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)

THE EUROPEAN COMMISSION,

Having regard to the Treaty on the Functioning of the European Union,

Having regard to Regulation (EU) 2015/2283 of the European Parliament and of the Council on novel foods, amending Regulation (EU) No 1169/2011 of the European Parliament and of the Council and repealing Regulation (EC) No 258/97 of the European Parliament and of the Council and Commission Regulation (EC) No 1852/2001 ([1]), and in particular Article 8 thereof,

Whereas:

(1) Regulation (EU) 2015/2283 lays down rules for the placing on the market and use of novel foods within the Union.

(2) Pursuant to Article 8 of Regulation (EU) 2015/2283, the Commission has to establish the Union list of novel foods authorised or notified under Regulation (EC) No 258/97 of the European Parliament and of the Council ([2]).

(3) The Union list of novel foods is to apply without prejudice to other provisions laid down in sector specific legislation.

(4) The measures provided for in this Regulation are in accordance with the opinion of the Standing Committee on Plants, Animals, Food and Feed,

HAS ADOPTED THIS REGULATION:

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.

Done at Brussels, 20 December 2017.

For the Commission

The President

Jean-Claude JUNCKER

([1]) OJ L 327, 11.12.2015, p. 1.

([2]) Regulation (EC) No 258/97 of the European Parliament and of the Council of 27 January 1997 concerning novel foods and novel food ingredients (OJ L 43, 14.2.1997, p. 1).

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	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' Food supplements containing N-acetyl-D-neuraminic acid shall bear a statement that the food supplement should not be given to infants, young children and children under 10 years of age where they consume breast milk or other foods with added N-acetyl-D-neuraminic acid within the same twenty four hour period.	
	Infant and follow-on formulae as defined by Regulation (EU) No 609/2013 [1]	0,05 g/L of reconstituted formula		
	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		
	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		
	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)		

Authorised novel food	Conditions under which the novel food may be used		Additional specific labelling requirements	Other requirements
	Specified food category	*Maximum levels*		
	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'	
***Ajuga reptans* extract from cell cultures**	*Specified food category*	*Maximum levels*		
	Food Supplements as defined in Directive 2002/46/EC	In line with normal use in food supplements of a similar extract of the flowering aerial parts of *Ajuga reptans*		

Authorised novel food	Conditions under which the novel food may be used		Additional specific labelling requirements	Other requirements
L-Alanyl-L-Glutamine	*Specified food category*	*Maximum levels*		
	Food Supplements as defined in Directive 2002/46/EC			
	Foods for special medical purposes as defined in Regulation (EU) No 609/2013 excluding foods for infants and young children			
Algal oil from the microalgae *Ulkenia* sp.	*Specified food category*	*Maximum levels of DHA*	The designation of the novel food on the labelling of the foodstuffs containing it shall be 'Oil from the micro-algae *Ulkenia sp*.'	
	Bakery products (breads, rolls and sweet biscuits)	200 mg/100 g		
	Cereal bars	500 mg/100 g		
	Non-alcoholic beverages (including milk based beverages)	60 mg/100 ml		
***Allanblackia* seed oil**	*Specified food category*	*Maximum levels*	The designation of the novel food on the labelling of the foodstuffs containing it shall be '*Allanblackia* seed oil'	
	Yellow fat spreads and cream based spreads	20 g/100 g		
***Aloe macroclada* Baker leaf extract**	*Specified food category*	*Maximum levels*		
	Food Supplements as defined in Directive 2002/46/EC	In line with normal use in food supplements of the similar gel derived from *Aloe vera* (L.) Burm.		
Antarctic Krill oil 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 Antarctic Krill (*Euphausia superba*)'	
	Dairy products except milk-based drinks	200 mg/100 g or for cheese products 600 mg/100 g		
	Dairy analogues except drinks	200 mg/100 g or for analogues to cheese products 600 mg/100 g		

Authorised novel food	Conditions under which the novel food may be used		Additional specific labelling requirements	Other requirements
	Specified food category	*Maximum levels of combined DHA and EPA*		
	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		
	Food Supplements as defined in Directive 2002/46/EC	3 000 mg/day for the 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 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		
	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			

Authorised novel food	Conditions under which the novel food may be used		Additional specific labelling requirements	Other requirements
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 Antarctic Krill (*Euphausia superba*)'	
	Dairy products except milk-based drinks	200 mg/100 g or for cheese products 600 mg/100 g		
	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		
	Food Supplements as defined in Directive 2002/46/EC	3 000 mg/day for the 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 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		

Authorised novel food	Conditions under which the novel food may be used		Additional specific labelling requirements	Other requirements
	Specified food category	*Maximum levels of combined DHA and EPA*		
	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			
Arachidonic acid-rich oil from the fungus *Mortierella alpina*	*Specified food category*	*Maximum levels*	The designation of the novel food on the labelling of the foodstuffs containing it shall be 'Oil from *Mortierella alpina*' or '*Mortierella alpina* oil'	
	Infant formula and follow-on formula as defined in Regulation (EU) No 609/2013	In accordance with Regulation (EU) No 609/2013		
	Foods for special medical purposes for premature infants as defined in Regulation (EU) No 609/2013	In accordance with Regulation (EU) No 609/2013		
Argan oil from *Argania spinosa*	*Specified food category*	*Maximum levels*	The designation of the novel food on the labelling of the foodstuffs containing it shall be 'Argan oil' and if used as seasoning 'Vegetable oil only for seasoning' shall be mentioned on the label	
	As seasonings	Not specified		
	Food Supplements as defined in Directive 2002/46/EC	In line with normal food use of vegetable oils		
Astaxanthin-rich oleoresin from *Haematococcus pluvialis* algae	*Specified food category*	*Maximum levels*	The designation of the novel food on the labelling of the foodstuffs containing it shall be 'Astaxanthin'	
	Food Supplements as defined in Directive 2002/46/EC	40-80 mg/day of oleoresin, resulting in ≤ 8 mg astaxanthin per day		

Authorised novel food	Conditions under which the novel food may be used		Additional specific labelling requirements	Other requirements
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 be 'Fermented black bean (Soya) extract' or 'Fermented Soya extract'	
	Food Supplements as defined in Directive 2002/46/EC	4,5 g/day		
Bovine lactoferrin	*Specified food category*	*Maximum levels*	The designation of the novel food on the labelling of the foodstuffs containing it shall be 'Lactoferrin from cows' milk'	
	Infant formula and follow-on formula as defined in Regulation (EU) No 609/2013 (ready to drink)	100 mg/100 ml		
	Foods on dairy basis intended for young children (ready to eat/drink)	200 mg/100 g		
	Processed cereal food (solid)	670 mg/100 g		
	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		

Authorised novel food	Conditions under which the novel food may be used		Additional specific labelling requirements	Other requirements
	Specified food category	*Maximum levels*		
	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 *Buglossoides* oil'	
	Dairy products and analogues	250 mg/100 g		
		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		
	Breakfast cereals	625 mg/100 g		
	Food supplements as defined in Directive 2002/46/EC, excluding food supplements for infants and young children	500 mg/day		
	Foods for special medical purposes as defined in Regulation (EU) No 609/2013, excluding foods for special medical purposes intended for infants and young children	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		

Authorised novel food	Conditions under which the novel food may be used		Additional specific labelling requirements	Other requirements
***Calanus finmarchicus* oil**	*Specified food category*	*Maximum levels*	The designation of the novel food on the labelling of the foodstuffs containing it shall be 'oil from *Calanus finmarchicus* (crustacean)'	
	Food supplements as defined in Directive 2002/46/EC	2,3 g/day		
Chewing gum base (monomethoxypolyethylene glycol)	*Specified food category*	*Maximum levels*	The designation of the novel food on the labelling of the foodstuffs containing it shall be 'Gum base (including 1,3-butadiene, 2-methyl-homopolymer, maleated, esters with polyethylene glycol mono-Me ether)' or 'Gum base (including CAS No: 1246080-53-4)'	
	Chewing gum	8 %		
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 be 'Gum base (including methyl vinyl ether-maleic anhydride copolymer)' or 'Gum base (including CAS No 9011-16-9)'	
	Chewing gum	2 %		
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 be 'Chia oil (*Salvia hispanica*)'	
	Fats and oils	10 %		
	Pure chia oil	2 g/day		
	Food Supplements as defined in Directive 2002/46/EC	2 g/day		
Chia seeds (*Salvia hispanica*)	*Specified food category*	*Maximum levels*	1. The designation of the novel food on the labelling of the foodstuffs containing it shall be 'Chia seeds (*Salvia hispanica*)' 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.	
	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		

Authorised novel food	Conditions under which the novel food may be used		Additional specific labelling requirements	Other requirements
	Specified food category	*Maximum levels*		
	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		
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 be 'Chitin-glucan from *Aspergillus niger*'	
	Food Supplements as defined in Directive 2002/46/EC	5 g/day		
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 be 'Chitin-glucan from *Fomes fomentarius*'	
	Food Supplements as defined in Directive 2002/46/EC	5 g/day		
Chitosan extract from fungi (*Agaricus bisporus*; *Aspergillus niger*)	*Specified food category*	*Maximum levels*	The designation of the novel food on the labelling of the foodstuffs containing it shall be 'Chitosan extract from *Agaricus bisporus*' or 'Chitosan extract from *Aspergillus niger*'	
	Food Supplements as defined in Directive 2002/46/EC	In line with normal use in food supplements of chitosan from crustaceans		
Chondroitin sulphate	*Specified food category*	*Maximum levels*	The designation of the novel on the labelling of the foodstuff containing it shall be 'Chondroitin sulphate derived from microbial fermentation and sulphation'	
	Food supplements as defined in Directive 2002/46/EC for adult population, excluding pregnant and lactating women	1 200 mg/day		

Authorised novel food	Conditions under which the novel food may be used		Additional specific labelling requirements	Other requirements
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 be 'Chromium Picolinate'	
	Foods covered by Regulation (EU) No 609/2013	250 µg/day		
	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 be '*Cistus incanus* L. Pandalis herb'	
	Herbal infusions	Intended daily intake: 3 g herbs/day (2 cups/day)		
Citicoline	*Specified food category*	*Maximum levels*	1. The designation of the novel food on the labelling of the foodstuffs containing it shall be 'Citicoline' 2. The labelling of foods containing citicoline shall bear a statement that the product is not intended to be consumed by children	
	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	250 mg per serving and a maximum daily consumption level of 1 000 mg		
Clostridium butyricum	*Specified food category*	*Maximum levels*	The designation of the novel food on the labelling of the foodstuffs containing it shall be '*Clostridium butyricum* MIYAIRI 588 (CBM 588)' or '*Clostridium butyricum* (CBM 588)'	
	Food Supplements as defined in Directive 2002/46/EC	$1{,}35 \times 10^8$ CFU/day		
Extract of defatted cocoa powder	*Specified food category*	*Maximum levels*	Consumers shall be instructed not to consume more than 600 mg polyphenols corresponding to 1,1 g of extract of defatted cocoa powder per day	
	Nutrition bars	1 g/day and 300 mg polyphenols corresponding to not more than 550 mg of extract of defatted cocoa powder in one portion of food (or food supplement)		
	Milk based beverages			
	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			

