

Tell me more about eczema in children

What is eczema?

Eczema is inflammation of the skin, which gives it a red, dry and flaky appearance. In people with darker skin tones, it can look purple or brown in colour. The main feature of eczema is itching. This itching causes children to scratch, which can damage the skin even more, which then causes more itching. Scratching can make the skin become thick and leathery. Constant itching can make your child very distressed and can lead to poor sleep and concentration. In the UK, the word 'eczema' in children really refers to 'atopic eczema'. This is a particular type of inflammation of the skin, often linked with asthma and hay fever.

What causes atopic eczema?

There is no single cause of eczema. We know that 'genetic' (inherited) factors related to the immune system and skin barrier are important. These genetic factors probably make a child more at risk of developing eczema, asthma, hay fever and food allergy. On top of this there are a number of things in the environment which will trigger atopic eczema in a susceptible child. These triggers are not always allergies – in fact, irritation from ordinary soaps, wearing wool next to the skin, overheating at night and contact with water and dusty materials can all be triggers. Internal triggers such as being unwell, tiredness, stress often make eczema worse, and sometimes skin infections on top of eczema can cause a flare. Specific allergies to foods such as eggs, nuts or cow's milk, or airborne allergens including house dust mite, animal dander, grasses and pollens aggravate eczema in some children. Eczema can lead to food allergy rather than food allergy causing eczema.

Will my child grow out of eczema?

Eczema in childhood is a condition which tends to come and go. The good news is that in most children, eczema will gradually improve. Around 60% of children who have eczema in the first few years of their lives are clear of it by the age of 11, but, unfortunately, we cannot say which children will clear or when, and some children may have an eczema tendency for life, even if it improves with age.

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Can eczema be cured?

Unfortunately, no, but there is a **lot** we can do to control and prevent flare-ups of eczema, so your child can lead a normal life. Lots of research is happening to try and find things that will prevent or 'switch off' eczema, but these are still in their experimental stages.

How can I find out what my child is allergic to?

Many of the ups and downs of eczema are not caused by specific allergies, but are due to irritation from a whole range of things as outlined above. And in many children, the eczema seems to have a life of its own, flaring up for no obvious reason.

Two common things that cause allergic reactions are house dust mite and certain foods. House dust mite allergy is extremely common in atopic eczema, but it is very difficult to get rid of this mite completely from our homes. Doing things like keeping the bedroom cool and well aired, regular vacuuming and avoiding carpets and too many upholstered items in the bedroom may be helpful. If your child's soft toy can't be washed at 60°C, place it in a plastic bag in the freezer for 24 hours. Freezing it will kill the dust mites.

Food allergies may be obvious to you if your child's eczema consistently gets worse after eating a certain food type such as hen's egg, especially if your child develops vomiting/diarrhoea and hives. Some food allergies may be more difficult to recognise especially in infants under 1 year. Tests such as skin prick tests and blood tests can be helpful but do not always give us the answers and are only undertaken following a detailed history by your health care professional. Do not explore allergy tests online or from shops in the high street. If you think your child's eczema gets worse after eating a particular food (eg eggs, dairy products, chocolate, fish, nuts, citrus fruit), then you might steer clear of that food completely for 6 weeks and then consider giving that food again to your child to see if it really does make his/her eczema worse. Don't experiment in this way with more severe reactions or suspected nut allergy though - discuss this with your nurse or doctor first. If you are going to put your child on a dairy-free diet, then you should discuss beforehand your child's diet with your doctor, nurse or dietician to make sure that your child will be having enough calories, protein and calcium.

What about other treatments?

The main treatments for sorting out itchy inflamed skin in atopic eczema (flare control creams) are topical corticosteroid creams or ointments. These are very effective and are **safe if used properly**. Calcineurin inhibitors such as tacrolimus or pimecrolimus may be used in addition to corticosteroids in certain

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situations such as persistent eczema on the face. Short courses of anti-histamines, one hour before bedtime, are occasionally helpful in breaking patterns of sleep disturbance due to eczema. Soothing cotton or paste bandages can also be helpful for your child if they are tearing the skin on their arms or legs to bits. Occasionally, other medicines, such as ciclosporin, methotrexate and ultraviolet light treatment are used to treat eczema, and new biologic treatments such as dupilumab and abrocitinib are becoming available if nothing else works. These treatments are only used for children with eczema that is very difficult to control and require outpatient monitoring.

