

MILK FREE WEANING

INTRODUCTION

This leaflet is aimed at parents/ carers of babies who have a confirmed or suspected cows milk protein allergy (CMPA).

There are two types of cow's milk protein allergy depending on how the immune system reacts. Immediate allergies which happen within 2 hours of consuming cow's milk are known as IgE mediated food allergies. More delayed allergies which typically happen from 2 hours to 72 hours after food consumption are known as non-IgE mediated allergies.

For the first 6 months of life breast milk or a formula milk is all a baby requires. Breast milk is the ideal first choice (sometimes the mother may need to go onto a dairy free diet, please speak to your Health Visitor or Dietitian).

If breast milk is unavailable suitable milk formula substitutes include: -

- i) An extensively hydrolysed infant formula should be used as first line treatment for an infant with cow's milk allergy, unless the child has had anaphylaxis to cow's milk,
- ii) A special amino acid formula for some infants with anaphylaxis or where there is an intolerance to the extensively hydrolysed formula (this is rare).

Extensively hydrolysed and amino acid formula milks are available on prescription from your GP. They are all nutritionally complete. They taste and smell different to ordinary formula milks but are well accepted by younger babies when offered frequently over several days (all babies need to try new flavours a few times before accepting it). Using these formulas can make your baby's stools change colour e.g., become dark green but this is normal and should not be a cause for concern. If you are weaning with breast milk or a specialised formula you can mix the formula milk or expressed breast milk with cereals and other foods to allow the baby to adjust to the new taste.

When a baby is changed to a new formula it can take between 2-4 weeks for improvements to be seen. Some children may show improvement within a few days, whereas other children can take longer, so it is best not to change formula too quickly. There are a wide range of milk formula substitutes available and it can take a few attempts before a suitable formula substitute is found.

Infant soya formulas are sometimes used for infants over the age of 6 months. They are not recommended for babies under the age of 6 months as they contain natural phytoestrogens. Some infants with milk allergy can also be allergic to soya protein.

The infant soya formula Wysoy (*SMA*) is nutritionally complete and is tolerated by many infants with Cow's Milk Protein Allergy (CMPA). Wysoy (*SMA*), can be purchased from chemists (please discuss with your Dietitian/Doctor/Health Visitor if your child develops symptoms).

Goats milk formulae are unsuitable for a CMPA.

For lactose intolerance (e.g., following gastroenteritis) a lactose free formula may be suggested. These can be purchased from chemists and are **not** suitable for cow's milk allergy.

STARTING SOLIDS – 'FIRST TASTES'

The age of introducing solids can vary but the recommendation is **around 6 months of age, when your baby is showing developmental signs that they are ready.**

If your child has CMPA, this should not prevent you from introducing other **allergenic** foods, (such as egg, wheat, fish or nut spreads) along with a good variety of fruits and vegetables. Recent research has shown that **delaying** introduction of nuts (e.g., peanut butter) in weaning foods may increase the chance of nut allergy (see advice below).

You can use smooth peanut butter, puffed peanut snacks or grind whole peanuts to a fine powder. Mix with pureed fruits/vegetables, dairy free yogurt, porridge, baby cereals etc. or add to baby's milk substitute.

Suggested recipe: Mix 1 teaspoon of smooth peanut butter with 1 tablespoon of warm water(boiled) or baby's milk substitute or some pureed fruit/vegetables. Aim for a total of 2 level teaspoons per week. If you are concerned that another food you are trying is causing a reaction, avoid that food and discuss this with your Health Visitor or Dietitian.

Remember - whole nuts should not be given below 5 years of age due to the risk of choking

Because your baby is allergic to cow's milk, all solids offered will need to be free from cow's milk and cow's milk products.

Which foods contain cow's milk?

Many foods contain milk; it will be important to check the list of ingredients for the following words in any food given to your baby.

Under labelling law in the UK and European Union (EU), every pre-packed food, must show clearly on the label whether it contains **milk**.

Most foods which contain milk will have **milk** highlighted (*in bold, colour or underlined*) on the ingredients label.

milk	lactose
milk solids	whey
non-fat milk solids	hydrolysed whey protein
cheese	casein
butter	caseinate
skimmed milk powder	

As your baby gets older and joins in with family meals, it is important to also check these for cow's milk and cow's milk products e.g., butter, milk in mashed potato.

If you are using manufactured baby foods/jars these may contain milk. You must check labels or ingredient lists carefully. Customer care lines (see on jars for details) can give more information on individual products.

'May contain' or made in a factory labelling

Some labels say 'may contain cow's milk' or 'not suitable for cow's milk protein allergy' as the manufacturer may not be able to ensure that the product does not accidentally contain small amounts. These should generally be ok, but if unsure avoid.

