This book is intended for parents or carers of infants who have been prescribed Aptamil Pepti by a healthcare professional

#### COW'S MILK ALLERGY

#### PARENT BOOKLET



IMPORTANT NOTICE: Breastfeeding is best. Aptamil Pepti 1 & 2 are foods for special medical purposes for the dietary management of cow's milk allergy. They should only be used under medical supervision, after full consideration of the feeding options available including breastfeeding. Aptamil Pepti 1 is suitable for use as the sole source of nutrition for infants from birth, and/or as part of a balanced diet from 6-12 months. Aptamil Pepti 2 is only suitable for infants from 6 months as part of a mixed diet.

#### INTRODUCTION

For infant's diagnosed with cow's milk allergy, information and guidance for parents can be limited. That's where this Parent Booklet comes in.

It has been written specifically to help fill that knowledge gap. In it, you will find information and insights that will help you understand and manage your infant's journey through cow's milk allergy – explaining why your infant has been prescribed Aptamil Pepti instead of their usual formula, how it can be used during weaning, plus practical tips on managing your infant's cow's milk free diet.

Of course it's only natural to feel worried when your infant is diagnosed with cow's milk allergy, but now that you know the cause of your infant's symptoms, you can take positive steps to help manage their cow's milk allergy and this book will help.

This Parent Booklet has been written by Tanya Wright, BSc Hons, MSc (Allergy), a specialist Registered Dietitian working within the Allergy Service at Guy's and St. Thomas' Hospital, London. Tanya specialises in paediatric food allergy and intolerance, and is the author of several food allergy and recipe books.





## WHAT IS COW'S MILK ALLERGY AND HOW COMMON IS IT?

Cow's milk allergy is a reaction to one or more of the proteins present in cow's milk that results in distressing symptoms for infants.

Cow's milk allergy is the most common food allergy in children under three years of age<sup>1</sup>, with estimates of its prevalence varying from 2-3% in infants under one year old.<sup>2</sup> By the age of three years, most children will have outgrown this particular allergy, but for a few it may last longer – until they're around six to eight years old.

#### SYMPTOMS

Cow's milk allergy is difficult to diagnose as symptoms are non-specific and commonly experienced in the early months of life by non-allergic infants (e.g. reflux or colic symptoms). As a result, their association with cow's milk allergy is often not made leading to misdiagnoses or delayed diagnoses<sup>3</sup>.

If cow's milk allergy is affecting your infant, he/she may become very unsettled and start to develop particular symptoms that are typically associated with his/her skin, gut or breathing...

DERMATOLOGICAL (SKIN)	GASTROINTESTINAL (GUT)	RESPIRATORY (BREATHING)	
Itching	Excessive crying	Runny nose/sniffles	
Redness	Vomiting	Wheezing	
Eczema	Food refusal or aversion	Coughing	
Hives (raised, itchy rash)	Reflux	Sneezing	
Swelling	Constipation	Itchy/blocked nose	
	Perianal redness (red bottom)	Conjunctivitis	
	Diarrhoea		
	Abdominal pain or discomfort		
	Blood and/or mucus in stools in an otherwise well infant		

While some infants may display only a couple of these symptoms, it is not unusual for several symptoms to occur and in rare cases there can be an extreme anaphylactic reaction to cow's milk.

The time it takes for an infant with a cow's milk allergy to react can also vary significantly. *Immediate cow's milk allergy*, as the name suggests, will occur immediately or within 0-2 hours, while *delayed cow's milk allergy* can develop after several hours or even up to 72 hours after they've ingested the cow's milk.

The key thing to remember is that all infants are different and it is therefore very important that your infant sees a Healthcare Professional to discuss their particular symptoms.



#### **SYMPTOMS**

#### What is it in cow's milk that causes my infant to develop these symptoms?

It is usually one or more of the proteins present in cow's milk that triggers an immune response in the body and causes these symptoms.

Although most children eventually grow out of their cow's milk allergy, its diagnosis and management can be a worrying time for parents. The good news is, with prompt diagnosis by a Healthcare Professional, and expert dietary advice, cow's milk allergy can be effectively managed and its impact reduced to a minimum.

#### Is lactose intolerance the same as cow's milk allergy?

No. An infant that is lactose intolerant will usually experience less severe reactions than one with an allergy.

As with cow's milk allergy, symptoms of lactose intolerance can include diarrhoea, vomiting, and stomach cramps but not usually skin related symptoms or breathing difficulties.