But aren't steroids bad for you?

You should not confuse taking steroid tablets with topical corticosteroid creams and ointments applied to the skin. Whilst it is true that some of these creams were abused in the 1970s by prescribing strong preparations for delicate sites such as the face, we do not see children develop side effects from topical corticosteroid creams when used as recommended in our clinic. Thinning of the skin can be a problem if the cream is applied continuously for a very long period, but we would never recommend them to be used in this way. If needing to use every day for longer than 3 weeks then you should seek medical advice to consider alternative treatments. Continuous use can also lead to a rebound when stopping, which is another reason why we never use them continuously. They are usually used in a "reactive" way by applying them for several days during a flare to get control, or by using them in a "proactive" way by applying them just on the weekend to keep control once the eczema is clear. Emollients are always used alongside topical corticosteroids, but not applied at the same time, allow 30 minutes between applications. Poorly controlled eczema gives rise to far more problems for your child's well-being than does the sensible use of short-term topical corticosteroid creams.

What about infections of the skin in eczema?

Secondary infection by an organism called *Staph. aureus* is one of the most common reasons for eczema in the younger child to deteriorate. This can be recognised as the skin becomes very red and oozy. Occasionally, yellow pus spots may appear. Usually, treating the eczema more intensively with corticosteroid creams will improve the infection better than antibiotics. If you are using pots or tubs of emollient make sure you use a clean spoon to scoop out the emollient from the pot, as dipping fingers into the pot can be a source of infection. If the infection is very extensive or if your child is unwell, then your doctor might prescribe antibiotics (flucloxacillin unless your child is allergic to penicillin). Herpes (cold sore virus) may also cause infection on top of eczema. See your doctor if your child has been in contact with a cold sore or develops a cluster of little blisters on top of their eczema.

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What things can I do to help my child's eczema?

DO:

- Use enough emollient (medical moisturising cream) to stop your child's skin being dry and to prevent flares. Use the emollient especially after having a bath, and before and after swimming as this will keep the skin supple.
- Avoid soap and avoid direct contact with shampoo on your skin. Most emollients can be used as soap substitutes. There are a number of alternative wash products available and they come in the form of creams, ointments, bath and shower products. Bath oils are not able to be prescribed by health professionals.
- Use flare control creams when the skin is red and inflamed. These treatments need to be prescribed by a doctor who will instruct you on how to use them. The most common type of active treatments are corticosteroid creams which come in a variety of strengths or potencies: Mild eg hydrocortisone, Moderate eg clobetasone butyrate (Eumovate), strong eg. Betamethasone (Betnovate) or very strong eg. Clobetasol propionate (Dermovate).. Other active treatments include calcineurin inhibitors such as tacrolimus (Protopic®) and pimecrolimus (Elidel®).
- Keep the bedroom cool at night by opening the window in the day.
- Use light cotton sheets or a lightweight synthetic duvet.
- Keep your child's nails trimmed short so they cannot break the skin when scratching.
- Learn more about eczema by visiting the [Eczema Care Online](#) self-help website – a programme that has been independently developed by experts and patients and shown to help in clinical trials

DON'T

- Let your child wear wool or rough clothing next to the skin – cotton or very soft synthetics are usually best.
- Use ordinary soaps.
- Rub the skin dry after bathing. Pat dry the skin instead of rubbing.
- Let your child overheat and sweat – where appropriate use layers of clothing rather than one thick layer.
- Wait until your child's skin gets really bad before starting your flare control treatments
- Use corticosteroid creams continuously for long periods or strong creams on delicate areas like the face. Ask your doctor or nurse for a written plan of what to put where and for how long.

Further information

Please visit our website on: <http://www.nottinghameczema.org.uk/> There, you will find lots more useful information that has been produced in an unbiased way designed to help you. For instance:

- Skin Moisturisers in Atopic Eczema – information on the treatment for eczema that underpins all others <http://www.nottinghameczema.org.uk/documents/emollient-final-aug22.pdf>
- Atopic eczema and steroid creams - what you should know about this standard eczema treatment <http://www.nottinghameczema.org.uk/documents/atopic-eczema-and-steroid-creams2022v4-2.pdf>
- Atopic eczema and infections <http://www.nottinghameczema.org.uk/documents/atopic-eczema-and-infectionsdraft3janfinal.pdf>

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