

Allergy and Immunology



Eczema; food allergies and other triggers

What is eczema?

Eczema is a common skin condition which can affect children of all ages. It is associated with redness of the skin and itch. There are a number of trigger factors which in some but not all cases can make the eczema worse; these include allergies to foods and other antigens in the environment. If allergies to foods or other antigens are found to make the eczema worse this is called atopic (allergic) eczema. However, many cases of eczema in childhood are not associated with allergies. This type of eczema is called non atopic eczema.

Why is the skin dry?

Eczema is often associated with dry skin due to absence of natural oils. The dryness of the skin is inherited from the parents. The dry skin is a major reason why it is important to avoid or minimize the use of soaps which act to remove natural oils from the skin.

Can my child grow out of eczema?

Eczema is particularly common in infancy and early childhood and many children will improve as they enter the school. In general the milder the eczema is in early childhood the more likely one is to grow out of it as one gets older.

What are common trigger factors?

In addition to allergies there are a number of other trigger factors which may make the eczema worse. These include;

- Hot weather
- Soaps which remove natural oils
- Food allergy
- Dust mite allergy
- Staphylococcal germ infection on the skin
- Skin virus infection (in particular herpes simplex)

What is the role of Staphylococcal germ infections?

Staphylococcal germ infections make the eczema worse in 2 ways;

- 1 By causing skin infection which is associated with crusting and redness of the skin. Antibiotics can reduce this infection and cause a marked improvement.
- 2 By living on the skin and producing substances called superantigens which activate the immune system and cause inflammation in the skin. In this situation the antibiotics will not necessarily reduce or eliminate the infection. Your doctor may try to remove or reduce these bacteria by use of baths or washes applied to the skin. It has also been shown that treatment of the eczema with cortisone ointments and creams can lower the number of staphylococcal germs on the skin.

Are there other infections on the skin which can make eczema worse?

Eczema skin may have reduced immunity and be more susceptible to virus infections in particular herpes simplex. This infection can make the eczema a lot worse and treatment with antiviral agents may be indicated. The development of blisters on the eczema can be a sign of herpes virus infection.

What is the role of food allergies?

Food allergies do not cause the eczema, but can make it worse. There are 2 main ways a food allergy can worsen the eczema:

- 1 Immediate reactions with redness and itching of the skin developing soon (within an hour or two) after eating the food.** Children with these reactions will usually have a positive IgE antibody skin prick test or blood test.
- 2 Delayed reactions.** In this case the eczema may gradually get worse (more redness itchiness) over 1-2 days after ingesting the food. These reactions are thought to be due to immune cells in the skin (T cells) reacting against the food. They are not caused by IgE antibodies and therefore tests for these antibodies (skin prick test or blood test) are not useful in predicting these reactions.

What foods make eczema worse?

There is wide range of foods that might worsen eczema. The foods most commonly found in both immediate and delayed reactions are cow's milk, hen's egg, wheat and peanuts. To identify which foods may make eczema worse your doctor may try a diet which removes the suspected foods.

How are delayed reactions diagnosed?

There is no good skin or blood tests to sort out whether foods cause a delayed reaction. It is often necessary to have a trial of elimination of the suspected food followed by reintroduction to determine if the food is causing a delayed reaction.

Should I remove all the foods that have a positive allergy test?

Many children with a positive allergy test can eat that food without a problem. Removing multiple common foods such as wheat, milk, soy and egg from the diet is difficult to manage, particularly as the child grows older. Recent research also suggests that removal or avoidance of a food to which the child is not allergic in early life might actually increase the risk of developing an allergy to that food.

What is the role of very restricted diets?

Sometimes in severe cases your doctor may advise a trial of a diet restricted to only a few meats (eg, chicken and lamb), a few vegetables (eg, broccoli pumpkin) a few fruits (pears, apples) a cereal (rice) and only water or rice milk to drink. The diet is usually given for 4-6 weeks initially and should not be continued past 6 weeks unless advised by your doctor or dietitian.