Authorised novel food	Conditions under which the novel food may be used		Additional specific labelling requirements	Other requirements
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		
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 be 'Coriander seed oil'	
	Food Supplements as defined in Directive 2002/46/EC	600 mg/day		
***Crataegus pinnatifida* dried fruit**	*Specified food category*	*Maximum levels*	The designation of the novel food on the labelling of the foodstuffs containing it shall be '*Crataegus pinnatifida* dried fruit'	
	Herbal infusions	In line with normal food use of *Crataegus laevigata*		
	Jams and jellies in accordance with Directive 2001/113/EC [5]			
	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'	
Dextran preparation produced by *Leuconostoc mesenteroides*	*Specified food category*	*Maximum levels*	The designation of the novel food on the labelling of the foodstuffs containing it shall be 'Dextran'	
	Bakery products	5 %		
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 be 'Diacylglycerol oil of plant origin (at least 80 % diacylglycerols)'	
	Cooking oils			
	Fat spreads			
	Salad dressings			
	Mayonnaise			
	Meal replacement for weight control (as drinks)			

Authorised novel food	Conditions under which the novel food may be used		Additional specific labelling requirements	Other requirements
	Specified food category	*Maximum levels*		
	Bakery products			
	Yoghurt type products			
Dihydrocapsiate (DHC)	*Specified food category*	*Maximum levels*	1. The designation of the novel food on the labelling of the foodstuffs containing it shall be 'Dihydrocapsiate' 2. Food supplements containing synthetic dihydrocapsiate will be labelled as 'not intended for children up to 4,5 years'	
	Cereal bars	9 mg/100 g		
	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		
	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		

Authorised novel food	Conditions under which the novel food may be used		Additional specific labelling requirements	Other requirements
	Specified food category	*Maximum levels*		
	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		
	Non-alcoholic powdered drink mixes	14,5 mg/kg equivalent to 1,5 mg/100 ml		
Dried extract of *Lippia citriodora* from cell cultures	*Specified food category*	*Maximum levels*	The designation of the novel food on the labelling of the foodstuffs containing it shall be 'dried extract of *Lippia citriodora* from cell cultures HTN®Vb'	
	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 *Lippia citriodora*		
***Echinacea angustifolia* extract from cell cultures**	*Specified food category*	*Maximum levels*		
	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 *Echinacea angustifolia*		

Authorised novel food	Conditions under which the novel food may be used		Additional specific labelling requirements	Other requirements
***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		
	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		
Epigallocatechin gallate as a purified extract from green tea leaves (*Camellia sinensis*)	*Specified food category*	*Maximum levels*	The labelling shall bear a statement that consumers should not consume more than 300 mg of extract per day	
	Food Supplements as defined in Directive 2002/46/EC	150 mg of extract in one portion of food or food supplement		
	Foods fortified in accordance with Regulation (EC) No 1925/2006			
L-ergothioneine	*Specified food category*	*Maximum levels*	The designation of the novel food on the labelling of the foodstuffs containing it shall be 'L-ergothioneine'	
	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		

Authorised novel food	Conditions under which the novel food may be used		Additional specific labelling requirements	Other requirements
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			
Ferrous ammonium phosphate	*Specified food category*	*Maximum levels*	The designation of the novel food on the labelling of the foodstuffs containing it shall be 'Ferrous ammonium phosphate'	
	Food supplements as defined in Directive 2002/46/EC	To be used in compliance with Directive 2002/46/EC, Regulation (EU) No 609/2013 and/or Regulation (EC) No 1925/2006		
	Foods covered by Regulation (EU) No 609/2013			
	Foods fortified in accordance with Regulation (EC) No 1925/2006			
Fish peptides from *Sardinops sagax*	*Specified food category*	*Maximum levels fish peptide product*	The designation of the novel food on the labelling of the foodstuffs containing it shall be 'Fish (*Sardinops sagax*) peptides'	
	Foods based on yoghurt, yoghurt drinks, fermented milk products, and powdered milk	0,48 g/100 g (ready to eat/drink)		
	Flavoured water, and vegetable-based drinks	0,3 g/100 g (ready to drink)		
	Breakfast cereals	2 g/100 g		
	Soups, stews and soup powders	0,3 g/100 g (ready to eat)		

Authorised novel food	Conditions under which the novel food may be used		Additional specific labelling requirements	Other requirements
Flavonoids from *Glycyrrhiza glabra*	*Specified food category*	*Maximum levels of flavonoids from Glycyrrhiza glabra*	1. The designation of the novel food on the labelling of the foodstuffs containing it shall be 'Flavonoids from *Glycyrrhiza glabra L.*' 2. The labelling of the foods where the product was added as a novel food ingredient shall bear a statement that: (a) the product should not be consumed by pregnant and breast feeding women, children and young adolescents; and (b) people taking prescription drugs should only consume the product under medical supervision; (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.	Beverages containing flavonoids shall be presented to the final consumer as single portions.
	Beverages based on milk	120 mg/day		
	Beverages based on yoghurt			
	Beverages based on fruit or vegetables			
	Food Supplements as defined in Directive 2002/46/EC	120 mg/day		
	Total diet replacement for weight control as defined in Regulation (EU) No 609/2013	120 mg/day		
	Foods for special medical purposes as defined in Regulation (EU) No 609/2013	120 mg/day		
Fucoidan extract from the seaweed *Fucus vesiculosus*	*Specified food category*	*Maximum levels*	The designation of the novel food on the labelling of the foodstuffs containing it shall be 'Fucoidan extract from seaweed *Fucus vesiculosus*'.	
	Foods including food supplements as defined in Directive 2002/46/EC for the general population	250 mg/day		
Fucoidan extract from the seaweed *Undaria pinnatifida*	*Specified food category*	*Maximum levels*	The designation of the novel food on the labelling of the foodstuffs containing it shall be 'Fucoidan extract from seaweed Undaria pinnatifida'	
	Foods including food supplements as defined in Directive 2002/46/EC for the general population	250 mg/day		

Authorised novel food	Conditions under which the novel food may be used		Additional specific labelling requirements	Other requirements
2′-Fucosyllactose	*Specified food category*	*Maximum levels*	1. The designation of the novel food on the labelling of the foodstuffs containing it shall be '2′-fucosyllactose'. 2. The labelling of food supplements 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 day.	
	Unflavoured pasteurised and sterilised (including UHT) milk-based products	1,2 g/l		
	Unflavoured fermented milk-based products	1,2 g/l beverages		
		19,2 g/kg products other than beverages		
	Flavoured fermented milk-based products including heat-treated products	1,2 g/l beverages		
		19,2 g/kg products other than beverages		
	Dairy analogues, including beverage whiteners	1,2 g/l beverages		
		12 g/kg for products other than beverages		
		400 g/kg for whitener		
	Cereal bars	12 g/kg		
	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-*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		
	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-*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 novel 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	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		
	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	4,8 g/l for drinks		
		40 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	60 g/kg		
	Flavoured drinks	1,2 g/l		
	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	9,6 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	3,0 g/day for general population		
		1,2 g/day for young children		

Authorised novel food	Conditions under which the novel food may be used		Additional specific labelling requirements	Other requirements
Galacto-oligosaccharide	*Specified food category*	*Maximum levels (expressed as ratio kg galacto-oligosaccharide/kg final food)*		
	Food Supplements as defined in Directive 2002/46/EC	0,333		
	Milk	0,020		
	Milk drinks	0,030		
	Meal replacement for weight control (as drinks)	0,020		
	Dairy analogue drinks	0,020		
	Yoghurt	0,033		
	Dairy based deserts	0,043		
	Frozen dairy deserts	0,043		
	Fruit drinks and energy drinks	0,021		
	Infant meal replacement drinks	0,012		
	Baby juice	0,025		
	Baby yogurt drink	0,024		
	Baby desert	0,027		
	Baby snack	0,143		
	Baby cereals	0,027		
	Drinks intended to meet the expenditure of intense muscular effort especially for sportsmen	0,013		

Authorised novel food	Conditions under which the novel food may be used		Additional specific labelling requirements	Other requirements
	Specified food category	*Maximum levels (expressed as ratio kg galacto-oligosaccharide/kg final food)*		
	Juice	0,021		
	Fruit pie fillings	0,059		
	Fruit preparations	0,125		
	Bars	0,125		
	Cereals	0,125		
	Infant formula and follow-on formula as defined in Regulation (EU) No 609/2013	0,008		
Glucosamine HCl	*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		
	Foods covered by Regulation (EU) No 609/2013			
	Milk-based drinks and similar products intended for young children			
	Meal replacement for weight control			
	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			

Authorised novel food	Conditions under which the novel food may be used		Additional specific labelling requirements	Other requirements
Glucosamine sulphate KCl	*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		
Glucosamine sulphate NaCl	*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*	1. The designation of the novel food on the labelling of the foodstuffs containing it 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 any foodstuffs containing it. For example, 'Excessive consumption of these products may cause digestive discomfort, especially for children under 8 years of age'. 3. In the case of products with two 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.	
	Fresh dairy products such as yogurts, fermented milks, fresh cheeses and other dairy-based desserts.	1,5 g/100 g		
	Fruit or vegetable-based liquid foodstuffs (of the 'smoothie' variety)	1,8 g/100 g		
	Fruit or vegetable-based compotes	3,25 g/100 g		
	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		
Heat-treated milk products fermented with *Bacteroides xylanisolvens*	*Specified food category*	*Maximum levels*		
	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 shall be 'hydroxytyrosol'. The labelling of the food products containing hydroxytyrosol shall bear the following statements: (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	
	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		
	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		
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'	
	Edible ices	0,01 %		
Aqueous extracts of dried leaves of *Ilex guayusa*	*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 *Ilex guayusa*'	
	Herbal infusions	In line with normal use in herbal infusions and food supplements of a similar aqueous extract of dried leaves of *Ilex paraguariensis*		
	Food Supplements as defined in Directive 2002/46/EC			
Isomalto-oligosaccharide	*Specified food category*	*Maximum levels*	1. The designation of the novel food on the labelling of the foodstuffs containing it shall be 'Isomaltooligosaccharide'. 2. Foods containing the novel ingredient must be labelled as 'a source of glucose'.	
	Energy-Reduced Soft Drinks	6,5 %		
	Energy Drinks	5,0 %		
	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 novel food may be used		Additional specific labelling requirements	Other requirements
	Specified food category	*Maximum levels*		
	Processed Vegetables and Vegetable Juices	5 %		
	Other Soft Drinks	5 %		
	Cereals Bars	10 %		
	Cookies, Biscuits	20 %		
	Breakfast Cereal Bars	25 %		
	Hard Candies	97 %		
	Soft Candies/Chocolate Bars	25 %		
	Meal replacement for weight control (as bars or milk based)	20 %		
Isomaltulose	Not specified		1. The designation of the novel food on the labelling of the foodstuffs containing it shall be 'Isomaltulose'. 2. The designation of the novel food on the labelling shall be accompanied by indication that the 'Isomaltulose is a source of glucose and fructose'.	
Lactitol	*Specified food category*	*Maximum levels*	The designation of the novel food on the labelling of the food supplements containing it shall be 'Lactitol'	
	Food Supplements as defined in Directive 2002/46/EC (capsules or tablets) intended for the adult population	20 g/day		

