

Department of Dermatology

Food allergies and eczema

Information for parents and carers



Eczema, also known as atopic eczema or atopic dermatitis, is a skin condition that causes inflammation and irritation. Eczema affects 1 in 5 children under the age of 2.

We are often asked for the 'cause' of a child's eczema and requests for allergy testing. It would be nice to be able to do a simple test and remove one thing to 'cure' eczema, but unfortunately the causes of eczema are much more complicated than this.

Most children are born with the tendency to develop eczema. There are many complex reasons why children get eczema and why eczema gets worse. Allergy testing is only useful in certain cases, when it can change the way you manage the eczema.

This information leaflet has been designed to help answer some of the questions that people commonly ask about eczema and food allergies.

Do food allergies cause eczema?

Very rarely. Although some children with eczema also have a food allergy, less than 2 out of 10 children with eczema develop a food allergy.

Our current understanding is that the eczema comes before the food allergy. The more severe the eczema, the higher the risk for developing an allergy.

It is therefore very important to control the eczema.

How can eczema cause the development of a food allergy?

This is still being researched, but we now know that eczema leads to a higher risk of food allergies developing, particularly if the eczema is poorly controlled.

Inside the skin there are lots of immune cells. The theory is that the inflamed skin of eczema is 'leaky' – this can let in small amounts of foods through the skin. These food particles are then seen by the immune cells, which react to the food as if it was attacking the body. This is what can lead to developing a food allergy.

Research shows that if children avoid eating certain foods when they are younger, when they do have contact with them on eczema prone skin they may go on to develop an allergy to that food. This has clearly been shown with peanut allergy.

Previously, children at risk of developing a food allergy were advised to avoid certain foods (such as eggs, peanuts and dairy). There is now good evidence that children should be given these foods earlier in their diets, so our advice about weaning and food exposure is now changing.

What types of reactions to foods are seen in children with eczema?

There are two main types of food reactions seen in children with eczema:

1. Immediate (or IgE mediated) reactions:

These reactions mostly develop immediately or within a short time after eating a food (usually less than 30-60 minutes). This is because the immune system reacts to the food by producing a type of antibody called IgE antibodies, which trigger an immediate allergic reaction. This can cause a number of symptoms, such as hives (a rash similar to nettle rash), itching, wheezing, diarrhoea and/or vomiting and (rarely) sudden collapse.

Children with these reactions will need to be referred to a specialist allergy clinic for further testing. They will usually have a skin prick test. This is a test to see whether they have a reaction to a small amount of potential allergen (the substance that triggers the reaction), which is inserted into the skin. They may also have an IgE antibody blood test (a test to look at immune reactions in their blood).

The foods that most commonly cause an allergy in the UK are milk, eggs, nuts and seeds, shellfish, fish, and wheat.

2. Delayed reactions:

This usually causes the eczema to get worse 24-48 hours after eating the food. Unlike immediate reactions, these are not due to circulating antibodies in the blood, so tests such as skin prick or blood tests are not helpful.

My child has had a positive result to an allergy test – should I remove this food from their diet?

Children with eczema and/or food allergy can have falsely positive allergy tests and this may lead to the unnecessary removal of foods. Any allergy test result should be interpreted by and discussed with a specialist.

There are several reasons why it is not a good idea to remove common foods such as wheat, milk and egg from your child's diet if it is not necessary. It may mean that their diet will no longer meet their nutritional needs and a limited diet may be difficult to manage, especially if it is not necessary.

There is another important reason why removing a food from a child's diet may not be good idea. Studies have shown that removing a food from the diet of a child who regularly eats that food can lead to an allergic reaction when that particular food is reintroduced.

What should I do if I think certain foods are causing my child's eczema to get worse?

There are no skin prick tests or blood tests that will tell us if certain foods may be the cause of an eczema flare. Your child's doctor will decide if their history suggests that a particular food is involved and may recommend a **trial** of eliminating the food from their diet (an exclusion diet). Sometimes though, the effect of removing a food is unclear and it may be necessary to start your child back on the suspected food to see if this does cause their eczema to get worse.

During an exclusion diet it is important to replace the missing foods with other foods of similar nutritional value. This is particularly important if cow's milk is removed from a young child's diet. A dietitian can help give you advice about this and will also supervise the exclusion diet.

Foods **can be a trigger** for a worsening of eczema, known as a flare, but **do not cause eczema**. This means that avoiding the food is not likely to 'cure' the eczema, but may help to prevent it from getting worse.

How can I help my child avoid an eczema flare?

Excluding a certain food from your child's diet is not likely to improve or prevent eczema.

There are many complex reasons why eczema may get worse. The best course of action is to treat the eczema.

The best way to treat eczema is to manage flare-ups with the most appropriate topical treatments. These will include applying emollients (moisturisers) and active treatments (corticosteroids or tacrolimus) to affected areas. It is best to also avoid irritants, like soap.

You may be advised in clinic to use proactive treatments on flare prone areas of skin, to try and prevent flare ups ("get control, keep control"), or given solutions to help reduce infection rates (such as cleansing baths). These will be discussed with you in clinic, depending on the type of eczema and symptoms your child has. We can also give you our 'Get control, keep control' leaflet.

How to contact us

If you have any further questions, please contact the Dermatology Consultant's secretary:

Tel: **01865 228 224**

(Monday to Friday, 9.00am to 5.00pm)

Further information

British Society for Paediatric Dermatology

Website: www.bspd.org

Allergy UK

Website: www.allergyuk.org/skin-allergy/atopic-eczema

If you have a specific requirement, need an interpreter, a document in Easy Read, another language, large print, Braille or audio version, please call **01865 221 473** or email **PALS@ouh.nhs.uk**

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February 2017
Review: February 2020
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