



Information for patients who have been diagnosed with a lactose intolerance

Building healthier lives

UHB is a no smoking Trust

Lactose is the natural occurring sugar in milk and milk containing products. We digest lactose with an enzyme in our bodies called lactase.

There are three types of lactose intolerance:

- Hereditary This means that lactose intolerance runs in your family. This is very rare. No lactase enzyme is produced by the body. In this case, lactose needs to be completely omitted (removed) from the diet
- 2. **Primary** This is more common in certain races, for example African, Asian, and American Indians. In this case the amount of lactase made by the body reduces after infancy. You will need to eat less lactose for life
- 3. **Secondary** This occurs when the small bowel is damaged due to inflammation of the gut wall in Crohn's disease, Coeliac disease or Gastroenteritis. This intolerance is usually temporary and resolves eventually. You will need to eat less lactose for the duration of the disease activity or until the gut heals and lactase levels return to normal

Symptoms

You may start to feel unwell **30 minutes to two hours** after eating a food containing lactose. The symptoms may be mild or severe depending on how severe the lactose intolerance is. The common symptoms of lactose intolerance are listed below.

- Diarrhoea
- Excess wind and bloating
- Cramps
- Nausea

Is lactose intolerance harmful?

Ingesting lactose will cause the uncomfortable symptoms listed above, but it will not cause gut damage.

Diagnosis

Diagnosis is confirmed by a hydrogen breath test or a lactose tolerance test. This is performed in hospital gastroenterology departments, or by your GP. However some people might find they are lactose intolerant by excluding it from the diet and monitoring their symptoms.

Changing your diet

In most cases, cutting down on or avoiding sources of lactose and replacing them with lactose-free alternatives is enough to control the symptoms of lactose intolerance.

How do I find my tolerance?

You must start off by testing yourself with increasing amounts of lactose (e.g. starting at 100ml of milk then increasing this volume to 200ml and then 500ml if you feel are able to find your maximum tolerance level).

Sources of lactose

High sources of lactose	Lower sources of lactose	Lactose free alternatives	
Cow's milk	Chocolate	Soy milk	
Goat's milk	Hard cheese (such as cheddar)	Nut milks	
Sheep's milk	Yoghurt	Rice milk	
Soft cheese (such as mozzarella)		Lactose free milks	
Butter		Soya cheese	
Ice cream		Soya yoghurts	
Foods made from dairy (such as creamy or cheesy sauces and salad dressings)		Dairy free spreads	
		Dairy free chocolate	

- High sources of lactose should be avoided in large amounts, but may be tolerated in small amounts (e.g. milk in tea or coffee), spread out over the day or taken with meals to help absorption
- Depending on how severe your lactose intolerance is, you
 may need to decrease the amount of milk in your diet or
 change to a lactose free version. Try and choose a lactose free
 milk with added calcium
- You may tolerate foods with lower sources of lactose in small quantities. Yogurt and hard cheese are usually better tolerated than milk. This is because bacteria in these foods produce their own lactase to digest any lactose in the food
- It is worth experimenting with different foods to try to find out if there are any dairy products you can eat as they are good sources of calcium
- You should trial daily probiotics drinks. They also contain bacteria that may help break down lactose. Speak to your dietitian about whether this is appropriate

Nutritional Labelling

- Labels have to legally declare any source of milk (lactose) in the food products. The word 'milk' will be highlighted on the lahel
- Some ingredients may sound like they contain lactose when they do not, such as lactic acid, sodium lactate and cocoa butter. These ingredients do not need to be avoided if you are lactose intolerant
- Derivatives of milk which should be avoided include: butter, voghurt, cream, cheese (unless known to be suitable). They will be highlighted on the food label

Medication

Some prescription medicines, over-the-counter medicines and complementary medicines may contain a small amount of lactose. This is not usually enough to trigger the symptoms of lactose intolerance in most people.

Lactase substitutes

Enzyme supplements are available but are mainly used by those with hereditary intolerance or severe primary/secondary intolerance.

Lactase enzymes can be added to lactose-containing food items, or taken with meals, to prevent symptoms. These are available in health food shops and pharmacies – always read the label for quidelines on how to use.

Lactase substitutes replace the lactase your small intestine is not producing, which can reduce your symptoms by helping your body break down any lactose in your diet more easily. They can either be added to milk or taken just before eating a meal containing lactose.

You can also buy cow's milk containing additional lactase. This means you still get the nutritional benefits of the milk, but you are less likely to experience any symptoms after consuming it.

Importance of calcium

If you are cutting down on dairy foods in your diet you may not be getting enough calcium in your daily diet. Calcium has several important functions, including helping build strong bones and teeth, regulating muscle contractions (including heartbeat) and ensuring that the blood clots normally.

Therefore, it is recommended that you choose lactose-free products (milks and yoghurts) with added calcium and ensure your diet contains alternative dairy free sources of calcium, such as:

- Green leafy vegetables, such as broccoli, cabbage and okra
- Soya beans
- Tofu
- Nuts
- Bread and anything made with fortified flour
- Fish containing edible bones (for example, sardines, salmon, and pilchards)
- Foods fortified with calcium

You can also buy combined calcium and vitamin D supplements from most pharmacists to help maintain good bone health. Please discuss this with your doctor or dietitian.

Advice for breastfeeding women

It is safe to breastfeed your child if you are lactose intolerant. It does not put them at a greater risk of becoming lactose intolerant and has important health benefits for your baby.

Notes		

If you require this information in another format, such as a different language, large print, braille or audio version please ask a member of staff or email interpreting.service@uhb.nhs.uk. **NUTRITION AND DIETETICS Queen Elizabeth Hospital Birmingham** Mindelsohn Way, Edgbaston, Birmingham B15 2GW Telephone: 0121 371 2000 PI23/1892/03 Author: Gastroenterology Dietitians