kg	
Lead: ≤ 0,5 mg/kg	

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	Microbiological criteria:  Total viable aerobic count: ≤ 10 <sup>2</sup> CFU/g  Escherichia coli: Absence in 1 g  Salmonella: Absence in 1 g  Staphylococcus aureus: Absence in 1 g  Pseudomonas aeruginosa: Absence in 1 g
Sacha Inchi oil from Plukenetia volubilis	Description/Definition:  Sacha inchi oil is a 100 % cold pressed vegetable oil obtained from the seeds of <i>Plukenetia volubiis</i> L. It is a transparent, fluid (liquid) and shiny oil at room temperature. It has a fruity, light, green vegetable taste without undesirable flavours.  Aspect, limpidity, shine, colour: Fluid at room temperature, clean, shiny yellow gold  Odour and taste: Fruity, vegetable without non acceptable taste or odour  Purity:  Water and Volatiles: < 0,2 g/100 g  Impurities insoluble in hexane: < 0,05 g/100 g  Oleic acidity: < 2,0 g/100 g  Peroxide value: < 15 meq Oz/kg  Trans fatty acids: < 1,0 g/100 g  Total unsaturated fatty acids: > 90 %  Omega 3 alpha linolenic acid (ALA): > 45 %  Saturated fatty acids: < 10 %  No trans fatty acids: < 0,2 %)  More than 50 % of tri-linolenin and di-linolenin-triglycerides  Phytosterols composition and level  No cholesterol (< 5,0 mg/100 g)
Salatrims	Description/Definition:  Salatrim is the internationally recognised acronym for (short and long chain acyl triglyceride molecules). Salatrim is prepared by non-enzymatic interesterification of triacetin, tripropionin, tributyrin, or their mixtures with hydrogenated canola, soybean, cottonseed, or sunflower oil. Description: Clear, slightly amber liquid to a light coloured waxy solid at room temperature. Free of particulate matter and of foreign or rancid odour.  Glycerol ester disribution:  Triacylglycerols: > 87 %

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	Diacylglycerols: $\leq 10$ %  Monoacylglycerols: $\leq 2.0$ %  Fatty acid composition:  MOLE % LCFA (long chain fatty acids): 33-70 %  MOLE % SCFA (short chain fatty acids): 30-67 %  Saturated long chain fatty acids: $< 70$ % by weight  Trans fatty acids: $\leq 1.0$ %  Free fatty acids as oleic acid: $\leq 0.5$ %  Triacylglycerol profile:  Triesters (short/long of 0.5 to 2.0): $\geq 90$ %  Triesters (short/long = 0): $\leq 10$ %  Unsaponifiable material: $\leq 1.0$ %  Moisture: $\leq 0.3$ %  Ash: $\leq 0.1$ %  Colour: $\leq 3.5$ Red (Lovibond)  Peroxide value: $\leq 2.0$ Meq/Kg
Schizochytrium sp. oil rich in DHA and EPA	
Schizochytrium sp. (ATCC PTA-9695) oil	Peroxide value: ≤ 5,0 meq/kg oil Unsaponifiables: ≤ 3,5 %  Trans-fatty acids: ≤ 2,0 %  Free fatty acids: ≤ 0,4 %  Docosapentaenoic acid (DPA) n-6: ≤ 7,5 %  DHA content: ≥ 35 %