Authorised novel food	Conditions under which the novel food may be used		Additional specific labelling requirements	Other requirements
Lacto-N-neotetraose	*Specified food category*	*Maximum levels*	1. The designation of the novel food on the labelling of the foodstuffs containing it shall be 'Lacto-N-neotetraose'. 2. The labelling of food supplements containing lacto-N-neotetraose shall bear 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.	
	Unflavoured pasteurised and sterilised (including UHT) milk-based products	0,6 g/l		
	Unflavoured fermented milk-based products	0,6 g/l for beverages 9,6 g/kg for products other than beverages		
	Flavoured fermented milk-based products including heat-treated products	0,6 g/l for beverages 9,6 g/kg for products other than beverages		
	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 novel 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		
	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		

Authorised novel food	Conditions under which the novel food may be used		Additional specific labelling requirements	Other requirements
	Specified food category	*Maximum levels*		
	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 be 'Lucerne (*Medicago sativa*) protein' or 'Alfalfa (*Medicago sativa*) protein'.	
	Food supplements as defined in Directive 2002/46/EC	10 g/day		
Lycopene	*Specified food category*	*Maximum levels*	The designation of the novel food on the labelling of the foodstuffs containing it shall be 'Lycopene'	
	Fruit/vegetable juice-based drinks (including concentrates)	2,5 mg/100 g		
	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 novel food may be used		Additional specific labelling requirements	Other requirements
Lycopene from *Blakeslea trispora*	*Specified food category*	*Maximum levels*	The designation of the novel food on the labelling of the foodstuffs containing it shall be 'Lycopene'	
	Fruit/vegetable juice-based drinks (including concentrates)	2,5 mg/100 g		
	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		
Lycopene from tomatoes	*Specified food category*	*Maximum levels*	The designation of the novel food on the labelling of the foodstuffs containing it shall be 'Lycopene'	
	Fruit/vegetable juice-based drinks (including concentrates)	2,5 mg/100 g		
	Drinks intended to meet the expenditure of intense muscular effort especially for sportsmen	2,5 mg/100 g		

Authorised novel food	Conditions under which the novel food may be used		Additional specific labelling requirements	Other requirements
	Specified food category	*Maximum levels*		
	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		
Lycopene oleoresin from tomatoes	*Specified food category*	*Maximum levels of lycopene*	The designation of the novel food on the labelling of the foodstuffs containing it shall be 'Lycopene oleoresin from tomatoes'	
	Fruit/vegetable juice-based drinks (including concentrates)	2,5 mg/100 g		
	Drinks intended to meet the expenditure of intense muscular effort especially for sportsmen	2,5 mg/100 g		
	Total diet replacement for weight control covered by 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 novel food may be used		Additional specific labelling requirements	Other requirements
	Specified food category	*Maximum levels of lycopene*		
	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 be 'Magnesium citrate malate'	
	Food Supplements as defined in Directive 2002/46/EC			
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 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.		
	Chewing gum			
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 be 'Maize-germ oil extract'	
	Food Supplements as defined in Directive 2002/46/EC	2 g/day		
	Chewing gum	2 %		
Methylcellulose	*Specified food category*	*Maximum levels*	The designation of the novel food on the labelling of the foodstuffs containing it shall be 'Methylcellulose'	Methylcellulose is not to be used in foods specially prepared for young children
	Edible ices	2 %		
	Flavoured drinks			

Authorised novel food	Conditions under which the novel food may be used		Additional specific labelling requirements	Other requirements
	Specified food category	*Maximum levels*		
	Flavoured or unflavoured fermented milk products			
	Cold desserts (dairy, fat, fruit, cereal, egg-based products)			
	Fruit preparations (pulps, purees or compotes)			
	Soups and broths			
(6S)-5-methyltetrahydrofolic acid, glucosamine 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 it shall be 'Organic silicon (monomethylsilanetriol)'	
	Food Supplements as defined in Directive 2002/46/EC for adult population (in liquid form)	10,40 mg/day		
Mycelial extract from Shiitake mushroom (*Lentinula edodes*)	*Specified food category*	*Maximum levels*	The designation of the novel food on the labelling of the foodstuffs containing it shall be 'extract from the mushroom *Lentinula edodes*' or 'extract from Shiitake mushroom'	
	Bread products	2 ml/100 g		
	Soft drinks	0,5 ml/100 ml		
	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 novel 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 *Morinda citrifolia*'	
	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 citrifolia*)	*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'	
		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		

Authorised novel food	Conditions under which the novel food may be used		Additional specific labelling requirements	Other requirements
	Specified food category	*Maximum levels*		
	Sweet spreads, fillings and icings	31 g/100 g		
	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		

Authorised novel food	Conditions under which the novel food may be used		Additional specific labelling requirements	Other requirements
	Specified food category	*Maximum levels*		
	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 labelling of the foodstuffs containing it shall be 'Noni leaves' or 'leaves of *Morinda citrifolia*'. 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 *Morinda citrifolia*.	
	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 *Morinda citrifolia*		
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 be 'Morinda citrifolia fruit powder' or 'Noni fruit powder'	
	Food Supplements as defined in Directive 2002/46/EC	2,4 g per/day		
***Odontella aurita* microalgae**	*Specified food category*	*Maximum levels*	The designation of the novel food on the labelling of the foodstuffs containing it shall be '*Odontella aurita* microalgae'	
	Flavoured pasta	1,5 %		
	Fish soups	1 %		
	Marine terrines	0,5 %		
	Broth preparations	1 %		
	Crackers	1,5 %		
	Frozen breaded fish	1,5 %		

Authorised novel food	Conditions under which the novel food may be used		Additional specific labelling requirements	Other requirements
Oil enriched with phytosterols/phytostanols	*Specified food category*	*Maximum levels of phytosterols/phytostanols*	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	1. 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. 2. The amount of phytosterols/phytostanols added to a container of beverages shall not exceed 3 g. 3. Salad dressings, mayonnaise and spicy sauces shall be packed as single portions.		
	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			
	Salad dressings, mayonnaise and spicy sauces			
Oil extracted from squids	*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'.	
	Dairy products except milk-based beverages	200 mg/100 g or for cheese products 600 mg/100 g		
	Dairy analogues except drinks	200 mg/100 g or for analogues to cheese products 600 mg/100 g		
	Spreadable fat and dressings	600 mg/100 g		
	Breakfast cereals	500 mg/100 g		

Authorised novel food	Conditions under which the novel food may be used		Additional specific labelling requirements	Other requirements
	Specified food category	*Maximum levels of DHA and EPA combined*		
	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 name of the fruit preparations as such and in any product in which it is used	
	Types of fruit: apple, apricot, banana, blackberry, blueberry, cherry, coconut, fig, grape, grapefruit, mandarin, mango, melon, peach, pear, pineapple, prune, raspberry, rhubarb, strawberry			
Phosphated maize starch	*Specified food category*	*Maximum levels*	The designation of the novel food on the labelling of the foodstuffs containing it shall be 'Phosphated maize starch'	
	Baked bakery products	15 %		
	Pasta			
	Breakfast cereals			
	Cereal bars			

Authorised novel food	Conditions under which the novel food may be used		Additional specific labelling requirements	Other requirements
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 be 'Fish phosphatidylserine'	
	Beverages based on yoghurt	50 mg/100 ml		
	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 be 'Soya phosphatidylserine'	
	Beverages based on yoghurt	50 mg/100 ml		
	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		
	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		
Phospholipid product containing equal amounts of phosphatidylserine and phosphatidic acid	*Specified food category*	*Maximum levels of phosphatidylserine*	The designation of the novel food on the labelling of the foodstuffs containing shall be 'Soy phosphatidylserine and phosphatidic acid'	The product is not intended to be marketed to pregnant or breast-feeding women
	Breakfast cereals	80 mg/100 g		
	Cereal bars	350 mg/100 g		

Authorised novel food	Conditions under which the novel food may be used		Additional specific labelling requirements	Other requirements
	Specified food category	*Maximum levels of phosphatidylserine*		
	Foods based on yogurt	80 mg/100 g		
	Soy-based yogurt-like products	80 mg/100 g		
	Yogurt based-drinks	50 mg/100 g		
	Soy-based yogurt-like drinks	50 mg/100 g		
	Powders based on milk powder	3,5 g/100 g (equivalent to 40 mg/100 ml ready-to drink)		
	Food Supplements as defined in Directive 2002/46/EC	800 mg/day		
	Foods for special medical purposes as defined in Regulation (EU) No 609/2013	In compliance with Regulation (EU) No 609/2013		
Phospholipides from egg yolk	*Specified food category*	*Maximum levels*		
	Not specified			
Phytoglycogen	*Specified food category*	*Maximum levels*	The designation of the novel food on the labelling of the foodstuffs containing it shall be 'Phytoglycogen'	
	Processed foods	25 %		
Phytosterols/phytostanols	*Specified food category*	*Maximum levels*	In accordance with Annex III.5 of Regulation (EU) No 1169/2011	
	Rice drinks	1. They 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 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		
	Rye bread with flour containing ≥ 50 % rye (wholemeal rye flour, whole or cracked rye kernels and rye flakes) and ≤ 30 % wheat; and with ≤ 4 % added sugar but no fat added.			
	Salad dressings, mayonnaise and spicy sauces.			

Authorised novel food	Conditions under which the novel food may be used		Additional specific labelling requirements	Other requirements
	Specified food category	*Maximum levels*		
	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.			
Plum kernel oil	*Specified food category*	*Maximum levels*		
	For frying and as seasoning	In line with normal food use of vegetable oils		
Potato proteins (coagulated) and hydrolysates thereof	Not specified		The designation of the novel food on the labelling of the foodstuffs containing it shall be 'Potato protein'	

Authorised novel food	Conditions under which the novel food may be used		Additional specific labelling requirements	Other requirements
Prolyl oligopeptidase (enzyme preparation)	*Specified food category*	*Maximum levels*	The designation of the novel food on the labelling of the foodstuffs containing it shall be 'Prolyl oligopeptidase'	
	Food Supplements as defined in Directive 2002/46/EC for general adult population	120 PPU/day (2,7 g of enzyme preparation/day) (2×10^6 PPI/day) PPU – Prolyl Peptidase Units or Proline Protease Units PPI – Protease Picomole International		
Protein extract from pig kidneys	*Specified food category*	*Maximum levels*		
	Food Supplements as defined in Directive 2002/46/EC	3 capsules/day; equalizing 12,6 mg pig kidney extract a day Diamine oxidase (DAO) content: 0,9 mg/day (3 capsules with a content of DAO of 0,3 mg/capsule)		
	Food for special medical purposes as defined in Regulation (EU) No 609/2013			
Rapeseed 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 be 'Rapeseed oil extract'	
	Food Supplements as defined in Directive 2002/46/EC	1,5 g per portion recommended for daily consumption		
Rapeseed Protein	As a vegetable protein source in foods except in infant formula and follow-on formula		1. The designation of the novel food on the labelling of the foodstuffs containing it shall be 'Rapeseed protein'. 2. 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.	

