

The fat content is also important.

Yoghurt made from full-fat milk is more tolerable for patients than low-fat yoghurt. The fat means that the yoghurt remains in the intestines for longer and the enzymes can break down the lactose better. This also applies to other foodstuffs containing lactose. It is therefore advisable to consume milk products at the same time as foodstuffs containing fat during a meal. However, there are also yoghurts that contain a relatively high proportion of lactose due to the addition of powdered milk. These are not very well tolerated. Anyone who is very sensitive or produces no lactase whatsoever must take note of even tiny quantities of lactose and ensure a lactose-free diet.



The following foodstuffs may contain lactose in small quantities:

- Flavourings
- Baked goods
- Binders
- Spreads
- Salad dressing
- Mayonnaise
- Margarine
- Ready meals
- Sweets
- Sweetener tablets
- Sausage products, including ham
- Spice mixes
- Thickening agents
- Muesli mixes
- Bran tablets
- Preserved vegetables, e.g. gherkins

The following foods are lactose- and milk-free:

- Meat/fish
- Fruit and vegetables (when fresh)
- Nuts
- Potatoes, pasta, rice
- Pulses
- Grains, cereals
- Herbs, spices
- Fruit juices, mineral water, tea, coffee
- Special low-lactose milk (2.5 g of lactose per litre)

Alternative: Lactase tablets

An alternative to a diet low in lactose is the option of taking the enzyme lactase, which is required for the digestion of lactose, in tablet form before every meal. This may reduce the restrictions necessary when selecting food to a tolerable level and also allow foods that are less well tolerated to be consumed in exceptional circumstances (e.g. in restaurants or when visiting acquaintances). Lactase preparations increase lactose absorption in the intestines and thus ensure that food containing lactose is tolerated better. Furthermore, the consumption of probiotic foods that are mixed with live lactic acid bacteria may lead to an improvement in symptoms. Lactobacillus acidophilus, lactobacillus rhamnosus and bifidobacterium in particular are said to make a beneficial contribution to digestion thanks to their positive effect on intestinal flora in humans.

Supply of calcium – preventing osteoporosis

Milk and milk products are important suppliers of calcium in our diet. To prevent osteoporosis, calcium requirements should still be covered in the event of lactose intolerance.

The following are advisable:

- Switching to calcium-containing mineral water/tap water
- Foods that contain lots of calcium should be increasingly included in meals (e.g. poppyseed, kale, sesame, broccoli, sardines, almonds, fennel)
- Alternative switch to soured milk products (e.g. soured milk, crème fraîche, sour cream or heavy sour cream (schmand))
- Calcium supplements in the form of calcium preparations are also possible as an alternative

Presented by:

practice stamp

Lactose intolerance

Lactase deficiency



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Lactose intolerance

The lactose (milk sugar) contained in food is normally broken down in the small intestine by the enzyme lactase. But in the case of lactose intolerance, there is a shortage of the enzyme lactase. This results in the lactose not being broken down and reaching the large intestine without having been digested. Here it is fermented, thus triggering certain symptoms.

Symptoms

Lactose that has not been broken down triggers typical symptoms in the large intestine: bloating, flatulence, heartburn, diarrhoea, nausea, hypoglycaemia and irritable bowel symptoms. Symptoms such as headaches and indisposition (a feeling of being ill) may also occur.

Lactose intolerance or a lactoprotein allergy?

Lactose intolerance is often confused with a lactoprotein allergy. However, the two are unrelated.

Lactose intolerance is an adverse food reaction due to a shortage of an enzyme. Unlike in an allergy, the immune system does not intervene in this case and there are no antibodies formed.

In the event of lactose intolerance, the consumption of lactose should be restricted or completely eliminated.