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Schizochytrium sp. oil	Acid value: $\le 0.5$ mg KOH/g Peroxide value (PV): $\le 5.0$ meq/kg oil Moisture and volatiles: $\le 0.05$ % Unsaponifiables: $\le 4.5$ % Trans-fatty acids: $\le 1.0$ % DHA content: $\ge 32.0$ %
Schizochytrium sp. (T18) oil	Acid value: $\le 0.5$ mg KOH/g Peroxide value: $\le 5.0$ meq/kg oil Moisture and volatiles: $\le 0.05$ % Unsaponifiables: $\le 3.5$ % Trans-fatty acids: $\le 2.0$ % Free fatty acids: $\le 0.4$ % DHA content: $\ge 35$ %
Fermented soybean extract	Description/Definition:  Fermented soybean extract is an odourless milk-white coloured powder. It is comprised of 30 % fermented soybean extract powder and 70 % resistant dextrin (as carrier) from corn-starch, which is added during the processing. Vitamin K₂ is removed during the manufacturing process.  Fermented soybean extract contains nattokinase isolated from natto, a foodstuff produced by the fermentation of non-genetically modified soybeans ( <i>Glycine max</i> (L.)) with a selected strain of <i>Bacillus subtilis</i> var. natto.  Nattokinase activity: 20 000-28 000 Fibrin degradation unit/g (*) Identity: Confirmable  Condition: No offensive taste or smell  Loss on drying: ≤ 10 %  Vitamin K2: ≤ 0,1 mg/kg  Heavy metals:  Lead: ≤ 5,0 mg/kg  Arsenic: ≤ 3,0 mg/kg  Microbiological criteria:  Total viable aerobic count: ≤ 10³ CFU (³)/g  Yeast and mould: ≤ 10² CFU/g  Coliforms: ≤ 30 CFU/g

	Spore-forming bacteria: ≤ 10 CFU/g  Escherichia coli: Absence/25 g  Salmonella: Absence/25 g  Listeria: Absence/25 g  (*) Assay method as described by Takaoka et al. (2010).
Spermidine-rich wheat germ extract (Triticum aestevium)	Description/Definition:  Spermidine-rich wheat germ extract is obtained from non-fermented, non-sprouting wheat germs ( <i>Triticum aestevium</i> ) by the process of solid-liquid extraction targeting specifically, but not exclusively polyamines.  Spermidine: 0,8-2,4 mg/g Spermidine trichloride < 0,1 μg/g Spermidine trichloride < 0,1 μg/g Putrescine: < 0,3 mg/g Cadaverine: < 0,1 μg/g Mycotoxins:  Aflatoxins (total): < 0,4 μg/kg Microbiological criteria: Total aerobic bacteria: < 10 000 CFU/g Yeast and moulds: < 10 CFU/g Escherichia coli: < 10 CFU/g Salmonella: Absence/25 g Listeria monocytogenes: Absence/25 g
Sucromalt	Description/Definition:  Sucromalt is a complex mixture of saccharides which is produced from sucrose and a starch hydrolysate by means of an enzymatic reaction. In this process, glucose units are attached to saccharides from the starch hydrolysate by means of an enzyme produced by the bacterium <i>Leuconostoc citreum</i> or by means of a recombinant strain of the production organism <i>Bacillus licheniformis</i> . The resulting oligosaccharides are characterised by the presence of α-(1→6) and α-(1→3) glycosidic compounds. The overall product is syrup, in addition to these oligosaccharides, contains mainly fructose but also the disaccharide leucrose and other disaccharides.  Total solids: 75-80 %  Moisture: 20-25 %  Sulphatase: Max 0,05 %  pH: 3,5-6,0  Conductivity < 200 (30 %)

	Nitrogen < 10 ppm
	Fructose: 35-45 % d.w.
	Leucrose: 7-15 % d.w.
	Other disaccharides: Max 3 %
	Higher saccharides: 40-60 % d.w
Sugar cane fibre	Description/Definition:
	Sugar Cane Fibre is derived from the dry cell wall or fibrous residue remaining after expression or extraction of sugar juice from sugar cane, of the Saccharum genotype. It consists primarily of cellulose and hemicellulose.
	The production process consists of several steps, including: chipping, alkaline digestion, removal of lignins and other non-cellulosic components, bleaching of purified fibres, acid washing and neutralization.
	Moisture: $\leq 7.0 \%$
	Ash: $\leq 0.3 \%$
	Total Dietary Fibre (AOAC) dry basis (all insoluble): ≥ 95 %
	of which: Hemicellulose (20-25 %) and cellulose (70-75 %)
	Silica (ppm): ≤ 200
	Protein: 0,0 %
	Fat: Trace
	pH: 4-7
	Heavy metals:
	Mercury (ppm): $\leq 0,1$
	Lead (ppm): $\leq 1,0$
	Arsenic (ppm): $\leq 1.0$
	Cadmium (ppm): $\leq 0.1$
	Microbiological criteria:
	Yeast and moulds (CFU/g): ≤ 1 000
	Salmonella: Absence
	Listeria monocytogenes: Absence
Sunflower oil extract	Description/Definition:
	The sunflower extract is obtained by a concentration factor of 10 of the unsaponifiable fraction of refined sunflower oil extracted from the seeds of the sunflower, <i>Helianthus Annuus</i> L.