Your baby is ready to start on solids if they can:

1. Stay in a sitting position and hold their head steady
2. Co-ordinate their eyes, hand and mouth so that they can look at the food, pick it up and put it in their mouth all by themselves
3. Swallow food. Babies who are not ready will push their food back out, so they get more round their face than they do in their mouths.

HOW TO BEGIN

SUITABLE FIRST SOLIDS

Mashed or soft, cooked sticks of fruit and vegetables like parsnip, potato, carrot, yam, swede, butternut squash, all cooled before eating. These can be given from a flat plastic spoon, or your baby can use their fingers.

Other foods include milk free baby rice mixed with your babies' usual milk, milk free baby cereal, soft ripe peach or melon, mashed banana, soft ripe pear or avocado.

TOP TIPS:

1. Don't give solids for the first time if your baby is very hungry, tired, or upset.
2. It may be best to give a breast feed or some of a suitable formula milk first, then your baby will be more likely to accept solid food.
3. It does not matter at which time of the day you introduce solids, choose when is convenient for you and your baby.
4. If your baby rejects the food, try again the next day. Sometimes an apparent dislike of a food simply means that your baby is not hungry.
5. Do not add solids, e.g., rusks, to the bottle. Once your baby is taking the food you can introduce slightly firmer textures and include a variety of different flavours.

SUGAR, HONEY AND SALT

Do not add these to foods. It is important not to add salt because your baby's kidneys cannot function as well as yours, so too much can be harmful.

Do not add to food or give foods containing high salt content e.g., soups, gravy, stock cubes, sauces/curries and try to reduce salt in cooking. Salt can be added to your portions after taking out your baby's portion.

Choose low in salt or no added salt snacks e.g., baby corn puffs, rice sticks, bread sticks and not crisps.

Sugar damages the developing teeth and should be limited.

It is recommended that honey is **NOT** given to any baby under 1 year due to harmful bacteria spores which can make babies ill.

ALLERGENS

You should not delay introducing other **allergenic** foods, such as egg, wheat, fish or nut spreads. Once introduced and if tolerated, keep offering those foods as part of your baby's usual diet (to minimise the risk of allergy).

If you are concerned that food may cause a reaction, then try offering it in small amounts initially and check that it is tolerated. If you are still concerned that a food is causing a reaction, avoid that food and discuss this with your Health Visitor or Dietitian.

Nuts

Whole nuts should be avoided until 5 years of age due to choking risk. A small amount (1/16th of a baby spoon) of nut spreads (e.g., cashew, almond and peanut butter) should be tried initially on the lips. If tolerated, include nut spreads and ground nut in cooking regularly.

Eggs

Try to buy British Lion eggs, because they are very low risk for containing bacteria causing food poisoning (Salmonella). Avoid giving raw egg if you are not sure if it is a British Lion Egg. If there is no British Lion Egg mark, make sure they are well cooked until the egg white and yolk are hard.



WATER

Babies under 6 months should only be given boiled and cooled tap water. Bottled water should not be given to babies due to its high salt content. If tap water is unsafe and you need to use bottled water, check the label to make sure the water contains less than 200mg per litre of sodium (also written as Na) and less than 250mg per litre of sulphate (also written as SO₄). Like tap water, bottled water needs to be boiled and cooled before use.

VITAMIN AND MINERAL SUPPLEMENTS

The government recommends that all children from 6 months to 5 years are given a vitamin supplement containing vitamins A, C and D.

Babies who are having more than 500ml (1 pint) of infant formula a day should not be given vitamin supplements. This is because formula is fortified with vitamins A, C and D and other nutrients. Babies who are being breastfed should be given a daily vitamin D supplement from birth.

You are entitled to free vitamin drops if you qualify for Healthy Start. Your Health Visitor can give you advice on vitamin drops and where to get them. Ask your pharmacist for advice if you are unsure which supplement to buy.

Having too much of some vitamins can be harmful. Keep to the dose recommended on the label and be careful not to give your baby 2 supplements at the same time.

Some children on milk-free diets can have a low calcium intake, particularly if they are not having enough cow's milk substitute or non-dairy foods that are rich in calcium

(See BDA Calcium Fact Sheet <https://www.bda.uk.com/resource/calcium.html>) for further ideas.

If you have concerns, discuss these with your Dietitian who can advise you further. If your child is avoiding other foods in addition to milk and dairy products, your Dietitian may suggest additional vitamin or mineral supplements.

NEXT FOODS

Soft, cooked meat like chicken, mashed fish (check for bones), lentils, mashed hard boiled eggs, smooth peanut butter (whole nuts should be avoided in children under 5 years due to the risk of choking), pasta, noodles, toast, pieces of chapatti and boiled rice.

