

Living with an egg allergy

Nutrition & Dietetics Department

This information leaflet tells you about the diagnosis and treatment of egg allergy. It is designed for all ages of people with egg allergy, their families and carers. The term egg is used to describe all types of egg, so from all birds including hens and ducks.

Egg allergy, also known as hens' egg allergy, affects 0.5-2.5% of young children. It is often associated with eczema. Allergies to other foods may also occur. 70-90% of children will grow out of egg allergy, usually by 5 years of age.

Egg allergy rarely starts in adulthood. Adults with egg allergy are often allergic to birds or feathers, as these contain a similar protein.

What are the symptoms of egg allergy?

Infants and children may refuse egg-containing foods. Reactions vary from mild to severe, and can be life threatening. They often start very quickly.

Mild reaction:

- Mouth and lip tingling
- Facial redness and swelling, often around the mouth
- Nausea, vomiting, abdominal pain
- Hives or nettle rash

Severe reaction (also called anaphylaxis) above symptoms plus:

- Wheezing, difficulty in breathing
- Throat swelling or tightness
- Dizziness, collapse
- Palpitations

How do I test for egg allergy?

Testing for egg allergy is done by skin prick testing or a blood test. Occasionally people have an egg challenge – where they are gradually exposed to egg – this only occurs in a hospital environment.

What shall I do in the event of a reaction?

Accidental exposure to eggs is common – **if you have emergency treatment always carry it with you**. If your child is egg-allergic ensure all carers (including school & babysitters) are aware of this. A management plan may be provided, which you can carry with you. Consider joining the MedicAlert Scheme where you wear a bracelet or necklace alerting any doctor to your allergy.

Mild Reaction: Take an antihistamine e.g Piriton®, cetirizine. This may take 15–30 minutes to start working. If the reaction gets worse seek medical help.

Severe Reaction: If you have an adrenaline injector (Epipen® or Jext®) use it immediately and call an ambulance. It is important to seek medical help even if you feel better as the adrenaline can wear off. Take an antihistamine if you are able to. If you are wheezy and have a salbutamol/Ventolin® inhaler then use it.

Why do I need to avoid eating eggs?

People need to avoid eating eggs if they have an allergy, intolerance or sensitivity to egg. This can be to all forms of egg or just too raw or 'loosely cooked' egg. The term 'loosely cooked egg' means a food containing egg which is lightly cooked. Cooking egg changes the egg protein. This makes it easier to tolerate (less likely to cause an allergic reaction).

How do I know if a food contains egg?

It is easy to avoid eggs if they are on their own. It is more difficult to avoid eggs when they are part of a recipe or bought dish.

All food manufactured within the UK and European Union has to list egg clearly on the ingredients list. Food manufactured outside the EU may not have to follow this rule.

Manufacturers of unpackaged foods e.g. food bought at the delicatessen, meat or fish counter or bakery section now have to provide allergy information. This should be available on request if not displayed. This law includes foods/drinks served in restaurants, pubs, market stalls, school dinners, buffets, trains, planes, ice cream vans, fast food outlets, etc.

Supermarkets and food manufacturers produce lists of their foods that are free from egg. These are available free of charge and can be useful. *Do remember that ingredients do change so you will still need to check the food label.*

The following terms mean that egg is present in a food:

Egg / fresh egg, egg powder, dried egg, frozen egg, pasteurised egg, egg yolk, egg white, egg protein (albumin, ovalbumin, globulin, ovoglobulin, livetin, ovomucin, vitellin, ovovitellin), egg lecithin E322

How do I know if a food contains raw or loosely cooked egg?

Use the table below to help you. If you need to avoid all egg you should avoid all foods listed in the table.

Table reproduced with kind permission from Tanya Wright SRD

Well cooked egg	Loosely cooked egg	Raw egg
Plain cakes	Meringues	Fresh mousse
Biscuits	Lemon curd	Fresh mayonnaise
Dried egg pasta	Quiche	Ice cream especially fresh and luxury types
Egg in sausages and prepared meat dishes	Scrambled egg	Freshly made sorbet
Egg glaze on pastry	Boiled egg	Royal icing (fresh and powdered icing sugar)
Sponge fingers	Fried egg	Horseradish sauce
Quorn	Omelette	Tartar sauce
Egg in some gravy granules	Poached egg	Some cheeses if they contain egg white lysozyme or other egg proteins
Dried egg noodles	Batter made with egg	Raw egg in cake mix and other dishes awaiting cooking (children of all ages love to taste!)
	Homemade products coated in breadcrumbs where egg is used to stick on the breadcrumbs	Carbonara sauce
	Hollandaise sauce	Fondant icing inside a Cadbury's crème egg®
	Egg custard	Chocolate bars containing egg in their filling eg Milky way®, Mars bar®
	Pancakes and Yorkshire pudding – some patients who can eat 'Well cooked egg' can tolerate these but it depends on how well cooked they are and if they contain sticky batter inside	
	Bread and butter pudding	
	Fresh egg pasta	

Can I make cakes without egg?

