

Cow's Milk Protein Allergy: How to Wean Your Baby milk free

**Paediatric Dietitians, GRH
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Outline of Session

- What is Cow's Milk Protein Allergy?
- Symptoms and Diagnosis
- Lactose Intolerance or CMPA?
- Treatment of Cow's Milk Protein Allergy
- Food Labelling
- Cow's Milk Free Weaning (Meal Ideas)
- Introduction Of Other Common Allergenic Foods
- Cow's Milk Free Alternative Products
- Reintroducing Cow's Milk Back Into The Diet
- Meeting Calcium Requirements & Vitamins and Minerals



What is Cows milk allergy (CMPA)

- ***CMPA** is an abnormal response by the bodys immune system in which **proteins** in a food(in this case cows milk) are recognised as a potential threat . This can then cause the immune system to become ‘**sensitised**’. When this happens, there is potential that when cow’s milk is consumed the immune system remembers this protein and may react to it by producing allergic symptoms. (**Allergy UK**)*

CMPA

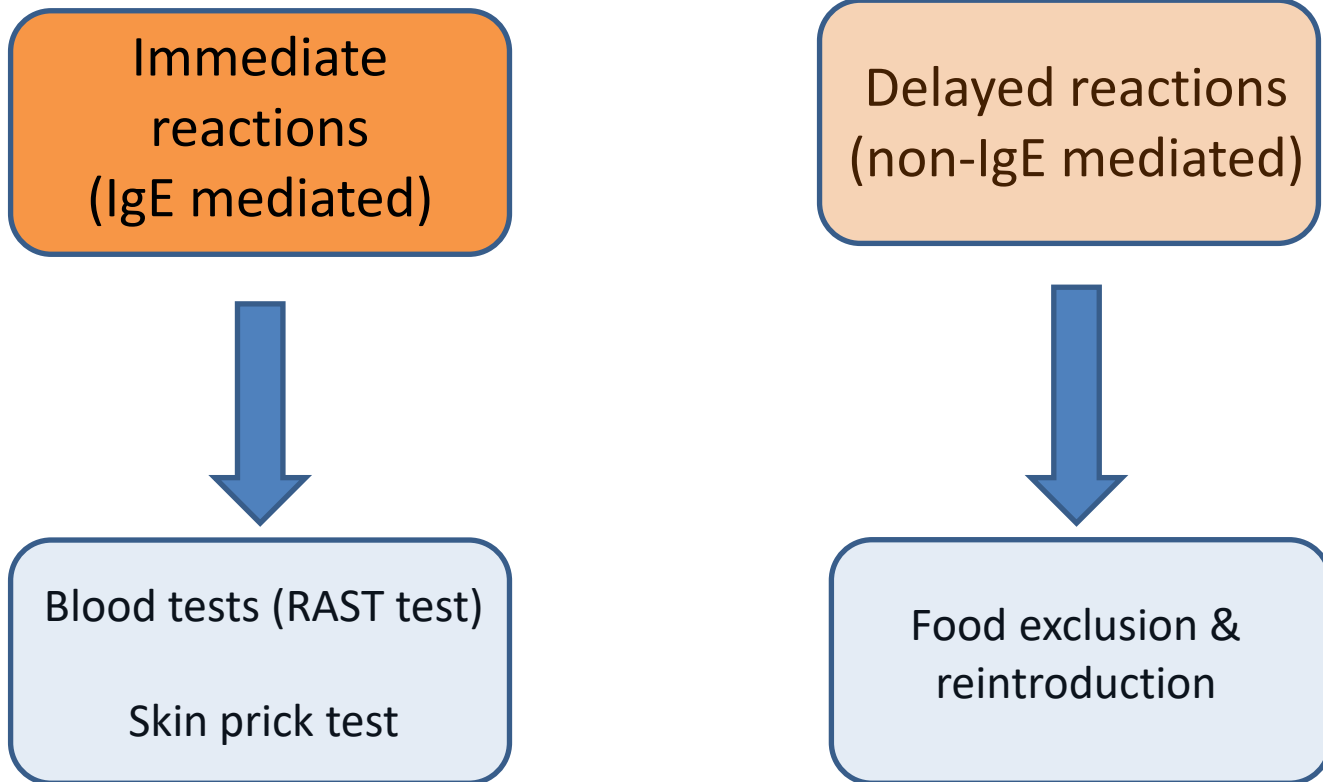
- One of the most common food allergies to occur in children – affects 2–5% of children
- Two types of CMPA:
 - Immediate (**IgE mediated**), symptoms typically show within minutes of having milk
 - Delayed (**non-IgE mediated**), symptoms typically show within hours, sometimes days, after having milk