Generally

Lactose is contained in cow's milk and all products that are prepared with milk. Sheep's milk and goat's milk also contain lactose, and processing the milk, for example by boiling it, does not lead to the breakdown of the lactose contained. Lactose is also frequently added to foodstuffs as a stabiliser and emulsifier. The required degree of abstinence from lactose-containing foodstuffs depends on the severity of the illness, in other words on the amount of lactose that is tolerated. This ranges from complete intolerance to slight intolerance. It is rare for intolerance reactions to occur in the event of small amounts of lactose (less than 3 g), meaning that the consumption of food with small quantities of lactose spread throughout the day is usually tolerated without any problems. Symptoms often only occur with lactose quantities of 10 g and above.

Dependence of lactose intolerance on the severity of the illness:

Severity	Lactose (g) per day that is tolerated with no symptoms
Slight	8 - 10g
Medium	up to 1g
Severe	none

Nutritional therapy

People suffering from lactose intolerance therefore need to adhere to a dietetic treatment regime. For this purpose, it is necessary to study declared food contents. In Germany, all important components of a food must be listed on the packaging by law, ordered according to the amount contained. However, the contents of so-called food additives do not have to be listed if they make up less than 25 % of the additive. As already mentioned, lactose is often used as a flavour carrier or as an emulsifier (e.g. in sausage) and does not have to be declared in this case. Some manufacturers provide a

full declaration of all contents on packaging. By stating that it is a full declaration, they guarantee accuracy and correctness.

Medicines

Medicines, vitamin preparations and toothpaste may also contain lactose. Please ask your doctor about lactose-free alternatives. **Always read the list of contents on the packaging carefully when making a purchase!**

Unsuitable foods

The following foods contain lactose in large quantities and are thus not suitable or are suitable only in small quantities (in the event of slight lactose intolerance):

Unsuitable foods

Milk and milk products	Milk, cheese*, dried milk, blancmange and similar desserts, milkshakes, cocoa, sweet dishes, coffee creamers, condensed milk, cream, quark, cottage cheese, processed cheese, cheese preparations
Bread and baked goods	Bread and cake mixes, rolls made with milk, waffles, cakes, biscuits, crispbreads, crackers
Ready-made meals	Frozen ready meals, preserved foods, frozen preparations, e.g. vegetable preparations
Confectionary	Ice cream, chocolate, toffees and caramels, sweet bars, chocolate spread, chocolates
Sausages	Liver sausage, low-fat sausage products, tinned sausages
Instant products	Instant soups and sauces, instant pudding mixes, powdered mashed potato, dumpling mixes, vegetarian patty mixes
Ready-made sauces	Gourmet sauces, barbecue sauces, salad dressings, mayonnaise
Other products	Muesli mixes, margarine products, spreads

* During cheese production, lactose is largely broken down through fermentation. The amount of lactose that is converted into lactic acid depends on the coagulation and storage period.

Generally:

The more mature the cheese, the less lactose it contains.

Cheese with a low lactose content:

Blue cheese	<0.1 g / 100 g
Emmental cheese	<0.1 g / 100 g
Parmesan cheese	0.05-3.2 g / 100 g
Cheshire cheese 50 %	0.3 g / 100 g
Jerome cheese	<0.1 g / 100 g
Wine cheese	<0.1 g / 100 g
Raclette cheese	<0.1 g / 100 g
Camembert cheese 45 %	0.1-1.8 g / 100 g

Fresh cheese with a significant amount of lactose:

Fresh cheese 50 %	3.4 g / 100 g
Feta 45 %	0.5-4.1 g / 100 g
Cottage cheese 20 %	3.3 g / 100 g

Remember!

Foodstuffs from health food shops and whole-food shops generally contain full declarations and the advice: lactose-free or milk-free.

In the event of lactose intolerance, it is often advisable to switch to soured milk products as an alternative:

Yoghurt, soured milk, kefir, whey, sour cream, heavy sour cream (schmand), crème fraîche and other products made from soured milk are often tolerated well because the lactose that they contain has already been broken down to a large extent through lactic acid bacteria. However, tolerance of such products should be individually tested!