



# Information For Home Cow's Milk reintroduction

Your child has been advised to reintroduce cow's milk back into their diet by your doctor/dietitian. They have assessed that it is safe to do so at home.

Before starting the food challenge please ensure that you have read the general information regarding food challenge at the beginning of this information booklet. If you unsure about any of the information in this booklet please discuss with your dietitian or consultant before starting the challenge.

The cow's milk reintroduction has 7 stages. Most children will start on stage 1. Your child may already be eating one or more of the foods in the reintroduction and may be advised to start the reintroduction at a different stage.

The reintroduction contains both commercially available foods and homemade options. Recipes for the foods can be found at the back of the information booklet.

If a food is tolerated on any stage of the reintroduction, your child should continue to consume this (as well as the foods in the previous stages) and then move onto the next stage.

If your child does not tolerate the food in a particular stage, simple go back to the previous stage. You should be advised on when that next stage can be tried again.

Your Dietitian has recommended that you start at stage \_\_\_\_\_



### **General Information regarding food challenges**

#### Is your child well?

- To do a food challenge your child needs to be in good health for example if they have a cold, flu or any other childhood illness they should not do the test.
- If your child has eczema or asthma don't do the test unless symptoms are well under control.
- If you are in doubt about whether your child is well enough, postpone the challenge to a later date

#### Where should the challenge be done?

- The challenge should be done at home in a calm environment with parental or adult supervision
- Make sure you have allowed enough time to do the challenge
- Introduce the new food early in the day to allow parents to observe any symptoms during the day time.

#### What if my child takes antihistamines?

- It is important that your child does not have any antihistamine in their bodies before doing a food challenge as this may mask a reaction.
- It is a good idea if your child uses antihistamines to do a challenge at a time of year when they are least affected by seasonal allergies

During the milk challenge do not try introducing other new foods. Food challenges should be done one at a time on the advice of your doctor/dietitian.

## Know what to do if your child has an allergic reaction during the food challenge!

- Have antihistamines available in case your child has a reaction at any stage along the challenge.
- Check the following table to check the possible allergic symptoms and what to do if they occur. If any of the symptoms occur stop the food challenge immediately and treat your child as necessary.

### Mild to moderate symptoms

- Tingling or itching sensation in the mouth
- Feeling hot or very chilled
- Intense itching
- Rapid development of nettle rash/wheals(hives)
- Swelling, particularly of the face
- Rising anxiety
- Nausea and/or vomiting
- Abdominal pain
- Pallor
- Mild wheeziness(give inhaler if prescribed)

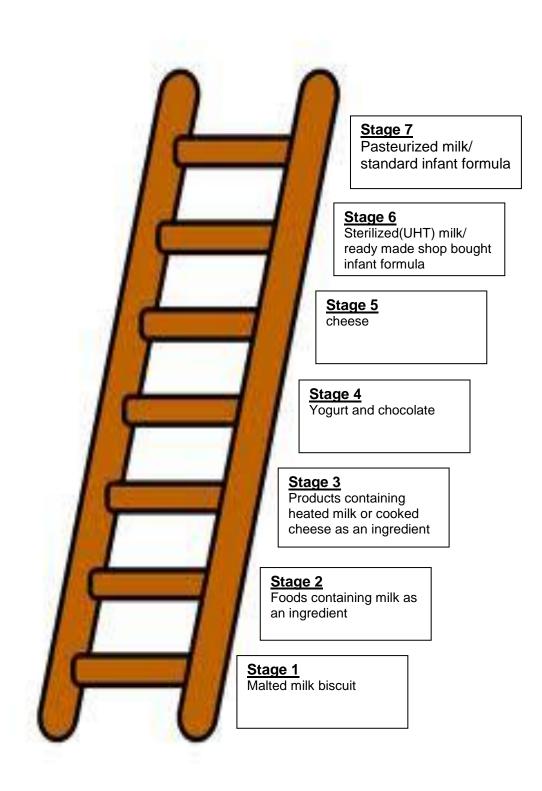
## Severe symptoms (possibly life threatening)

- Difficulty in breathing either wheezy and/or hoarseness and/or croupy sound
- Decreased level of consciousness, faint, pale and floppy
- Collapse
- Give auto injector if prescribed and call 999

Treatment:
Stop food challenge
Give antihistamines and
monitor child's condition for
6-10 hours as some
symptoms can develop a few
hours after ingesting.

