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# Diet and your Child's Atopic Eczema – Information for Parents

Atopic eczema is a chronic, inflammatory, itchy skin condition that usually develops in early childhood. Atopic eczema has a genetic component that often makes the skin barrier work less well. A poorly working skin barrier means that eczema can be made worse by things like irritants, allergens, infection, and changes in the weather.

Children with atopic eczema can be allergic to foods (food allergy), things in the air (airborne allergy), or things put directly on the skin (contact allergy).

This information leaflet is about food allergy and diet for children with atopic eczema.

A nutritious, well balanced diet is important in children with atopic eczema, to keep the skin and body as healthy as possible. Many people think that certain foods are making their eczema worse. However, it is important not to restrict a child's diet without clear benefit to their eczema as restrictive diets can harm a child's growth and development.

### How important is food allergy in atopic eczema?

It is still unclear exactly what proportion of children food allergy is playing a role, because estimates from studies vary widely. The reason for this is that the effects of food on the skin in eczema are complicated and difficult to assess. We do know that having eczema makes a child more likely to develop food allergy in the future.

Food allergy in eczema can show itself in different ways

- 1. Immediate reaction to food within seconds to minutes, causing an itchy rash (hives), and sometimes swollen lips or tongue, vomiting, wheeze or collapse. The food should be avoided until medical advice is obtained.
- 2. Worsening of eczema within 48 hours after ingesting certain foods

Food allergy is more likely to be playing a role in younger children whose eczema is quite severe, and in eczema that does not seem to respond to steroid creams with moisturisers. Food allergy should be considered if eczema is associated with any of the following:

- 1. Immediate or delayed reactions to food (as above)
- 2. Onset of eczema under 6 months of age
- 3. Rash (hives) when suspected food touches the skin

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- 4. Gut symptoms or faltering growth
- 5. Family history of food allergy

Food allergy is likely to be less important if the eczema developed after 2 years of age when other environmental triggers become more significant.

### Which foods might my child be allergic to?

The commonest foods children with eczema are allergic to are egg, milk and peanuts.

Allergy can occur to many other foods including wheat, fish, shellfish, tree nuts, soya, lentils strawberries and other fruits.

Sometimes, it is easy to work out which foods are causing a problem when there is an immediate reaction such as vomiting or a nettle rash appearing on the child's skin, which looks different from the usual eczema.

It is more difficult to work out foods which are causing a flare (worsening) in eczema, because it may take 1-2 days after eating the food before the eczema flares up. A collection of other symptoms such as altered bowel habit (constipation or diarrhoea) or vomiting may indicate food has a role.

The most reliable way of knowing whether a food allergy is aggravating your child's eczema is to completely avoid the food for 4-8 weeks (remembering to check ingredients on shop bought products), and then, at the end of this period, let them eat the food again. If your child develops a clear flare up of the eczema 1-2 days after eating the food in question, then this is a fairly reliable guide that your child's eczema is being aggravated by that food, although they may not be allergic to the food in the sense of immediate or potentially dangerous reactions.

It is helpful to keep a diary or regular photographs of your child's eczema before, during, and after the food is withdrawn and reintroduced, in order to help you decide whether it has made a difference. Remember that eczema is a condition which tends to go up and down of its own accord, so deciding whether avoidance has made your child's eczema better can be tricky. If you are unsure whether a food that you have avoided has really made your child's eczema worse, then try the 4-8 week avoidance test once again, followed by the reintroduction of the food. This form of parental observation is the most important practical way of diagnosing food induced aggravation of your child's atopic eczema.

If your child develops symptoms such as swollen lips or wheezing with certain foods, or if you suspect peanut allergy, then you should NOT experiment with diets on your own – seek help from your doctor or nurse.

### Are there any tests that can help us?

Tests can be helpful in diagnosing food allergy, particularly when there is an immediate reaction to a food (within 30 minutes). Tests are much less helpful in working out which foods are aggravating the eczema by slower modes of action (days after ingestion) or accumulation in the body. The tests which can be considered are blood tests, and Skin Prick Tests (see our information sheet 'Allergy Tests in eczema')

High street and internet tests are not reliable and cannot be recommended.

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Many parents believe that coming to hospital and having an allergy test will give them the answer of the cause of their child's eczema. It is extremely rare for a single allergic cause to be found for eczema in this way, because (i) eczema does not have a single cause and (ii) the tests are not that much good at telling us what happens in the body with foods and eczema.