Suggestions for next stage weaning include:-

- soft meats (without salt) mixed with potato and pureed vegetables.
- mashed fish e.g., cod, tuna, mixed with milk substitute or a white sauce made from milk substitute (see recipes).
- pasta simmered in milk substitute until soft or with tomato sauce, meat or lentils
- Weetabix or Readybrek for breakfast mixed with breast milk or milk substitute. **Readybrek contains traces of milk so is unsuitable for babies with severe CMPA.**
- Homemade custard or milk pudding made with milk substitute (see recipe). Try mixing with puree fruit.

Once solids have been accepted it is important that meals are varied to ensure a variety of flavours and a good mixed diet. About 500ml (18oz) of milk substitute formula should be taken per day, either as a drink or mixed with solids up to 1 year of age. After this time if your baby is managing a varied diet with calcium fortified foods 300ml (12oz) of formula may be sufficient. Speak to your Health Visitor or Dietitian if unsure.

Introduce a cup from around 6 months and offer sips of water with meals. An open cup or free-flow cup without a valve will help your baby learn to sip and is better for your babies' teeth. Bath time is an excellent time for babies to practice their cup drinking skills. Formula can also be offered in a beaker cup rather than a bottle.

MEALTIMES BECOME MORE IMPORTANT

At about the age of 7-8 months your baby will develop the ability to chew, even if teeth are not yet present. Now is the time to offer foods with soft lumps and encourage more finger foods.

If your baby spits out lumps or gags, keep trying at 1 meal per day and make sure other smooth solids, e.g., Weetabix, are made thicker. Try mixing a little of the lumpier food into smooth pureed food when you first try.

Suggestions for later stage weaning foods include:

- A soft family meal, e.g., spaghetti bolognese, shepherd's pie and mince and gravy with potato and soft vegetables mashed with a fork (add more gravy or bolognese if too thick).
- Mashed/ meat with soft, cooked vegetables and well-cooked rice.
- Flaked fish in white sauce made with milk substitute.
- Baked beans and milk free mashed potato (fork mashed) with tuna (canned in spring water).
- Soya yogurts* mixed with mashed banana or other fruit.
- Jelly or blancmange made with milk substitute (see recipe).
- Soft ripe fruit pieces e.g., melon, peach, strawberries

****Many babies with a cow's milk protein allergy are also allergic to soya particularly the soya in soya yogurts, soya milk and soya ice-cream***

Remember to check all family foods for cow's milk.

SUITABLE FINGER FOODS

- Toast or bread spread with a dairy free margarine (and small scrape of smooth peanut butter) cut into fingers.
- Pieces of soft fruit or vegetables, e.g., cooked carrot stick, piece of boiled potato, slice of banana or peach or mango.
- Milk free rusk/baby rice cake/bread stick, baby corn snack, milk free pancakes
- Pitta bread with hummus

GAGGING

Gagging is a normal reflex as infants learn to chew and swallow solid foods. It is very normal for your baby to gag when you introduce solid foods. This is because they are learning to regulate the amount of food they can chew and swallow at one time. They will eventually learn to cope with different textures and harder foods. If your baby is gagging, this is what may happen:

- your baby's eyes may water
- they might push their tongue forward (or out of their mouth)
- to bring the food forward in their mouth – they might make a retching movement, or they may vomit

See <https://www.nhs.uk/start4life> for further information and videos on gagging

Remember - never leave babies alone whilst they are feeding themselves

BABY LED WEANING

Baby-led weaning encourages the infant to feed him/herself a mixture of handheld solid foods. It misses out on the pureed food stage. Babies join in at family mealtimes and are offered a variety of foods. Babies set their own pace and begin to reduce their milk intake when they are ready. Baby led weaning should only be tried if your baby is able to sit unsupported and is showing an interest in picking up foods and other objects.

Studies show that children who have opportunities to eat a mixture of pureed and solid foods have the greatest nutrient intakes. A variety of flavours and textures are important rather than puree vs solid food.

CONTINUING WITH A COW'S MILK FREE DIET

Most infants and children grow out of their cow's milk allergy, usually between the first and third years of life.

If your infant had a severe reaction to cow's milk (e.g., whole body rash, face/lip swelling, severe vomiting, cough/wheeze) do not reintroduce cow's milk in foods at home until you have discussed this with your Dietitian.

All infants who are continuing a cow's milk free diet should have an appointment with a Dietitian to check the diet is nutritionally adequate and for further weaning and recipe ideas. Please ask your GP or Health Visitor to refer you.

