

# Home Introduction of Cow's Milk for IgE-mediated Milk Allergy

## Introduction of cow's milk at home should only be performed under guidance from your child's hospital Allergy Team.

Most children will grow out of their milk allergy as they get older and this journey starts with them being able to tolerate baked milk. Being able to tolerate foods with baked milk as an ingredient makes the diet less restrictive and may help the body grow out of the allergy more quickly. This plan explains how to introduce milk in a slow and safe way. The first step is to give a small amount of baked milk protein in a biscuit.

### **Important:**

Home introduction of cow's milk should only be performed with guidance from your child's Allergy Team

- Do not start home milk introduction if previous reactions to milk have involved severe symptoms such as breathing difficulties, tongue swelling or floppiness/collapse
  
- Do not start home milk introduction if your child has severe or uncontrolled asthma
  
- Do not start home milk introduction or move onto the next stage if your child is unwell, as this can make it more difficult to assess if any reaction is due to illness or the milk. Delay starting or moving on to the next stage if your child has any of the following:
  - A cough/cold/temperature or fever
  - Flare up of eczema, asthma or hayfever
  - Or if they have had antihistamine in the last 4-5 days

### **Practical tips**

- Try to give the dose every day. If you miss several days, give a smaller dose when you re-start
- Introduce new foods at home so that you can easily obtain help and advice if needed
- Introduce the food in the morning, preferably not just before the child is due a nap, but when you have plenty of time to monitor your child at home
- **Ensure you have your emergency allergy treatment readily available**

# What to do if your child reacts

## If your child develops any allergic symptoms during home milk introduction :

1. Manage the allergic reaction as detailed in their personal allergy action plan (see below)
  - Mild reactions - Go back to the last tolerated step
  - Severe reactions – Stop milk introduction and contact your allergy team to discuss

## Personal Allergy Action Plan

Your child should have an individual allergy action plan in place – like the one below – but with their name and allergy details on it. This is usually provided by the allergy team in clinic.

If you do not have an allergy action plan in place contact you allergy team to request one.

**bsaci** **ALLERGY ACTION PLAN** **RCPCH** **anaphylaxis** **AllergyUK**

This child has the following allergies:

Name: \_\_\_\_\_

DOB: \_\_\_\_\_

Photo: \_\_\_\_\_

**Watch for signs of ANAPHYLAXIS (life-threatening allergic reaction)**

Anaphylaxis may occur without skin symptoms. ALWAYS consider anaphylaxis in someone with known food allergy who has **SUDDEN BREATHING DIFFICULTY**

**A AIRWAY**

- Persistent cough
- Hoarse voice
- Difficulty swallowing
- Swollen tongue

**B BREATHING**

- Difficult or noisy breathing
- Wheeze or persistent cough

**C CONSCIOUSNESS**

- Persistent dizziness
- Pale or floppy
- Suddenly sleepy
- Collapse/unconscious

**IF ANY ONE (OR MORE) OF THESE SIGNS ABOVE ARE PRESENT:**

- 1 Lie child flat with legs raised (if breathing is difficult, allow child to sit)
- 2 Immediately dial 999 for ambulance and say **ANAPHYLAXIS (ANA-FIL-AX-IS)**
- 3 In a school with 'spare' back-up adrenaline autoinjectors, **ADMINISTER** the **SPARE AUTOJECTOR** if available
- 4 Commence CPR if there are no signs of life
- 5 Stay with child until ambulance arrives, **do NOT** stand child up
- 6 Phone parent/emergency contact

**\*\*\* IF IN DOUBT, GIVE ADRENALINE \*\*\***

You can dial 999 from any phone, even if there is no credit left on a mobile. Medical observation in hospital is recommended after anaphylaxis. For more information about managing anaphylaxis in schools and 'spare' back-up adrenaline autoinjectors, visit [www.bsaci.org.uk](http://www.bsaci.org.uk)

**Mild/moderate reaction:**

- Swollen lips, face or eyes
- Itchy/tingling mouth
- Hives or itchy skin rash
- Abdominal pain or vomiting
- Sudden change in behaviour

**Action to take:**

- Stay with the child, call for help if necessary
- Locate adrenaline autoinjector(s)
- Give **antihistamine**: \_\_\_\_\_ (if available, see notes above)
- Phone parent/emergency contact

**Emergency contact details:**

1) name: \_\_\_\_\_

2) name: \_\_\_\_\_

**Parental consent:** I hereby authorize school staff to administer the medicines listed on this plan including a 'spare' back-up adrenaline autoinjector (AAU) if available in accordance with Department of Health guidance on the use of AAUs in schools.

signed: \_\_\_\_\_

Print name: \_\_\_\_\_

Date: \_\_\_\_\_

**Additional instructions:**

If necessary, DIAL 999 and GIVE ADRENALINE using a 'back-up' adrenaline autoinjector if available, **do not** activate adrenaline (Spare) until you speak.

