

## Cow's milk allergy

The term cow's milk allergy is generally used to describe reactions generated by the immune system. This is how the term will be used here. Non immune reactions are normally classified as cow's milk intolerance.

Cow's milk allergy is common in infants and very young children. It rarely develops after one year of age and the onset is closely related to the introduction of cow's milk based infant formula. The prevalence is estimated to be as high as two per cent among children under a year old. Fortunately about half outgrow their allergy by one year, and most children have outgrown it by the age of three.

However, cow's milk allergy may occasionally be lifelong and severe.

### **Symptoms of milk allergy**

In early infancy, symptoms are usually tummy pain and vomiting. In a small number of infants there is nettle rash, swelling of the face, eczema and respiratory symptoms including asthma.

As the infant gets older, typical allergic reactions to milk include rash, hives and redness around the mouth, which can spread all over the body, runny nose, sneezing and itchy watery eyes, coughing, choking, gagging, wheezing and trouble breathing, abdominal cramps, vomiting and diarrhoea. The reaction can stop at any stage or develop into anaphylaxis (a serious allergic reaction that affects a number of body organs).

### **Severe milk allergy**

In severe cases, an allergic reaction to milk can develop into anaphylaxis with minute amounts. Strict avoidance of all traces of milk and all its derivatives is the only way to deal with this type of allergy. Some people choose to keep milk products out of the house. Emergency adrenaline

(epinephrine) should be prescribed and kept within close proximity at all times.

### **Very mild milk allergy**

Small amounts of processed dairy products (e.g. yoghurt and cheese) can be tolerated. The child is likely to outgrow milk allergy at an early age.

### **Mild to moderate milk allergy**

Small traces of milk products in cooked goods can be eaten without causing a reaction. Lactose is usually tolerated but avoid milk, cream, cheese, yoghurt and ice cream.

### **Reactions through touch and smell**

A food does not have to be eaten to cause a reaction, although eating it causes more severe reactions. Hives can occur on skin contact with milk. If food gets into the wet surfaces (e.g. through a cut in the skin, on the lips or in the eye) severe reactions can occur.

Inhaled cow's milk protein, such as from the cheese on a pizza, can cause allergic reactions. These are not normally severe unless present in extremely high concentrations.

### **Avoidance of milk**

Degrees of avoidance will depend on the individual and the severity of the milk allergy. Many people need to avoid milk and dairy but can cope with trace amounts in cooked goods (e.g. cakes, biscuits and pies).

Milk can turn up unexpectedly in foods so it is important to check food labels every time you shop – even if you have bought a product before. Recipes do sometimes change.

The 25 per cent rule governing compound ingredients has now been amended under European

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legislation. This means that food companies have to declare major allergens, including milk, even when they appear in minute quantities. They have until November 2005 to comply. If you are in any doubt about a product, call the manufacturer or retailer.

Lactose does not normally contain the proteins responsible for causing reactions, but there is a risk of contamination with milk protein. People with very severe milk allergy may be wise to avoid anything with lactose in it.

## **Medicines**

Some medicines contain milk products so check with the prescribing doctor or with the pharmacist when collecting your prescription.

Some tablets are manufactured with the aid of lactose. As stated above, lactose does not normally contain the proteins responsible for causing reactions, but could cause problems for people whose milk allergy is very severe.

## **Treating severe symptoms**

If severe symptoms are a possibility, adrenaline (epinephrine) should be carried at all times (e.g. EpiPen or Anapen). These injectors are very easy to use and designed for self-administration.

## **Alternatives to milk**

Soya milk formulae are sometimes recommended for children who are allergic to cow's milk. However, some milk-allergic children react to soya.

Goat's milk and sheep's milk are not suitable alternatives to cow's milk as they share similar proteins with cow's milk that could result in cross-reactivity.

Most health professionals recommend special casein hydrolysed formulae (e.g. Nutramigen or Pregestimil). These are made from cow's milk that is treated to change the proteins. A few milk allergic children react

to them and need an elemental formula called Neocate.

## **Terms indicating the presence of cow's milk**

Apart from the obvious ingredients to avoid (such as milk, cream and dairy) watch out for the following:

- Butter, butter fat, buttermilk, butterfat, butteroil.
- Casein, whey.
- Sodium and calcium caseinate.
- Cheese, yoghurt, ghee.
- Ice cream.

## **Cow's milk intolerance**

Milk intolerance is different to milk allergy and does not involve the immune system. There may be delayed gastro-intestinal symptoms, such as vomiting, diarrhoea and colic. These symptoms can develop over hours or days after ingesting a modest amount of cow's milk (over 120mls or 4oz). Allergy testing is not effective for milk intolerance. Antihistamines do not work either. Strict milk avoidance is not necessary, and traces in baking can be safely eaten.

## **Lactase deficiency**

People who are allergic to milk react to the milk protein and not to the milk sugar (lactose). Lactase deficiency is quite different to allergy and caused by the lack of the enzyme lactase, which is needed to digest lactose.

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