Authorised novel food	Conditions under which the novel food may be used		Additional specific labelling requirements	Other requirements
Trans-resveratrol	*Specified food category*	*Maximum levels*	1. The designation of the novel food on the labelling of the food supplements containing it shall be '*Trans*-resveratrol'. 2. The labelling of food supplements containing trans-resveratrol shall bear a statement that people using medicines should only consume the product under medical supervision.	
	Food Supplements as defined in Directive 2002/46/EC for adult population (capsule or tablet form)	150 mg/day		
Trans-resveratrol (microbial source)	*Specified food category*	*Maximum levels*	1. The designation of the novel food on the labelling of the food supplements containing it shall be '*Trans*-resveratrol'. 2. The labelling of food supplements containing trans-resveratrol shall bear a statement that people using medicines should only consume the product under medical supervision.	
	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*)		
Rooster comb extract	*Specified food category*	*Maximum levels*	The designation of the novel food on the labelling of the foodstuffs containing it shall be 'Rooster comb extract' or 'Cockerel comb extract'	
	Milk-based drinks	40 mg/100 g or mg/100 ml		
	Milk based fermented drinks	80 mg/100 g or mg/100 ml		
	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 *Plukenetia volubilis*	*Specified food category*	*Maximum levels*	The designation of the novel food on the labelling of the foodstuffs containing it shall be 'Sacha inchi oil (*Plukenetia volubilis*)'	
	As for linseed oil	In line with normal food use of linseed oil		

Authorised novel food	Conditions under which the novel food may be used		Additional specific labelling requirements	Other requirements
Salatrims	*Specified food category*	*Maximum levels*	1. The designation of the novel food on the labelling of the foodstuffs containing it shall be 'reduced energy fat (salatrims)'. 2. There shall be a statement that excessive consumption may lead to gastrointestinal disturbance. 3. There shall be a statement that the products are not intended for use by children.	
	Bakery products and confectionary			
***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 microalgae *Schizochytrium* sp.'	
	Food Supplements as defined in Directive 2002/46/EC for adult population excluding pregnant and lactating women	3 000 mg/day		
	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		
	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		

Authorised novel food	Conditions under which the novel food may be used		Additional specific labelling requirements	Other requirements
	Specified food category	*Maximum levels of DHA and EPA combined*		
	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)		
	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		

Authorised novel food	Conditions under which the novel food may be used		Additional specific labelling requirements	Other requirements
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 it shall be 'Oil from the microalgae _Schizochytrium_ sp. (ATCC PTA-9695)'	
	Dairy products except milk-based drinks	200 mg/100 g or for cheese products 600 mg/100 g		
	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		
	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 novel food may be used		Additional specific labelling requirements	Other requirements
	Specified food category	*Maximum levels of DHA*		
	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		
***Schizochytrium* sp. oil**	*Specified food category*	*Maximum levels of DHA*	The designation of the novel food on the labelling of the foodstuffs containing it shall be 'Oil from the microalgae *Schizochytrium* sp.'	
	Dairy products except milk-based drinks	200 mg/100 g or for cheese products 600 mg/100 g		
	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		

Authorised novel food	Conditions under which the novel food may be used		Additional specific labelling requirements	Other requirements
	Specified food category	*Maximum levels of DHA*		
	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		
	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		

Authorised novel food	Conditions under which the novel food may be used		Additional specific labelling requirements	Other requirements
***Schizochytrium* sp. (T18) oil**	*Specified food category*	*Maximum levels of DHA*	The designation of the novel food on the labelling of the foodstuffs containing it shall be 'Oil from the microalgae *Schizochytrium* sp.'	
	Dairy products except milk-based drinks	200 mg/100 g or for cheese products 600 mg/100 g		
	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		
	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 novel food may be used		Additional specific labelling requirements	Other requirements
	Specified food category	*Maximum levels of DHA*		
	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*	1. The designation of the novel food on the labelling of the foodstuffs containing it 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.	
	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		
Spermidine-rich wheat germ extract (*Triticum aestevium*)	*Specified food category*	*Maximum levels*	The designation of the novel food on the labelling of the food supplements containing it shall be 'spermidine-rich wheat germ extract'	
	Food Supplements as defined in Directive 2002/46/EC intended for the adult population	Equivalent of max. 6 mg/day spermidine		

Authorised novel food	Conditions under which the novel food may be used		Additional specific labelling requirements	Other requirements
Sucromalt	*Specified food category*	*Maximum levels*	1. The designation of the novel food on the labelling of the foodstuffs containing it shall be 'Sucromalt'. 2. The designation of the novel food on the labelling shall be accompanied by indication that the product is a source of glucose and fructose.	
	Not specified			
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 be 'Sunflower oil extract'	
	Food Supplements as defined in Directive 2002/46/EC	1,1 g/day		
Dried *Tetraselmis chuii* microalgae	*Specified food category*	*Maximum levels*	The designation of the novel food on the labelling of the foodstuffs containing it shall be 'Dried microalgae *Tetraselmis chuii*' or 'Dried microalgae *T. chuii*' Food supplements containing dried microalgae *Tetraselmis chuii* shall bear the following statement: 'Contains negligible amounts of iodine'	
	Sauces	20 % or 250 mg/day		
	Special salts	1 %		
	Condiment	250 mg/day		
	Food Supplements as defined in Directive 2002/46/EC	250 mg/day		

Authorised novel food	Conditions under which the novel food may be used		Additional specific labelling requirements	Other requirements
***Therapon barcoo*/Scortum**	Intended use identical to that of the salmon, namely the preparation of culinary fish products and dishes, including cooked, raw, smoked and baked fish products			
D-Tagatose	*Specified food category*	*Maximum levels*	1. The designation of the novel food on the labelling of the foodstuffs containing it 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'.	
	Not specified			
Taxifolin-rich extract	*Specified food category*	*Maximum levels*	The designation of the novel food on the labelling of the foodstuffs containing it shall be 'taxifolin-rich extract'.	
	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		
Trehalose	*Specified food category*	*Maximum levels*	1. The designation of the novel food on the labelling of the foodstuffs containing it 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'.	
	Not specified			

Authorised novel food	Conditions under which the novel 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 µg of vitamin D_2/100 g fresh weight	1. The designation on the label of the novel food as such or of the foodstuffs containing it shall be 'UV-treated mushrooms (*Agaricus bisporus*)'. 2. 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_2 levels'.	
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_2 yeast'	
	Yeast-leavened breads and rolls	5 µg of vitamin D_2/100 g		
	Yeast-leavened fine bakery wares	5 µg of vitamin D_2/100 g		
	Food Supplements as defined in Directive 2002/46/EC	5 µg of vitamin D_2/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_2/100 g		

Authorised novel food	Conditions under which the novel food may be used		Additional specific labelling requirements	Other requirements
UV-treated milk	*Specified food category*	*Maximum levels of vitamin D_3*	1. The designation on the label of the novel food shall be 'UV-treated'. 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) 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'.	
	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		
	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		
Vitamin K_2 (menaquinone)	To be used in compliance with Directive 2002/46/EC, Regulation (EU) No 609/2013 and/or Regulation (EC) No 1925/2006		The designation of the novel food on the labelling of the foodstuffs containing it shall be 'Menaquinone' or 'Vitamin K_2'	
Wheat bran extract	*Specified food category*	*Maximum levels*	The designation of the novel food on the labelling of the foodstuffs containing it shall be 'Wheat bran extract'	The 'Wheat Bran Extract' may not be introduced onto the market as a food supplement or food supplement ingredient. Nor may it be added to infant formula.
	Beer and substitutes	0,4 g/100 g		
	Ready to eat cereals	9 g/100 g		
	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 novel 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-glucans'	
	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 population 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		

Authorised novel food	Conditions under which the novel food may be used		Additional specific labelling requirements	Other requirements
	Specified food category	*Maximum levels of pure beta-glucans from yeast (Saccharomyces cervisiae)*		
	Wholegrain and high fibre instant hot breakfast cereals	1,5 g/kg		
	Cookie-type biscuits	6,7 g/kg		
	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 be 'synthetic zeaxanthin'	
	Food Supplements as defined in Directive 2002/46/EC	2 mg/day		

Authorised novel food	Conditions under which the novel food may be used		Additional specific labelling requirements	Other requirements
Zinc L-pidolate	*Specified food category*	*Maximum levels*	The designation of the novel food on the labelling of the foodstuffs containing it shall be 'Zinc L-pidolate'	
	Foods covered by Regulation (EU) No 609/2013	3 g/day		
	Milk based drinks and similar products intended for young children			
	Meal replacement for weight control			
	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			

(1) 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).

(2) 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).

(3) 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).

(4) 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)

(5) 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)

(6) 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).

Table 2: Specifications

Authorised Novel Food	Specification
N-Acetyl-D-neuraminic acid	**Description:** 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 %): ≤ 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 Residual proteins: < 0,01 % (w/w)

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	Residual solvents: 2-Propanol: < 0,1 % (w/w) Acetone: < 0,1 % (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* (Baobab) dried fruit pulp**	**Description/Definition:** The Baobab (*Adansonia digitata*) 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 µ) 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

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***Ajuga reptans* extract from cell cultures**	**Description/Definition:** Hydroalcoholic extract from *Ajuga reptans* L. tissue cultures which is substantially equivalent to extracts from flowering aerial parts of *Ajuga reptans* obtained by traditional cultures.
L-Alanyl-L-Glutamine	**Description/Definition:** L-Alanyl-L-Glutamine is produced by fermentation with a genetically modified strain of *Escherichia coli*. 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): ≤ 0,2 % Residue on ignition: ≤ 0,1 % Loss on drying: ≤ 0,5 % Optical rotation: + 9,0 - + 11,0° pH (1 %; H_2O): 5,0-6,0 Ammonium (NH_4): ≤ 0,020 % Chloride (Cl): ≤ 0,020 % Sulphate (SO_4): ≤ 0,020 % **Microbiological criteria:** *Escherichia coli*: Absence/g
Algal oil from the microalgae *Ulkenia* sp.	**Description/Definition:** Oil from the micro-algae *Ulkenia* sp. Acid value: ≤ 0,5 mg KOH/g Peroxide value (PV): ≤ 5,0 meq/kg oil Moisture and volatiles: ≤ 0,05 % Unsaponifiables: ≤ 4,5 % Trans-fatty acids: ≤ 1,0 % DHA content: ≥ 32 %

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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 leaf extract**	**Description/Definition:** Powdered gel extract derived from the leaves of *Aloe macroclada* 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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Antarctic Krill oil from *Euphausia superba*	**Description/Definition:** To produce lipid extract from Antarctic Krill (*Euphausia superba*) 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 (*Euphausia superba*) 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 O_2/kg oil Oxidative stability: All food products containing Antarctic Krill oil rich in phospholipids from *Euphausia superba* 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 *Mortierella alpina* 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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	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 *Argania spinosa* (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_2/kg
Astaxanthin-rich oleoresin from *Haematococcus pluvialis* algae	**Description/Definition:** Astaxanthin is a carotenoid produced by *Haematococcus pluvialis* 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_2 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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	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 (*Glycine max (L.) Merr.*) fermented with *Aspergillus oryzae*. The extract contains an α-glucosidase inhibitor. **Characteristics:** Fat: ≤ 1,0 % Protein: ≥ 55 %

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	Water: ≤ 7,0 % Ash: ≤ 10 % Carbohydrate: ≥ 20 % a-glucosidase inhibitory activity: IC50 min 0,025 mg/ml Soy isoflavone: ≤ 0,3 g/100 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
***Buglossoides arvensis* seed oil**	**Description/Definition:** Refined Buglossoides oil is extracted from the seeds of *Buglossoides arvensis* (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: ≤ 2,0 % w/w of total fatty acids Acid value: ≤ 0,6 mg KOH/g Peroxide value: ≤ 5,0 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

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***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) *Calanus finmarchicus*. 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_2/kg
Chewing gum base (monomethoxypolyethylene glycol)	**Description/Definition:** The novel food ingredient is a synthetic polymer (Patent number WO2006016179). It consists of branched polymers of monomethoxypolyethylene 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 % 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 %

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	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 anhydride copolymer)	**Description/Definition:** 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: ≤ 10 ppm **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

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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 CO_2. **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 hispanica*)	**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 **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 *Aspergillus niger*; 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).

