

Temporary lactose intolerance

Patient information leaflet

This advice leaflet has been produced to support families of children who are thought to be suffering from temporary lactose intolerance resulting from a recent gut illness (gastroenteritis); often referred to as secondary lactose intolerance.

Typical symptoms

Symptoms of lactose intolerance include:

- loose, watery stools (diarrhoea)
- abdominal bloating and pain
- gurgling stomach
- excessive wind
- nappy rash

Lactose intolerance should be suspected in all children who have had a recent bout of gastroenteritis and who continue to suffer from the above symptoms for more than 2 weeks after their illness.

What is lactose intolerance?

Lactose is the natural sugar found in breast milk, cow's milk and the milk of other mammals such as goats and sheep. Lactose intolerance occurs when there is not enough enzyme (lactase) in the gut to break the lactose down, so it stays in the bowel where it can ferment, producing gases, pain and loose stools. Gut illnesses such as gastroenteritis can temporarily damage the gut lining, reducing the amount of lactase produced.

How is lactose intolerance diagnosed?

If a child has any symptoms of lactose intolerance, they may be seen by a health care professional such as a health visitor. The best test in a child is to strictly cut out lactose from the diet for two weeks and see if the symptoms get better. If they do, the diagnosis is confirmed if the symptoms come back on a normal diet.

How is secondary lactose intolerance normally treated?

Secondary lactose intolerance, unless it is caused by a long term condition, is temporary. Usually cutting out lactose containing milk and dairy products from the diet for 8 weeks will give the gut time to heal. The ability of the gut to produce lactase will build up again and after 8 weeks, the child should be able to drink milk/ formula and eat regular dairy products.

If the child's intolerance is caused by a long-term condition such as coeliac disease or food allergy however, they will need treatment for this. Just cutting out lactose for 8 weeks may make some of the symptoms better, but it won't cure the underlying condition. It is likely that after 8 weeks, the child will be unable to go back to having normal dairy products and milk without the symptoms coming back. If this is the case, the underlying condition needs to be identified and treated.

What happens next?

Step 1 – Two week lactose free trial

If the health care professional suspects that a child under 1 year of age is suffering from temporary lactose intolerance following a gut illness and if the child is not being breast fed they will advise that the child be changed onto lactose free infant formula. **This can be purchased from a supermarket or pharmacy at a similar price to standard infant formula.** If you are entitled to Healthy Start vouchers, you can use these towards the cost of the formula. If the child is over 1 year of age, cow's milk based Lactofree™ milks of varying fat contents are available to buy. Plant based milks and dairy alternatives such as soya are not recommended during the 2 week trial period, as this can confuse the diagnosis between lactose intolerance and cow's milk allergy.

If the mother is breastfeeding, they should continue to do so, do not need to change to a lactose free infant formula, use lactase enzymes or cut out lactose from their diet.

If the child is having solids, a low lactose diet should also be followed. This involves avoiding all key sources of lactose i.e. fresh, heat treated and powdered cow's milk and other mammalian milks e.g. sheep, goat and dairy products including soft and cottage cheeses, yogurt, fromage frais and ice cream. During the trial, other foods and medicines containing lactose should also be avoided. **Please check with your Dr before stopping any medication**

Check food labels to make sure the products do not contain **lactose** or any of the other ingredients listed below and remember that manufacturers often change their recipes, so check regularly (See Table 1). You can also access dietary information via the Allergy UK website (choose lactose intolerance from the list at <https://www.allergyuk.org/information-and-advice/conditions-and-symptoms/586-types-of-food-intolerance>).

Table 1

Foods allowed for the 2 week trial and the further 6 weeks treatment	Foods to avoid/ check food label
<p>Milk and milk products</p> <p>Use a lactose free infant formula or Lactofree™ milk – full cream or semi-skimmed</p> <p>Lactofree™ yogurts, hard/ soft cheese, cream, spread or other lactose free brands</p> <p><i>Plant alternatives e.g. soya, oat, coconut, hemp, nut milks and products are lactose free but should not be used for the diagnostic 2 week trial period.</i></p>	<p>Standard cow or goat infant formula, cow’s milk, goat’s milk, sheep’s milk (fresh, UHT, powdered, full cream/ semi-skimmed/ skimmed)</p> <p>Milk powder (skimmed and full cream), dried milk</p> <p>Condensed, evaporated milk</p> <p>Milk solids, non-fat milk solids</p> <p>Cheese, cheese powder, paneer</p> <p>Cream, ice cream</p> <p>Yogurt, fromage frais</p> <p>Buttermilk, butterfat, milk fat, animal fat</p> <p>Hydrolysed whey sugar</p> <p>Sauces and desserts made from milk e.g. custard, milk pudding, white sauce.</p>
<p>Fats and oils</p> <p>Pure fats, oils, lard, suet dripping</p> <p>Lactofree spread, dairy free margarines e.g. Vitalite™, Pure™, Tomor™, supermarket own brand, Kosher and vegan spreads</p>	<p>Butter, margarine, ghee, low fat spread, shortening</p>
<p>Bread and cereals</p> <p>Bread, breakfast cereals, rice and pasta, oats, wheat, rye. Check labels on bread and breakfast cereal packets.</p>	<p>Yogurt coated muesli bars, milk bread, chocolate coated cereals</p>
<p>Meat, fish and alternatives</p> <p>Meat, poultry, offal, bacon, ham, fish, shellfish, eggs, pulses, e.g. lentils, chickpeas, hummus, soya mince, tofu</p>	<p>Processed and pre packed meats and fish e.g. sausages, burgers, hot dogs, fish paste, meat paste, pies, fish in sauce/ batter, fish cakes, quiche, scotch eggs, scrambled egg</p>
<p>Fruit and vegetables</p> <p>Fresh, frozen, tinned or dried fruit and vegetables</p>	<p>Instant mashed potato and vegetables with added milk, white or cheese sauces, vegetables cooked in butter, pies, fruit yogurt, fools, mousses, chocolate/ yogurt coated fruit, fruit pies, fruit in batter</p>
<p>Miscellaneous</p>	<p>Other foods that may contain lactose include biscuits</p>

