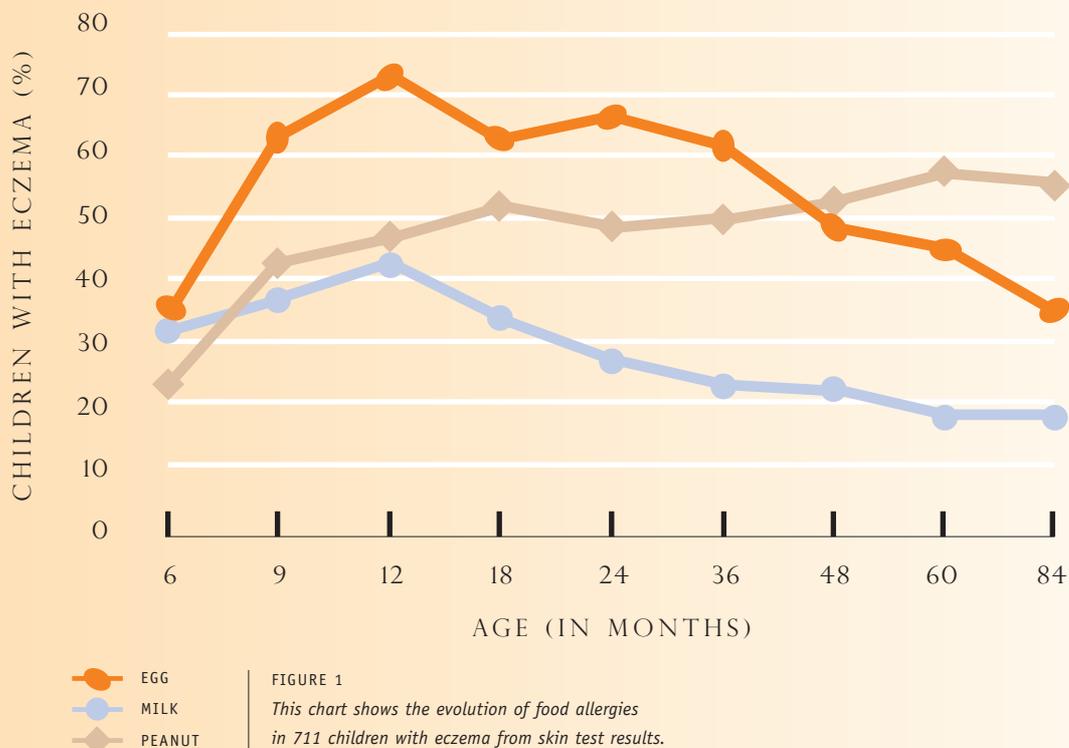


egg allergy

How common is egg allergy?

EGG IS THE MOST COMMON FOOD ALLERGY IN INFANTS AND YOUNG CHILDREN AND THE MOST LIKELY ALLERGY TO FADE OVER TIME ESPECIALLY AFTER THE AGE OF THREE. ALMOST ALL SIGNIFICANT EGG ALLERGY REACTIONS OCCUR IN VERY YOUNG CHILDREN WITH INFANTILE ECZEMA.





How serious is an egg allergy?

Although children can have severe life-threatening reactions to egg, reports of death from this allergy are extremely rare.

When do most egg allergies become obvious?

Most egg allergy reactions including severe reactions occur between 6 and 15 months of age when egg is given for the first time. At this stage the child is often very highly sensitized because the allergy has not been appreciated and there has been contact with little bits of protein through breast milk or a little bit in biscuits in the diet.

Older children can retain their egg allergy and have skin contact reactions and hives around the mouth or redness of the face if egg is ingested.

It is rare to find an adult with a reaction to egg. Highly allergic adults sometimes have nausea or flaring of their eczema after eating egg that is a major ingredient in a food. This doesn't happen very often as those with an egg allergy tend to have a natural aversion to eating eggs. Most egg allergic adults that I have seen can eat egg if it is a minor ingredient in a food.

Egg allergic children have a natural aversion to egg containing foods. The aversion is particularly noticeable in children with good appetites who happily eat a wide range of flavours in their diets but refuse cakes or any attempt to feed them egg.

Foods that commonly cause egg allergy reactions?

The foods that cause egg allergy reactions vary according to the age of the child. First reactions to eggs are usually after baby custard or scrambled egg. Playing with eggshells or grabbing at an egg in the carton in the groceries, contact with a tiny spot of beaten egg while whipping egg white or giving the child the spoon to lick after beating a cake. Occasionally the egg-wash on a roll or bun is overlooked.

