

PATIENT INFORMATION LEAFLET

Temporary Lactose Intolerance – how to spot the signs and treat the condition in babies and young children.

This advice leaflet has been produced to support parents who have children thought to be suffering from temporary lactose intolerance as a result of a recent gut illness, most likely gastroenteritis.

Lactose intolerance is a common digestive problem where the body is unable to digest lactose, a type of sugar mainly found in milk and dairy products.

The condition might be temporary because a patient can be treated and recover from the illness.

Typical symptoms include:

- diarrhoea
- abdominal pain
- gurgling stomach
- excessive bloating and wind
- nappy rash
- infantile colic

The condition can also cause constipation and nausea.

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 two 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 animals such as goats and sheep. Lactose intolerance occurs when there is not

enough of the enzyme lactase in the gut, which is needed to break the lactose down, so it stays in the bowel where it can ferment, producing gases, pain and diarrhoea. Gut illnesses such as gastroenteritis can temporarily damage the gut lining, reducing the amount of lactase produced.

Lactose intolerance is often confused with Cow's Milk Allergy/Intolerance which is when an infant is unable to cope with the protein (casein) in the formula or cow's milk. The symptoms of Cow's Milk Allergy/Intolerance include irritability, vomiting, reflux, food refusal, constipation, diarrhoea, wind, blood and/or mucus in stools, lack of growth in the child, severe eczema, acute rhinitis or conjunctivitis. These symptoms are not the result of an episode of gastroenteritis.

How is lactose intolerance diagnosed?

A GP or Health Visitor may be able to diagnose the condition in a child. 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 when lactose is reintroduced.

How is secondary lactose intolerance normally treated?

Unless lactose intolerance is caused by a long term condition, it is temporary if treated. This can be achieved by cutting out lactose containing milk and dairy products from the diet for eight weeks which will give the gut time to heal. The ability of the gut to produce lactase will build up again and after this period, 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 eight weeks may make some of the symptoms better, but it won't cure the underlying condition. It is likely that after eight weeks, the child will be unable to go back to having normal dairy products and milk without the symptoms returning. 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 one year 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 the child is over one 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 two 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. They do not need to stop breast feeding and change their infant 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 such as fresh, heat treated and powdered cow's milk and other animal milks such as sheep or goat's milk, 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 GP 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> – you will have to enter your email in order to access the factsheet.

Table 1 Foods allowed for the two week trial and the further six weeks treatment

Foods to eat:	Foods to avoid:
<p>Milk and milk products</p> <ul style="list-style-type: none"> • Use a lactose free infant formula or Lactofree™ milk - full cream or semi-skimmed • Lactofree™ yogurts, hard/ soft cheese, cream, spread or other lactose free brands • 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 	<ul style="list-style-type: none"> • Standard cow or goat infant formula, cow's milk, goat's milk, sheep's milk (fresh, UHT, powdered, full cream/ semi-skimmed/ skimmed), milk powder (skimmed and full cream), dried milk • Condensed, evaporated milk • Milk solids, non-fat milk solids • Cheese, cheese powder, paneer • Cream, ice cream • Yogurt, fromage frais • Buttermilk, butterfat, milk fat, animal fat • Hydrolysed whey sugar • Sauces and desserts made from milk e.g. custard, milk pudding, white sauce
<p>Fats and oils</p> <ul style="list-style-type: none"> • Pure fats, oils, lard, suet dripping • Lactofree™ spread, dairy free margarines e.g. Vitalite™, Pure™, Tomor™, supermarket own brand, Kosher and vegan spreads 	<ul style="list-style-type: none"> • Butter, margarine, ghee, low fat spread, shortening
<p>Bread and cereals</p> <ul style="list-style-type: none"> • Bread, breakfast cereals, rice and pasta, oats, wheat, rye • Check labels on bread and breakfast cereal packets 	<ul style="list-style-type: none"> • Yogurt coated muesli bars, milk bread, and chocolate coated cereals
<p>Meat, fish and alternatives</p> <ul style="list-style-type: none"> • Meat, poultry, offal, bacon, 	<ul style="list-style-type: none"> • Processed and pre packed meats and fish

<p>ham, fish, shellfish, eggs.</p> <ul style="list-style-type: none"> • Pulses, e.g. lentils, chickpeas, hummus, soya mince, tofu 	<p>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> <ul style="list-style-type: none"> • Fresh, frozen, tinned or dried fruit and vegetables 	<ul style="list-style-type: none"> • Instant mashed potato and vegetables with added milk, white or cheese sauces • Vegetables cooked in butter • Fruit pies, fruit yogurt, fools, mousses • Chocolate/ yogurt coated fruit • Fruit in batter
<p>Miscellaneous</p> <ul style="list-style-type: none"> • Check ingredient labels on packaged foods 	<p>Other foods may contain lactose: biscuits (especially cheese flavoured or chocolate coated), cakes, cake mixes, creamed soups, mayonnaise, dressings, milk chocolate, milk flavourings e.g. Ovaltine, flavoured crisps, cheese flavoured snacks and some fruit bars. Some powdered artificial sweeteners also contain lactose.</p>

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 do not and do not need to be avoided:

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

Always check food labels if in doubt.

Step 2 – Review of two week lactose free trial

After two 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 six 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 eight 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. Table 2 below will help you with this.

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

Day of reintroduction	Number of scoops to 6floz (180ml) water	
	Lactose free formula	Standard infant formula
Day 1	5	0
Day 2	4	1
Day 3	3	2
Day 4	2	3
Day 5	1	4
Day 6	0	5

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.

Important

The child's weight and growth should be checked at each review with the health care professional such as a GP or Health Visitor.

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.

For more information visit:

- <https://www.nhs.uk/conditions/lactose-intolerance/>
- <https://www.nutrition.org.uk/nutritionscience/allergy/lactose-intolerance.html?limitstart=0>
- Or speak to your GP or Health Visitor.

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