

Ingredients Seminar
Dansk Mejeriteknisk Selskab
Ingredients and additives and how to label them
Claims and Organic foods



What is an "ingredient" in the food legislation

The term "ingredient" is defined in the Food Information Regulation (1169/2011) as:

Any substance or product, including flavourings, food additives and food enzymes, and any constituent of a compound ingredient, used in the manufacture or preparation of a food and still present in the finished product, even if in an altered form.

Residues shall not be considered as 'ingredients'.

 $\frac{https://eur-lex.europa.eu/legal-content/EN/TXT/PDF/?uri=CELEX:02011R1169-20180101\&qid=1613046658767\&from=DA$



How ingredients should be labelled and the legal framework for labeling of foodstuffs

The list of ingredients according to Regulation 1169/2011

The list of ingredients shall be headed or preceded by a suitable heading which consists of or includes the word 'ingredients'.

It shall include all the ingredients of the food, in descending order of weight, as recorded at the time of their use in the manufacture of the food.

Examples of ingredients: milk, fruit, microbial cultures, additives, flavours, some enzymes, novel food ingredients etc.

https://www.foedevarestyrelsen.dk/SiteCollectionDocuments/Kemi%20og% 20foedevarekvalitet/Mærkning/Maerkningsvejledningen%20maj%202018.pdf



Definition of food additive

Food additives are any substance not normally consumed as a food in itself and not normally used as a characteristic ingredient of food, whether or not it has nutritive value, the intentional addition of which to food for a technological purpose in the manufacture, processing, preparation, treatment, packaging, transport or storage of such food results, or may be reasonably expected to result, in it or its by-products becoming directly or indirectly a component of such foods.

E-numbers from E 100 to E 1521 In total 402 approved food additives

Examples for labelling:

Colour: E100 or Curcumin

Gelling agent: E440 or Pectins



Definition of processing aid

Processing aid is any substance which:

- (i) is not consumed as a food by itself;
- (ii) is intentionally used in the processing of raw materials, foods or their ingredients, to fulfil a certain technological purpose during treatment or processing; and
- (iii) may result in the unintentional but technically unavoidable presence in the final product of residues of the substance or its derivatives provided they do not present any health risk and do not have any technological effect on the final product;

Examples:

Anti-foaming agent for the process of washing potatoes

Enzymes in different food processes e.g. dairy, baking or brewing.



The legal framework for food additives

Additives can be used in food according to Regulation 1333/2008 on food additives.

The approvals are build up as a positive list also available in the EU-database:

https://webgate.ec.europa.eu/foods_system/main/?event=display

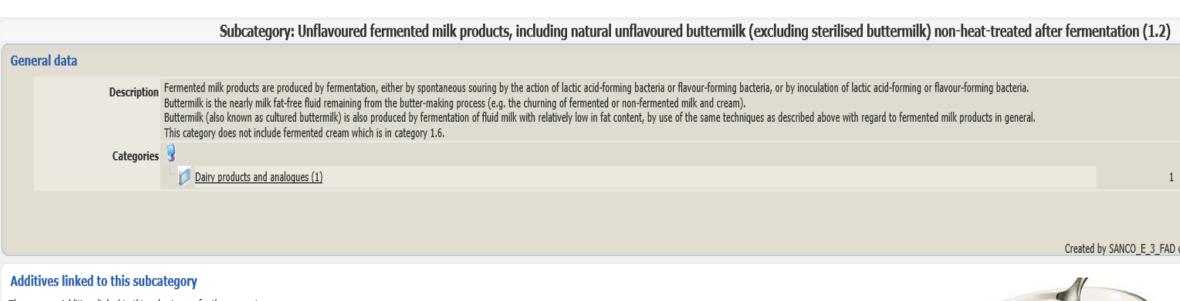
Conditions for approval of food additives:

- (a) it does not, on the basis of the scientific evidence available, pose a safety concern to the health of the consumer at the level of use proposed;
- (b) there is a reasonable technological need that cannot be achieved by other economically and technologically practicable means;
- (c) its use does not mislead the consumer.



Yoghurt can be placed in two food categories

1.2 Unflavoured fermented milk products, including natural unflavoured buttermilk (excluding sterilised buttermilk) non-heat-treated after fermentation



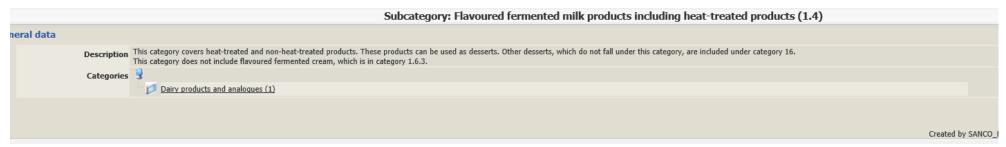
There are no Additives linked to this subcategory for the moment.