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	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 *Fomes fomentarius*. 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): ≤ 1,00 Mercury (ppm): ≤ 0,03 Arsenic (ppm): ≤ 0,20

Authorised Novel Food	Specification
	Microbiological criteria: Total mesophilic bacteria: ≤ 10^3/g Yeast and moulds: ≤ 10^3/g Coliforms at 30 °C: ≤ 10^3/g *E. coli*: ≤ 10/g *Salmonella* and other pathogenic bacteria: Absence/25 g
Chitosan extract from fungi (*Agaricus bisporus*; *Aspergillus niger*)	**Description/Definition:** The chitosan extract (containing mainly poly(D-glucosamine)) is obtained from stems of *Agaricus bisporus* or from the mycelium of *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 Degree of acetylation (in % mol/wet weight): 0-30 Viscosity (1 % in 1 % acetic acid) (mPa.s): 1-14 for chitosan from Aspergillus niger; 12-25 for chitin from *Agaricus bisporus* Ash (% w/dry weight): ≤ 3,0 Proteins (% w/dry weight): ≤ 2,0 Particle size: > 100 nm Taped density (g/cm^3): 0,7-1,0 Fat binding capacity 800 × 9 w/wet weight): pass

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	Heavy metals: Mercury (ppm): ≤ 0,1 Lead (ppm): ≤ 1,0 Arsenic (ppm): ≤ 1,0 Cadmium (ppm): ≤ 0,5 **Microbiological criteria:** Aerobic count (CFU/g): ≤ 10^3 Yeast and mould count (CFU/g): ≤ 10^3 *Escherichia coli* (CFU/g): ≤ 10 Enterobacteriaceae (CFU/g): ≤ 10 *Salmonella*: Absence/25 g *Listeria monocytogenes*: Absence/25 g
Chondroitin sulphate	**Description/Definition:** Chondroitin sulphate (sodium salt) is a biosynthetic product. It is obtained by chemical sulphation of chondroitin derived from fermentation by the bacterium *Escherichia coli* O5:K4:H4 strain U1-41 (ATCC 24502). Chondroitin sulphate (sodium salt) (% dry basis): 95-105 MWw (weight avg.) (kDa): 5-12 MWn (number avg.) (kDa): 4-11 Dispersity ($w_h/w_{0,05}$): ≤ 0,7 Sulphation pattern (ΔDi-6S) (%): ≤ 85 Loss on drying (%) (105 °C to constant weight): ≤ 10,0 Residue on ignition (% dry basis): 20-30 Protein (% dry basis): ≤ 0,5 Endotoxins (EU/mg): ≤ 100 Total organic impurities (mg/kg): ≤ 50
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

Authorised Novel Food	Specification
	Chemical formula: $Cr(C_6H_4NO_2)_3$ Chemical characteristics: Chromium Picolinate: ≥ 95 % Chromium (III): 12-13 % Chromium (VI): not detected Water: ≤ 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 Vitamin E: 40–50 mg Alpha-Tocopherol: 20–50 mg Beta and Gamma-Tocopherols: 2–15 mg Delta-Tocopherol: 0,1–2 mg

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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: $C_{14}H_{26}N_4O_{11}P_2$ 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): ≤ 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: ≤ 10^3 CFU/g Yeast and moulds: ≤ 10^2 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.
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: ≤ 10^3 CFU/g *Escherichia coli*: Not detected in 1 g

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	Staphylococcus aureus: Not detected in 1 g *Pseudomonas aeruginosa*: Not detected in 1 g Yeast and moulds: ≤ 10^2 CFU/g
Extract of defatted cocoa powder	Cocoa (*Theobroma cacao* L.) Extract 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^3 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 %
Coriander seed oil from *Coriandrum sativum*	**Description/Definition:** 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 %

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	Linoleic acid (C18:2): 12-19 % α-Linolenic acid (C18:3): < 1,0 % Trans fatty acids: ≤ 1,0 % **Purity:** Refractive index (20°C): 1,466-1,474 Acid value: ≤ 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* dried fruit**	**Description/Definition:** 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.
α-cyclodextrin	**Description/Definition:** A non-reducing cyclic saccharide consisting of six α-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 α-cyclodextrin may be carried out using one of the following procedures: precipitation of a complex of α-cyclodextrin with 1-decanol, dissolution in water at elevated temperature and re-precipitation, steam-stripping of the complexant, and crystallisation of α-cyclodextrin from the solution; or chromatography with ion-exchange or gel filtration followed by crystallisation of α-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. Synonyms: α-cyclodextrin, α-dextrin, cyclohexaamylose, cyclomaltohexaose, α-cycloamylase Chemical name: Cyclohexaamylose

Authorised Novel Food	Specification
	CAS No.: 10016-20-3 Chemical formula: $(C_6H_{10}O_5)_6$ 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 α-cyclodextrin in a chromatogram of reference α-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: ≤ 0,5 % (as glucose) Sulphated ash: ≤ 0,1 % Lead: ≤ 0,5 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 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_2 (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

Authorised Novel Food	Specification
	Procedure: Inject the sample solution into the chromatograph, record the chromatogram, and measure the area of the α-CD peak. Calculate the percentage of α-cyclodextrin in the test sample as follows: % α-cyclodextrin (dry basis) = 100 × (AS/AR) (WR/WS) where As and AR are the areas of the peaks due to α-cyclodextrin for the sample solution and reference solution, respectively. Ws and WR are the weights (mg) of the test sample and reference α-cyclodextrin, respectively, after correcting for water content.
γ-cyclodextrin	**Description/Definition:** A non-reducing cyclic saccharide consisting of eight α-1,4-linked D-glucopyranosyl units produced by the action of cyclodextrin glucosyltransferase (CGTase, 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 8-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: γ-cyclodextrin, γ-dextrin, cyclooctaamylose, cyclomaltooctaose, γ-cycloamylase Chemical name: Cyclooctaamylose CAS number: 17465-86-0 Chemical formula: $(C_6H_{10}O_5)_8$ Assay: ≥ 98 % (dry basis) **Identification:** Melting range: Decomposes above 285 °C Solubility: Freely soluble in water; very slightly soluble in ethanol 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 %
Dextran preparation produced by *Leuconostoc mesenteroides*	1. **Powdered form:** Carbohydrates: 60 % with: (Dextran: 50 %, Mannitol: 0,5 %, Fructose: 0,3 %, Leucrose: 9,2 %) Protein: 6,5 % Lipid: 0,5 %

Authorised Novel Food	Specification
	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 %
Diacylglycerol oil of plant origin	**Description/Definition:** 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): ≥ 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: ≤ 0,5 mg KOH/g Moisture and volatile: ≤ 0,1 % Peroxide value: ≤ 1,0 meq/kg Unsaponifiables: ≤ 2,0 % Trans fatty acids≤ 1,0 % MAG = monoacylglycerols, DAG = diacylglycerols, TAG = triacylglycerols

Authorised Novel Food	Specification
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_{18} H_{28} O_4 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 %
Dried extract of *Lippia citriodora* from cell cultures	**Description/Definition: Dried extract of cell cultures HTN®Vb of *Lippia citriodora* (Palau) Kunth**.
***Echinacea angustifolia* extract from cell cultures**	Extract of the roots of *Echinacea angustifolia* obtained from tissue culture plant which is substantially equivalent to a root extract from *Echinacea angustifolia* 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 *Echium plantagineum* L. Stearidonic acid: ≥ 10 % w/w of total fatty acids Trans fatty acids: ≤ 2,0 % (w/w of total fatty acids) Acid value: ≤ 0,6 mg KOH/g Peroxide value: ≤ 5,0 meq O_2/kg Unsaponifiable content: ≤ 2,0 % Protein content (total nitrogen): ≤ 20 µg/ml Pyrrolizidine alkaloids: Not detectable with a detection limit 4,0 µg/kg
Epigallocatechin gallate as a purified extract from green tea leaves (*Camellia sinensis*)	**Description/Definition:** 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

<table>
<tr><th>Authorised Novel Food</th><th>Specification</th></tr>
<tr><td></td><td>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</td></tr>
<tr><td>L-ergothioneine</td><td>Definition
Chemical name (IUPAC): (2S)-3-(2-thioxo-2,3-dihydro-1H-imidazol-4-yl)-2-(trimethylammonio)-Propanoate
Chemical formula: $C_9H_{15}N_3O_2S$
Molecular mass: 229,3 Da
CAS No.: 497-30-3
<table>
<tr><th>Parameter</th><th>Specification</th><th>Method</th></tr>
<tr><td>Appearance</td><td>White powder</td><td>Visual</td></tr>
<tr><td>Optical rotation</td><td>$[\alpha]_D \geq (+)\ 122°$ (c = 1, H_2O)[a)]</td><td>Polarimetry</td></tr>
<tr><td>Chemical purity</td><td>≥ 99,5 %
≥ 99,0 %</td><td>HPLC [Eur. Ph. 2.2.29]
1H-NMR</td></tr>
<tr><td>Identification</td><td>Compliant with the structure</td><td>1H-NMR</td></tr>
<tr><td></td><td>C: 47,14 ± 0,4 %
H: 6,59 ± 0,4 %
N: 18,32 ± 0,4 %</td><td>Elemental analysis</td></tr>
<tr><td>Total residual solvents
(methanol, ethyl acetate, isopropanol, ethanol)</td><td>[Eur. Ph. 01/2008:50400]
< 1 000 ppm</td><td>Gas chromatography
[Eur. Ph. 01/2008:20424]</td></tr>
<tr><td>Loss on drying</td><td>Internal standard < 0,5 %</td><td>[Eur. Ph. 01/2008:20232]</td></tr>
<tr><td>Impurities</td><td>< 0,8 %</td><td>HPLC/GPC or 1H-NMR</td></tr>
</table></td></tr>
</table>