Yes! Eggs are usually needed in cakes to give structure and binding. There are recipes which use other foods to give structure and binding such as baking powder for structure and fruit puree for binding. You can also buy 'Egg replacer' to use instead of eggs. These can replace whole egg or egg whites and are available in health food shops, 'free from' sections in supermarkets or online suppliers. Recipe's can be adapted to use egg replacer. Other egg-free products include egg free omelette mix and egg free mayonnaise.

Where can I find egg free recipes?

Egg free recipes can be found online and in many bookshops and libraries. Vegan recipes are always suitable and many are available online.

If I avoid eggs will my diet be nutritionally adequate?

Yes! All the nutrients found in eggs are found in other foods. Your diet will contain the essential nutrients you need as long as you eat a balanced diet. If you are concerned about your diet, ask your doctor to refer you to a dietitian.

What about medications?

Certain medications may contain traces of egg, often as egg lecithin (E322). These should be avoided by people with egg allergy. Always make sure that any doctor treating you knows about your egg allergy. Check with your pharmacist if you are unsure about any medication.

What about vaccinations?

We recommend that all children with egg allergy have the normal childhood vaccinations except intranasal flu (see overleaf). If there have been severe allergic reactions to previous vaccines, then a review by an allergy specialist is advised.

Can my child have the MMR vaccination?

Large research studies have shown that children with egg allergy do not have an increased risk of severe allergic reactions to the MMR vaccine. This is because MMR vaccine is not grown on hens' eggs.

What about the Flu vaccine?

It is safe for children aged 2-18 years, with egg allergy, to have the Fluenz (intranasal influenza vaccine) in any setting including school and primary care. The only exception are those children who have had anaphylaxis to egg AND required admission to intensive care. These children should be referred to a specialist for immunisation in hospital.

Children aged 6 months to 2 years, with egg allergy, requiring the influenza vaccine should be given inactivated (injected) Influenza vaccines that are egg free or have an ovalbumin (egg) content <0.12micrograms/l. This can be done in your GP practice.

Are there any other vaccines which should be avoided?

The Yellow Fever and Rocky Mountain Spotted Fever vaccines should be avoided in people with egg allergy. If necessary for travel, St Thomas's hospital allergy unit have a yellow fever clinic for people with egg allergy. This needs to be organised via your GP and at least three months needs to be allowed in addition for adequate time for the vaccination to take effect.

Can I eat chicken?

Most people with egg allergy can eat well-cooked chicken with no problem. They may need to be careful with undercooked chicken, particularly chicken on the bone.

Will I need to avoid eggs for life?

Some people will always need to avoid egg, as they will always develop symptoms if they eat egg. For other people the problem may go away. 70-90% of babies and children will grow out of egg allergy or sensitivity as they get older. See table on page 6.

What is the most important thing for people on an egg free diet?

If you or your child need to avoid all egg remember to check labels on all manufactured foods to make sure they do not contain egg.

Reference source and further information

- www.allergyuk.org
- www.anaphylaxis.org.uk
- www.egglesscooking.com
- www.goodnessdirect.co.uk
- www.plamilfoods.co.uk
- Safety of live attenuated influenza vaccine in atopic children with egg allergy
Paul J. Turner, Jo Southern, Nick J. Andrews, Elizabeth Miller, Michel Erlewyn-Lajeunesse, et al. *Journal of Allergy and Clinical Immunology*, Vol. 136, Issue 2, p376–381
- The green book. Chapter 21 Influenza. Pages 21-22
<https://www.gov.uk/government/collections/immunisation-against-infectious-disease-the-green-book>

If you need further advice please contact

Royal Surrey County Hospital:	01483 571122
Dietetic Department:	Ext. 4202
Allergy Nurse Specialist:	Ext 4140
Immunology Department:	Ext 2323

This leaflet is produced by the Immunology and Dietetic departments at The Royal Surrey County Hospital, NHS Foundation Trust. It is not a substitute for dietary advice given to a specific individual by a dietitian. If you need to see a dietitian, ask your GP or consultant for a referral.

Please note that the information in this leaflet was correct at time of writing. The ingredients of manufactured products can change.

Authors: Debbie Evans, Paediatric Dietitian & Dr Yousuf Karim Consultant Immunologist

Contact details

If you have any questions about the information in this leaflet please contact the dietetic department at the address below:

Royal Surrey County Hospital
Department of Nutrition & Dietetics
Egerton Road, Guildford, Surrey, GU2 7XX.

Switchboard telephone: 01483 571122 ext. 4202

Direct line: 01483 464119

Fax: 01483 464119

Email: rsch.dietitians@nhs.net

PALS and Advocacy contact details

Contact details of independent advocacy services can be provided by our Patient Advice and Liaison Service (PALS) who are located on the right hand side as you enter the main reception area. PALS are also your first point of contact for health related issues, questions or concerns surrounding RSCH patient services.

Telephone: 01483 402757

Email: rsc-tr.pals@nhs.net

Opening hours: 9.00am–3.00pm, Monday to Friday

If you would like information documents in large print, on tape or in another language or form please contact PALS.

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Author: Debbie Evans

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