In older children the reactions have commonly been after eating ice cream or sorbet that contains either raw egg white or partially cooked egg in the form of custard. Mayonnaise that contains raw egg on sandwiches is also a cause of reactions that are usually mild.

Because of the way that children with egg allergies refuse to touch any food that contains egg, it is remarkable that the ice cream and sorbet are so readily consumed in some quantity. It is possible that the ice numbs the mouth to the unpleasant sensation associated with allergen contact.

Is the allergy due to the egg white or the yolk?

The egg white is more likely than the yolk to cause an allergy reaction but both parts of the egg can cause allergies. Eggs from birds other than hens can cause an allergy reaction in children with a significant hens egg allergy, as the proteins are the same.

MMR immunizations in children with egg allergies

In the past an allergy to egg was viewed as a contraindication for giving the measles, mumps and rubella (MMR) vaccine at 12 months. In fact it is still stated in the Consumer Product Information. The vaccine is not cultured in whole egg but in tissue in the developing chicken embryo. Thousands of children with a known egg allergy have now been safely immunized. Occasionally there has been a rash immediately after the needle but this has been a rare event.

Some children with an egg allergy are very reactive and have multiple food allergies and intolerances. In these cases we would continue to recommend that they be immunized in a hospital setting.

Influenza vaccine is cultured in egg and may cause reactions in those with an egg allergy.

Severe reactions can occur to any immunization. Doctors and nurses should always have adrenaline immediately available as recommended in the consumer product information during any vaccination. Check that your doctor has the appropriate emergency treatment ready before any immunization is given.

Timing of immunizations

The recommended schedule for immunizations has been developed to try to protect children in the most vulnerable age groups. Children with older siblings or in contact with a lot of other children are at a much greater risk of getting highly infectious childhood diseases. If children are well enough to attend day care, immunizations should not be delayed.

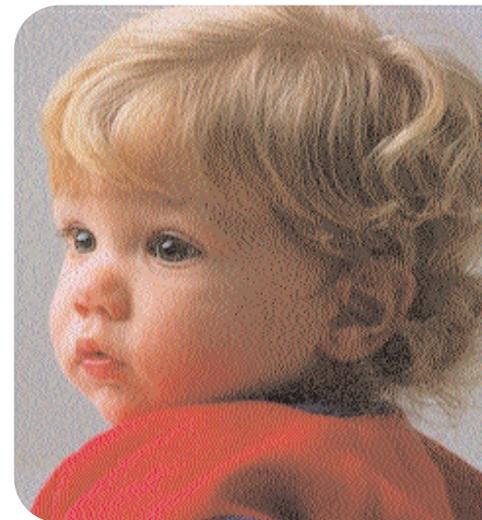
Sometimes immunizations have been delayed for medical reasons after discussing the risks and benefits with the parents.

Does egg avoidance in the first year prevent an egg allergy?

There is a window of opportunity for an egg allergy to develop. Egg is quite a potent allergen and it is evident from case histories that there doesn't need to be much obvious egg in the breastfeeding mother's diet for an egg sensitization in the infant to occur. Allergies to egg may start before birth and the window of opportunity persists until about a year of age.

In very high-risk infants, egg avoidance in the maternal diet from later in pregnancy and the first year of life has avoided sensitization in almost all cases.

Children with a history of an egg reaction often start tolerating small amounts in cooking after two years.



Other food allergies in children with an egg allergy

Since egg allergy is the most common allergy it is possible that it is an isolated problem. However, an egg allergy reaction is also a good marker for an allergy tendency and a warning that there is an increased risk of house dust mite allergy and asthma in the next few years.

Children with a history of an egg allergy reaction should always be warned of the possibility that there is also a peanut or other nut allergy. Although the egg allergy is unlikely to cause too many serious reactions the peanut allergy can have catastrophic consequences.

Skin test responses to egg and the chance of a reaction

The size of a skin test reaction to egg and the type of reaction with contact varies according to age.

A small skin test response to egg is highly significant at 6 months of age whereas after 12 months small skin prick test reactions to egg of 3 or 4 mm in diameter are usually only associated with mild food allergy reactions if there is any reaction at all. Note that there are exceptions.

In young children under 2 years, if the diameter of the skin weal to egg is 5x5 mm or greater there is invariably a reaction after egg is given. The size of a skin test reaction is not a good guide to the severity of a reaction from contact as other factors such as the amount or whether the egg is in a cooked or raw state can affect the severity of a reaction.