Authorised Novel Food	Specification		
	Parameter	**Specification**	**Method**
	Heavy metals[b) c)]		
	Lead	< 3,0 ppm	ICP/AES
	Cadmium	< 1,0 ppm	(Pb, Cd)
	Mercury	< 0,1 ppm	Atomic fluorescence (Hg)
	Microbiological specifications[b)]		
	Total viable aerobic count (TVAC)	≤ 1×10^3 CFU/g	[Eur. Ph. 01/2011:50104]
	Total yeast and mould count (TYMC)	≤ 1×10^2 CFU/g	
	Escherichia coli	Absence in 1 g	
	Eur. Ph.: European Pharmacopoeia; 1H-NMR: proton nuclear magnetic resonance; HPLC: high-performance liquid chromatography; GPC: gel permeation chromatography; ICP/AES: Inductively coupled plasma atomic emission spectroscopy; CFU: colony-forming units.		
	a) Lit. $[\alpha]_D$ = (+) 126,6° (c = 1, H_2O)		
	b) Analyses conducted on each batch		
	c) Maximum levels in accordance with Regulation (EC) No 1881/2006		
Ferric Sodium EDTA	**Description/Definition:**		
	Ferric Sodium EDTA (ethylenediaminetetraacetic acid) is an odourless free-flowing, yellow to brown powder with a chemical purity of more than 99 % (w/w). It is freely soluble in water.		
	Chemical formula: $C_{10}H_{12}FeN_2NaO_8 \cdot 3H_2O$		
	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 %		
Ferrous ammonium phosphate	**Description/Definition:**		
	Ferrous ammonium phosphate is a grey/green fine powder, practically insoluble in water and soluble in dilute mineral acids.		
	CAS No.: 10101-60-7		

Authorised Novel Food	Specification
	Chemical formula: $FeNH_4PO_4$ Chemical characteristics: pH of 5 % suspension in water: 6,8-7,8 Iron (total): ≥ 28 % Iron (II): 22-30 % (w/w) Iron (III): ≤ 7,0 % (w/w) Ammonia: 5-9 % (w/w) Water: ≤ 3,0 %
Fish peptides from *Sardinops sagax*	**Description/Definition:** The novel food ingredient is a peptide mixture, which is obtained by an alkaline protease-catalysed hydrolysis of fish (*Sardinops sagax*) 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: ≤ 10 g/100 g Moisture: ≤ 8 g/100 g (*) Kjeldahl method
Flavonoids from *Glycyrrhiza glabra*	**Description/Definition:** Flavonoids derived from the roots or rootstock of *Glycyrrhiza glabra* 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 Glabridin: 2,5-3,5 % of fat Glycyrrhizinic acid: < 0,005 % Fat including polyphenol-type substances: ≥ 99 % Protein: < 0,1 % Carbohydrates: not detectable

Authorised Novel Food	Specification
Fucoidan extract from the seaweed *Fucus vesiculosus*	**Description/Definition:** Fucoidan from the seaweed *Fucus vesiculosus* 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: 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 %

Authorised Novel Food	Specification
	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 seaweed *Undaria pinnatifida*	**Description/Definition:** Fucoidan from seaweed *Undaria pinnatifida* 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 **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 %

Authorised Novel Food	Specification
	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 %
2′-Fucosyllactose (synthetic)	**Definition:** Chemical name: α-l-Fucopyranosyl-(1→2)-β-d-galactopyranosyl-(1→4)-d-glucopyranose Chemical formula: $C_{18}H_{32}O_{15}$ 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: ≤ 1,0 w/w % L-Fucose: ≤ 1,0 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 (%): ≤ 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 %

<table>
<tr><th>Authorised Novel Food</th><th colspan="2">Specification</th></tr>
<tr><td></td><td colspan="2">Heavy Metals:
Palladium: ≤ 0,1 mg/kg
Nickel: ≤ 3,0 mg/kg
Microbiological criteria:
Aerobic mesophilic bacteria total count: ≤ 500 CFU/g
Yeasts and Moulds: ≤ 10 CFU/g
Residual endotoxins: ≤ 10 EU/mg</td></tr>
<tr><td rowspan="3">2′-Fucosyllactose (microbial source)</td><td colspan="2">Definition:
Chemical name: α-L-Fucopyranosyl-(1→2)-β-D-galactopyranosyl-(1→4)-D-glucopyranose
Chemical formula: $C_{18}H_{32}O_{15}$
CAS No: 41263-94-9
Molecular weight: 488,44 g/mol</td></tr>
<tr><td>Source:
Genetically modified strain of Escherichia coli K-12</td><td>Source:
Genetically modified strain of Escherichia coli BL21</td></tr>
<tr><td>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:
2′-Fucosyllactose: ≥ 94 %
D-Lactose: ≤ 3,0 %
L-Fucose: ≤ 1,0
Difucosyl-D-lactose: ≤ 1,0 %
2′-Fucosyl-D-lactulose: ≤ 1,0 %
pH (20 °C, 5 % solution): 3,2-5,0
Water: ≤ 5,0 %
Ash, sulphated: ≤ 1,5 %
Acetic acid: ≤ 1,0 %
Residual proteins: ≤ 0,01 %</td><td>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 a microbiological process. 2′-Fucosyllactose is isolated by spray drying.
Purity:
2′-Fucosyllactose: ≥ 90 %
Lactose: ≤ 5,0 %
Fucose: ≤ 3,0 %
3-Fucosyllactose: ≤ 5,0 %
Fucosylgalactose: ≤ 3,0 %
Difucosyllactose: ≤ 5,0 %
Glucose: ≤ 3,0 %
Galactose: ≤ 3,0 %
Water: ≤ 9,0 % (powder)
Ash, sulphated: ≤ 0,5 % (powder and liquid)
Residual proteins: ≤ 0,01 % (powder and liquid)</td></tr>
</table>

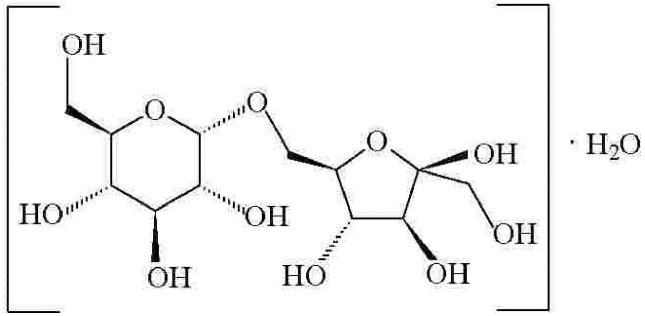
Authorised Novel Food	Specification	
	Microbiological criteria: Aerobic mesophilic bacteria total count: ≤ 500 CFU/g Yeasts: ≤ 10 CFU/g Moulds: ≤ 100 CFU/g Endotoxins: ≤ 10 EU/mg	**Heavy Metals:** Lead: ≤ 0,02 mg/kg (powder and liquid); Arsenic: ≤ 0,2 mg/kg (powder and liquid) Cadmium: ≤ 0,1 mg/kg (powder and liquid) Mercury: ≤ 0,5 mg/kg (powder and liquid) **Microbiological criteria:** Total plate count: ≤ 10^4 CFU/g (powder), ≤ 5 000 CFU/g (liquid) Yeasts and Moulds: ≤ 100 CFU/g (powder); ≤ 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: ≤ 100 EU/g (powder), ≤ 100 EU/ml (liquid) Aflatoxin M1: ≤ 0,025 µg/kg (powder and liquid)
Galacto-oligosaccharide	**Description/Definition:** **Galacto-oligosaccharide is produced from milk lactose by an enzymatic process using β-galactosidases from *Aspergillus oryzae, Bifidobacterium bifidum* 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	
Glucosamine HCl from *Aspergillus niger* and genetically modified strain of *E. Coli* K12	White crystalline odourless powder Molecular formula: $C_6H_{13}NO_5 \cdot HCl$ Relative molecular mass: 215,63 g/mol D-Glucosamine HCl 98,0-102,0 % of reference standard (HPLC) Specific rotation + 70,0° - + 73,0°	

Authorised Novel Food	Specification
Glucosamine sulphate KCl from *Aspergillus niger* and genetically modified strain of *E. Coli* K12	White crystalline odourless powder Molecular formula: $(C_6H_{14}NO_5)_2SO_4 \cdot 2KCl$ 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°
Glucosamine sulphate NaCl from *Aspergillus niger* and genetically modified strain of *E. Coli* K12	White crystalline odourless powder Molecular formula: $(C_6H_{14}NO_5)_2SO_4 \cdot 2NaCl$ Relative molecular mass: 573,31 g/mol D-Glucosamine HCl: 98-102 % of reference standard (HPLC) Specific Optical Rotation: + 52° - + 54°
Guar Gum	**Description/Definition:** Native guar gum is the ground endosperm of seeds from natural strains of guar *Cyamopsis tetragonolobus* L. Taub. (*Leguminosae* 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 Colour: White Odour: Light Average diameter of particles: 60-70 µm Moisture: Max 15 % Viscosity (*) at 1 hour —

Authorised Novel Food	Specification
	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 products fermented with *Bacteroides xylanisolvens*	**Description/Definition:** Heat-treated fermented milk products are produced with *Bacteroides xylanisolvens* (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 *Bacteroides xylanisolvens* (DSM 23964). The resulting fermented milk product is homogenised and then heat-treated to inactivate *Bacteroides xylanisolvens* (DSM 23964). The final product does not contain viable cells of *Bacteroides xylanisolvens* (DSM 23964) (*). (*) Modified DIN EN ISO 21528-2.
Hydroxytyrosol	**Description/Definition:** Hydroxytyrosol is a pale yellow viscous liquid obtained by chemical synthesis Molecular formula: $C_8H_{10}O_3$ Molecular weight: 154,6 g/mol CAS No: 10597-60-1 Moisture ≤ 0,4 % Odour: Characteristic

Authorised Novel Food	Specification
	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: ≤ 0,03 mg/kg Cadmium: ≤ 0,01 mg/kg Mercury: ≤ 0,01 mg/kg **Residual Solvents** Ethyl acetate: ≤ 25,0 mg/kg Isopropanol: ≤ 2,50 mg/kg Methanol: ≤ 2,00 mg/kg Tetrahydrofuran: ≤ 0,01 mg/kg
Ice Structuring Protein type III HPLC 12	**Description/Definition:** 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: ≤ 2,0 % DNA: Not detectable
Aqueous extract of dried leaves of *Ilex guayusa*	**Description/Definition:** Dark brown liquid. Aqueous extracts of dried leaves of *Ilex guayusa*.