Symptoms of Cow's Milk Protein Allergy

- Diarrhoea or constipation, stomach ache, nausea, reflux or vomiting, blood or mucus in stools, wind, discomfort with feeding
- Itchy skin rashes & eczema
- Runny or blocked nose
- Swelling of the face, eyes, lips
- Swallowing or breathing difficulties (rare)

Diagnosis of Cow's Milk Protein Allergy

Dependent on type of allergy



Sure its CMPA? What is Lactose Intolerance?

- Body cannot digest the sugar in cow's milk (lactose)
- Often confused with cow's milk protein allergy
- An intolerance, not an allergy
- Very rare – affects 1% of UK population
- Can be temporary following an upset tummy/ gastro bug/antibiotics
- Symptoms are very similar to cow's milk protein allergy:
 - Diarrhoea, nausea & occasional vomiting, wind, tummy ache



Breastfeeding



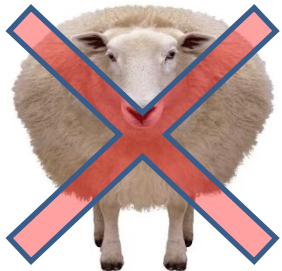
- Mild-to-moderate non-IgE mediated CMPA in exclusively breastfed babies is rare and is not a reason to stop
- If your baby's symptoms only began when you introduced a top-up infant formula try to revert back to breastfeeding/EBM only if possible
- Delayed mild - to - moderate non-IgE mediated CMPA can only be diagnosed through an elimination diet (to confirm that symptoms improve), followed by the reintroduction of cow's milk into the breastfeeding mother's diet (to confirm a return of symptoms).

Benefits of breastfeeding

HEALTH BENEFITS FOR THE INFANT	HEALTH BENEFITS FOR THE MOTHER
Breastfeeding reduces the infant's risk of developing:	Breastfeeding reduces the mother's risk developing:
Infections, including in particular ear infections Diarrhoea and vomiting Sudden infant death syndrome Childhood leukaemia Type 2 diabetes Obesity Cardiovascular disease in adulthood Benefits the infant's developing immune system Supports the development of the infant's gastrointestinal tract & healthy gut bacteria	Breast cancer Ovarian cancer Osteoporosis Cardiovascular disease Obesity

Treatment for suspected CMPA

- A diet free from cow's milk and food made with cow's milk
- avoid milk and food products from other animals, such as sheep, goat & buffalo as the protein is very similar to the protein in cow's milk
- If under 1 year of age, your child should have breast milk or a suitable hypoallergenic formula



Maternal Cows milk exclusion

- Beta-lactoglobulin is a cow's milk protein that can be found in the breast milk of cow's milk consuming mothers and can cause a non-IgE mediated reaction.
- If mild –moderate non-IgE is suspected a strict maternal dairy free exclusion is advised.
- 10ug vitamin D and 1250mg calcium supplement recommended
- Re-introduction recommended after 4 weeks to confirm diagnosis.