Treatment:
Call 999 and seek emergency
help immediately

## **Summary of Milk Ladder**







**STAGE 1** (For children currently avoiding all cow's milk in food/drink)

Food: malted milk biscuit (home made-see recipe at back of booklet or

shop bought)

#### Week 1

Small crumb of biscuit containing milk to be eaten every day

#### Week 2

- (3 days) small crumb of biscuit to be eaten
- (2 days) large crumb of biscuit to be eaten
- (2 days) 1/8 biscuit to be eaten

#### Week 3

• 1/4 biscuit to be eaten daily

#### Week 4

• ½ biscuit to be eaten daily

#### Week 5

1 whole biscuit to be eaten daily

#### Week 6 onwards

 Continue to eat at least 1 biscuit daily, other biscuits can be introduced where milk is an ingredient e.g. digestive or garibaldi biscuit. Once you are happy this is well tolerated move onto stage 2 of the reintroduction.

#### Notes:

- You may stay at each stage for longer than shown above if your child is very sensitive to milk but <u>do not increase</u> to the next dose quicker as this may trigger a reaction, the body requires time to build up tolerance.
- Try to give the dose every day. If you miss several days (e.g. child unwell), give a smaller dose when you restart and build up
- Do not increase dose if your child is unwell
- If you see symptoms, reduce the dose to a level that is tolerated
- Important :Do not allow other foods containing milk

## What if the challenge has been unsuccessful?

If your child has a reaction to the food being introduced stop the stage 1 challenge.

Continue to avoid all milk and foods containing milk for a further 6 months and then repeat the challenge again.



**STAGE 2** (For children already tolerating stage 1 foods)

Food: cakes made with cows milk e.g. mini muffin/cupcake, scotch pancakes, baked/fried potato products e.g waffles, croissant/bread that contains milk, breakfast cereals that contain milk, frozen Yorkshire puddings/shop brought pancakes, processed meats that contain milk , butter, margarine, flavourings that contain milk eg. crisps

Start each new food at day 1 and proceed to day 5 onwards If a food is not tolerated try a different food from those listed.

#### **Day 1**

 ¼ portion of stage 2 food (e.g. ¼ mini muffin/cupcake/scotch pancake/ potato smile/waffle/1 tbsp. cereal/ ¼ palm sized slice meat)

#### Day 2

• ½ portion of stage 2 food (e.g. ½ mini muffin/cupcake/scotch pancake/ potato smile/waffle/2 tbsp. cereal/ ½ palm sized slice meat)

#### Day 3

• ¾ portion of stage 2 food (e.g. ¾ mini muffin/cupcake/scotch pancake/ potato smile/waffle/3 tbsp. cereal/ ¾ palm sized slice meat)

#### Day 4

• 1 portion of stage 2 food (e.g. 1 mini muffin/cupcake/scotch pancake/ potato smile/waffle/4 tbsp. cereal/ 1 palm sized slice meat)

#### Day 5 onwards

• Gradually increase the number of portions of these stage 2 foods every day until your child is eating stage 2 foods regularly.

#### Notes:

- Continue to eat stage 1 milk containing biscuit per day in addition to following stage 2 challenge.
- You may stay at each stage for longer than shown above if your child is very sensitive to milk but <u>do not increase</u> to the next dose quicker as this may trigger a reaction, the body requires time to build up tolerance.
- Try to give the dose every day. If you miss several days (e.g. child unwell), give a smaller dose when you restart and build up
- Do not increase dose if your child is unwell
- If you see symptoms, reduce the dose to a level that is tolerated
- Important :Do not allow other foods containing milk

## What if the challenge has been unsuccessful?

If your child has a reaction to the food being introduced in stage 2, stop the stage 2 challenge. Continue to include stage 1 daily milk containing biscuit however avoid all other foods containing milk for a further 2-3 months and then try the challenge again starting at stage 2.





(For children already tolerating stage 1 and stage 2 foods)

Food:

Products containing cooked cheese or whole cow's milk as heated ingredient e.g. mash potato topping cottage/shepherds/fish pie, lasagne, pizza, custard, custard tart, rice pudding, cheese or white sauce, cream soups, home made batters e.g. pancakes, Yorkshire pudding

Start each new food at day 1 and proceed to day 5 onwards If a food is not tolerated try a different food from those listed.

#### Day 1

• 1 tablespoon of stage 3 food

#### <u>Day 2</u>

• 2 tablespoons of stage 3 food

#### Day 3

3 tablespoons of stage 3 food

#### Day 4

4 tablespoons of stage 3 food

#### Day 5 onwards

• Gradually increase the number of portions of these stage 3 foods every day until your child is eating stage 3 foods regularly.

#### Notes:

- Continue to eat stage 1 and 2 foods in addition to following stage 3 challenge.
- You may stay at each stage for longer than shown above if your child is very sensitive to milk but <u>do not increase</u> to the next dose quicker as this may trigger a reaction, the body requires time to build up tolerance.
- Try to give the dose every day. If you miss several days (e.g. child unwell), give a smaller dose when you restart and build up
- Do not increase dose if your child is unwell
- If you see symptoms, reduce the dose to a level that is tolerated
- Important :Do not allow other foods containing milk

## What if the challenge has been unsuccessful?

If your child has a reaction to the food being introduced in stage 3, stop the stage 3 challenge.