Bottlefed infants that are lactose intolerant are usually prescribed a lactose free formula by a healthcare professional. This is not a milk allergy and the reaction does not involve an immune response.

#### MANAGING COW'S MILK ALLERGY

Managing cow's milk allergy involves removing all cow's milk from your infant's diet, so you'll need to get familiar with reading food labels and ingredients, as milk can be present in other foodstuff.

The following pages will help you know where and what to look for in the supermarket. There's also some appropriate feeding advice about formula milks if your infant is bottlefed and has been diagnosed with cow's milk allergy.

#### FOOD LABELS

Being conscious of your infant's cow's milk allergy and knowing exactly what is in ready-made or prepacked foods can help you make informed choices in the supermarket, which is why it is important to have an understanding of food labelling.

Food labelling laws are in place to help, and common allergens, like milk, have to be declared on pre-packaged foods. By law, all manufactured foods sold in Ireland (and across the EU) must tell you if cow's milk (or milk from any animal such as goat, sheep or buffalo) or a derivative of these, is present in the food.

As you can see in the example below, the word 'milk' will be clearly highlighted in the ingredients list. If you check the ingredients list you will be able to tell if the product contains cow's milk or not. Milk cannot be hidden under another name.

#### **INGREDIENTS**

Water, Carrots, Onions, Red Lentils (4.5%) Potatoes, Cauliflower, Leeks, Peas, **Wheat** flour, Cream (**milk**), Yeast Extract, Concentrated Tomato Paste, Garlic, Sugar, **Celery** Seed, Sunflower Oil, Herb and Spice, White Pepper, Parsley

#### **ALLERGY ADVICE**

For allergens see ingredients in **bold** 

The following is a list of all the names that are used to show that a derivative of milk is contained in a product. Within Ireland and the EU we do not need to look for this list of names as milk derivatives are always clearly labelled as 'milk', however outside Ireland and the EU it may be useful to know these names because the food labelling laws differ.

- · Butter, butter fat, butter oil
- Buttermilk
- Casein/Caseinates (in all forms)
- Cheese
- Cream
- Curds
- Custard
- Ghee
- Lactose
- Milk (in all forms, including condensed, derivative, dry, evaporated, goat's milk and milk from other animals, low fat, malted, milk fat, non fat, powder, protein, skimmed, solids, whole)

- · Milk protein hydrolysate
- Rennet casein
- · Sour cream, sour cream solids
- Sour milk solids
- Whey (in all forms)
- · Whey protein
- Yoghurt

#### FEEDING ADVICE

Breast milk provides the best nutrition for infants, including infants with cow's milk allergy. In some cases your infant may be reacting to the milk proteins passing from your diet into your breastmilk. If your infant is diagnosed with cow's milk allergy and you're breastfeeding, you may have to change your diet, but, as it is quite rare, this should only ever be done after consulting your Healthcare Professional.

If your infant is being formula fed and has been diagnosed with cow's milk allergy, your Doctor may prescribe an extensively hydrolysed formula like Aptamil Pepti. The protein in these formulas has been broken down into smaller pieces so that the infant's immune system does not recognise it as an allergen. The process of hydrolysis does not affect the nutritional value of the formula.

Soya formulas are not recommended in the treatment of cow's milk allergy, particularly not for infants under 6 months of age. This is because some infants with cow's milk allergy will also react to the proteins in soya milk. Similarly, other animal milks (e.g. goat, sheep) are not suitable as infants who are allergic to cow's milk are at a high risk of reacting to these milks also.



#### APTAMIL PEPTI

Aptamil Pepti has been developed for the dietary management of cow's milk allergy. It is similar in composition to our standard infant milks, apart from the protein, which has been broken down (extensively hydrolysed) to make it less likely to cause an allergic reaction. Aptamil Pepti is whey-based and contains lactose to ensure the taste is acceptable to infants.

Available in two forms, Aptamil Pepti 1 & 2 are the only extensively hydrolysed formulas in Ireland to contain the prebiotic oligosaccharides, galacto- and fructo-oligosaccharides (scGOS/IcFOS)\*, which encourage the growth of beneficial bacteria in the gut. They also contain long chain polyunsaturated fatty acids (LCPs) Omega 3 and Omega 6.