This BSACI Action Plan for Allergic Reactions is for children and young people with **mild food allergies, who need to avoid certain allergens**. For children at risk of anaphylaxis and who have been prescribed an adrenaline autoinjector device, there are BSACI Action Plans which include instructions for adrenaline autoinjectors. These can be downloaded at [bsaci.org](http://bsaci.org)

For further information, consult NICE Clinical Guidance CG16 Food allergy in children and young people at [guidance.nice.org.uk/CG16](http://guidance.nice.org.uk/CG16)

This is a medical document that can only be completed by the child's healthcare professional. It must not be altered without their permission. This document provides medical instructions for schools to administer a 'spare' adrenaline autoinjector. In the event of the above named child having anaphylaxis (as per the NICE Medicines (Administration) Regulations 2017), the healthcare professional named below confirms that there are no medical contraindications to the above named child having administered an adrenaline autoinjector by school staff in an emergency. This plan has been prepared by: \_\_\_\_\_

sign & print name: \_\_\_\_\_

hospital/clinic: \_\_\_\_\_

Date: \_\_\_\_\_

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## Contact details for your child's Hospital Allergy Team:

Lead healthcare professional:

Telephone number:

Email address:

## What to Give and How Much

The tables below provide details of how to start and gradually introduce cow's milk into your child's diet. Homemade recipes, including wheat and egg free, are available for steps 1 to 3 - see section with recipes.

- Start with **STAGE 1 foods in the 'What to Give' table** on the next page
- Gradually **increase the portion size each day** according to the **'How Much to Give' table**
- Aim to increase the portion size every week
- If your child reacts, wait a few days before restarting at the step that they previously tolerated

Once your child has progressed through all steps for that particular food, you can introduce other foods from the same stage until you are confident that they are tolerating a wide variety of similar foods.

Once your child has been tolerating a variety of STAGE 1 foods for 2-4 months you can progress onto STAGE 2, following the same process. Continue until you reach STAGE 6.

If you have any questions or concerns throughout the home milk introduction program, then please contact your child's hospital allergy team.

### How Much to Give

Step	Amount of food	Time until next stage
1	Grain of rice size	Once a day for a minimum of 1 week
2	Pea size	Once a day for a minimum of 1 week
3	1 level Teaspoon	Once a day for a minimum of 1 week
4	1 level Tablespoon	Once a day for a minimum of 1 week
5	¼ age appropriate portion OR ½ biscuit or ½ fairy cake or ½ pancake	Once a day for a minimum of 1 week
6	½ age appropriate portion OR 1 biscuit or 1 fairy cake or 1 pancake	Once a day for a minimum of 1 week
7	Full age appropriate portion OR 2 biscuits or 2 fairy cakes or 2 pancakes	Once a day for a minimum of 1 week

# What to Give and How Much

## What to Give

<b>Stage 1</b>	<b>BAKED MILK - home made or shop bought BISCUIT containing milk powder</b> <ul style="list-style-type: none"> <li>● Malted milk, Shorties, Garibaldi</li> </ul>
<b>Stage 2</b>	<b>BAKED products containing larger amounts of milk or butter/margarine</b> <ul style="list-style-type: none"> <li>● Plain fairy cake, sponge cake or muffins, croissants, brioche</li> <li>● Pancakes, pikelets, waffles, Yorkshire pudding, Naan bread</li> </ul>
<b>Stage 3</b>	<b>COOKED foods containing small amounts of milk or cheese baked in the oven 20-30 mins</b> <ul style="list-style-type: none"> <li>● Mashed potato toppings e.g. shepherd's pie</li> <li>● Fish pie, lasagne, moussaka, pasta bake</li> </ul>
<b>Stage 4</b>	<b>COOKED foods containing larger amounts of cow's milk, cheese or yogurt</b> <ul style="list-style-type: none"> <li>● Pizza or cheese on toast</li> <li>● Sauces and soups made with heated milk or cheese</li> <li>● Curry made with yogurt or milk</li> <li>● Chocolate &amp; chocolate coated items e.g. biscuits, croissants</li> <li>● Cheese powder flavouring e.g. cheese crisps, cheese crackers / breadsticks</li> </ul>
<b>Stage 5</b>	<b>UNCOOKED Yogurt and cheese</b> <ul style="list-style-type: none"> <li>● Fermented desserts such as yoghurt, fromage frais, Shrikand, Khandvi</li> <li>● Puddings containing milk e.g. custard, rice pudding</li> <li>● Hard and soft cheese e.g. cheddar, cream cheese, paneer</li> <li>● Uncooked butter, margarine</li> </ul>
<b>Stage 6</b>	<b>UNCOOKED Fresh milk products</b> <ul style="list-style-type: none"> <li>● Fresh cow's milk, ice-cream</li> </ul>