Yoghurt can be placed in two food categories

1.4 Flavoured fermented milk products including heat-treated products



ditives linked to this subcategory

E No.	Additive name	Maximum limit, restrictions / exceptions
E 104	Quinoline Yellow	ML = 10 mg/l
E 110	Sunset Yellow FCF/Orange Yellow S	 ML = 5 mg/l
E 124	Ponceau 4R, Cochineal Red A	ML = 5 mg/l
E 160b(i)	Annatto bixin	 ML = 15 mg/l
E 160b(ii)	Annatto norbixin	ML = 4 mg/l
E 160d	<u>Lycopene</u>	ML = 30 mg/l
E 200 - 213	Sorbic acid – potassium sorbate; Benzoic acid – benzoates	ML = 300 mg/l , only non-heat treated dairy-based desserts
E 297	Fumaric acid	ML = 4000 mg/l , only fruit-flavoured desserts
E 338 - 341, E 343 and E 450 - 452	Phosphoric acid - phosphates - di - tri- and polyphosphates	ML = 3000 mg/l
E 355 - 357	Adipic acid - adipates	ML = 1000 mg/l , only fruit-flavoured desserts
E 363	Succinic acid	ML = 6000 mg/l
E 416	Karaya gum	ML = 6000 mg/l
E 427	Cassia qum	ML = 2500 mg/l
E 432 - 436	Polysorbates	ML = 1000 mg/l
E 473 - 474	Sucrose esters of fatty acids-sucroglycerides	ML = 5000 mg/l
E 475	Polyglycerol esters of fatty acids	ML = 2000 mg/l
E 477	Propane-1,2-diol esters of fatty acids	ML = 5000 mg/l
E 481 - 482	Sodium and Calcium stearoyl-2-lactylates	ML = 5000 mg/l
E 483	Stearyl tartrate	ML = 5000 mg/l
E 491 - 495	Sorbitan esters	ML = 5000 mg/l
E 950	Acesulfame K	ML = 350 mg/l , only energy-reduced products or with no added sugar
E 951	<u>Aspartame</u>	ML = 1000 mg/l , only energy-reduced products or with no added sugar
E 952	Cyclamic acid and its Na and Ca salts	ML = 250 mg/l , only energy-reduced products or with no added sugar
E 954	Saccharin and its Na, K and Ca salts	ML = 100 mg/l , only energy-reduced products or with no added sugar



A short overview of the legal framework for claims

Regulation No 1924/2006 on nutrition and health claims made on foods.

https://eur-lex.europa.eu/legal-content/EN/TXT/PDF/?uri=CELEX:02006R1924-20141213&from=DA

A claim is any message or representation, which is not mandatory under Community or national legislation, including pictorial, graphic or symbolic representation, in any form, which states, suggests or implies that a food has particular characteristics.



https://ec.europa.eu/food/safety/labelling_nutrition/claims/register/public/?event=register.h_ome

https://www.foedevarestyrelsen.dk/Leksikon/Sider/Ernaerings-og-sundhedsanprisninger.aspx



Nutrition and health claims

Nutrition claim is any claim which states, suggests or implies that a food has particular beneficial nutritional properties.

"Sugarfree", "high content of fibers" or "contains omega-3 fatty acids".

Health claim is any claim that states, suggests or implies that a relationship exists between a food category, a food or one of its constituents and health;

"Calcium is needed for the maintenance of normal bones"

"Live cultures in yoghurt or fermented milk improve lactose digestion of the product in individuals who have difficulty digesting lactose" (with the condition: yoghurt or fermented milk should contain at least 10% Colony Forming Units live starter microorganisms (Lactobacillus delbrueckii subsp. bulgaricus and Streptococcus thermophilus) per gram.)



Ingredients allowed in organic processed food

- A minimum organic content of 95% of organic agricultural ingredients
- EU restrictive lists / national authorization for the remaining 5% of the agricultural ingredients that are not available as organic in sufficient quantities
- Non-agricultural ingredients only when authorised under organic rules
 - Added water and cooking salt
 - Micro-organisms and enzymes, additives, natural flavourings
 - Vitamins and minerals etc. added to foodstuffs for specific nutritional purposes, if their use is mandatory (however special requirements for baby food)
- Prohibition on the use of ionizing radiation and GMOs and products produced from or by GMOs
- Requirement on mass balance recordkeeping concerning organic ingredients throughout the whole chain from farm to fork. Concerning other ingredients, compliance has to be documented by the operator.



Thank you!

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