Suitable Formulas for Cow's Milk Protein Allergy



Extensively Hydrolysed Formulas (eHF)



Soya
(Over 6 months)



Amino Acid Formulas



Food Labelling

To follow a CM free diet, it is important to check food labels:

- Pre-packed food
 - allergens are emphasised on the label, e.g. skimmed milk powder, hydrolysed casein (**Milk**), cream (*from milk*)
- Foods without packaging/food served whilst you are out
 - written or verbal information on allergens needs to be provided by staff
- ‘May contain’ warnings
 - food may be contaminated with an allergen by accident
- The law only covers allergens used as ingredients, not allergens that may be present following accidental contact
- **For medicines, always check with your pharmacist**

Top Tips

- Check ALL food labels – you'll be surprised by what contains milk!
- Ask your local supermarket for a list of their own brand foods which are 'cow's milk free'
- Don't assume that a 'free from' product will be free from all allergens - always check the label
- Online supermarket sites are useful but always check the label of the product
- Use the Food Maestro App



Cow's Milk Protein Free Weaning

- This is the same as weaning a non-allergic baby **except** you are avoiding foods which contain cow's milk
- Weaning occurs around 6 months



Stage 1

- Try mashed or pureed fruit and vegetables like parsnip, potato, yam, sweet potato, carrot, apple or pear
- Baby rice or porridge (remember to check food labels)
- Use baby's usual milk (breast milk or hypoallergenic formula) to mix food to desired consistency
- Pureed/mashed meat, chicken or lentils

Stages 2 & 3 – Meal Ideas

- Breakfast
 - Cow's milk free breakfast cereal/porridge with milk substitute
 - Toast fingers with cow's milk protein free spread
 - Pancakes made with milk substitute
- Main meals
 - Baked beans or scrambled egg on toast
 - Meat/chicken or fish with potato/rice and vegetables
 - Pasta with a tomato, roasted vegetable sauce or cow's milk free white sauce. Can add cow's milk free cheese.
 - Flaked fish poached in a milk substitute, mashed potato & vegetables
 - Shepherd's Pie using cow's milk free substitutes
 - Omelette using soya milk & cheese alternative

Check the
food
labels

- **Puddings**
 - Fruit
 - Cow's milk free yoghurts, desserts, ice cream, custard (serve with fruit)
 - Rice pudding, semolina or custard made with milk alternative
 - Milk jelly using milk alternatives
- **Finger food/snacks**
 - Raw vegetable sticks
 - Dried fruit/small pieces of soft, ripe fruit
 - Cow's milk free cheese cubes/slices
 - Breadsticks or hummus
 - Crumpets/bagels/pittas/cheese scone made with cheese alternative
 - Sandwiches with egg/tuna/chicken/ham/cow's milk free cheese spread



Introduction Of Other Common Allergenic Foods

- Includes:
 - egg, soya, wheat, peanuts and other nuts, sesame seeds, mustard seed, celery, fish and shellfish
- Do not usually need to be avoided once your baby is 6 months old
- Introduce by giving one new food at a time to help identify any foods your baby may react to

SUITABLE MILK ALTERNATIVES

- Can be used in cooking over 6 months of age
- Generally not to be used as main milk drink until your child is 2 years of age
 - Choose a milk drink with added calcium



Hazelnut



Alpro Soya Growing Up Milk Drink
(can be used as main milk drink from 1 year)



Pea

Hemp



Oat



Almo

1L



Coconut



Cashew

Other Cow's Milk Free Alternative Products

- Spreads
- Cheese
- Yoghurts & desserts
- Ice creams & frozen desserts
- Creams/Custards/Crème Fraiche
- Chocolate



Will My Child Grow Out Of Their Cow's Milk Protein Allergy?

