

PATIENT INFORMATION BROCHURE

EGG ALLERGY

Egg allergy affects about 2% of infants and children and is most common in the first 3 years of life especially in children with eczema.

WHAT CAUSES EGG ALLERGY?

- The main proteins in egg white are called ovomucoid, ovalbumin, ovotransferrin and lysozyme.
- The main protein in egg yolk is called alpha-livetin. Reactions are mostly due to the proteins in the egg white.

CLINICAL REACTIONS

- The most common type of egg allergy is IgE-mediated or “immediate” allergy.
- This typically occurs within minutes but may present up to 2 hours after exposure.
- Reactions may be mild or life-threatening and include hives, flushing, swelling, itching, nausea, vomiting, wheezing, difficulty breathing and collapse (anaphylaxis).

HOW IS THE DIAGNOSIS MADE?

- Immediate reactions can be tested for, even in young babies, by doing blood tests and/or skin prick tests.
- Blood tests are available to test for egg white, egg yolk and ovomucoid.
- Skin prick tests can be done even on young babies by placing a few drops of egg on the skin and making a prick through the droplet.
- Should these test results be equivocal (uncertain), an “oral food challenge” may be performed where a doctor or nurse gives increasing amounts of egg to the individual under controlled conditions, usually in hospital, in order to be able to treat severe reactions should they occur.

MANAGEMENT

- Children and adults with egg should be managed in collaboration with a dietician experienced in managing food allergy. The dietician will provide advice, recipes and education on how to achieve a nutritious and complete diet.
- Parents should be educated to read food labels and recognize terms that may indicate the presence of egg.
- A detailed “action plan” should be provided in case of reactions. This should clearly describe the difference between mild and severe reactions as well as the actions that need to take place in each case. This plan should also be provided to the child’s school/care givers.

ELIMINATION

- The mainstay of treatment remains avoidance of egg.
- Whether the individual avoids all traces of egg or tolerates small amounts of extensively heated egg such as that found in baked goods, depends on the nature of that particular person’s allergy.
- Over 70% of children who are allergic to egg will tolerate baked goods that contain egg such as biscuits and cupcakes, although they still react to lightly- cooked egg such as scrambled egg. These children should be encouraged to continue to eat the baked egg on a regular basis. This may help them to outgrow their egg allergy.

FOODS THAT MAY CONTAIN EGG PROTEIN

Asian dishes	Crumbed foods	Ice cream/frozen dessert	Pies
Baked goods	Custard	Icing	Soup
Battered food	Dessert mixes	Marshmallow	Processed meats
Biscuits	Dips	Mayonnaise	Puddings
Cakes	Egg noodles/pasta	Meringue	Sausages
Confectionary	Fried rice	Mousse	Salad dressings
Croissants	Health drinks	Nougat	Tarts/pastrys

TERMS THAT IMPLY THE PRODUCT MAY CONTAIN EGG

Albumin
Globulin
Lecithin
Livetin
Lysozyme
Vitellin
Words starting with "ova" or "ovo," such as ovalbumin or ovoglobulin

VACCINATIONS AND EGG ALLERGY

Measles vaccine, influenza (“flu”) vaccine and the measles-mumps rubella (MMR) vaccine do not contain significant egg protein and should be given routinely to egg-allergic children. Rabies and yellow fever vaccine may cause reactions and egg-allergic individual who require these vaccines should see an allergy specialist.

WILL MY CHILD OUTGROW THE EGG ALLERGY?

- Most children develop tolerance in early childhood but this depends on the type of allergy, the time of diagnosis, the level of antibodies at the time of diagnosis and the specific protein to which the child is allergic.
- Children who have high levels of antibodies to ovomucoid are less likely to outgrow their allergy. Children who are able to eat egg in baked goods such as cupcakes are likely to outgrow their egg allergy.

FOLLOW UP

Children with egg allergy should be seen at regular intervals to assess growth and nutrition and to reinforce avoidance and emergency management plans. Blood and skin prick tests are repeated annually to assess whether they are outgrowing their allergy as well as to decide on a suitable time to perform an oral food challenge.

For additional reading visit: http://en.wikipedia.org/wiki/Egg_allergy