Check ingredient labels on packaged foods	(especially cheese flavoured or chocolate coated), cakes, cake mixes, creamed soups, mayonnaise, dressings, milk chocolate, milk flavourings e.g. Ovaltine, flavoured crisps and cheese flavoured snacks and some fruitbars. Some powdered artificial sweeteners also contain lactose.
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Other sources of Lactose

Lactose is not only found in food – it may be used in some tablets and medicines such as:

- Tablets / liquids and cough medicines – check with your pharmacist.
- Vitamin and mineral supplements including some calcium supplements.
- Toothpastes/mouthwashes may also have lactose added.
- Powdered/tablet artificial sweeteners may contain lactose.

Food ingredients which DO NOT contain lactose

Some food ingredients sound as though they contain lactose but they actually do not and **don't** need be avoided:

- Lactic acid E270 Cocoa butter
- Stearoyl lactylates, Glucona-delta-lactone
- Sodium lactate E325 Potassium lactate E325 Calcium lactate E327

Step 2 – Review of 2 week lactose free trial

After 2 weeks on a strict lactose free diet, a review with your health visitor or GP is recommended. If the symptoms are better, the child needs to continue on the low lactose diet for another 6 weeks.

If the symptoms are no better on a low lactose diet, the GP will need to look for other causes of the symptoms.

Step 3 – Re-introduction of lactose

After a total of 8 weeks, the health care professional should review the child's symptoms again and discuss gradual reintroduction of standard infant formula/ milk and lactose containing foods (if taking solids) as follows:

- If not on solids yet, you can start by replacing one bottle of the lactose free infant formula with standard infant formula for a few days, and if ok, swap another bottle for

standard infant formula every few days until tolerating all standard infant formula. If this seems to be too fast, you can do it more gradually by introducing 1floz of standard infant formula into each bottle at a time. The following table 2 will help you with this.

Table 2 Suggested re-introduction procedure to wean back onto standard infant formula

Day of re-introduction	No. scoops to 6floz (180ml) water	
	Lactose free formula	Standard infant formula
Day 1	5	1
Day 2	4	2
Day 3	3	3
Day 4	2	4
Day 5	1	5
Day 6	0	6

- If taking solids, you may want to start by offering a pot of normal yogurt or fromage frais and increase the amounts of these before gradually changing the formula as described above.

Step 4 – Review if symptoms recur following re-introduction of lactose

If the child's symptoms recur after giving standard infant formula and/ or dairy products, the child needs to be seen by the GP again.

Lactose intolerance - PIL for secondary intolerance



V1.2 Last reviewed: August 2021

Review date: August 2024

Nottinghamshire Area Prescribing Committee

Important

The child's weight and growth should be checked at each review with the health care professional.

It has been shown that lactose increases the amount of calcium absorbed by the body. Lactose may also encourage the growth of good bacteria in the gut. It is therefore important to include lactose back in the diet as soon as possible.

Lactofree™ products are basically cow's milk without the lactose, so you still get the same nutrients as you would from cow's milk. Cow's milk is an important source of energy, protein, calcium, iodine, vitamin A and vitamin B₂ (riboflavin) and B₁₂ (cobalamin). If you use plant based milks, the child may lack some of the important nutrients and the diet may need to be assessed. If the child is found to react to cow's milk protein however, Lactofree™ products should not be used.

Lactose intolerance - PIL for secondary intolerance

Version	Author(s)	Date	Changes
1.2	Dr Lisa Waddell, Lead Community Paediatric Dietitian, Nottingham CityCare Partnership; update by Neelam Ali, Medicines Optimisation Pharmacist, NHS Nottingham and Nottinghamshire CCG	August 2021	No changes to PIL.