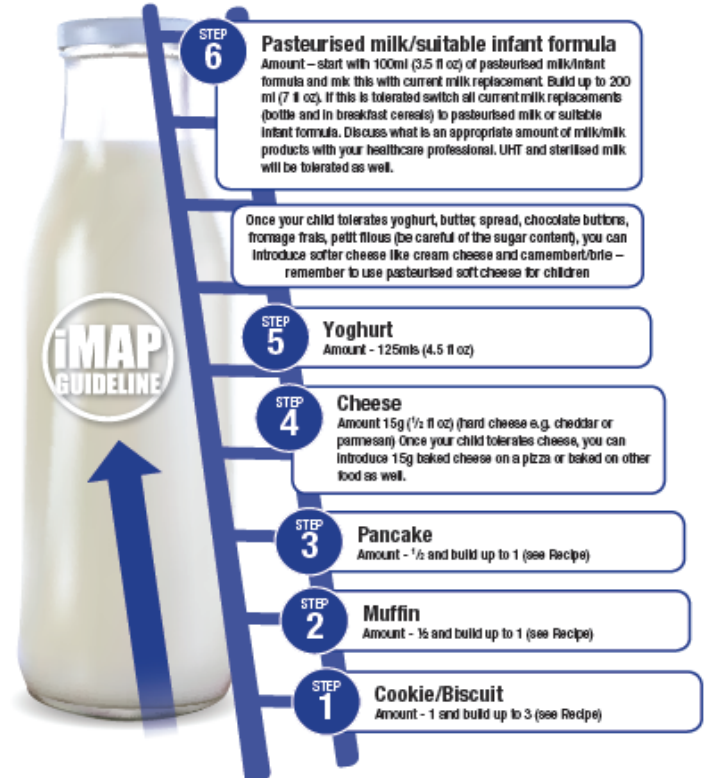
- Some children with mild to moderate non-IgE mediated cow's milk protein allergy will grow out of it by their first birthday
- Most children will grow out of their allergy between 1 and 3 years of age
- Some may take longer than this or may not grow out of it

Reintroducing Cow's Milk Back Into The Diet

- Milk (containing cow's protein) can be reintroduced into the diet at 9-12 months of age OR 6 months after starting a cow's milk free diet
- Use the Milk Ladder
 - Ensure your child is well before commencing
 - Begin at step 1 and consume the amount of food suggested
 - If the food is tolerated, continue giving your child this food and then try the next step and so on...
 - If the food is not tolerated, stop and try again with this step in 4 weeks. Continue to keep any milk containing food that was tolerated in the diet

THE iMAP MILK LADDER

To be used only in children with Mild to Moderate Non-IgE Cow's Milk Allergy
Under the supervision of a healthcare professional
PLEASE SEE THE ACCOMPANYING RECIPE INFORMATION



STEP 6 **Pasteurised milk/suitable infant formula**
Amount - start with 100ml (3.5 fl oz) of pasteurised milk/infant formula and mix this with current milk replacement. Build up to 200 ml (7 fl oz). If this is tolerated switch all current milk replacements (bottle and in breakfast cereals) to pasteurised milk or suitable infant formula. Discuss what is an appropriate amount of milk/milk products with your healthcare professional. UHT and sterilised milk will be tolerated as well.

Once your child tolerates yoghurt, butter, spread, chocolate buttons, fromage frais, petit flocons (be careful of the sugar content), you can introduce softer cheese like cream cheese and camembert/brûlé - remember to use pasteurised soft cheese for children

STEP 5 **Yoghurt**
Amount - 125mls (4.5 fl oz)

STEP 4 **Cheese**
Amount 15g (½ fl oz) (hard cheese e.g. cheddar or parmesan) Once your child tolerates cheese, you can introduce 15g baked cheese on a pizza or baked on other food as well.

STEP 3 **Pancake**
Amount - ½ and build up to 1 (see Recipe)

STEP 2 **Muffin**
Amount - ½ and build up to 1 (see Recipe)

STEP 1 **Cookie/Biscuit**
Amount - 1 and build up to 3 (see Recipe)

AT EACH OF THE FOLLOWING STEPS
Cookie, muffin, pancake, cheese and yoghurt
It may be advisable in some cases to start with a ¼ or a ½ of that particular food and then over a few days to gradually build up to a whole portion - Please ask your healthcare professional for guidance on this

THE LOWER STEPS ARE DESIGNED TO BE USED WITH HOME MADE RECIPES. THIS IS TO ENSURE THAT EACH STEP HAS THE APPROPRIATE MILK INTAKE. THE RECIPES WILL BE PROVIDED BY YOUR HEALTHCARE PROFESSIONAL. Should you wish to consider locally available store-bought alternatives - seek the advice of your healthcare professional Re: availability