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	Composition: Oleic acid (C18:1): 20 % Linoleic acid (C18:2): 70 % Unsaponifiable matter: 8,0 % Phytosterols: 5,5 % Tocopherols: 1,1 %	
Dried Tetraselmis chuii microalgae	Description/Definition:  The dried product is obtained from the marine microalgae <i>Tetraselmis chuii</i> , belonging to the <i>Chlorodendraceae</i> family, cultivated in sterile sea water in closed photobioreactors insulated from the outside air.  Purity/Composition:  Identified by means of nuclear marker rDNA 18 S (sequence analysed no less than 1 600 base pairs) in the National Centre for Biotechnology information (NCBI) database: Not less than 99,9 %  Humidity: ≤ 7,0 %  Proteins: 35-40 %  Ashes: 14-16 %  Carbohydrates: 30-32 %  Fibre: 2-3 %  Fat: 5-8 %  Saturated fatty acids: 29-31 % of total fatty acids  Monounsaturated fatty acids: 21-24 % of total fatty acids  Polyunsaturated fatty acids: 44-49 % of total fatty acids  Iodine: ≤ 15 mg/kg	
Therapon barcoo/Scortum	Description/Definition:  Scortum/Therapon barcoo is a species of fish in the family Terapontidae. It is an endemic fresh water species from Australia. It is now reared in fish farms. Taxonomic Identification: Class: Actinopterygii > order: Perciformes > family: Terapontidae > genus: Therapon or Scortum Barcoo Composition of fish flesh:  Protein (%): 18-25  Moisture (%): 65-75  Ash (%): 0,5-2,0  Energy (KJ/Kg): 6 000-11 500	

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	Carbohydrates (%): 0,0 Fat (%): 5-15 Fatty acids (mg FA/g fillet): Σ PUFA n-3: 1,2-20,0 Σ PUFA n-6: 0,3-2,0 PUFA n-3/n-6: 1,5-15,0 Total omega 3 acids: 1,6-40,0 Total omega 6 acids: 2,6-10,0	
D-Tagatose	Description/Definition:  Tagatose is produced by isomerization of galactose by means of chemical or enzymatic conversion, or by epimerization of fructose by means of enzymatic conversion. These are single-step conversions.  Appearance: White or almost white crystals Chemical name: D-tagatose Synonym: D-lyxo-Hexulose CAS number: 87-81-0 Chemical formula: C <sub>6</sub> H <sub>12</sub> O <sub>6</sub> Formula weight: 180,16 (g/mol) Purity: Assay: ≥ 98 % on a dry weight basis Loss on drying: ≤ 0,5 % (102 °C, 2 hours) Specific Rotation: [α]2O <sub>D</sub> : − 4 to − 5,6° (1 % aqueous solution) (*) Melting range: 133-137 °C Heavy metals: Lead: ≤ 1,0 mg/kg (**)  (*) Food and nutrition paper 5 Rev 2 − Guide to specifications for general notices, general analytical techniques, identification tests, test solutions and other reference materia (JECFA) 1991, 307 p.; English − ISBN 92-5-102991-1  (**) Determine using an atomic absorption technique appropriate to the specified level. The selection of sample size and method of sample preparation may be based on the principles of the method described in FNP 5. 'Instrumental methods' (*).	
Taxifolin-rich extract	<b>Definition:</b> Chemical name: [(2R,3R)-2-(3,4 dihydroxyphenyl)-3,5,7-trihydroxy-2,3-dihydrochromen-4-one, also called (+) trans (2R,3R)- dihydroquercetin] and with more than 2 % of the cis-form	