# Homemade Recipes – including wheat and egg free

## Stage 1: Biscuit Recipe – makes 20 small finger sized biscuits

Use either fruit and vanilla essence to make a sweet biscuit or dairy free cheese to make a savoury biscuit	
Ingredients	Recipe
<ul style="list-style-type: none"> <li>125g flour (wheat or wheat free)</li> <li>1g xanthan gum (if using wheat free flour)</li> <li>50g cold <u>dairy free</u> margarine</li> <li>60–80g mashed / grated fruit e.g. banana, apple</li> <li>½ teaspoon vanilla essence/extract</li> <li>2g skimmed milk powder</li> </ul> <p>To make a cheese biscuit replace the fruit and vanilla essence with 40g grated <u>dairy free</u> cheese</p>	<ol style="list-style-type: none"> <li>1. Preheat the oven to 180°C / 350° F /Gas 4</li> <li>2. Mix flour, xanthan gum (if using) and milk powder together in a bowl</li> <li>3. Rub in the dairy free margarine</li> <li>4. Mix in the fruit and vanilla essence or dairy free cheese</li> <li>5. Place the dough into the fridge for 30 minutes if you have time (makes it easier to handle)</li> <li>6. Roll out the dough and cut into 20 finger sized biscuits</li> <li>7. Bake in the oven for 10 – 15 minutes</li> </ol>

## Stage 2: Muffin Recipe – makes 10 muffins

Use either fruit and vanilla essence to make a sweet muffin or dairy free cheese to make a savoury muffin	
Ingredients	Recipe
<ul style="list-style-type: none"> <li>250g flour (wheat or wheat free)</li> <li>1g xanthan gum (if using wheat free flour)</li> <li>10g baking powder</li> <li>25g sugar (optional)</li> <li>Pinch of salt</li> <li>50ml sunflower or canola oil</li> <li>100g mashed / grated fruit e.g. banana, apple</li> <li>½ teaspoon vanilla essence/extract</li> <li>250mls milk</li> </ul> <p>To make a cheese muffin replace the fruit and vanilla essence with 60g grated <u>dairy free</u> cheese</p>	<ol style="list-style-type: none"> <li>1. Preheat the oven to 180°C / 350° F /Gas 4</li> <li>2. Mix flour, xanthan gum (if using), baking powder, sugar and salt together in a bowl</li> <li>3. Whisk the oil and milk in a separate bowl and then add this to the flour mix – stir well</li> <li>4. Mix in the fruit and vanilla essence or dairy free cheese</li> <li>5. Divide the mixture equally between 10 muffin cases</li> <li>6. Bake in the oven for 15 - 20 minutes</li> </ol>

## Stage 2: Pancake Recipe – makes 6 pancakes

Ingredients	Recipe
<ul style="list-style-type: none"> <li>125g flour (wheat or wheat free)</li> <li>1g xanthan gum (if using wheat free flour)</li> <li>10g baking powder</li> <li>Pinch of salt</li> <li>30ml sunflower or canola oil</li> <li>250mls milk</li> </ul>	<ol style="list-style-type: none"> <li>1. Whisk all the ingredients together in a bowl</li> <li>2. Pour the mixture into a measuring jug</li> <li>3. Heat a small amount of oil in a frying pan</li> <li>4. Pour approximately 1/6<sup>th</sup> of the mixture into the frying pan and cook the pancake, turning once, until brown</li> </ol>

- 50mls water

5. Repeat until all the mixture has been used to make 6 pancakes