Lactose Free Diets

Patient Information

Lactose is the main sugar in mammalian milks, including cow's milk and human breast milk. For the body to use this sugar it needs to be broken down in the gut by an enzyme called lactase.

This leaflet gives more information about lactose free diets.

Lactose intolerance



Some people cannot digest the lactose in milk. This tends to cause symptoms such as excess wind, abdominal pain or diarrhoea. It does not cause rashes. Most people with lactose intolerance will be able to tolerate some lactose in their diet without a problem.

Some children and adults will stop producing the lactase enzyme which breaks down lactose as they get older. This often runs in families and is much more common in those of African, Mediterranean or Asian descent. It is uncommon in young children and in Northern Europeans.

Lactose intolerance can also occur temporarily after an episode of gastroenteritis (diarrhoea and vomiting bug). This can occur in young children and babies as well as adults. This is usually lasts from a few weeks to a few months.

Is lactose intolerance the same as milk allergy?

No. Milk allergy is when the immune system of the body reacts against the protein in milk (not the lactose). This can cause a variety of symptoms including swelling of the skin, wheeze and rashes, particularly nettle rash, which comes on quickly after having milk. It is treated with a milk-free diet and medication such as antihistamine.

How is lactose intolerance diagnosed?

It is important to consider other causes of the symptoms such as milk allergy or coeliac disease. If lactose intolerance is suspected the diagnosis is usually made by a diet trial (also called an exclusion-reintroduction or elimination diet)

- 1. It is helpful to keep a note of symptoms in a diary or notebook before starting the diet and throughout the trial.
- 2. Lactose containing foods should be removed from the diet for a period of 2 weeks.
- 3. During the initial diet trial it is best to be strict about the diet. Alternative milk products eq Soya or oat milk can be used and there are specific products available from supermarkets and health food shops for people with lactose intolerance. These include lactose-free milk, cheese and butter.
- 4. If there is an improvement in symptoms continue the diet for a total of four weeks.

- 5. If there is an improvement in symptoms on a lactose-free diet then these foods should be **reintroduced to confirm that the symptoms return**. This stage is very important so that children do not have unnecessary diet restrictions.
- 6. Once it has been proven that the symptoms are linked to lactose the diet can gradually be altered to find a level of lactose which is tolerated. Nearly everyone will tolerate some lactose.
- 7. In general there will be a clear and quick improvement on the diet if lactose is the problem. Sometimes it becomes clear that it is the milk protein rather than the lactose which is the problem. This is suspected if symptoms resolve when milk free but come back if lactose-free products are used.

There are some laboratory tests which have been used to help diagnose lactose intolerance. Stool tests (reducing substances and pH) are no longer felt to be helpful in children as they are often inaccurate with both false negatives and false positives. There is a breath test which is sometime used in complex cases but it is not suitable for children under the age of about 4 or 5 years to do and requires a hospital visit. The best test is therefore felt to be the exclusion-reintroduction diet trial.

Examples of foods for a lactose free diet:

Milks for babies under one year: SMA[®] lactose free, Enfamil O-Lac[®] baby formula. (Soya baby formula is also lactose-free)

Milks for 1-2 year olds: Lactofree[®] full fat milk, Alpro Soya Junior 1+[®] or baby formula as above.

Milks for over 2 year olds and adults: Lactose-free milks or standard calcium-enriched soya milks. Older children and adults can try oat milks, almond milks, coconut milks (Kara[®]) etc. Butter substitutes: eg Lactofree[®], Vitalite[®] or Pure[®] spreads Yoghurts: Lactofree[®] or Soya or vegan products

Cheese: Lactofree[®] or vegan cheese

Other information about Lactose Intolerance:

Nearly all people with lactose intolerance will be able to find a level of lactose in their diet which they can tolerate.

- Most people will be able to have some yoghurt and cheese as the process of changing milk into these products naturally reduces the lactose content. Many will be able to have small amounts of normal milk.
- Cooking does not significantly alter the lactose content of milk.
- Health food shops sell lactase enzyme tablets or drops which some people find helpful.
- Young children, particularly those under 5 years old, who are on a long-term lactose free diet should be referred a dietitian to assess that their diet is nutritionally adequate.
- As milk products are a major source of calcium and vitamin D supplements should be considered if milk is not being replaced.

Further Information:

Your GP, health visitor, dietitian or doctor will be happy to answer questions. Further information is available on the NHS choices website <u>www.nhs.uk/Conditions</u>