Continue to include stage 1 and stage 2 foods daily however avoid all other foods containing milk for a further 2-3 months and then try the challenge again starting at stage 3.

A37 - Milk ladder for cow's milk reintroduction June 2015 Liz Ingham, Specialist Paediatric Dietitian Review date June 2016





(For children already tolerating stage 1,2 and 3 foods)

Food: yogurt, chocolate

Start each new food at day 1 and proceed to day 5 onwards If a food is not tolerated try a different food from those listed.

#### Day 1

• ¼ portion of yogurt or chocolate (e.g. ¼ small pot yogurt, ¼ small bag chocolate buttons or 5g chocolate)

#### Day 2

½ portion of yogurt or chocolate (e.g. ½ small pot yogurt, ½ small bag chocolate buttons or 10g chocolate)

#### Day 3

3/4 portion of yogurt or chocolate (e.g. 3/4 small pot yogurt, 3/4 small bag chocolate buttons or 15g chocolate)

#### Day 4

1 portion of yogurt or chocolate (e.g. 1 small pot yogurt, 1 small bag chocolate buttons or 20g chocolate)

#### Day 5 onwards

 Gradually increase the number of portions of these foods included every day until your child is regularly eating yogurt/chocolate.

#### Notes:

- Continue to eat stage 1,2 and 3 foods in addition to following stage 4 challenge
- You may stay at each stage for longer than shown above if your child is very sensitive to milk but do not increase to the next dose quicker as this may trigger a reaction, the body requires time to build up tolerance.
- Try to give the dose every day. If you miss several days (e.g. child unwell), give a smaller dose when you restart and build up
- Do not increase dose if your child is unwell
- If you see symptoms, reduce the dose to a level that is tolerated
- Important :Do not allow other foods containing milk

## What if the challenge has been unsuccessful?

If your child has a reaction to the food being introduced in stage 4, stop the stage 4 challenge.

Continue to include stage 1, 2 and 3 foods however avoid all other foods containing milk for a further 2-3 months and then try the challenge again starting at stage 4.



Norfolk and Norwich University Hospitals Miss

**NHS Foundation Trust** 



#### **STAGE 5** (For children already tolerating stage 1,2,3 and 4 foods)

Food: cheese

#### Day 1

• ¼ portion of cheese (e.g 6g)

#### Day 2

• ½ portion of cheese (e.g. 12g)

#### <u>Day 3</u>

• ¾ portion of cheese (e.g.18g)

#### Day 4

• 1 portion of cheese (e.g. 24g)

#### <u>Day 5</u>

• Gradually increase the number of portions of cheese included every day until your child is eating cheese regularly.

#### Notes:

- Continue to eat stage 1, 2, 3 and 4 foods in addition to following stage 5 challenge
- You may stay at each stage for longer than shown above if your child is very sensitive to milk but <u>do not increase</u> to the next dose quicker as this may trigger a reaction, the body requires time to build up tolerance.
- Try to give the dose every day. If you miss several days (e.g. child unwell), give a smaller dose when you restart and build up
- Do not increase dose if your child is unwell
- If you see symptoms, reduce the dose to a level that is tolerated
- Important :Do not allow other foods containing milk

## What if the challenge has been unsuccessful?

If your child has a reaction to the food being introduced in stage 5, stop the stage 5 challenge.

Continue to include stage 1,2,3 and 4 foods however avoid all other foods containing milk for a further 2-3months and then try the challenge again starting at stage 5.



(For children already tolerating stage 1,2,3,4 and 5 foods)

Food: sterilized (UHT) milk/ shop bought ready made infant formula

#### **Day 1**

25 mls sterilized (UHT) milk/ shop bought ready made infant formula

#### Day 2

• 50mls sterilized (UHT) milk/ shop bought ready made infant formula

#### Day 3

75mls sterilized (UHT) milk/ shop bought ready made infant formula

#### Day 4

100mls sterilized (UHT) milk/ shop bought ready made infant formula

#### Day 5

 Gradually increase the amount of sterilized milk per day until your child is drinking it regularly in their diet

#### Notes:

- Continue to eat stage 1, 2, 3, 4 and 5 foods in addition to following stage 6 challenge.
- You may stay at each stage for longer than shown above if your child is very sensitive to milk but <u>do not increase</u> to the next dose quicker as this may trigger a reaction, the body requires time to build up tolerance.
- Try to give the dose every day. If you miss several days (e.g. child unwell), give a smaller dose when you restart and build up
- Do not increase dose if your child is unwell
- If you see symptoms, reduce the dose to a level that is tolerated
- Important :Do not allow other foods containing milk

## What if the challenge has been unsuccessful?

If your child has a reaction to the food being introduced in stage 5, stop the stage 5 challenge.

