
Cow's milk allergy

Summary

- If you, or a child in your care, have a severe allergic reaction, call triple zero (000) and ask for an ambulance.
 - Milk is a common cause of allergies in children, but is not common in adults.
 - Milk and milk products are one of the most common foods to cause life-threatening severe allergic reactions.
 - An allergy to cow's milk and related dairy products is different to lactose intolerance.
 - Visit your doctor or specialist doctor to discover what is causing your allergy.
 - The best way to manage a milk allergy is to avoid all products containing milk (under strict medical supervision).
 - Speak to your doctor about making action plans for severe allergic reactions.
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An allergy to cow's milk and related dairy products affects one in 50 in babies and is different to lactose intolerance. Very few adults are allergic to cow's milk. People who are allergic to cow's milk can also be allergic to milk from other animals such as goats, sheep and buffalo.

Symptoms of milk allergy vary and range from mild reactions to a severe allergic reaction (anaphylaxis). Some people experience symptoms immediately, but in others, the symptoms can take time to develop.

If you think you or your child have a cow's milk allergy, visit your doctor for a diagnosis. To manage a cow's milk allergy, you or your child must avoid all food containing milk (under strict medical supervision). Do not change your child's diet without consulting a doctor or your child could suffer from nutritional deficiencies.

Food allergies can be life threatening. If you or a child in your care have a severe allergic reaction (anaphylaxis), call triple zero (000) for an ambulance. Do not stand or walk. Administer adrenaline (epinephrine) via autoinjector (EpiPen®), if available.

Causes of cow's milk allergy

Milk allergy is most commonly caused by an allergy to cow's milk, although some people are allergic to milk from other animals such as goats, sheep and buffalo.

In all allergies, the immune system reacts to trigger molecules (allergens). Your immune system produces antibodies that detect the allergen, causing inflammatory reactions and the release of a chemical called histamine, both of which cause allergic symptoms. In the case of milk, the trigger molecules are two milk proteins called whey and casein. You or your child may be allergic to either one of these proteins, or both.

Some reactions to milk are not caused by allergies

Some people can have a physical reaction to milk that is not due to an allergy. If you lack an enzyme called lactase, which breaks down the milk sugar lactose, you can experience symptoms that seem similar to an allergy (diarrhoea, vomiting, stomach pain and gas). This is called **lactose intolerance** and is different from milk allergy, because it does not involve your immune system reacting to a trigger molecule. Some people also experience excess thick mucus in their throat after eating or drinking dairy products, but this is not caused by an allergy. The Australasian Society of Clinical Immunology and Allergy (ASCI) advises that this mucus production is not a health risk.

Symptoms of cow's milk allergy

Symptoms of a cow's milk allergy can appear within minutes or several days of consuming cow's milk or dairy products. The severity of the symptoms will depend on the person and the amount of cow's milk they consume.

Symptoms that can appear within minutes of having a small amount of milk include:

- raised red bumps of skin – **hives** (urticaria)
- itchy, red, weeping or crusty rash of the skin – dermatitis or eczema
- swelling of the face
- wheeze or persistent cough
- vomiting
- diarrhoea.

If your child is prone to a severe allergic reaction to milk, these symptoms can also appear very rapidly.

Symptoms that can appear within hours include:

- vomiting
- diarrhoea
- rashes or eczema.

Symptoms that can appear within days include:

- eczema
- diarrhoea
- asthma.

Severe allergic reaction – anaphylaxis

After peanuts and tree nuts, cow's milk is one of the most common foods to cause severe allergic reactions. Severe allergic reaction (anaphylaxis) is life threatening.

Symptoms of a severe allergic reaction include:

- difficult or noisy breathing
- swelling of the tongue
- swelling or tightness of the throat
- difficulty talking or hoarse voice
- wheeze or persistent cough
- persistent dizziness or collapse
- paleness and floppiness in young children

If you or a child in your care have a severe allergic reaction (anaphylaxis), call triple zero (000) for an ambulance. Do not stand or walk. Administer adrenaline (epinephrine) via autoinjector (EpiPen®), if available.

