



A parent's guide to cow's milk allergy:

Could my baby have cow's milk allergy?



What is cow's milk allergy?

About this booklet

This booklet is written for parents and carers who are concerned that their baby might have cow's milk allergy. It explains what cow's milk allergy is, how it is diagnosed and how it is managed.

Cow's milk allergy (CMA) is one of the most common allergies in childhood. It occurs when the immune system 'over-reacts' to the protein found in cow's milk and milk-containing products (also known as dairy).

The exact causes of CMA are currently unknown, and CMA can develop in babies for no apparent reason. However, allergy can run in families, so there is a slightly higher chance that a baby might develop CMA if their parents suffer from conditions like hay fever, eczema or food allergies.

CMA can cause a range of symptoms, including digestive problems, rashes, swelling of the face, or eczema. These symptoms can appear immediately after consuming dairy (within 2 hours) or may be delayed, taking up to 48 hours to develop.

Signs and symptoms

Immediate symptoms of CMA can appear within 2 hours of eating dairy and may include:

- breathing difficulties
- swollen lips, tongue or face
- hives, rash, redness or itching
- eczema flare
- diarrhoea
- vomiting

Delayed symptoms can appear up to 2 days after eating dairy and may include:

- eczema, itching or redness
- tummy pain
- colic-type symptoms
- reflux
- constipation
- frequent or loose stools
- blood or mucus in stools

These delayed symptoms may also lead to night-time waking, crying or distress during feeding, or poor weight gain.

Babies with CMA can react in many different ways to milk protein and may have one or more of these symptoms. Symptoms can vary in severity – sometimes they may be mild but they can also be severe. Some of these symptoms can also occur for reasons other than CMA, so it is important to discuss all symptoms fully with your doctor.

How common is CMA?

CMA affects between 2% and 6% of all infants.^{1,2} The good news is that CMA is usually a temporary condition, and more than three-quarters of babies grow out of CMA later in childhood.³ This should mean that many children with CMA are able to start eating a normal diet (including milk and dairy products) as they get older.

Allergies and intolerance

CMA should not be confused with lactose intolerance. Lactose intolerance is a condition in which people cannot digest the sugar found in milk (called lactose). This can lead to digestive problems, so can appear similar to CMA, but doesn't give rise to the rashes, eczema, facial swelling or breathing difficulties which may be seen with CMA.

Allergies to other foods

Other foods are known to sometimes cause allergic reactions in children. These include:

- Eggs
- Soya
- Fish and shellfish
- Wheat
- Nuts
- Sesame

You should always seek professional advice before excluding foods from your child's diet. Your doctor or dietitian will help you make sure that your child receives all the nutrients that they need for healthy development and growth.



How will your doctor diagnose CMA?

If you are concerned that your baby may have CMA, you should visit your GP. Your doctor will first discuss your baby's symptoms in detail. It may help if you have recorded what symptoms your baby suffers and when they have occurred. Your doctor will also examine your baby for any signs or symptoms that may be related to CMA.

As allergies can run in families, if you or your partner suffer from eczema, asthma or allergies such as hay fever, it may be more likely that your baby has CMA. If your GP suspects that your baby is suffering from an allergy, they will ask questions about any allergies that close family members have, to establish if there is a family history of allergy.

As a first step, your doctor may prescribe medicines to treat any symptoms your baby may have, such as emollients or creams for eczema. If your doctor suspects that your baby has CMA, then he or she will explain the next steps. There are different types of CMA, and each will be diagnosed differently. This might involve skin prick tests, blood tests or an 'elimination diet'. Your GP may also refer you to a specialist allergy clinic.



Skin prick tests

Skin prick testing is a quick and straightforward method used to identify any substances that may cause someone to have an allergic reaction. A skin prick test involves a prick on the skin, and gives you a result in about 20 minutes. It is not painful, but can be a little uncomfortable for a short while.

Blood tests

In certain cases, your doctor might recommend a blood test to establish if your child is allergic to milk proteins. This will involve a small sample of blood being taken for analysis. The results may take several days to come back.

Elimination diet

Your doctor may also ask you to remove all sources of cow's milk protein from your baby's diet for a period of 2–6 weeks, under careful medical supervision. This is known as an elimination diet. If you are breastfeeding, your doctor may advise you to exclude cow's milk and dairy products from your own diet. After this period, your doctor may give your baby a small quantity of cow's milk formula. Your doctor will keep a close eye on any symptoms and if your baby's symptoms subside during the elimination period and reappear when cow's milk is reintroduced, it confirms that your child is allergic to cow's milk proteins.