Authorised Novel Food	Specification
	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-oligosaccharide	**Powder:** Solubility (water) (%): > 99 Glucose (% dry basis): ≤ 5,0 Isomaltose + DP3 to DP9 (% dry basis): ≥ 90 Moisture (%): ≤ 4,0 Sulphated ash (g/100 g): ≤ 0,3 **Heavy metals:** Lead (mg/kg): ≤ 0,5 Arsenic (mg/kg): ≤ 0,5 **Syrup:** Dried solids (g/100 g): > 75 Glucose (% dry basis): ≤ 5,0 Isomaltose + DP3 to DP9 (% dry basis): ≥ 90 pH: 4 - 6 Sulphated ash (g/100 g): ≤ 0,3 **Heavy metals:** Lead (mg/kg): ≤ 0,5 Arsenic (mg/kg): ≤ 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

Authorised Novel Food	Specification
	Chemical name: 6-O-α-D-glucopyranosyl-D-fructofuranose, monohydrate CAS No.: 13718-94-0 Chemical formula: $C_{12}H_{22}O_{11} \cdot H_2O$ Structural formula  Formula weight: 360,3 (monohydrate) **Purity:** Assay: ≥ 98 % on the dry basis Loss on drying: ≤ 6,5 % (60 °C, 5 hours) **Heavy metals:** Lead: ≤ 0,1 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: $C_{12}H_{24}O_{11}$ Molecular weight: 344,31 g/mol CAS No: 585-86-4

Authorised Novel Food	Specification
	Purity: Solubility (in water): Very soluble in water Specific rotation [α] D20 = + 13° to + 16° Assay: ≥ 95 % d.b (d.b - expressed on the dry weight basis) Water: ≤ 10,5 % Other polyols: ≤ 2,5 % d.b Reducing sugars: ≤ 0,2 % d.b Chlorides: ≤ 100 mg/kg d.b Sulphates: ≤ 200 mg/kg d.b Sulphated ash: ≤ 0,1 % d.b Nickel: ≤ 2,0 mg/kg d.b Arsenic: ≤ 3,0 mg/kg d.b Lead: ≤ 1,0 mg/kg d.b
Lacto-N-neotetraose (synthetic)	**Definition:** Chemical name: β-d-Galactopyranosyl-(1→4)-2-acetamido-2-deoxy-β-d-glucopyranosyl-(1→3)-β-d-galactopyranosyl-(1→4)-d-glucopyranose Chemical formula: $C_{26}H_{45}NO_{21}$ 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: ≤ 0,4 % Acetic acid: ≤ 0,3 %

Authorised Novel Food	Specification
	Residual solvents (methanol, 2-propanol, methyl acetate, acetone): ≤ 50 mg/kg singly, ≤ 200 mg/kg in combination Residual proteins: ≤ 0,01 % Palladium: ≤ 0,1 mg/kg Nickel: ≤ 3,0 mg/kg **Microbiological criteria:** Aerobic mesophilic bacteria total count: ≤ 500 CFU/g Yeasts: ≤ 10 CFU/g Moulds: ≤ 10 CFU/g Residual endotoxins: ≤ 10 EU/mg
Lacto-N-neotetraose (microbial source)	**Definition:** Chemical name: β-d-Galactopyranosyl-(1→4)-2-acetamido-2-deoxy-β-d-glucopyranosyl-(1→3)-β-d-galactopyranosyl-(1→4)-d-glucopyranose Chemical formula: $C_{26}H_{45}NO_{21}$ CAS No: 13007-32-4 Molecular weight: 707,63 g/mol **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 %

Authorised Novel Food	Specification
	Microbiological criteria: Aerobic mesophilic bacteria total count: ≤ 500 CFU/g Yeasts: ≤ 10 CFU/g Moulds: ≤ 10 CFU/g Residual endotoxins: ≤ 10 EU/mg
Lucerne leaf extract from *Medicago sativa*	**Description/Definition:** The Lucerne (*Medicago sativa* 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 % 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 ≥ 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

Authorised Novel Food	Specification
Lycopene from *Blakeslea trispora*	**Description/Definition:** The purified lycopene from *Blakeslea trispora* consists of ≥ 95 % lycopene and ≤ 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 from tomatoes	**Description/Definition:** The purified lycopene from tomatoes (*Lycopersicon esculantum* L.) consists of ≥ 95 % lycopene and ≤ 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 (*Lycopersicon esculentum Mill.*) 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.

Authorised Novel Food	Specification
	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): Colourless to yellowish Appearance (20 % aqueous solution): Clear solution pH (20 % aqueous solution): Approx. 6,0 **Impurities:** Chloride: ≤ 0,05 % Sulphate: ≤ 0,05 % Arsenic: ≤ 3,0 ppm Lead: ≤ 2,0 ppm Cadmium: ≤ 1 ppm Mercury: ≤ 0,1 ppm
Magnolia Bark Extract	**Description/Definition:** Magnolia bark extract is obtained from the bark of the plant *Magnolia officinalis* 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 %

Authorised Novel Food	Specification
	Heavy metals: Arsenic (ppm): ≤ 0,5 Lead (ppm): ≤ 0,5 Methyl eugenol (ppm): ≤ 10 Tubocurarine (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 (%): 68-89 % δ-tocopherol (%): < 7,0 % 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: ≤ 10 mEq O_2/kg **Heavy metals:** Iron (Fe): < 1 500 µg/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 in unsaponifiable matter'

Authorised Novel Food	Specification
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: $C_6H_7O_2(OR1)(OR2)(OR3)$ where R1, R2, R3 each may be one of the following: — H — CH_3 or — CH_2CH_3 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 ($-OCH_3$) and not more than 5 % of hydroxyethoxyl groups ($-OCH_2CH_2OH$) 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: ≤ 1,5 % determined at 800 ± 25 °C pH: ≥ 5,0 and ≤ 8,0 (1 % colloidal solution) **Heavy metals:** Arsenic: ≤ 3,0 mg/kg Lead: ≤ 2,0 mg/kg Mercury: ≤ 1,0 mg/kg Cadmium: ≤ 1,0 mg/kg
(6S)-5-methyltetrahydrofolic acid, glucosamine salt	**Description/Definition:** 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: $C_{32}H_{51}N_9O_{16}$ Molecular weight: 817,80 g/mol (anhydrous) CAS No.: 1181972-37-1 Appearance: Creamy to light-brown powder

Authorised Novel Food	Specification
	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: ≤ 2,0 ppm Cadmium: ≤ 1,0 ppm Mercury: ≤ 0,1 ppm Arsenic: ≤ 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_6O_3Si Molecular weight: 94,14 g/mol CAS No: 2445-53-6 **Purity:** Organic Silicon (monomethylsilanetriol) preparation (aqueous solution): Acidity (pH): 6,4-6,8 Silicon: 100-150 mg Si/l **Heavy metals:** Lead: ≤ 1,0 µg/l Mercury: ≤ 1,0 µg/l Cadmium: ≤ 1,0 µg/l Arsenic: ≤ 3,0 µg/l **Solvents:** Methanol: ≤ 5,0 mg/kg (residual presence)

Authorised Novel Food	Specification
Mycelial extract from Shiitake mushroom (*Lentinula edodes*)	**Description/Definition:** The novel food ingredient is a sterile aqueous extract obtained from the mycelium of *Lentinula edodes* 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 5×10^5 Daltons, a degree of branching of 2/5 and a triple helical tertiary structure. **Purity/Composition of the mycelial extract from *Lentinula edodes*:** 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 *Morinda citrifolia* 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).
Noni fruit puree and concentrate (*Morinda citrifolia*)	**Description/Definition:** The fruits of *Morinda citrifolia* are harvested by hand. Seeds and skin may be separated mechanically from the pureed fruits. After pasteurisation, the puree is packaged in aseptic containers and stored under cold conditions.

Authorised Novel Food	Specification
	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: ≤ 0,4 g/100 g Ash: < 1,0 g/100 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 (*): ≤ 0,254 µg/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 (*): ≤ 0,254 µg/ml (*) By an HPLC-UV method developed and validated for the analysis of anthraquinones in *Morinda citrifolia* 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).

Authorised Novel Food	Specification
Noni leaves (*Morinda citrifolia*)	**Description/Definition:** After cutting, the leaves of *Morinda citrifolia* 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 fruit powder (*Morinda citrifolia*)	**Description/Definition:** Noni fruit powder is made from pulped noni (*Morinda citrifolia L.*) 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 *Morinda citrifolia* fruit powder. Limits of detection: 2,5 ng/ml (5,15 dimethyl-morindol)

Authorised Novel Food	Specification
***Odontella aurita* microalgae**	Silicon: 3,3 % Crystalline silica: max 0,1-0,3 % as impurity
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 % campesterol: ≤ 40 % campestanol: ≤ 5,0 % stigmasterol: ≤ 30 % brassicasterol ≤ 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: ≤ 0,5 KOH/g oil Peroxide value: ≤ 5 meq O_2/kg oil p-Anisidine value: ≤ 20 Cold test at 0 °C: ≤ 3 hours Moisture: ≤ 0,1 % (w/w) Unsaponifiable matter: ≤ 5,0 %

Authorised Novel Food	Specification		
	Trans fatty acids: ≤ 1,0 % Docosahexaeonic acid: ≥ 20 % Eicosapentaenoic acid: ≥ 10 %		
Pasteurised fruit-based preparations produced using high-pressure treatment	**Parameter**	**Target**	**Comments**
	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
	pH	3,2 to 4,2	
	° Brix	7 to 42	Assured by added sugars
	a_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: $(C_6H_{10}O_5)_n$ $[(C_6H_9O_5)_2PO_2H]x$ $[(C_6H_9O_5)PO_3H_2]y$ 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		

Authorised Novel Food	Specification
Phosphatidylserine from fish phospholipids	**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 O_2/kg ([1]) Tocopherols may be added as antioxidants according to Commission Regulation (EU) No 1129/2011
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 % Phosphatidylserine: ≥ 61 % Glycerides: < 2,0 % free L-serine: < 1,0 % Tocopherols: < 0,3 % Phytosterols: < 0,2 % **Liquid form:** Moisture: < 2,0 % Phospholipids: ≥ 25 %

Authorised Novel Food	Specification
	Phosphatidylserine: ≥ 20 % 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 $(C_6H_{12}O_6)$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 %

Authorised Novel Food	Specification
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 (*Prunus domestica*) 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

Authorised Novel Food	Specification
Prolyl oligopeptidase (enzyme preparation)	**Specification of the enzyme:** Systematic name: Prolyl oligopeptidase Synonyms: Prolyl endopeptidase, proline-specific endopeptidase, endoprolylpeptidase Molecular 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: ≤ 1,0 mg/kg Arsenic: ≤ 1,0 mg/kg Cadmium: ≤ 0,5 mg/kg Mercury: ≤ 0,1 mg/kg **Microbiological criteria:** Total aerobic plate count: ≤ 10^3 CFU/g Total yeasts and moulds: ≤ 10^2 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

Authorised Novel Food	Specification
	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/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
Protein extract from pig kidneys	**Description/Definition:** 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: < 10^5 CFU/g Yeasts/moulds count: < 10^5 CFU/g *Salmonella*: Absence/10g Bile salt resistant enterobacteriaceae: < 10^4 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

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	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: < 10^4 CFU/g Total combined yeasts/moulds count: < 10^3 CFU/g *Salmonella*: Absence/10g Bile salt resistant enterobacteriaceae: < 10^2 CFU/g
Rapeseed oil high in unsaponifiable 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 (%): 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 % linolenic acid: 6-14 % erucic acid: < 2,0 % Acid value: ≤ 6,0 mg KOH/g Peroxide value: ≤ 10 mEq O_2/kg

