



**Ministry of Food, Agriculture  
and Fisheries of Denmark**

Danish Veterinary and  
Food Administration

# Ingredients Seminar

## Dansk Mejeriteknisk Selskab

### Ingredients and additives and how to label them

### Claims and Organic foods

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# 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’.



<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/Mærkningsvejledningen%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](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

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

### General data

**Description** Fermented milk products are produced by fermentation, either by spontaneous souring by the action of lactic acid-forming bacteria or flavour-forming bacteria, or by inoculation of lactic acid-forming or flavour-forming bacteria. Buttermilk is the nearly milk fat-free fluid remaining from the butter-making process (e.g. the churning of fermented or non-fermented milk and cream). Buttermilk (also known as cultured buttermilk) is also produced by fermentation of fluid milk with relatively low in fat content, by use of the same techniques as described above with regard to fermented milk products in general. This category does not include fermented cream which is in category 1.6.

### Categories

 Dairy products and analogues (1)

1

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### Additives linked to this subcategory

*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

**Subcategory: Flavoured fermented milk products including heat-treated products (1.4)**

**General data**

**Description** This category covers heat-treated and non-heat-treated products. These products can be used as desserts. Other desserts, which do not fall under this category, are included under category 16. This category does not include flavoured fermented cream, which is in category 1.6.3.

**Categories** Dairy products and analogues (1)

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### Substances linked to this subcategory

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

<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  $10^8$  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.





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# Thank you!

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