In older children who are less sensitive a larger weal of 7x7 mm or greater weal is usually associated with some reaction.

Children can also have reactions to egg that are not due to an allergy. Egg is often refused and eating egg can cause rashes, vomiting and loose stools without any evidence of a true allergy. This reaction tends to be dose related and children with this problem tend to have a history of reacting to cow's milk and soy.

Helpful cooking hints and egg substitutes

Egg substitutes work best in moist baking products such as fruitcake or muffins

The following substitute for 1 egg

1–2 teasp commercial egg replacer (eg Egglie or No Egg)

1 teasp baking powder + 1 tablesp liquid + 1 tablesp vinegar

1 teasp yeast disolved in $\frac{1}{4}$ cup warm water

1 tablesp apricot jam or apple juice

1.5 tablesp water + 1.5 tablesp oil + 1 teasp baking powder

HOW TO AVOID

egg

EGG AVOIDANCE IS RECOMMENDED FOR FAMILIES AND CARE SITUATIONS WHERE THERE IS A YOUNG CHILD (UNDER TWO OR THREE YEARS) WITH A SIGNIFICANT EGG ALLERGY BECAUSE CONTACT WITH SMALL QUANTITIES CAN BOOST THE ALLERGY.

In very rare instances children with an egg allergy can have an anaphylactic reaction from being close to someone eating whole egg. These children are highly sensitized **AND** they react to traces of egg.

Children who are highly allergic to egg can have a mild food allergy reaction from:

- Being in the kitchen when eggs are being fried
- Being in the next room when pavlova mix is being used
- Being touched by someone who has been handling raw egg even after hand washing
- Sitting close to another person eating egg

food labels

All packaged foods must have an ingredients list on their label. The first ingredient on the list is the ingredient that there is most of in the product and the last ingredient on the list is the one that is in the least amount by weight. Water is not included as part of this process. Salt, MSG, spices and preservatives will normally come near the end of the list.

- ALWAYS** check the label every time you buy the food as the ingredients of the product may change.
- PROCESSED FOODS** that do not use egg as an ingredient **MAY CONTAIN TRACES OF EGG AS A CARRYOVER INGREDIENT** if egg-containing products are made in the same restaurant, bakery, processing line or factory etc. *A may contain...* warning does not help to identify whether the food has a lot or a little of the possible ingredient.
- COOKED FOODS CAN BE CONTAMINATED WITH EGG FROM THE COOKING SURFACE OR UTENSILS.**

Words on labels to look out for

egg white
egg yolk
dried egg
egg lecithin
lecithin (usually soy)
powdered egg
mayonaise
albumin
ovalbumin
ovomucoid
globulin

Precautions for children with an egg allergy

<p>Egg as <u>major ingredient</u></p>	<p>Boiled, fried, poached scrambled eggs*</p> <p>Egg in salads</p> <p>Quiche, egg and bacon pie, spinach pie</p> <p>Custards*</p> <p>Meringues and pavlova</p> <p>Macaroons</p> <p>Mayonnaise*</p> <p>Sauces (Béarnaise sauce, tartar sauce)</p>
<p>Egg as <u>usual ingredient</u> that may be overlooked</p>	<p>Cake</p> <p>Éclairs and other pastries made from choux pastry</p> <p>Breads (glazed), pastries (glazed), doughnuts, Waffles, pancakes, pikelets</p> <p>Egg noodles</p> <p>Fried rice</p> <p>Pre-crumbed food: — schnitzel, hamburgers & meatloaf</p> <p>Caesar salad</p>
<p>Egg as <u>possible ingredient</u> that may be overlooked</p>	<p>Ice cream*</p> <p>Sorbet*</p> <p>Dips with mayonnaise as an ingredient</p> <p>Bread, dumplings, biscuits, baking powder, pretzels</p> <p>Macaroni, spaghetti, soups (especially with noodles)</p> <p>Sausages</p> <p>Salad dressings (such as Caesar salad or Ranch dressing)</p> <p>Confectionary, marshmallow</p> <p>Clear soups and white wine (egg white is used to get rid of particles that cause cloudiness)</p>
<p>Products at <u>risk of being contaminated</u> with egg (<i>not as an ingredient</i>)</p>	<p>Biscuits (egg may be a carryover ingredient)</p>

* These foods have been associated with severe reactions in our experience

Copies of this brochure can be obtained from:

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