Lactose intolerance is a condition in which people have symptoms due to the decreased ability to digest lactose, a sugar found in dairy products. Those affected vary in the amount of lactose they can tolerate before symptoms develop. Symptoms may include abdominal pain, bloating, diarrhea, gas, and nausea. These symptoms typically start thirty minutes to two hours after eating or drinking milk-based food. Severity typically depends on the amount a person eats or drinks. Lactose intolerance does not cause damage to the gastrointestinal tract.

Since lactose dairy products obstruct or weaken stomach acid, most of the bloating, pain, gas come from the blockage of the HCl acid. Lactose Dairy products should not be taken with meals. The person thinks they are lactose intolerant but it might just be poor food combining.

True Lactose intolerance is due to the lack of enzyme lactase in the small intestines to break lactose down into glucose and galactose. There are four types: primary, secondary, developmental, and congenital. Primary lactose intolerance occurs as the amount of lactase declines as people age. Secondary lactose intolerance is due to injury to the small intestine such as from infection, celiac disease, inflammatory bowel disease, or other diseases. Developmental lactose intolerance may occur in premature babies and usually improves over a short period of time. Congenital lactose intolerance is an extremely rare genetic disorder in which little or no lactase is made from birth.

Diagnosis may be confirmed if symptoms resolve following eliminating lactose from the diet. Other supporting tests include a hydrogen breath test and a stool acidity test. Other conditions that may produce similar symptoms include irritable bowel syndrome, celiac disease, and inflammatory bowel
Lactose intolerance is different from a milk allergy. Management is typically by decreasing the amount of lactose in the diet, taking lactase supplements, or treating the underlying disease. People are usually able to drink at least one cup of milk per sitting without developing significant symptoms, with greater amounts tolerated if drunk with a meal or throughout the day.

The exact number of adults with lactose intolerance is unknown. One estimate puts the average at 65% of the global population. Rates of lactose intolerance vary between regions, from less than 10% in Northern Europe to as high as 95% in parts of Asia and Africa. Onset is typically in late childhood or early adulthood. The ability to digest lactose into adulthood evolved in several human populations independently, probably as an adaptation to the domestication of dairy animals 10,000 years ago.

People with lactose intolerance often avoid eating dairy products. This is usually because they are concerned that dairy may cause unwanted and potentially embarrassing side effects.

However, dairy foods are very nutritious, and not all of them are high in lactose.

This article explores 6 dairy foods that are low in lactose.

What Is Lactose Intolerance?

Borderline to extreme Lactose intolerance is a very common digestive problem. In fact, it affects around 75% of the world's population.

Interestingly, it's most prevalent in Asia and South America, but much less common in parts of the Western world like North America, Europe and Australia.
Those who have it don’t have enough of an enzyme called lactase. Produced in your gut, lactase is needed to break down lactose, the main sugar found in milk.

Without lactase, lactose can pass through your gut undigested and cause unpleasant symptoms like nausea, pain, gas, bloating and diarrhoea (1Trusted Source).

Fear of developing these symptoms can lead people with this condition to avoid foods that contain lactose, such as dairy products.

However, this isn’t always necessary, as not all dairy foods contain enough lactose to cause problems for people with an intolerance.

In fact, it’s thought that many people with an intolerance can eat up to 12 grams of lactose at a time without experiencing any symptoms (3Trusted Source).

To put that in perspective, 12 grams is the amount found in 1 cup (230 ml) of milk.

Additionally, some dairy foods are naturally low in lactose. Below are 6 of them.

1. **Butter**

   Butter is a very high-fat dairy product that’s made by churning cream or milk to separate its solid fat and liquid components.

   The final product is around 80% fat, as the liquid part of milk, which contains all the lactose, is removed during processing (4).

   This means that the lactose content of butter is really low. In fact, 3.5 ounces (100 grams) of butter contain only 0.1 grams (4).

   Levels this low are unlikely to cause problems, even if you have an intolerance (1Trusted Source).

   If you are concerned, it’s worth knowing that butter made from fermented milk products and clarified butter contain even less lactose than regular butter.

