

Fact Sheet

Egg allergy



How common is egg allergy?

Egg allergy is one of the most common food allergies in childhood affecting about 1-2% of preschool children. It is usually due to allergy (IgE) antibodies against egg proteins. IgE antibodies can be detected using an allergy test such as a skin prick test or blood test. Not all children with a positive egg allergy test will develop reactions on eating egg or foods containing egg. If your child has a positive allergy test but has never eaten egg your doctor will determine the chance of developing a reaction if there is exposure to egg.

What are the symptoms of egg allergy?

The majority of immediate allergic reactions to egg are mild and consist of hives around the mouth or more generalised hives on other parts of the body. Swelling of the lips and around the eyes can also occur. Some children may develop hives from skin contact with egg. This can happen when foods such as cake mixes or batters touch the skin. Raw egg is more likely to produce these contact reactions than cooked egg. These reactions are usually restricted to the area of skin that comes into contact with the egg and do not always mean your child will develop worse symptoms from eating egg. Sometimes hives around the mouth or eyes can occur from skin contact with egg but may resemble the reaction that occurs from eating egg. Your doctor will help to sort this out.

A less common symptom is abdominal pain and vomiting which

occurs soon after eating egg or products containing egg. More sensitive children can develop coughing, wheezing, difficulty breathing or hoarseness of the voice due to an allergic reaction occurring in the airway. In the most severe cases collapse and loss of consciousness can occur. Egg or egg containing foods are less likely to cause severe reactions as compared to peanut. Very rarely very sensitive individuals have died from a severe allergic reaction to egg. Other reactions to egg not due to IgE allergy antibodies are not discussed here.

How is egg allergy diagnosed?

In most cases the symptoms of egg allergy start soon after exposure to egg or egg containing foods. These symptoms usually occur minutes after the food is eaten, but can occasionally take up to 2 hours following the exposure. The presence of allergy IgE antibodies to egg can be confirmed by an allergy skin prick test or a blood test (called a RAST test). It is important to realise that not every child with a positive allergy test will develop symptoms on exposure to eggs and the interpretation of the test should be discussed with your doctor.

Does the allergy occur to egg white or egg yolk?

Allergy can occur to both egg white and yolk. Egg white allergy is more common. If your child is allergic to egg and needs to avoid egg it is simplest to avoid both egg yolk and egg white.

Fact Sheet

Egg allergy



My child seems to react to raw but not cooked egg.

What does this mean?

Some of the allergy inducing parts of the egg are altered by heat used in cooking and become less likely to cause a reaction. This explains why some people react to raw or lightly cooked but not well cooked egg. However other children will react to both raw and cooked eggs. Many children with egg allergy can tolerate small amounts of baked egg in cakes and muffins. You should discuss whether your child might be able to do this with your doctor.

How do I avoid exposing my child to egg?

Egg or egg products may be found in foods we don't always expect them to be in. It pays to know where to look. It is important to use common sense and read food labels carefully. Egg can also be in prepared foods that may not have a food label attached.

The following foods often contain egg:

Asian dishes
Battered food
Binding for rissoles, patties, meatloaf
Biscuits
Cakes
Cake mixes
Confectionary eg. marshmallows
Croissants
Crumbed foods
Custards
Dessert mixes
Dips
Egg noodles and pasta
Fried rice
Health drinks
Ice cream, frozen desserts and sherbets
Icings
Malted chocolate drinks, eg. Ovaltine

Note: Some children with egg sensitivity are able to eat cooked foods containing small amounts of egg without developing a reaction. Your doctor can advise you about this. Do not give your child egg containing foods unless this has been discussed with your doctor.

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

Some foods may carry a warning on the label "may contain traces of egg". This usually indicates that the food is made in a facility that also makes other foods which do contain egg. Discuss what to do about these foods with your doctor.

Mayonnaise
Melts
Milk puddings
Mock or butter cream
Mousse
Muffins and muffin mixes
Naan bread
Nougat
Pie fillings
Prepared soups, clear soups, consommés
Prepared meats
Puddings
Rissoles, sausages
Salad dressings
Some breads, breaded foods
Shiny glaze on baked goods
Tarts and pastry
Vegetarian meat substitutes

Fact Sheet

Egg allergy



Does my child have to avoid eating chicken?

No. Allergy to chicken is very uncommon and is different to egg allergy.



What is an Epipen?

An Epipen is an emergency device which injects a dose of adrenaline into the muscle. It is used to treat severe reactions to egg. Adrenaline reverses the severe allergic reaction and can be lifesaving.



Should my child have an Epipen?

Children who have had a serious reaction to egg with involvement of the breathing passages should have an Epipen. The need for other children and babies to have an Epipen depends on a number of factors which should be discussed with your doctor. **If you have an Epipen it is very important that you understand how and when to use it and that you have a written anaphylaxis action plan provided by your doctor.**



Can my child grow out of egg allergy?

Many infants and young children will grow out of their egg allergy. Approximately 2/3 will grow out of their allergy by 5-10 years of age. Those children who have had milder allergic reactions with only skin reactions are more likely to outgrow their allergy than children with more severe reactions. Your doctor can determine whether egg allergy is still present by monitoring the allergy tests every 12 months or so.



Is my child likely to have a severe reaction from casual contact with egg product on benches, other children's hands or by smelling eggs?

No. Severe reactions from casual contact are extremely rare.

Can I prevent egg allergy in my future children?

There are no steps which can guarantee a child will not develop egg allergy. There is no evidence that avoiding eggs in pregnancy prevents egg allergy in the baby. The evidence is unclear whether avoidance of eggs by the mother while breastfeeding will alter the development of egg allergy in the baby.

What about immunisation should my child avoid any vaccines?

It used to be thought that measles immunisation should not be given to egg allergic children. This is incorrect. The measles vaccine is safe in all egg allergic children as is not grown in hen eggs and all egg allergic children should have measles vaccine. Influenza vaccine is grown in hens eggs and can usually be given to egg allergic children under the supervision of an allergist. Discuss Influenza and Yellow fever vaccination (if required) with your doctor.

Fact Sheet

Egg allergy



Remember:

- If you are unsure about something discuss it with your doctor.
- Most children will outgrow their egg allergy.

Where can I find more information on the Internet?

- The CHW diet sheets available on www.chw.edu.au/parents/factsheets/
- The Australian Society of Clinical Immunology and Allergy (ASCI) website contains useful information on food allergy written by Australian specialists (www.allergy.org.au).
- The patient support group Anaphylaxis Australia offers valuable updates and tips for dealing with food allergies (www.allergyfacts.org.au).

Written by the Department of Allergy, Immunology and Infectious diseases The Children's Hospital at Westmead.

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.

This document was reviewed on 7th July 2010

the children's hospital at Westmead

www.chw.edu.au

 **SYDNEY CHILDREN'S HOSPITAL RANDWICK**

www.sch.edu.au

 Kaleidoscope
HUNTER CHILDREN'S HEALTH NETWORK

www.kaleidoscope.org.au