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Гrehalose	Description/Definition:	
	A non-reducing disaccharide that consists of two glucose moieties linkes by an $\alpha$ -1,1-glucosidic bond. It is obtained from liquefied starch by a multisted enzymatic process. The commercial product is the dihydrate. Virutally odourless, white or almost white crystals with a sweet taste	
	Synonyms: α,α-trehalose	
	Chemical name: α-D-glucopyranosyl-α-D-glucopyranoside, dihydrate	
	CAS No.: 6138-23-4 (dihydrate)	
	Chemical formula: C <sub>12</sub> H <sub>22</sub> O <sub>11</sub> · 2H <sub>2</sub> O (dihydrate)	
	Formula weight: 378,33 (dihydrate)	
	Assay: $\geq 98\%$ on the dry basis	
	Determine using an atomic absorption technique appropriate to the specified level. The selection of sample size and method of sample preparation may be base on the principles of the method described in FNP 5 (1), 'Instrumental methods'	
	Method of assay:	
	Principle: trehalose is identified by liquid chromatography and quantified by comparison to a reference standard containing standard trehalose  Preparation of sample solution: weigh accurately about 3 g of dry sample into a 100 ml volumetric flask and add about 80 ml of purified, deionised water.  Bring sample to complete dissolution and dilute to mark with purified deionised water. Filter through a 0,45 micron filter	
	Preparation of standard solution: dissolve accurately weighed quantities of dry standard reference trehalose in water to obtain a solution having know concentration of about 30 mg of trehalose per ml.	
	Apparatus: liquid chromatography equipped with a refractive index detector and integrating recorder	
	Conditions:	
	Column: Shodex Ionpack KS-801 (Showa Denko Co.) or equivalent	
	— length: 300 mm	
	— diameter: 10 mm	
	— temperature: 50 °C	
	Mobile phase: water	
	flow rate: 0,4 ml/min	
	Injection volume: 8 µl	
	Procedure: inject separately equal volumes of the sample solution and the standard solution into the chromatograph.	
	Record the chromatograms and measure the size of response of the trehalose peak	
	Calculate the quantity, in mg, of trehalose in 1 ml of the sample solution by the following formula:	
	% trehalose = $100 \times (R_U/R_S) (W_S/W_U)$	
	where	

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	$R_S = \text{peak}$ area of trehalose in the standard preparation $R_U = \text{peak}$ area of trehalose in the sample preparation $W_S = \text{weight}$ in mg of trehalose in the standard preparation $W_U = \text{weight}$ of dry sample in mg $Characteristics$ : Identification: Solubility: Freely soluble in water, very slightly soluble in ethanol Specific rotation: $[\alpha]D20 + 199^{\circ}$ (5 % aqueous solution) Melting point: 97 °C (dihydrate) $Purity$ :  Loss on drying: $\leq 1.5$ % (60 °C, 5 h) $Column{2}{c}$ Total ash: $\leq 0.05$ % $Column{2}{c}$ Heavy metals: $Column{2}{c}$ Lead: $\leq 1.0$ mg/kg
UV treated mushrooms (Agaricus bisporus)	Description/Definition: Commercially grown <i>Agaricus bisporus</i> to which UV light treatment is applied to harvested mushrooms. UV radiation: a process of radiation in ultraviolet light within the wavelength of 200-800 nm.  Vitamin D <sub>2</sub> : Chemical name: (3β,5Z,7E,22E)-9,10-secoergosta-5,7,10(19),22-tetraen-3-ol Synonym: Ergocalciferol CAS No: 50-14-6 Molecular weight: 396,65 g/mol Contents: Vitamin D <sub>2</sub> in the final product: 5-10 μg/100 g fresh weight at the expiration of shelf life
UV-treated baker's yeast (Saccharomyces cerevisiae)	Description/Definition:  Baker's yeast (Saccharomyces cerevisiae) is treated with ultraviolet light to induce the conversion of ergosterol to vitamin D <sub>2</sub> (ergocalciferol). Vitamin D <sub>2</sub> content in the yeast concentrate varies between 1 800 000-3 500 000 IU vitamin D/100 g (450-875 μg/g).  Tan-coloured, free-flowing granules