   So unless you have another reason to avoid butter, ditch the dairy-free spread.
SUMMARY: Butter is a very high-fat dairy product that contains only trace amounts of lactose. This means it's usually fine to include in your diet if you have a lactose intolerance.

2. Hard Cheese

Cheese is made by adding bacteria or acid to milk and then separating the cheese curds that form from the whey.

Given that the lactose in milk is found in the whey, a lot of it is removed when cheese is being made.

However, the amount found in cheese can vary, and cheeses with the lowest amounts are the ones that have been aged the longest.

This is because the bacteria in cheese are able to break down some of the remaining lactose, lowering its content. The longer a cheese is aged, the more lactose is broken down by the bacteria in it (5Trusted Source).

This means that aged, hard cheeses are often very low in lactose. For example, 3.5 ounces (100 grams) of cheddar cheese contain only trace amounts of it (6).

Cheeses that are low in lactose include Parmesan, Swiss and cheddar. Moderate portions of these cheeses can often be tolerated by people with lactose intolerance (6, 7, 8, 9Trusted Source).

Cheeses that tend to be higher in lactose include cheese spreads, soft cheeses like Brie or Camembert, cottage cheese and mozzarella.

What's more, even some higher-lactose cheeses may not cause symptoms in small portions, as they tend to still contain less than 12 grams of lactose.

SUMMARY: The amount of lactose can vary between different types of cheese. In general, cheeses that have been aged longer, such as cheddar, Parmesan and Swiss, have low levels.
3. Probiotic Yogurt

People with lactose intolerance often find yogurt much easier to digest than milk (10Trusted Source, 11Trusted Source, 12Trusted Source).

This is because most yogurts contain live bacteria that can help break down lactose, so you don't have as much to digest yourself (13Trusted Source, 14Trusted Source, 15Trusted Source).

For example, one study compared how well lactose was digested after drinking milk and consuming a probiotic yogurt (12Trusted Source).

It found that when people with lactose intolerance ate the yogurt, they were able to digest 66% more lactose than when they drank the milk.

The yogurt also caused fewer symptoms, with only 20% of people reporting digestive distress after eating the yogurt, compared to 80% after drinking the milk (10Trusted Source).

It’s best to look for yogurts labelled "probiotic," which means they contain live cultures of bacteria. Yogurts that have been pasteurized, which kills the bacteria, may not be as well tolerated (10Trusted Source).

Additionally, full-fat and strained yogurts like Greek and Greek-style yogurt could be an even better choice for people with lactose intolerance.

This is because full-fat yogurts contain more fat and less whey than low-fat yogurts.

Greek and Greek-style yogurts are also lower in lactose because they are strained during processing. This removes even more of the whey, making them naturally much lower in lactose.

**SUMMARY:** Lactose intolerant people often find yogurt much easier to digest than milk. The best yogurt for people with lactose intolerance is a full-fat, probiotic yogurt that contains live bacterial cultures.
4. Some Dairy Protein Powders

Choosing a protein powder can be tricky for those who are lactose intolerant.

This is because protein powders are usually made from the proteins in milk whey, which is the lactose-containing, liquid part of milk.

Whey protein is a popular choice for athletes, especially those who are trying to build muscle.

However, the amount found in whey protein powders can vary, depending on how the whey is processed.

There are three main types of whey protein powder:

- **Whey concentrate**: Contains around 79–80% protein and a small amount of lactose (16).

- **Whey isolate**: Contains around 90% protein and less lactose than whey protein concentrate (17).

- **Whey hydrolysate**: Contains a similar amount of lactose as whey concentrate, but some of the proteins in this powder have already been partially digested (18Trusted Source).

The best choice for lactose-sensitive individuals is probably whey isolate, which contains the lowest levels.

Nevertheless, the lactose content can vary considerably between brands, and most people have to experiment to see which protein powder brand works best for them.

**SUMMARY**: Dairy protein powders have been processed to remove a lot of their lactose. However, whey protein concentrate contains more of it than whey isolates, which may be a better choice for sensitive individuals.

