





# **Egg Reintroduction** information for parents, carers and relatives

This leaflet tells you how to reintroduce egg back into your child's diet.

It tells you how to perform a challenge with baked egg, and then lightly-cooked egg.

## **Reintroduction of egg into your child's diet**

Most children with egg allergy will outgrow their allergy in early life.

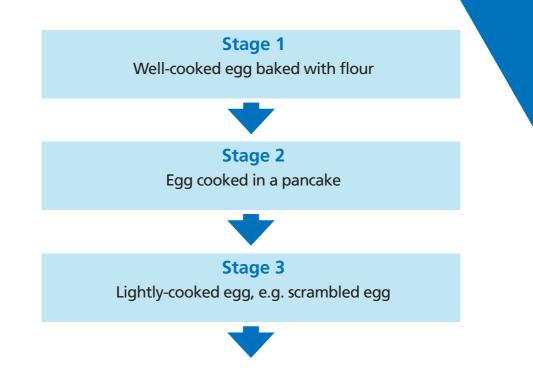
For most children it is reasonable to re-introduce egg at home.

A few with very severe reactions or who suffer from difficult to control asthma may need a formal egg challenge under hospital supervision.

As the allergy resolves, most children will start to tolerate highly-cooked/baked egg (such as cakes), followed by lightlycooked egg (such as pancakes, scrambled egg), and then finally raw egg (such as raw cake mix, homemade mayonnaise).

Although most children will outgrow their allergy, there is still a small possibility that your child will react to some food containing egg.

To try to keep any reactions as mild as possible please follow these instructions.



The first stage of introduction is to give a small amount of egg that is well-cooked and baked with flour.

The recipe on page 6 can be used in the protocol for cooked egg re-introduction.

## When to try reintroducing egg

- When your child is aged 12 months or 6 months from last reaction
- Retry egg when your child is otherwise well.
- Have some antihistamine (e.g. Piriton<sup>®</sup> or cetirizine) available.

# **Stage 1** Which foods to try

- Start with the recipe for sponge fairy cakes, see page 6-7.
- Begin by rubbing a small amount of plain fairy cake on the inner part of your child's lips.
- Wait for 30 minutes, allowing your child to continue normal activities.
- If there have been no symptoms, give your child a pea-sized amount of cake to eat.
- A day or two later, if there have been no symptoms, give your child twice the amount of cake to eat.
- If your child did not have any symptoms, give your child an increasing amount of cake every few days or each week: 1/16, 1/8, 1/4, 1/2, and finally a whole cake. Observe for local redness, itch, swelling, hives (nettle sting type rash), tummy pain, vomiting, or wheezing.
- This process can be completed with a 2 egg cake recipe (see recipe on page 6). Use 2 eggs, but the same amount of other ingredients.
- If symptoms occur at any stage, do not give any more cake.
- Give a dose of antihistamines (according to the label) by mouth.
- Continue to give smaller amounts of cake that were previously tolerated, or stop if symptoms continue.
- Give the amount of egg which was tolerated regularly and retry, increasing the amount after a couple of months.
- If symptoms occurred on low doses, stop reintroduction and try again in 6 months; or, discuss with your doctor/dietitian.

If the cake has been tolerated, then your child should eat this regularly. Try other foods containing well-cooked egg; such as biscuits and pasta (see the list below). You do not need to be as cautious when trying other new foods from the list below but still always have antihistamine available. You should continue with these foods for 6 months to 1 year, before moving onto lightly-cooked egg.

Do not worry if your child does not like to eat egg products - this is quite common. Keep offering and try different options from list below.

## Stage 1 Foods Baked / highly-cooked egg

Homemade cakes - see page 6-7 Shop bough sponge or fairy cake Hard biscuits containing egg **TUC crackers** Dried egg pasta Prepared meat dishes and sausages containing egg Egg glaze on pastry Quorn or similar mycoprotein products Gravy granules (if they contain egg) Shop bought pre-cooked frozen Yorkshire puddings Dried egg noodles Pastry containing egg (sausage roll, pie) Sponge finger biscuits Jaffa cakes Breadcrumb coating Meatballs - see page 6 Banana bread - see page 7

### **Appendix - Recipes**

#### Recipe for meatballs (makes 20)

500g mince (for example beef, chicken, or turkey) 60g breadcrumbs (wheat free if required) 1 medium egg 1 shallot, finely chopped Mixed herbs, salt, pepper

Preheat the oven to 180°C/Gas Mark 4.

Mix all of the ingredients together.

Roll into 20 meatballs that are similar in size and placed on an oiled baking sheet.

Bake for around 20 minutes until cooked through.

Serve with a sauce; or, crumbled and mixed with mashed potatoes, rice, or vegetables.

(~1g egg protein per 3 meatballs)

# Recipe for sponge fairy cakes (makes 8-12)

- this contains less egg than a 'normal' recipe
- 4 oz. / 125 g self-raising flour. 4 oz. / 125 g margarine.
- 4 oz. / 125 g caster sugar.
- 1 medium egg.

Cream together the margarine and sugar until fluffy.

Beat in the egg, and then fold in the flour. Add a small amount of milk if the mixture seems too thick.

Alternatively do 'all-in-one' method - beat all ingredients together with an electric whisk.