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	Vitamin D₂:  Chemical name: (5Z,7E,22E)-(3S)-9,10-secoergosta-5,7,10(19),22-tetraen-3-ol Synonym: Ergocalciferol  CAS No.: 50-14-6  Molecular weight: 396,65 g/mol  Microbiological criteria for the yeast concentrate:  Coliforms: ≤ 10³/g  Escherichia coli: ≤ 10/g  Salmonella: Absence in 25 g		
UV-treated bread	Description/Definition:  UV-treated bread is yeast leavened bread and rolls (without toppings) to which a treatment with ultraviolet radiation is applied after baking in order to convert ergosterol to vitamin D <sub>2</sub> (ergocalciferol).  UV radiation: A process of radiation in ultraviolet light within the wavelength of 240-315 nm for maximum of 5 seconds with energy input of 10-50 mJ/cm². Vitamin D <sub>2</sub> :  Chemical name: (5Z,7E,22E)-3S-9,10-secoergosta-5,7,10(19),22-tetraen-3-ol Synonym: Ergocalciferol  CAS No: 50-14-6  Molecular weight: 396,65 g/mol  Contents:  Vitamin D <sub>2</sub> (ergocalciferol) in the final product: 0,75-3 μg/100 g (*)  Yeast in dough: 1-5 g/100 g (**)  (*) EN 12821, 2009, European Standard.  (**) Recipe calculation.		
UV-treated milk	Description/Definition:  UV-treated milk is cow's milk (whole and semi-skimmed) to which a treatment with ultraviolet (UV) radiation via turbulent flow is applied after pasteurisation. The treatment of the pasteurised milk with UV radiation results in an increase in the vitamin D <sub>3</sub> (cholecalciferol) concentrations by conversion of 7-dehydrocholesterol to vitamin D <sub>3</sub> .  UV radiation: A process of radiation in ultraviolet light within the wavelength of 200-310 nm with energy input of 1 045 J/l.  Vitamin D <sub>3</sub> :  Chemical name: (1S,3Z)-3-[(2E)-2-[(1R,3aS,7aR)-7a-methyl-1-[(2R)-6-methylheptan-2-yl]-2,3,3a,5,6,7-hexahydro-1H-inden-4-ylidene]-4-methylidenecyclohexan-1-ol		