5. Kefir
Kefir is a fermented beverage that's traditionally made by adding "kefir grains" to animal milk (19Trusted Source).

Like yogurt, kefir grains contain live cultures of bacteria that help break down and digest the lactose in milk.

This means kefir may be better tolerated by people with lactose intolerance, when consumed in moderate quantities.

In fact, one study found that compared to milk, fermented dairy products like yogurt or kefir could reduce symptoms of intolerance by 54–71% (20Trusted Source).

**SUMMARY:** Kefir is a fermented milk beverage. Like yogurt, the bacteria in kefir break down lactose, making it more digestible.

6. Heavy Cream

Cream is made by skimming off the fatty liquid that rises to the top of milk.

Different creams can have different amounts of fat, depending on the ratio of fat to milk in the product.

Heavy cream is a high-fat product that contains around 37% fat. This is a higher percentage than that of other creams like half and half and light cream (21).

It also contains almost no sugar, which means its lactose content is very low. In fact, a half ounce (15 ml) of heavy cream only contains around 0.5 grams.

Therefore, small amounts of heavy cream in your coffee or with your dessert shouldn't cause you any problems.

**SUMMARY:** Heavy cream is a high-fat product that contains almost no lactose. Using small amounts of heavy cream should be tolerable for most people who are lactose intolerant.
The Bottom Line

Contrary to popular belief, it is not necessary for lactose-intolerant individuals to avoid all dairy products.

In fact, some dairy products — such as the 6 discussed in this article — are naturally low in lactose.

In moderate amounts, they're usually well tolerated by lactose-intolerant people.

Milk substitutes

Further information: Milk § Reduction or elimination of lactose, and Milk substitute

Plant-based "milks" and derivatives such as soy milk, rice milk, almond milk, coconut milk, hazelnut milk, oat milk, hemp milk, macadamia nut milk, and peanut milk are inherently lactose-free. Low-lactose and lactose-free versions of foods are often available to replace dairy-based foods for those with lactose intolerance.[63]

Lactase supplements

When lactose avoidance is not possible, or on occasions when a person chooses to consume such items, then enzymatic lactase supplements may be used.[64][65]

Lactase enzymes similar to those produced in the small intestines of humans are produced industrially by fungi of the genus Aspergillus. The enzyme, β-galactosidase, is available in tablet form in a variety of doses, in many countries without a prescription. It functions well only in high-acid
environments, such as that found in the human gut due to the addition of gastric juices from the stomach. Unfortunately, too much acid can denature it,\textsuperscript{[66]} so it should not be taken on an empty stomach. Also, the enzyme is ineffective if it does not reach the small intestine by the time the problematic food does. Lactose-sensitive individuals can experiment with both timing and dosage to fit their particular needs.

While essentially the same process as normal intestinal lactose digestion, direct treatment of milk employs a different variety of industrially produced lactase. This enzyme, produced by yeast from the genus \textit{Kluyveromyces}, takes much longer to act, must be thoroughly mixed throughout the product, and is destroyed by even mildly acidic environments. Its main use is in producing the lactose-free or lactose-reduced dairy products sold in supermarkets.\textsuperscript{[citation needed]}

\textbf{Rehabitation to dairy products}

Regular consumption of dairy foods containing lactose can promote a colonic bacteria adaptation, enhancing a favorable microbiome, which allows people with primary lactase deficiency to diminish their intolerance and to consume more dairy foods.\textsuperscript{[45][48][67]} The way to induce tolerance is based on progressive exposure, consuming smaller amounts frequently, distributed throughout the day.\textsuperscript{[68]} Lactose intolerance can also be managed by ingesting live yogurt cultures containing \textit{lactobacilli} that are able to digest the lactose in other dairy products. This may explain why many South Asians, though genetically lactose intolerant, are able to consume large quantities of milk without many symptoms of lactose intolerance, since consuming live yogurt cultures is very common among the South Asian population.\textsuperscript{[69]}
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