While home allergy testing and other kits are available, there is no evidence that these work and they are not recommended by allergy experts. Your doctor will be able to provide all the tests that are required to diagnose CMA.



How is CMA managed?

The only way to treat CMA is to avoid all sources of cow's milk. If your doctor suspects your baby has CMA he will give you careful guidance and support and refer you to a registered dietitian to help you eliminate all milk and dairy products from your baby's diet.

- **For breast-fed babies:** Breast milk provides the best nutrition for your baby, so if you are breastfeeding it is important not to stop but to continue. However, traces of cow's milk protein may be passed to your baby through breast milk. So it may be necessary to exclude cow's milk and dairy products from your own diet for a limited period to find out if this is the case. You should discuss this with a dietitian, who can also advise on suitable milk substitutes and review whether you need additional vitamins and minerals.
- **For formula-fed babies:** Your doctor will recommend that you replace your baby's cow's milk formula with a suitable nutritionally complete, hypoallergenic infant formula (see "What is a hypoallergenic formula?").
- **If your child has already started to eat solid food:** Ask to see a dietitian, who will be able to advise you and help ensure that all sources of cow's milk protein are removed from their diet.

- **Dietetic advice:** As milk is such an important source of nutrition for young children, it is essential that any elimination diet is done under medical supervision. Healthcare professionals, particularly dietitians, are a vital source of help for parents. The dietitian will help you tailor the diet to suit your child's own individual needs, check that it is varied and nutritionally adequate, and monitor their progress.

Goat's and sheep's milk, and milk from any other animals, are not recommended for infants with cow's milk allergy, as the protein in these milks is very similar to the protein in cow's milk.

Soya formula is not recommended for infants less than 6 months of age, and should not be the first choice for older infants unless advised by your doctor or dietitian.

Off-the-shelf soya, oat and rice milks are not nutritionally complete and should not be given to young infants as a main drink.

Lactose-free formulas and partially hydrolysed formulas available from supermarkets are not suitable for infants with cow's milk allergy.

What is a hypoallergenic formula?

Hypoallergenic formulas are foods for special medical purposes that have been scientifically formulated and proven for the management of CMA. Such formulas must be used under medical supervision, and there are two different types available.

“Extensively hydrolysed” formula is recommended by experts as the first choice for most formula-fed babies with CMA. It is based on protein that has been broken down (hydrolysed) into tiny pieces that will not trigger an allergic reaction in most infants.

Alternatively, “amino acid” formula is based on just the basic building blocks of protein. **Your doctor may recommend an amino acid formula if your child has multiple or severe allergy.**

The future

Many children grow out of CMA by the time they reach school age. As your baby gets older, your doctor or dietitian may recommend that you start to reintroduce foods that contain cow’s milk. This should always be done carefully and under the supervision of a dietitian or doctor, who may also perform further allergy tests.



References

1. Crittenden RG et al. J Am Coll Nutr 2005;24:582S-91S
2. Du Toit G et al. Arch Dis Child Educ Pract Ed 2010;95:134-44
3. Skripak JM et al. J Allergy Clin Immunol 2007;120:1172-7



What should I do next?

If you think that your baby may have CMA, then you should discuss your concerns with your GP, health visitor or dietitian. Although home allergy testing kits are available to buy, there is no good evidence that these work and they are not recommended by allergy experts. Your doctor will be able to provide all the tests that are required to diagnose CMA, and will give you ongoing support and guidance.

A useful booklet called **“Testing for food allergies in children and young people”** is published by the National Institute for Health and Clinical Excellence (NICE). This is available online (<http://www.nice.org.uk>) or from your doctor, health visitor or dietitian.

Useful resources

Further booklets in this series provide advice on giving your child a healthy milk-free diet, covering all the stages from diagnosis to being fully weaned, including a variety of milk-free recipes. The available booklets include:

A parent's guide to cow's milk allergy:

- *From diagnosis until weaning*
- *Weaning and up to 1 year*
- *Feeding tips for toddlers: from 1 year*

Please ask your doctor, dietitian or health visitor for copies, or contact the Mead Johnson Careline.



IMPORTANT NOTICE: Breastfeeding is best for babies. The decision to discontinue breastfeeding may be difficult to reverse and the introduction of partial bottle-feeding may reduce breast milk supply. The financial benefits of breastfeeding should be considered before bottle-feeding is initiated. Failure to follow preparation instructions carefully may be harmful to a baby's health. Parents should always be advised by an independent healthcare professional regarding infant feeding. Products of Mead Johnson must be used under medical supervision.

© 2011 Mead Johnson & Company, LLC. All rights reserved. NUT/Consumer/1/10-11 (EU11.541)