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Meeting Calcium Requirements

- Important to ensure that your child is receiving enough calcium when following a cow's milk protein free diet
- Breastfeeding mums who are following a cow's milk protein free diet may need a calcium supplement
- Calcium requirements change with age
- Use foods fortified with calcium to help meet requirements, e.g. cow's milk protein alternatives

Vitamins for Children

The government recommends:

- **ALL** children aged 6 months to 5 years are given vitamin supplements containing vitamins A, C & D
- Babies who are breastfed are given a daily vitamin D supplement from birth
- Babies who are formula fed, who are getting more than 500ml (about a pint) of formula per day do not need extra vitamins

Preventing food allergy in your baby (aimed at babies who don't already have a food allergy)

- When introducing solids include foods that are commonly known to cause allergies
- These include wheat, milk, egg, fish and seafood, seeds, peanuts and tree nuts
- Only give age appropriate foods to avoid risk of choking
- Introduce one new food at a time when your baby is otherwise well
- Excluding egg and peanut from a baby's diet may increase their risk of a food allergy
- Do not delay introduction of allergenic foods beyond 12 months Continue to give them to your baby regularly as part of their diet as they get older
- Many foods (e.g. citrus fruit, tomatoes and strawberries) can irritate the skin and cause a red rash, especially around the mouth – this is usually not a food allergy
- Smearing food onto the skin does not help identify a possible food allergy
- Some babies will develop a food allergy despite following this advice
- If you think your baby is having an allergic reaction stop giving the food and seek urgent medical advice

Useful Links

For support

- Allergy UK www.allergyuk.org
- NHS Choices www.nhs.uk
- British Dietetic Association www.bda.org.uk
- Food Maestro App – free from the App store



For recipes (cooking with cow's milk free alternatives)

- www.oatly.com
- www.alpro.com
- www.kokodairyfree.com
- www.provamel.com
- www.tofutti.com
- www.violifefoods.com



Breastfeeding support

- 1. Local NHS Breastfeeding support service (details in your baby's red book) - a good first stop.
- 2. Breastfeeding support telephone lines:
 - National Breastfeeding Helpline – 0300 100 0212.
 - Association of Breastfeeding Mothers – 0300 330 5453.
 - National Childbirth Trust (NCT) – 0300 330 0700.
- 3. La Leche League (0345 120 2918) provides very useful information on breastfeeding on their website, you can find a local group that may be able to also support you. www.laleche.org.uk
- 4. The Breastfeeding Network provides support for breastfeeding and have drop in centres and provide telephone support.
- <https://www.breastfeedingnetwork.org.uk/breastfeeding-support/>

Breastfeeding support

- 5. Breastfeeding support group for children with cow's milk allergy
<https://www.facebook.com/groups>
- [CMPASforBreastFeeding/](https://www.facebook.com/groups/CMPASforBreastFeeding/).
- 6. The NHS also has support websites - <https://www.nhs.uk/conditions/pregnancy-and-baby/benefits-breastfeeding/>
- and <https://www.nhs.uk/conditions/pregnancy-and-baby/problems-breastfeeding/>
- 7. GPs can access information on www.gpifn.org.uk to support you through your breastfeeding journey.
- 8. First Steps Nutrition - <https://www.firststepsnutrition.org/eating-well-infants-new-mums>
- 9. Start4Life Breastfeeding Friend – an NHS supported Facebook group that offers advice day or night.

Support

- <https://patientwebinars.co.uk/condition/food-allergy-in-children/>
- <https://www.gloshospitals.nhs.uk/our-services/services-we-offer/nutrition-dietetics/paediatric-dietitian-resources/>
- <https://www.gloshospitals.nhs.uk/our-services/services-we-offer/nutrition-dietetics/self-help-resource-library/>
- <https://www.rosan-paediatricdietitian.com/webinars/>

If you are concerned that your child has multiple allergies or losing weight you can opt in for a 1:1 appointment by calling the dietitians on **0300 422 5506**.

Thank you for listening
That was **A LOT** of information
Any questions?