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	Synonym: CholecalciferolCAS No: 67-97-0 Molecular weight: 384,6377 g/mol  Contents:  Vitamin D <sub>3</sub> in the final product:  Whole milk (*): 0,5-3,2 μg/100 g (**)  Semi-skimmed milk (*): 0,1-1,5 μg/100 g (**)  (*) As defined by Regulation (EU) No 1308/2013 of the European Parliament and of the Council of 17 December 2013 establishing a common organisation of the markets in agricultural products and repealing Council Regulations (EEC) No 922/72, (EEC) No 234/79, (EC) No 1037/2001 and (EC) No 1234/2007 (OJ L 347, 20.12.2013, p. 671).  (**) HPLC
Vitamin K <sub>2</sub> (menaquinone)	This novel food is produced by a synthetic or microbiological process.  Specification of synthetic Vitamin K <sub>2</sub> (menaquinone-7)  Chemical Name: (all-E)-2-(3,7,11,15,19,23,27-Heptamethyl-2,6,10,14,18,22,26-octacosaheptaenyl)-3-methyl-1,4-naphtalenedione  CAS Number: 2124-57-4  Molecular formula: C <sub>46</sub> H <sub>64</sub> O <sub>2</sub> Molecular weight: 649 g/mol  Appearance: Yellow powder  Purity: Max 6,0 % cis-isomer, max 2,0 % other impurities  Content: 97-102 % Menaquinone-7 (including at least 92 % all-trans Menaquinone-7)  Specifications of microbiologically produced Vitamin K <sub>2</sub> (menaquinone-7)  Source: Bacillus subtilis spp. natto  Vitamin K <sub>2</sub> (2-methyl-3-all-trans-polyprenyl-1,4-naphthoquinones), or the menaquinone series, is a group of prenylated naphthoquinone derivatives. The number of isoprene residues, where 1 isoprene unit consists of 5 carbons comprising the side chain, is used to characterise the menaquinone homologues. It is presented in an oil suspension that primarily contains MK-7 and MK-6 to a smaller extent.  Vitamin K <sub>2</sub> (menaquinones) series with menaquinone-7 (MK-7)(n = 6) being C <sub>46</sub> H <sub>64</sub> O <sub>2</sub> , menaquinone-6 (MK-6)(n = 5) being C <sub>41</sub> H <sub>56</sub> O <sub>2</sub> and menaquinone-4 (MK-4)(n = 3) being C <sub>31</sub> H <sub>40</sub> O <sub>2</sub> .
Wheat bran extract	Description/Definition: White crystalline powder obtained by enzymatic extraction from <i>Triticum aestivum</i> L. bran, rich in arabinoxylan oligosaccharides Dry matter: Min. 94 % Arabinoxylan oligosaccharides: Min 70 % of dry matter Average degree of polymerisation of arabinoxylan oligosaccharides: 3-8 Ferulic acid (bound to arabinoxylan oligosaccharides): 1-3 % of dry matter

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Authorised Novel Food	Specification
	Total poly/oligosaccharides: Min 90 %
	Protein: Max 2 % of dry matter
	Ash: Max 2 % of dry matter
	Microbiological parameters:
	Mesophilic bacteria – total count: Max 10 000/g
	Yeasts: Max 100/g
	Fungi: Max 100/g
	Salmonella: Absence in 25 g
	Bacillus cereus: Max 1 000/g
	Clostridium perfringens: Max 1 000/g
Yeast beta-glucans	Description/Definition:
	Beta-glucans are complex, high molecular mass (100-200 kDa) polysaccharides, found in the cell wall of many yeasts and cereals.
	The chemical name for 'yeast beta-glucans' is (1-3),(1-6)-β-D-glucans.
	Beta-glucans consist of a backbone of $\beta$ -1-3-linked glucose residues that are branched by $\beta$ -1-6-linkages, to which chitin and mannoproteins are linked by $\beta$ -1-4-bonds.
	Beta-glucans are isolated from yeast Saccharomyces cerevisiae.
	The tertiary structure of the glucan cell wall of <i>Saccharomyces cerevisiae</i> consists of chains of $\beta$ -1,3-linked glucose residues, branched by $\beta$ -1,6-linkages, forming a backbone to which are linked chitin via $\beta$ -1,4- bonds, $\beta$ -1,6-glucans and some mannoproteins.
	This novel food is available in three different forms: soluble, insoluble and insoluble in water, but dispersible in many liquid matrices.
	Chemical characteristics yeast (Saccharomyces cerevisiae) beta-glucans:
	Soluble form:
	Total carbohydrates: > 75 %
	Beta-glucans (1,3/1,6): > 75 %
	Ash: < 4,0 %
	Moisture: < 8,0 %
	Protein: < 3,5 %
	Fat: < 10 %
	Insoluble form:
	Total carbohydrates: > 70 %

