

LACTOSE INTOLERANCE

Introduction

A food intolerance is a repeated unpleasant reaction to a specific food. Every time the food to which there is intolerance is eaten, the same reaction occurs. Lactose intolerance is not a food allergy but is an intolerance to lactose - the sugar in milk - due to lack of an enzyme in the lining of the intestine. (Allergy to the protein in milk can also occur and such people cannot take milk).

Milk is a very nourishing food, rich in protein, calcium and vitamin D, which are important for the development of strong bones and teeth. Milk also contains a naturally occurring sugar called lactose. Like all sugars, lactose is a good source of energy. The body cannot absorb lactose until it is broken down into two component sugars which can then pass from the gut into the blood stream.

The body uses an enzyme called lactase in the lining of the small bowel to break down the lactose to the two sugars of which it is composed. Some people get upsets from milk and the most common reason for an upset is lactose intolerance.

How common is lactose intolerance?

A small number of people have congenital alactasia. This means they don't have any lactase at all, even from birth. These babies therefore cannot digest lactose which is present in breastmilk and standard infant milks.

Most adults had normal amounts of lactase as a child but lactase production gradually declines as they get older, though hypolactasia can occur at any age. Lactase tends to decline more rapidly and completely in some people originating from Eastern Europe, Africa, Asia or the mediterranean area.

Lactose intolerance can occur after a bout of gastro-enteritis (food poisoning). This is because gastro-enteritis damages the lining of the gut where lactase is produced. This is often referred to as secondary lactose intolerance and is usually temporary. It may also be associated with untreated coeliac disease (gluten sensitivity).

How is lactose intolerance diagnosed?

Often it is obvious by the description of the problem. The doctor can confirm the diagnosis as follows:

A test dose of milk

If the usual symptoms occur after drinking a glass of milk, lactose intolerance is likely.

Small intestinal biopsy

A small sample of the lining of the gut is taken via endoscopy (a narrow flexible telescope) and the amount of lactase measured.

How do symptoms occur?

If lactose is not digested, it passes through the gut and acts as a laxative. When it reaches the large bowel, it is digested by bacteria. Bacteria digest lactose differently and hydrogen gas is produced. Hydrogen causes bloating but is not dangerous. Cramps (or spasms) occur because the gut responds to the bloating by contracting.

How is lactose intolerance treated?

There is no cure because lactase cannot be replaced, although some cases of lactose intolerance are temporary.

Children with congenital lactase deficiency need a milk free diet and should be advised by a dietician to avoid deficiency of essential nutrients.

For affected adults, taking lactose in milk causes no harm and the worst that can happen is the development of wind or mild diarrhoea. For most adults, it is a matter of finding how much milk can be taken without causing symptoms. Most people will find, for example, that they can take milk in tea or coffee, though a glass of milk or a milk pudding causes them a mild upset.

Some people can take yoghurt without trouble because the lactose in the milk has been fermented by the bacteria used to make it. Hard cheese is naturally low in lactose and is usually well tolerated. Lactose reduced milks are available in supermarkets. These can be used with cereals or in puddings.

It is important to try to include cheese, yoghurt and low lactose milk in the diet if normal milk is being avoided. Dairy products are an excellent source of vitamins and calcium.

Core is the working name for the Digestive Disorders Foundation

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Registered Charity No 262762