### What should I do if I suspect food allergy in my child?

We recommend that you discuss this with your doctor or skin specialist, describing the problems food is causing.

Foods such as milk and wheat are essential for a growing child, and should not be excluded without discussion with a health care professional to ensure that a suitable replacement is given so general health is not affected. In young babies having milk only, a 4-8 week period replacing formula milk with a low allergenic "extensively hydrolysed protein" formula (eg. Nutramigen/ Althera/Similac alimentum/Aptimil pepti 1&2) or "amino acid based formula" (eg Neocate/ Nutramigen AA/ Alfamino) can be prescribed by your doctor. These formulas are a type of milk in which the big proteins (that cause food allergy) are broken down into small ones causing much less of a problem. In older children, milk free means cutting out all other dairy products at the same time, which is not easy.

At the end of 4-8 weeks, an assessment should be made of how the child's eczema has been. If it has improved a lot, then a dietitian referral is essential to advice on weaning and continuing the milk free diet. It is not safe to continue a milk free diet in a young baby for more than 8 weeks without dietetic advice.

If no improvement has occurred, then cow's milk should be gradually reintroduced, as it is an important source of calcium, protein and calories for a growing child.

Soya milk should not be used under 6 months of age because it contains traces of plant oestrogens (hormones that can affect your child's development) and because babies with milk allergy could also be allergic to soya. Goat's milk is not recommended because there is not enough evidence that it provides adequate nutrition for babies and because it contains lots of the same allergens as cow's milk.

# Will my child always be allergic to certain foods?

Most babies who are allergic to milk and egg in the first year of life will grow out of their allergies at some point. This is also true for most other food allergies occurring in the first year of life (except peanut). It is difficult to predict what age this will happen as it varies from child to child, but it is usually after 2 years of age.

If your child has ever had an immediate reaction to any food, with widespread rash, wheezing or lip/tongue swelling or vomiting, you should seek medical advice before reintroduction, especially if the food has been avoided for more than 8 weeks.

## How can I prevent food allergy in my next child?

We are not sure yet, but more and more work is suggesting that rather than avoiding foods in infants, we should be exposing them to a wide range of foods in order for their bodies to become tolerant. In Israel for example, where peanuts are a common part of the diet in younger life, peanut allergy is very rare, unlike the UK where peanuts are rarely found in the diet until much later.

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It is possible that some types of probiotics (friendly gut bacteria) may have a helpful role in preventing eczema and food allergies if taken by mothers in the last 3 months of pregnancy.

At the moment there is no clear evidence that breast feeding, specific formulas or later introduction of solids protects against eczema. Breast feeding is good for babies, but you should do what you are comfortable with.

### Can foods aggravate my child's eczema in other ways?

Other foods that parents commonly say can aggravate eczema are:

Citrus products e.g. orange juice

Colourings

Chocolate

Tomato

Some of these foods aggravate eczema due to chemicals such as histamine which are found in the food, rather than due to allergy. Others like tomato sauce irritate the skin around the mouth as a result of direct contact with the skin. Often it is sufficient to limit these foods rather than avoid them completely, providing they do not cause immediate reactions.

### What else can I do about diet to help my child's eczema?

Children with eczema need a nutritious, well balanced diet to allow the skin to heal.

It is recommended that all children under 5 years take a multivitamin preparation, and this is particularly important for children with eczema.

Low iron in the body causes itching, and seems to be common in children with eczema, so increasing iron in the diet, eg. green vegetables, red meat and pulses, is also advisable.

#### **Further information**

Allergy tests for Atopic Eczema <a href="http://www.nottingham.ac.uk/nsgcce/documents/allergy-tests-for-atopic-eczema.pdf">http://www.nottingham.ac.uk/nsgcce/documents/allergy-tests-for-atopic-eczema.pdf</a>

NICE Guideline Food allergy in children and young people <a href="http://guidance.nice.org.uk/CG116">http://guidance.nice.org.uk/CG116</a>

Care Pathway for Food Allergy from Royal College of Paediatrics and Child Health http://www.rcpch.ac.uk/allergy/foodallergy

Living with food allergy http://www.allergyuk.org/general-avoidance/general-avoidance

Food allergen labelling http://www.food.gov.uk/science/allergy-intolerance/label/

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