Continue to include stage 1, 2, 3, 4 and 5 foods however avoid all other foods containing milk for a further 2-3 months and then try the challenge again starting at stage 6.



For children already tolerating stage 1,2,3,4,5 and 6 foods)

Food: pasteurized milk/infant formula made with powder

#### Day 1

25 mls pasteurized milk/infant formula made with powder

#### Day 2

• 50mls pasteurized milk/infant formula made with powder

#### Day 3

75mls pasteurized milk/infant formula made with powder

#### Day 4

100mls pasteurized milk/infant formula made with powder

#### Day 5

- Gradually increase the amount of pasteurized milk/infant formula made with powder per day\_until your child is regularly drinking it in their diet.
- Once on regular intake of pasteurized milk you can introduce uncooked non-yogurt desserts e.g. cheesecake, mousse, ice cream, cream

#### Notes:

- Continue to eat stage 1, 2, 3, 4, 5 and 6 foods in addition to following stage 7 challenge
- You may stay at each stage for longer than shown above if your child is very sensitive to milk but <u>do not increase</u> to the next dose quicker as this may trigger a reaction, the body requires time to build up tolerance.
- Try to give the dose every day. If you miss several days (e.g. child unwell), give a smaller dose when you restart and build up
- Do not increase dose if your child is unwell
- If you see symptoms, reduce the dose to a level that is tolerated

## What if the challenge has been unsuccessful?

If your child has a reaction to the food being introduced in stage 7, stop the stage 7 challenge.

Continue to include stage 1, 2, 3, 4, 5 and 6 foods however avoid all other foods containing milk for a further 2-3 months and then try the challenge again starting at stage 7.



## Recipes to go with milk ladder

## **Biscuit ("malted milk")**

Makes 40 small biscuits

#### **Ingredients**

110g unsalted butter - softened 110g caster sugar 175g self-raising flour 50mls evaporated milk Water if mixture is too dry

#### Method

Preheat oven to 180C (160C for fan ovens)

In a large bowl, cream the butter and sugar and evaporated milk until pale Mix in sifted flour

This will make a stiff dough - if too dry add a small amount of water Divide dough into 2 and then into 2 again

Out of each quarter of the dough - make 10 small equal size balls

Place on baking tray covered with greased baking paper

Cook for 15 minutes or until golden at the edges but still a little soft Transfer to cooling rack

Dough not used can be wrapped in cling film and frozen

Cooked biscuits can also be frozen

#### **Variations**

Add any of the following - dairy free chocolate drops, grated lemon and/or orange zest and a small amount of juice, any spices such as cinnamon, dried fruit such as raisins, apricots, dates

#### Gluten and wheat free alternative:

For a gluten and wheat free biscuit replace the wheat flour with 175g gluten and wheat free self-raising flour

## Mini muffins/cupcakes

Makes 8 muffins
Ingredients
132g Wheat or Wheat free flour
40g Cocoa powder
1½ tsp Baking powder
¾ tsp Bicarbonate of soda
100g Soft brown sugar
40ml Any oil
70 ml Prune juice/Apple Puree
200ml Milk

#### Method

½ tsp Vanilla extract

Mix all the dry ingredients together
Mix the oil, apple puree/prune juice, milk and vanilla extract together
Add the fluid to the dry ingredients and mix lightly.
Scoop mix into muffin pans.
Bake at 180 C for 20 min.

#### **Variations**

Can be served with icing made with a suitable dairy free margarine or dairy free cream cheese.

## Scotch pancakes

Recipe provides 18 pancakes Ingredients
120g self-raising flour small pinch salt
30g caster sugar
1 egg
144 ml milk

#### Method

- 1. First grease your pan use oil as butter will burn, and then heat.
- 2. Sift the flour into a bowl, add the pinch of salt and the sugar.
- 3. Crack the egg into the milk, and whisk.
- 4. Pour the egg and milk liquid into the dry ingredients, and mix to form a smooth batter.
- 5. Test that the pan is hot enough by putting a teaspoon of batter onto it.
- 6. Use a tablespoon to drop the batter onto the pan.
- 7. When the surface of the batter has become covered in bubbles get ready to flip them over using a spatula.
- 8. When cooked remove the pancakes from the pan and wrap in a clean tea towel to keep moist.

#### Egg free or wheat free alternative

For an egg free alternative replace the egg with ½ large banana or use the instructions on an egg replacer.

For a wheat free pancake replace the wheat flour with wheat free flour.

A37 - Milk ladder for cow's milk reintroduction June 2015 Liz Ingham, Specialist Paediatric Dietitian Review date June 2016