Bake for 15 minutes at Gas Mark 5/190°C.

If no reaction try a 2 egg recipe – same amounts of other ingredients.

#### Recipe for banana bread (8 slices)

large banana, mashed
 medium egg
 180g plain flour or wheat-free
 flour mix
 teaspoons baking powder
 1/2 teaspoon cinnamon
 (optional)
 teaspoon vanilla essence
 60ml vegetable oil

Preheat the oven to 180°C/Gas Mark 4 and line a small loaf tin with baking paper. Blend the egg and vegetable oil together, and then add to the mashed banana.

Add the dry ingredients to the wet ingredients and mix. If baking a loaf, bake for 25 minutes or for muffins bake for 15 minutes.

Cool on a wire rack.

## Stage 2

# Guidance for gradual egg introduction at home using pancake

This pancake introduction can be used once cake has been confirmed to be well tolerated and the child is regularly eating a selection of food containing baked egg. Increasing to the next level of the reintroduction ladder helps assess further tolerance of egg in higher amounts.

- Ensure your child is well before starting and have oral antihistamines available.
- Make pancakes containing egg suggested recipe 100g plain flour, 1 large egg, 300ml semi-skimmed milk (or alternative as required), 1 tablespoon oil (plus extra for frying).

- Give your child a pea-sized amount of pancake to eat.
- If there have been no symptoms, a few days later, give your child twice the amount of pancake to eat.
- Repeat until the pancake is finished. Re-introduction can be gradual. Symptoms usually occur up to 2 hours after the last dose (worsening of eczema may occur after some hours, or the next day).
- If symptoms occur, do not give any more pancake. Give a dose of antihistamines (according to the label) by mouth, but continue other baked egg foods tolerated. Consider repeating the challenge in 6-12 months, or as advised by your healthcare professional.
- If the pancake has been tolerated, then your child can eat this regularly, along with other foods with higher amounts of cooked egg, such as fresh egg pasta.

Your child may now be ready to try a higher amount of well-cooked and less-well-cooked egg.

# Stage 3

## Home introduction of lightly-cooked whole egg

If your child can tolerate well-cooked egg as an ingredient for 6 months (for example, in cakes and pancake), you may wish to introduce lightly-cooked whole egg at home. The time it takes for egg allergy to resolve varies between individuals.

Egg no longer needs to be well-cooked for infants and children, as changes in safety standards have meant the risk of salmonella has fallen significantly. Choose eggs with the British Lion Code stamp as this ensures farmers have followed the strict controls.

- Postpone the reintroduction if your child is unwell.
- Have oral antihistamines available.
- Cook a portion of scrambled eggs, but ensure that other ingredients are tolerated, such as cow's milk.
- Begin by rubbing a small amount of egg on the inner part of your child's lips.
- Observe for 30 min, allow the child to continue normal activities.
- Signs of an allergic reaction may include: itching, redness, swelling, hives (nettle-sting type rash), tummy pain or vomiting.
- A day or two later, if there have been no symptoms; give your child a small bite of scrambled egg to eat.
- Repeat this stage with increasing amounts of scrambled egg at intervals of several days until a whole portion is finished.
   Symptoms usually occur up to 2 hours after the last dose (worsening of eczema may occur after some hours, or the next day).
- If symptoms occur, then do not give any more egg.
  Give a dose of antihistamines (according to the label) by mouth.
  Consider attempting reintroduction again in 6 months' time, and discuss with your doctor.
- If all of the doses have been tolerated, then your child should continue to eat lightly cooked whole egg. Try similar foods (such as omelette).

It may take time for your child to like egg if they have been avoiding it. Continue offering cooked egg dishes and your child should become more accepting over time.

## Stage 3 Foods Lightly-cooked egg

Homemade pancakes Scrambled egg **Boiled** egg Fried egg **Omelette** Egg fried rice Meringues - well cooked with no sticky centre Some marshmallows Lemon curd Quiche / flan / Spanish tortilla. Poached egg **Pancakes** Egg in batter Hollandaise sauce Quiche and flans (fruity and savoury) Egg custard and egg custard tarts Créme caramel Créme Brulée 'Real' custard Yorkshire pudding with 'sticky' batter inside Tempura batter Fresh egg pasta

# What to do if your child has a reaction:

- Most reactions occur within 2 hours of the food although eczema sometimes flares after a day or two.
- If you child has a mild reaction such as itching, redness, hives (nettle-sting type rash), tummy pain, or vomiting - go back to the type of egg your child definitely tolerates. Stay on this type of egg for about 6 months after the reaction before trying new foods again. If the reaction is only mild eczema you may wish to continue with the food.
- Sometimes children will tolerate small amounts of lightly cooked egg but will not tolerate larger amounts. If this is the case you can continue with small quantities if you wish.
- If you are unclear about when to try new foods discuss this with your doctor or dietitian.
- Severe reactions are very unlikely but if your child has a more severe reaction (such as breathing difficulties, wheezing) get medical help immediately and discuss with your doctor before considering any further reintroduction.
- Some people will never be able to tolerate raw or very lightly cooked egg but can eat highly cooked egg without problems.

These are general guidelines and sometimes will be altered by your doctor or dietitian depending on the clinical situation.

Discuss this with them if you have any concerns.



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