THERE ARE A WIDE VARIETY OF DAIRY FREE PRODUCTS AVAILABLE THAT CAN BE USED AS PART OF THE WEANING DIET FROM 6 MONTHS. PLEASE ASK YOUR DIETITIAN FOR FURTHER INFORMATION.

RECIPE IDEAS

Basic White Sauce

(to mix with puree/mashed fish or meat or potato)

125ml (5oz) milk substitute

2 teaspoons cornflour

Mix cornflour with small amount of milk substitute to form a smooth paste and stir in rest of milk substitute. Bring to boil in small saucepan or jug in microwave until thickened.

Can be added to pureed meat, fish, or soft vegetables.

Tuna and Tomato Bake

125ml (5oz) milk substitute

15g (1/2oz) milk free margarine or 3 teaspoons oil

90g (3oz) tinned tuna

2 tinned tomatoes (sieved) or 1/3 tin chopped tomatoes

15g (1/2oz) flour

Place oil or milk free margarine in saucepan and melt over gentle heat. Add flour and stir to make paste. Gradually add milk substitute a little at a time, stirring continuously. Bring to boil until thickened. Add tuna and tomato and stir together.

Can be served with mashed potato, or as a later weaning food with pasta.

Banana Custard

125ml(5oz) milk substitute

2 teaspoons custard powder (not instant)

1 small banana

Mix custard powder with a small amount of milk substitute to form a smooth paste. Put rest of milk substitute in a saucepan and heat gently. Add to custard paste and return to pan. Simmer until thickened (keep stirring). Chop or mash banana and stir into custard.

Milk Free Jelly Mousse (makes 2-3 mousses)

½ packet of jelly cubes or ½ sachet of jelly granules

250ml pint milk substitute

Small amount of boiling water

Dissolve jelly in a jug with a small amount (60ml/2oz) boiling water. Make up to 250ml with milk substitute and place in a bowl in fridge for 15-20 minutes. Whisk with an electric hand whisk until frothy. Divide into 2 empty yogurt pots or dishes and leave to set in fridge.

Pasta using specialist formula (makes 2-3 portions)

This recipe is useful for older babies with a low formula intake

250ml (8oz) of milk substitute

50g (2oz) dry pasta

Simmer the dried pasta gently in the milk substitute until all the liquid is absorbed

FREEZING BABY FOODS

If you have a freezer, you may find it convenient to prepare a quantity of pureed baby meals and then freeze them in small portions.

Useful containers for freezing baby foods are:-

1. Ice cube trays.
(Freeze food in trays then turn out into plastic bags for storage).
2. Plastic dishes with lids.

Hygiene is very important, so follow these rules:-

- i) Freeze only fresh foods in perfect condition.
- ii) Use only very clean equipment for preparation and storage.
- iii) Handle food as little as possible and always keep it clean.
- iv) Cool cooked foods quickly and freeze immediately.
- v) Label every item and include the date frozen. Most foods have a storage life of about 3 months.

USING FROZEN FOODS FOR YOUR BABY

1. Take the food out of the freezer and leave to thaw thoroughly in the fridge (unless the label states otherwise).
2. Put the food into a small container or cup and stand in a pan of boiling water, until the food reaches boiling temperature.
3. Stir the food occasionally, checking that it is thoroughly heated.
4. Allow to cool sufficient to give to baby.
5. **Never** re-freeze foods.
6. Microwaves can be used for heating a baby's food, but they do leave cold spots, so food should be stirred and left to stand for 1-2 minutes after heating to ensure even heat distribution. Microwaved food should be checked before giving it to a baby to make sure the temperature is not too hot.

CARE SHOULD ALWAYS BE TAKEN TO ALLOW THE FOOD TO COOL SUFFICIENTLY BEFORE GIVING TO YOUR BABY.

FOODS UNSUITABLE FOR FREEZING

Certain foods do not freeze well. These include:-

Bananas

Custards (these tend to separate)

Eggs - if raw, in shells, hard boiled or poached

Tomatoes - unless pureed or in a cooked dish

Rice and pasta purees (they tend to go 'stodgy' and will need extra liquid once thawed)

Further support for weaning:

<https://www.nhs.uk/start4life/weaning/>

NHS start4Lifeweaning

<https://www.firststepsnutrition.org/eating-well-infants-new-mums>

First Steps Nutrition

<https://healthforunder5s.co.uk/sections/baby/starting-solid-foods/>

Health for under 5s

<https://www.allergyuk.org/resources/weaning-support-pack/>

Allergy UK Weaning support pack

Vitamins and minerals:

<https://www.bda.uk.com/resource/iodine.html>

BDA Iodine Factsheet

<https://www.bda.uk.com/resource/calcium.html>

BDA Calcium Factsheet