

# Home introduction of egg for children with egg allergy

Information for patients, relatives & carers

#### **Child Health**

For more information, please contact:

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This leaflet is to be given with the BSACI Egg Reintroduction Ladder and BSACI Egg Classification Table which, if you do not have, can be obtained from the paediatric allergy team.

This is **NOT** suitable for children with previous severe reactions unless under medical supervision.

# **Background**

Most children with egg allergy grow out of their allergy in early life. This is a guide for parents on introducing egg into the diet at home for children who have previously had a mild allergic reaction to egg. There may be some variations for individual children, which your doctor/nurse will explain. Children who have had more severe symptoms previously may need to have a hospital-based food challenge for their initial introduction of baked egg.

The first stage of introduction is to give a small amount of egg that is well cooked and baked with flour e.g., a fairy (sponge) cake. Egg introduction is best done by following an introduction ladder, starting with a small amount of egg protein baked with flour, then larger amounts of well-cooked egg with/without flour.

# What if my child has a reaction?

It is important to know what an allergic reaction may look like:

### Mild/Moderate Reaction

Tingling or itchy sensation in the mouth Swelling of the lips, face, or eyes Itchy/red skin

Hives (raised itchy rash)

Vomiting / tummy pain

#### **Treatment**

Give oral antihistamines and monitor symptoms

### **Severe Reaction**

Swollen tongue

Difficulty swallowing

Hoarse voice

Wheezy breathing/tight chest or coughing

Pale / floppy

Decreased level of consciousness / collapse

#### **Treatment**

Use adrenaline pen if you have one, or call 999 immediately stating "anaphylaxis"

If any reactions are observed, **stop immediately** and follow your management plan and the advice above. Once your child has recovered, contact the allergy team to update and discuss further.

# How to introduce baked egg at home using cake – step 1 of ladder

The aim is to give slow stepped doses of increasing amounts of egg at intervals so that your child can eventually tolerate food containing egg.

### When to start the challenge

Ideally start the baked egg challenge in a morning and on a weekday – to ensure you can contact the allergy team that day if you have questions. You should have oral antihistamines available\*

Only start the challenge if your child is well and has not required use of their salbutamol inhaler or oral antihistamines in the previous five days.

\*Oral antihistamines may be available from your GP or local pharmacy. The pharmacist will be able to advice on the correct dose for your child's age.

### Initial introduction of baked egg

You will need to use this recipe for the challenge:

### **Cupcake recipe (makes 8)**

Ingredients

- 1 medium egg
- 4 oz /115g flour (or alternative)
- 4 oz /115g margarine (or alternative)
- 4 oz /115g caster sugar
  (1oz / 25g of flour can be substituted for cocoa if chocolate cake is preferred)

#### Method

- Heat the oven to 180°C (gas mark 4).
- Beat together the margarine and caster sugar.
- Then beat in the egg and then the flour.
- Spoon the mixture evenly into eight cupcake cases.
- Bake for fifteen minutes.
- Test a cupcake with a fork. There should be no mixture on the prongs if it is cooked properly.
- These cakes can be stored in a cool dry place or frozen.

A biscuit recipe using one egg in eight well-cooked biscuits (these can be savoury) is an alternative for children who dislike the texture of cake.

Small shop bought fairy cakes (no icing) could be used as an alternative. Please check for other allergens (such as wheat or cows' milk) that your child may be allergic to.

#### How to introduce baked egg

One. Bake a fairy cake containing egg (see recipe).

Two. Begin by rubbing a small amount of cake on the inner part of your child's lip, wait for 30 minutes. Allow the child to continue normal activities. Observe your child for local redness, itch or swelling. If there have been no symptoms, give your child a pea size amount of cake to eat.

Three. Observe your child for the rest of the day. Observe for local redness, itch, swelling, hives (nettle sting type rash), tummy pain, vomiting or wheezing. Symptoms usually occur up to 2 hours after the last dose (worsening of eczema or gastrointestinal upset may occur after some hours or the next day).

Four. The following day, if your child did not have any symptoms, give your child an increasing amount of cake/biscuit and increase every few days or each week: 1/16, 1/8, 1/4, 1/2 and finally a whole fairy cake.

Five. Keep giving a whole fairy cake at least 3 times a week for at least 1 month before proceeding to the next step of the egg ladder

# Further introduction of baked egg – steps 2 - 4

Once a 1 egg recipe is tolerated, then you can progress to step 2. See egg reintroduction ladder and egg classification table for ideas or other foods that can be tried (small amounts first) and then freely increase in the diet. Each step should be tolerated for at least one month before progressing.

The intervals between amounts given can be flexible. It is better to give small amounts frequently to build tolerance and then slowly increase the amount. If your child develops symptoms continue with a lower amount that was previously tolerated. Stop if symptoms continue and contact the allergy team.

# How to introduce cooked egg (pancake) at home – step 5 of ladder

This pancake introduction can be used once baked egg has been confirmed to be well tolerated and child is regularly eating a selection of foods containing baked egg. You should only progress to this step if informed to do so by the allergy team.

You will need to use this recipe for the challenge:

#### Pancake recipe

Ingredients

- 100g plain flour (or suitable alternative)
- 1 large egg
- 300ml semi-skimmed cow's milk (or alternative)
- 1 tbsp of sunflower oil for frying pan

#### Method

- Whisk all the ingredients together
- Well-cook individual pancakes in a frying pan.

Leftover pancakes can be individually wrapped in cling film and frozen for up to a month if required

# How to introduce cooked egg in pancakes

- **1.** Follow the previous advice on when and how to start a challenge
- 2. Give your child a pea size amount of pancake to eat. Monitor for any symptoms for the rest of the day.
- 3. The following day, if there have been no symptoms, give your child twice the amount of pancake to eat.
- 4. Repeat every few days until a whole pancake is eaten without symptoms.
- 5. If symptoms or a reaction occur, then do not give any more pancake, and follow the management plan for a reaction. Consider repeating the challenge in 6-12 months or as advised by the allergy team.
- 6. If the pancake has been tolerated, then your child can eat this regularly along with other egg containing foods listed in step 5 of the egg ladder/classification of egg table.

Once tolerated for at least 1 month your child may now be ready to try foods from step 6 of egg ladder.

The information in this leaflet has been taken from the British Society of Allergy and Clinical Immunology (BSACI) 2021 guideline for the management of egg allergy.

### Tell us what you think of this leaflet

We hope that you found this leaflet helpful. If you would like to tell us what you think, please contact: Paediatric Allergy Team, The York Hospital, Wigginton Road, York, YO31 8HE

Tel: 01904 721435 or 07984291824 Email: paediatricallergyysth@nhs.net

# Teaching, training, and research

Our Trust is committed to teaching, training, and research to support the development of health and healthcare in our community. Healthcare students may observe consultations for this purpose. You can opt out if you do not want students to observe. We may also ask you if you would like to be involved in our research.

# Patient Advice and Liaison Service (PALS)

PALS offers impartial advice and assistance to patients, their relatives, friends and carers. We can listen to feedback (positive or negative), answer questions and help resolve any concerns about Trust services.

PALS can be contacted on 01904 726262, or email pals@york.nhs.uk.

An answer phone is available out of hours.

# Leaflets in alternative languages or formats

Please telephone or email if you require this information in a different language or format, for example Braille, large print or audio.

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