

Fact Sheet

Food Allergies and Eczema



Is food allergy the cause of eczema?

No. Children are born with the tendency to have eczema and many things can make this eczema worse. This is called a “trigger” for the eczema. Foods can be a trigger for eczema in some cases but are not the cause of the eczema. One way to think of it is that eczema results from an imbalance of the immune system. As a result of this imbalance children may become sensitised (develop IgE allergy antibodies) to common substances in the environment (in particular foods, dust mites and grass pollens). In some (but not all cases) food allergy may make the eczema worse. If foods do trigger the eczema it is often only one or two rather than many. Removal of the food will sometimes result in a significant improvement but will not cure the eczema. Because foods are not the basic cause of eczema avoiding a food may either only partially control the eczema or not make any difference.

If a food allergy is making the eczema worse what are the symptoms?

There are 2 main ways a food allergy may make the eczema worse;

1 Immediate reaction 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. The reactions are thought to be due to the food reacting with the IgE antibody in most cases

2 Delayed reactions. In this case the eczema may gradually get worse (more redness itchiness) over 24 -48 hours 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 very helpful in predicting the reactions.

How are these delayed reactions diagnosed?

There are no good skin or blood tests to sort out whether foods cause a delayed reaction. The diagnosis is based on a history which suggests the possibility of such a reaction and a trial of elimination of the suspected food(s). If there is significant improvement the food should continue to be avoided. In a number of cases the result of removing food(s) from the diet may be unclear and it may be necessary to rechallenge with the suspected food.

What foods are most likely to make eczema worse?

The foods most commonly found in both delayed and immediate reactions are cow's milk, hen's egg, wheat and peanuts.

My child develops an eczematous rash around the mouth after eating certain foods is this food allergy?

This is called perioral contact dermatitis. It is commonly seen following ingestion of acidic fruits and vegetables such as orange, tomato and strawberries and is one of the most common food reactions. If a food does this it can be avoided. Allergy testing is not necessary in this situation. The foods may be avoided if the dermatitis around the mouth is troublesome, but in some situations the reactions are very mild and disappear quickly and removal of the food from the diet is not required.

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Why not just remove all the foods that show up on an allergy test?

Many children with a positive allergy test can eat that food without a problem. Removing many common foods such as wheat, milk, soy and egg from the diet is difficult to manage, particularly as the child grows older. Food allergies are most likely to make eczema worse in young (preschool) children and frequently become less relevant or not relevant at all in older children and adolescents. It is important not to indefinitely avoid a food just on the basis of an allergy test unless there is a clear worsening of the eczema when the food is eaten.

There is another reason why it may not be a good idea to remove every food that shows up on an allergy test. There are a number of cases being reported where a food that was previously being eaten regularly was removed just because of a positive allergy test, and when the child was subsequently re-exposed, the food caused a very severe allergic reaction. Thus continuing to eat a food if it is not making the eczema worse, even if the allergy test is positive, might actually prevent a more severe allergy developing.

If egg makes eczema worse is this due to the white or yolk?

Allergy can occur to both egg white and yolk. Egg white allergy is more likely to make eczema worse. If your child needs to avoid egg it is simplest to avoid both egg yolk and egg white. Raw egg is more likely to produce immediate reactions than cooked egg as some of the allergy inducing parts of the egg are altered by heat.

What about foods with a label that says "may contain traces"?

Many foods carry a warning on the label "may contain traces of ". This usually indicates that the food is made in a facility that also makes other foods which contain the listed food. Any possible trace or contamination would be so small that it is highly unlikely to make the eczema significantly worse. In general foods labelled this way do not need to be avoided as part of an eczema diet. However if your child has had a severe allergic reaction (anaphylaxis) to a food you should discuss what to do about these foods with your doctor.

Can my child grow out of the allergy to foods?

Yes. As the child grows out of the eczema the food allergy will usually improve as well. Eczema is often grown out of with time. This happens independently of the diet or other treatments.

Could artificial preservatives or colourings or natural salicylates and amines be causing the eczema or making it worse?

There is some suggestion that artificial colourings and preservatives may make eczema worse in a small proportion (< 3%) of children with eczema. There is no allergy test for colourings and preservatives. There is no evidence that natural salicylates and amines should be avoided in children with eczema.

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What is the role of very restricted diets?

Sometimes your doctor may advise a trial of a strict elimination diet. Such diets are 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. In very severe cases these diets may be used as an initial step to determine whether food allergy is making the eczema worse. The diet is usually tried for 4-6 weeks initially and should not be continued past 6 weeks unless there is a significant improvement in the eczema and your doctor has advised that the diet should continue. In general they are difficult to adhere to. If there is no improvement this suggests that the foods removed are not making the eczema worse. If there is improvement foods are then added back at a rate of 1-2/week. This process and diet will need supervision by your doctor and a dietician.

- The Web site of the Children's Hospital at Westmead contains fact sheets similar to this one on a number of aspects of allergic disease.
(<http://www.chw.edu.au/parents/factsheets/>)

Where can I find more information on the Internet?

- The Australian Society of Clinical Immunology and Allergy (ASCIA) website contains useful information on eczema written by Australian specialists
(www.allergy.org.au)
- DermNet NZ the web site of the New Zealand Dermatological Society has information about allergic skin diseases and eczema
(<http://dermnetnz.org/>)

This fact sheet is for education purposes only.
Please consult with your doctor or other health professional
to make sure this information is right for your child.

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the
children's
hospital at Westmead

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