Authorised Novel Food	Specification
	Beta-glucans (1,3/1,6): > 70 %
	Ash: ≤ 12 %
	Moisture: < 8,0 %
	Protein: < 10 %
	Fat: < 20 %
	Insoluble in water, but dispersible in many liquid matrices:
	$(1,3)$ - $(1,6)$ - $\beta$ -D-Glucans: $> 80 \%$
	Ash: < 2,0 %
	Moisture: < 6,0 %
	Protein: < 4,0 %
	Total fat: < 3,0 %
	Microbiological data:
	Total plate count: < 1 000 CFU/g
	Enterobacteriaceae: < 100 CFU/g
	Total coliforms: < 10 CFU/g
	Yeast: < 25 CFU/g
	Mould: < 25 CFU/g
	Salmonella: Absence in 25 g
	Escherichia coli: Absence in 1 g
	Bacillus cereus: < 100 CFU/g
	Staphylococcus aureus: Absence in 1 g
	Heavy metals:
	Lead: $< 0.2 \text{ mg/g}$
	Arsenic: < 0,2 mg/g
	Mercury: < 0,1 mg/g
	Cadmium: < 0,1 mg/g
Zeaxanthin	Description/Definition:
	Zeaxanthin is a naturally occurring xanthophyll pigment, it is an oxygenated carotenoid.
	The synthetic zeaxanthin is presented either as a spray-dried powder of gelatin or starch base ('beadlets') with added $\alpha$ -tocopherol and ascorbyl palmitate or as a corn oil suspension with added $\alpha$ -tocopherol. Synthetic zeaxanthin is produced by a multi-step chemical synthesis from smaller molecules.

Authorised Novel Food	Specification
	Orange-red crystalline powder with little or no odour. Chemical formula: C <sub>40</sub> H <sub>56</sub> O <sub>2</sub> CAS No: 144-68-3 Molecular weight: 568,9 daltons Physical-chemical properties: Loss on drying: < 0,2 % All-trans zeaxanthin: > 96 % Cis-zeaxanthin: < 2,0 % Other carotenoids: < 1,5 % Triphenylphosphine oxid (CAS No 791-28-6): < 50 mg/kg
Zinc L-pidolate	Description/Definition:  Zinc L-pidolate is a white to off-white powder, with characteristic odour.  International non-proprietary name (INN): L-pyroglutamic acid, Zinc salt  Synonyms: Zinc 5-oxoproline, Zinc pyroglutamate, Zinc pyrrolidone carboxylate, Zinc PCA, L-Zinc pidolate  CAS No: 15454-75-8  Molecular formula: (C <sub>5</sub> H <sub>6</sub> NO <sub>3)2</sub> Zn  Relative anhydrous molecular mass: 321,4  Appearance: White to slightly white powder  Purity:  Zinc L-pidolate (purity): ≥ 98 %  pH (10 % aqueous sol.): 5,0-6,0  Specific rotation: 19,6°- 22,8°  Water: ≤ 10,0 %  Glutamic acid: < 2,0 %  Heavy metals:  Lead: ≤ 3,0 ppm  Arsenic: ≤ 2,0 ppm  Cadmium: ≤ 1,0 ppm  Mercury: ≤ 0,1 ppm

Authorised Novel Food	Specification
	Microbiological criteria:  Total viable mesophilic count: ≤ 1 000 CFU/g  Yeasts and moulds: ≤ 100 CFU/g  Pathogen: Absence

 <sup>(</sup>¹) Commission Regulation (EU) No 231/2012 of 9 March 2012 laying down specifications for food additives listed in Annexes II and III to Regulation (EC) No 1333/2008 of the European Parliament and of the Council (OJ L 83, 22.3.2012, p. 1)
 (²) Commission Implementing Regulation (EU) 2015/175 of 5 February 2015 laying down special conditions applicable to the import of guar gum originating in or consigned from India due to contamination risks by pentachlorophenol and dioxins (OJ L 30, 6.2.2015, p. 10)