Keeping a record of your symptoms

Keep a diary that describes your symptoms or your child's symptoms and when and where they occur. Your diary could include information about whether the symptoms occur:

- inside your home, outside or both
- for a short time or longer
- at night, during the day or when you wake up
- after you have had a particular food or drink
- after you have taken a particular medication, either prescription or over the counter from a pharmacy or supermarket
- after you have taken a herbal medicine.

Diagnosis of cow's milk allergy

If you or your child have allergic symptoms, visit your family doctor who will ask some questions about your reactions. You can also discuss your record of your symptoms. To diagnose your allergy, your doctor may refer you to a specialist doctor, known as an allergist or clinical immunologist.

If your symptoms appear rapidly after eating or drinking milk or dairy products, the allergy may be easier to diagnose, whereas symptoms that take longer to appear make diagnosis more difficult.

Allergists can test for **allergies** using a number of methods depending on the type of potential allergy. To test for an allergy, the allergist may:

- do a skin prick test
- do a blood test
- ask you to temporarily avoid all milk or products containing milk (elimination diet), then follow up with the introduction of milk back into your diet (food challenge) under strict medical supervision.

A number of methods claim to test for allergies but have not been medically or scientifically proven. They can be costly and could lead to dangerous avoidance of certain foods. ASCIA recommends that you do not use certain methods to have potential allergies tested, including:

- cytotoxic food testing
- electrodermal testing
- hair analysis
- iridology
- kinesiology
- pulse testing
- reflexology
- Vega testing.

Always speak with your doctor if you are thinking of using a complementary medicine or therapy to test for allergies.

Treatment for cow's milk allergy

If you or your child have been diagnosed with milk allergy, treatment involves total avoidance of milk or products containing milk. This can be difficult to achieve. ASCIA advises that children who are allergic to cow's milk are often allergic to goat's milk, and so substitution with a milk of animal origin may not be possible.

To avoid milk and milk products, read food labels and avoid foods that contain milk or milk products such as:

- butter
- buttermilk
- casein and caseinate
- cheese
- chocolate
- cow's or goat's milk – including 'A2 milk'
- cream
- crème fraiche
- ghee
- ice cream
- margarines that contain milk products
- milk powder
- nougat
- whey

- yoghurt.

ASCIA has more information about dietary avoidance of cow's milk for food allergy [<https://www.allergy.org.au/patients/food-allergy/ascia-dietary-avoidance-for-food-allergy>].

Eliminate milk and milk products from your baby or young child's diet only under strict medical supervision. Your doctor will need to advise on replacement sources of calcium and protein, which are especially important nutrients for children. Replacement formulas for babies also needs to be carefully supervised. For example, some children with cow's milk allergy will not be able to tolerate soy milk products.

Emergency treatment for severe allergic reactions

If you are at risk of a severe allergic reaction (anaphylaxis), carry an adrenaline (epinephrine) autoinjector such as an EpiPen® and a means of calling for medical assistance, such as a mobile telephone.

Emergency responses for a severe allergic reaction are:

- lay the person flat – do not allow them to stand or walk
- administer adrenaline with an autoinjector (such as an EpiPen®)
- always dial triple zero (000) to call an ambulance in a medical emergency.

If you are at risk of a severe allergic reaction make sure you:

- have a severe allergic reaction action plan
- carry an adrenaline autoinjector (such as an EpiPen®) to treat a severe allergic reaction
- wear medical identification jewellery – this increases the likelihood that adrenaline will be administered in an emergency
- avoid medication (where possible) that may increase the severity of allergic reaction or complicate its treatment – such as beta blockers
- seek medical advice.

Where to get help

- In an emergency, always call triple zero (000)
- Emergency department of your nearest hospital
- Your doctor
- **NURSE-ON-CALL**. Tel. 1300 60 60 24 – for health information and advice (24 hours, 7 days)
- **St John Ambulance Australia**. (Victoria) Tel. 1300 360 455
- **Allergy & Anaphylaxis Australia**. Tel. 1300 728 000
- **Asthma Australia**. Tel. 1800 ASTHMA (1800 278 462)

This page has been produced in consultation with and approved by:

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