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	Heavy metals: Iron (Fe): < 1 000 µg/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 'rapeseed oil high in unsaponifiable matter'.
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: ≤ 4,0 % Fibre: ≤ 0,5 % Total glucosinolates: ≤ 1 mmol/kg **Purity:** Total phytate: ≤ 1,5 % Lead: ≤ 0,5 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: $C_{14}H_{12}O_3$ Molecular weight: 228,25 Da CAS No: 501-36-0 **Purity:** *Trans*-resveratrol: ≥ 98 %-99 % Total by-products (related substances): ≤ 0,5 % Any single related substance: ≤ 0,1 % 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 and precipitation steps. The principal constituents of rooster comb extract are the glycosaminoglycans hyaluronic acid, chondroitin sulphate A and dermatan sulphate (chondroitin sulphate B). White or almost white hygroscopic powder. Hyaluronic acid: 60-80 % Chondroitin sulphate A: ≤ 5,0 %

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	Dermatan sulphate (chondroitin sulphate B): ≤ 25 % pH: 5,0-8,5 **Purity:** Chlorides: ≤ 1,0 % Nitrogen: ≤ 8,0 % Loss on drying: (105 °C for 6 hours): ≤ 10 % **Heavy metals:** Mercury: ≤ 0,1 mg/kg Arsenic: ≤ 1,0 mg/kg Cadmium: ≤ 1,0 mg/kg Chromium: ≤ 10 mg/kg Lead: ≤ 0,5 mg/kg **Microbiological criteria:** Total viable aerobic count: ≤ 10^2 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 *Plukenetia volubiis* 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 O_2/kg Trans fatty acids: < 1,0 g/100 g Total unsaturated fatty acids: > 90 %

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	Omega 3 alpha linolenic acid (ALA): > 45 % Saturated fatty acids: < 10 % No trans fatty acids (< 0,5 %) No erucic acid (< 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 inter-esterification 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 % Diacylglycerols: ≤ 10 % Monoacylglycerols: ≤ 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: ≤ 1,0 % Free fatty acids as oleic acid: ≤ 0,5 % Triacylglycerol profile: Triesters (short/long of 0,5 to 2,0): ≥ 90 % Triesters (short/long = 0): ≤ 10 % Unsaponifiable material: ≤ 1,0 % Moisture: ≤ 0,3 % Ash: ≤ 0,1 % Colour: ≤ 3,5 Red (Lovibond) Peroxide value: ≤ 2,0 Meq/Kg

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***Schizochytrium* sp. oil rich in DHA and EPA**	Acid value: ≤ 0,5 mg KOH/g Peroxide value: ≤ 5,0 meq/kg oil Oxidative stability: All food products containing *schizochytrium* sp. oil rich in DHA and EPA should demonstrate oxidative stability by appropriate and recognised national/international test methodology (e.g. AOAC) Moisture and volatiles: ≤ 0,05 % Unsaponifiables: ≤ 4,5 % Trans-fatty acids: ≤ 1 % DHA content: ≥ 22,5 % EPA content: ≥ 10 %
***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 %
***Schizochytrium* sp. oil**	Acid value: ≤ 0,5 mg KOH/g Peroxide value (PV): ≤ 5,0 meq/kg oil Moisture and volatiles: ≤ 0,05 % Unsaponifiables: ≤ 4,5 % Trans-fatty acids: ≤ 1,0 % DHA content: ≥ 32,0 %
***Schizochytrium* sp. (T18) oil**	Acid value: ≤ 0,5 mg KOH/g Peroxide value: ≤ 5,0 meq/kg oil Moisture and volatiles: ≤ 0,05 % Unsaponifiables: ≤ 3,5 % Trans-fatty acids: ≤ 2,0 % Free fatty acids: ≤ 0,4 % DHA content: ≥ 35 %

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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 K_2 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 (*Glycine max* (L.)) with a selected strain of *Bacillus subtilis* 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: ≤ 10^3 CFU ([3])/g Yeast and mould: ≤ 10^2 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 (*Triticum aestevium*) by the process of solid-liquid extraction targeting specifically, but not exclusively polyamines. Spermidine: 0,8-2,4 mg/g Spermine: 0,4-1,2 mg/g Spermidine trichloride < 0,1 µg/g

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	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: < 100 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 *Leuconostoc citreum* or by means of a recombinant strain of the production organism *Bacillus licheniformis*. The resulting oligosaccharides are characterised by the presence of α-(1→6) and α-(l→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.

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	Moisture: ≤ 7,0 % Ash: ≤ 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): ≤ 0,1 Lead (ppm): ≤ 1,0 Arsenic (ppm): ≤ 1,0 Cadmium (ppm): ≤ 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, *Helianthus Annuus* L. **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 *Tetraselmis chuii*, belonging to the *Chlorodendraceae* family, cultivated in sterile sea water in closed photobioreactors insulated from the outside air.

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	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 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

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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: $C_6H_{12}O_6$ 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: $[\alpha]20_D$: – 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 materials (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	**Description:** Taxifolin-rich extract from the wood of Dahurian Larch (*Larix gmelinii* (Rupr.) Rupr) is a white to pale-yellow powder that crystallizes from hot aqueous solutions. **Definition:** Chemical name: [(2R,3R)-2-(3,4 dihydroxyphenyl)-3,5,7-trihydroxy-2,3-dihydrochromen-4-one, also called (+) trans (2R,3R)- dihydroquercetin] Chemical formula: $C_{15}H_{12}O_7$ Molecular mass: 304,25 Da CAS No: 480-18-2 **Specifications:** *Physical parameter* Moisture: ≤ 10 %

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	Compound analysis Taxifolin (m/m): ≥ 90,0 % of the dry weight ***Heavy Metals, Pesticide*** Lead: ≤ 0,5 mg/kg Arsenic: ≤ 0,02 mg/kg Cadmium: ≤ 0,5 mg/kg Mercury: ≤ 0,1 mg/kg Dichlorodiphenyltrichloroethane (DDT): ≤ 0,05 mg/kg ***Residual solvents*** Ethanol: < 5 000 mg/kg ***Microbiological criteria*** Total Plate Count (TPC): ≤ 10^4 CFU/g Enterobacteria: ≤ 100/g Yeast and Mould: ≤ 100 CFU/g *Escherichia coli*: Absence/1 g *Salmonella*: Absence/10 g *Staphylococcus aureus*: Absence/1 g *Pseudomonas*: Absence/1 g **Usual range of components of the Taxifolin-rich extract (as per dry substance)** *Extract component* — *Content, usual observed range (%)* Taxifolin — 90 – 93 Aromadendrin — 2,5 – 3,5 Eriodictyol — 0,1 – 0,3 Quercetin — 0,3 – 0,5 Naringenin — 0,2 – 0,3 Kaempferol — 0,01 – 0,1 Pinocembrin — 0,05 – 0,12 Unidentified flavonoids — 1 - 3 Water (*) — 1,5 (*) Taxifolin in its hydrated form and during the drying process is a crystal. This results on the inclusion of water of crystallisation in a quantity of 1,5 %.

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Trehalose	**Description/Definition:** A non-reducing disaccharide that consists of two glucose moieties linkes by an α-1,1-glucosidic bond. It is obtained from liquefied starch by a multistep 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: $C_{12}H_{22}O_{11} \cdot 2H_2O$ (dihydrate) Formula weight: 378,33 (dihydrate) Assay: ≥ 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 based 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 known 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 = $100 \times (R_U/R_S)\ (W_S/W_U)$

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	where R_S = peak area of trehalose in the standard preparation R_U = peak area of trehalose in the sample preparation W_S = weight in mg of trehalose in the standard preparation W_U = weight of dry sample in mg **Characteristics:** Identification: Solubility: Freely soluble in water, very slightly soluble in ethanol Specific rotation: [α]D20 + 199° (5 % aqueous solution) Melting point: 97 °C (dihydrate) **Purity:** Loss on drying: ≤ 1,5 % (60 °C, 5 h) Total ash: ≤ 0,05 % **Heavy metals:** Lead: ≤ 1,0 mg/kg
UV treated mushrooms (*Agaricus bisporus*)	**Description/Definition:** Commercially grown *Agaricus bisporus* 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_2:** 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_2 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_2 (ergocalciferol). Vitamin D_2 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 D_2: 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: ≤ 10^3/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_2 (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/cm^2. **Vitamin D_2:** 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_2 (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_3 (cholecalciferol) concentrations by conversion of 7-dehydrocholesterol to vitamin D_3. UV radiation: A process of radiation in ultraviolet light within the wavelength of 200-310 nm with energy input of 1 045 J/l.

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	Vitamin D_3: 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]ethylidene]-4-methylidenecyclohexan-1-ol Synonym: Cholecalciferol CAS No: 67-97-0 Molecular weight: 384,6377 g/mol **Contents:** Vitamin D_3 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_2 (menaquinone)	This novel food is produced by a synthetic or microbiological process. ***Specification of synthetic Vitamin K_2 (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: $C_{46}H_{64}O_2$ 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_2 (menaquinone-7)*** Source: *Bacillus subtilis* spp. natto Vitamin K_2 (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_2 (menaquinones) series with menaquinone-7 (MK-7)(n = 6) being $C_{46}H_{64}O_2$, menaquinone-6 (MK-6)(n = 5) being $C_{41}H_{56}O_2$ and menaquinone-4 (MK-4)(n = 3) being $C_{31}H_{40}O_2$.

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Wheat bran extract	**Description/Definition:** White crystalline powder obtained by enzymatic extraction from *Triticum aestivum* 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 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 β-1-3-linked glucose residues that are branched by β-1-6-linkages, to which chitin and mannoproteins are linked by β-1-4-bonds. Beta-glucans are isolated from yeast *Saccharomyces cerevisiae*. The tertiary structure of the glucan cell wall of *Saccharomyces cerevisiae* consists of chains of β-1,3-linked glucose residues, branched by β-1,6-linkages, forming a backbone to which are linked chitin via β-1,4- bonds, β-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 %

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	Beta-glucans (1,3/1,6): > 75 % Ash: < 4,0 % Moisture: < 8,0 % Protein: < 3,5 % Fat: < 10 % **Insoluble form:** Total carbohydrates: > 70 % 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)-β-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 mg/g Arsenic: < 0,2 mg/g

Authorised Novel Food	Specification
	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 α-tocopherol and ascorbyl palmitate or as a corn oil suspension with added α-tocopherol. Synthetic zeaxanthin is produced by a multi-step chemical synthesis from smaller molecules. Orange-red crystalline powder with little or no odour. Chemical formula: $C_{40}H_{56}O_2$ 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: $(C_5H_6NO_3)_2$ 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 %

Authorised Novel Food	Specification
	Heavy metals: Lead: ≤ 3,0 ppm Arsenic: ≤ 2,0 ppm Cadmium: ≤ 1,0 ppm Mercury: ≤ 0,1 ppm **Microbiological criteria:** Total viable mesophilic count: ≤ 1 000 CFU/g Yeasts and moulds: ≤ 100 CFU/g Pathogen: Absence

(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)