<sup>\*</sup> scGos: short chain galacto-oligosaccharides, IcFos: long chain fructo-oligosaccharides

#### APTAMIL PEPTI 1



Aptamil Pepti 1 is an extensively hydrolysed formula for the dietary management of cow's milk allergy. It is made with 100% whey protein and is suitable from birth. Available on prescription in 400g and 800g tin\*. Powders are not suitable for a vegetarian or vegan diet and are not Halal approved.

#### APTAMIL PEPTI 2



Aptamil Pepti 2 is an extensively hydrolysed formula for the management of cow's milk allergy.

It is made with 100% whey protein and is suitable from 6 months of age in combination with a cow's milk-free weaning diet.

Available on prescription in 400g and 800g tin\*.

Powders are not suitable for a vegetarian or vegan diet and are not Halal approved.

#### SWITCHING TO APTAMIL PEPTI

If your healthcare professional has recommended Aptamil Pepti for your infant, it's important to note that it may take your infant up to two weeks to adjust to a new formula. You may notice some differences in their nappies – their stools may change in frequency and may turn green in colour. This type of change is normal and is due to the protein which is broken down in the formula.

#### Do I prepare Aptamil Pepti in the same way as any other formula?

All infant formulas are different so it is important to check the preparation instructions before using the product. Instructions for Aptamil Pepti are shown on the following page and can also be found on pack.

#### When can I expect my infant's symptoms to improve?

Every infant is different. Some symptoms may resolve very quickly, others may take longer. As a guideline you can expect most symptoms to improve significantly within 2 weeks.

If symptoms seem to get worse, do not show signs of improvement, or if you have any concerns, it is important that you consult your Healthcare Professional.

## HOW TO PREPARE APTAMIL PEPTI 1 & 2 MILK FROM POWDER



#### STEP 1

Wash hands and sterilise all utensils according to manufacturers' instructions.



#### STEP 2

Boil 1 litre of fresh tap water. Leave kettle to cool for no longer than 30 mins. Measure the required amount of water (refer to feeding guide) into a sterilised bottle. Be careful of scalding. Do not use artificially softened or repeatedly boiled water.



#### STEP 3

Using the scoop provided level off the powder with a clean knife. Do not press/heap the powder.

Because powdered milks are not sterile, failure to follow the instructions may make your infant ill.



#### STEP 4

Add the correct measure of powder to the water. Adding too many or too few scoops can be harmful. Cap the bottle and shake vigorously for **25 seconds** to dissolve the powder. Remove cap and replace with a sterilised teat.



#### STEP 5

Cool under running tap. Check temperature of feed. Feed immediately.

#### **Feeding instructions**

Make up each feed as required. For hygiene reasons, do not store made up feeds - always discard unfinished feeds as soon as possible and always within 2 hours. Never add extra scoops or anything else to your infant's feed. Do not heat in a microwave, as hot spots may occur and cause scalding. If necessary offer cooled, boiled water between feeds. Always use the scoop provided. Please note the colour of the scoop in the pack may change from time to time.

#### WEANING

Weaning is the gradual introduction of foods and is recommended to start between 4 to 6 months of age (and never before 17 weeks). If your infant can support their own head and coordinate their hands and eyes to guide objects to their mouth, they may be ready to start weaning. This is an important stage in their development and should only be started when you are sure they are ready. A sudden, short-lived increase in appetite is not a sign of readiness for weaning.

Experiment and explore new foods and textures during the weaning stage. The more diverse your baby's weaning diet is, the more nutrients they will get and they will learn to love these healthy foods for the long-term.

## Every infant is an individual, but there are clear signs that, together, show your infant is ready for solid foods alongside breast milk or formula. These signs include:

- 1. Infant can stay in a sitting position and hold their head steady.
- 2. Does not seem satisfied after a milk feed.
- 3. Shows an interest in food may be reaching out for food.
- 4. Chews and dribbles more frequently.
- 5. Starts to demand feeds more frequently over a time period of more than one week.

6. Watches others with interest when they are eating.

Initially when you start weaning most of the infant's nutrition will come from breastmilk or formula, but over time the amount of milk will reduce and food from a mixed diet becomes their main source of nutrition.





#### WHERE DO I START?

When you first introduce solid foods, it's best to choose a time when your infant is calm and alert, and you have plenty of time to let them explore and experiment, as well as deal with any mess. Try not to give them solids when they are really hungry, too tired or expecting their usual milk, as they could get frustrated.

