Lactose intolerance

Key points

- Lactose intolerance is a condition where your body has trouble digesting lactose, a sugar found in dairy foods such as milk. Eating foods high in lactose can lead to unpleasant symptoms like bloating, gas, stomach cramps and diarrhoea.
- Lactose is normally broken down by an enzyme in the body called lactase. Some people don't produce enough of this enzyme to break down the lactose in food. As a result, lactose remains undigested, which leads to symptoms. These people are considered to be lactose intolerant.
- If you have lactose intolerance, you don't need to cut out all lactose-containing foods. These foods are important sources of nutrients. Instead, manage your lactose intolerance by understanding which foods contain lactose and quantities you can tolerate.

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What is lactose intolerance?

Lactose intolerance is a set of symptoms caused by the body's inability to digest lactose properly.

Lactose is a naturally occurring sugar found in dairy foods. It is digested – or broken down by - an enzyme in our body called lactase.

People with lactose intolerance either don't have enough lactase to properly digest lactose, or they might have inflammation of the gut which causes temporary lactose intolerance. When lactose isn't digested, it travels through the digestive tract to the large intestine. There, it attracts water and is fermented by the gut bacteria that live there. This may cause symptoms including:

- Diarrhoea
- Stomach cramps
- Bloating
- Excessive flatulence

However, these symptoms can also be related to many other conditions. It's a good idea to discuss your symptoms with your GP before reducing or removing lactose from your diet.

Causes of lactose intolerance

Lactose intolerance is often due to genetic factors. People with East Asian, West African, Middle Eastern, Greek, Italian, and Aboriginal and Torres Strait Islander backgrounds often produce less lactase enzyme and have a 70-95% chance of being lactose intolerant. In Caucasians, approximately 1 in 20 people have some degree of lactose intolerance.

Other causes include conditions that reduce the amount of lactase your body produces. Some examples include:

- Gastroenteritis - which can temporarily reduce the amount of lactase enzyme you produce for several weeks after you've been unwell
- Parasite infections – which can also temporarily reduce your levels of the lactase enzyme, making it harder to break down lactose
- Intestinal inflammation – untreated Coeliac disease and other gastrointestinal conditions that cause inflammation of the intestinal lining can make it difficult for the lactase enzyme to work effectively.

Diagnosis

Lactose intolerance can be diagnosed in several ways:

- Symptom check: If you have noticeable symptoms (like bloating or diarrhoea) after you ingest high-lactose foods like a milkshake, you may have lactose intolerance.
- Hydrogen breath test: Your doctor may suggest this test, which measures the amount of hydrogen in your breath after consuming lactose. High levels can indicate problems digesting lactose.
- Endoscopy testing: If you're scheduled for a gastroscopy or colonoscopy, your gastroenterologist can measure the lactase enzyme levels in your gut.
- Genetic testing: This test can also be used to diagnose lactose intolerance, but keep in mind there is an out-of-pocket cost to have this test done.

It's important to note that these tests are not conclusive on their own, and should be interpreted by your doctor and dietitian alongside your symptoms and your diet.

Management

It is not necessary to remove all dairy products from your diet if you have lactose intolerance. Most lactose intolerant individuals still produce a small amount of the lactase enzyme, and the amount of lactose a person can tolerate also varies, for example, you may tolerate a small amount of milk in a cup of tea but not a milkshake. Recent evidence suggests that you should try and continue to eat as much lactose as you can tolerate. Complete avoidance of lactose may make your body produce even less of the lactase enzyme and become more sensitive.

Lactose content also differs between dairy foods. Hard cheeses (like cheddar or parmesan) and butter contain very little lactose. While milk, ice-cream, cream, fresh cheeses and some yoghurts are higher in lactose depending on the type and how it's made.

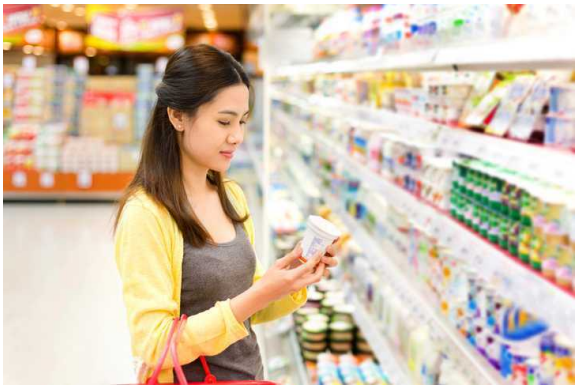
Knowing which foods contain more or less lactose, as well as keeping an eye on how much of it you eat, can help you manage symptoms while still enjoying some dairy in your diet.

Tips for managing lactose intolerance

- Drink milk in smaller quantities: Most people with lactose intolerance can tolerate up to half a cup of milk at a time. Full cream milk can be better tolerated than low fat or calcium-enriched milk.
- Spread lactose-containing foods out during the day - Eating smaller amounts at different times of the day, and eating them with other foods can help slow down digestion and reduce symptoms.

- Include yoghurt: Yoghurt is generally well tolerated because the natural bacteria break down the lactose.
- Include hard cheeses: Hard cheeses (such as cheddar and parmesan) are naturally very low in lactose and again well tolerated.
- Try lactose-free alternatives: You can buy lactose-free milk, yoghurt, ice cream and soft cheeses. These are produced by adding lactase enzyme to the products to break down lactose for you.
- Try lactase enzyme tablets or drops: You can buy enzyme drops or tablets from the pharmacy. Add them to regular milk and other dairy products, or take them before eating, to make dairy foods easier to digest.
- Try dairy-free alternatives: Plant-based milks such as soy, oat, rice and almond milk do not contain any lactose and can be suitable substitutes for dairy products. If you do try a milk alternative, check the ingredients list to ensure that they have had added calcium (look for the word 'calcium').

Learn about fibre and gut health



When to see a dietitian

Accredited Practising Dietitian

We recommend seeing a dietitian if you:

- Are struggling with any of the symptoms of lactose intolerance

- Have been diagnosed with lactose intolerance and want some support on dietary management of this condition
- Want to better understand how to meet your nutrient requirements while limiting your intake of lactose to reduce symptoms
- Want to know the best dietary approach to minimise symptoms and discomfort
- Would like a personalised eating plan to address a lactose intolerance.

Accredited Practising Dietitians (APDs) are university-trained nutrition specialists. They can help you with personalised, easy-to-follow and evidence-based advice.

APDs are Australia's most trusted dietetics professionals.

Find a dietitian

Top tips

- See a GP or dietitian if you're suffering from the common symptoms of lactose intolerance. They can help confirm lactose intolerance and give you advice to reduce symptoms and discomfort.
- If you're lactose intolerant, you don't need to eliminate lactose-containing foods entirely. These are important sources of calcium, protein and other nutrients. Learn which foods and in which quantities you can tolerate without triggering symptoms.
- There are plenty of lactose-free or dairy-free options, which provide alternative sources of nutrients if you're lactose intolerant.

This health advice page was peer-reviewed by an Accredited Practising Dietitian (APD) in February 2022.