To begin with you may notice that your infant pushes food back out of their mouth. This doesn't mean they don't like the food. Until now your infant has only ever encountered liquids and they have to learn to move more solid foods around their mouth and swallow.

Start by offering a small amount of thin smooth puréed food from the tip of a spoon. One to two teaspoons is enough to start with. Increase the thickness as your infant progresses (but still no lumps). Your infant will soon learn to form a bolus (a small mass of food) and move it to the back of their mouth to swallow it.

As your infant gets the hang of eating, you can gradually build up the amount and type of foods you offer, until they're enjoying two to three varied meals each day. If your infant seems enthusiastic, it's fine to offer them more.

## DISCOVERING NEW TASTES AND TEXTURES

The consistency, texture and range of foods need to change as your infant grows. Your infant will soon learn to bite and chew, hold a spoon and eventually feed themselves, so this is the perfect opportunity to encourage them to eat a varied, balanced diet and establish healthy eating habits that will last into childhood and beyond.

Once your infant has learned to take thicker pureed food from a spoon, you can think about introducing mashed foods and then on to foods with soft lumps. Your infant will also be able to pick things up, so offer soft finger foods too, such as cooked carrot sticks or fingers of toast.

This is also the time to introduce foods rich in a range of important vitamins and minerals, such as iron. Aim for a healthy, balanced diet, similar to that for yourself, but without salt or added sugar.

For more information on weaning visit aptaclub.ie



# HOW DO I START THE WEANING PROCESS IF INFANT IS ON APTAMIL PEPTI?

Wean as normal, but use Aptamil Pepti to mix foods where you would usually use cow's milk or cow's milk formula, such as making up porridge or in mashed potato.

Look in your supermarket for dairy-free alternatives to yoghurt, cheese, and dairy spreads. Dairy-free yoghurt choices that are available in most Irish supermarkets include coconut milk yoghurts and soya\* yoghurts. Try finding varieties that are fortified (or 'enriched') with calcium.

Vegan or dairy-free 'butter-type' spreads are also suitable to use sparingly in your infant's diet (but they're not necessary).

Dairy-free cheeses are unfortunately more difficult to find in Irish supermarkets, but more specialised health food stores may stock dairy-free cheeses based on soya\*, pea, cashew\*\*, almond\*\*\* or coconut. Don't worry if you can't find dairy-free cheese as it's still possible to get calcium and protein from other foods in the diet including breast milk or Aptamil Pepti and dairy-free yoghurts.

<sup>\*</sup>Some infants with cow's milk allergy may also be allergic to soya and therefore soya-based dairy alternatives are not suitable.

<sup>\*\*</sup>Not suitable if allergic to cashew nuts

<sup>\*\*\*</sup>Not suitable if allergic to almonds

If you are using products from the 'free-from' range make sure to check the ingredients carefully as some of them are not dairy free.

Be aware that some products are only lactose free and therefore still contain whole cow's milk protein. These are not suitable for your infant.

If in doubt whether the product is milk-free or not, always check the ingredients list on the label where the allergens are in bold text.

Many foods are naturally dairy free such as unprocessed meat, fish, vegetables, fruit, nuts, rice, beans/lentils (pulses) and grains so there are still plenty of nutritious foods you can still buy to feed your infant. Foods can be fresh, frozen or tinned, but avoid those with added salt or sugar.

Other foods to avoid giving your infant are honey, whole/chopped nuts, low fat foods, shark, swordfish and marlin, raw shellfish, bran, processed meats, high-fat and high-sugar foods and raw/under-cooked eggs.

# INTRODUCING TYPICAL ALLERGENIC FOODS INTO THE WEANING DIET

The time when infants should first be introduced to foods typically associated with allergies, such as peanut and egg, has been subject to debate and confusion in recent years.

The old school of thought was to completely avoid these foods in the infant's diet until at least 12 months.

However, recent research has shown that delaying the introduction of specific allergenic foods may in fact increase the risk of developing a food allergy to the same foods<sup>4,5</sup>.

Current guidelines from Ireland (ICGP)<sup>6</sup> and the UK (BSACI / BDA)<sup>7</sup> recommend that once weaning has started between 4-6 months, foods associated with allergies should be included in the infant's weaning diet.

These foods include well-cooked egg, foods containing peanut and tree nuts (e.g. smooth peanut butter or cashew/almond nut butter), fish, and wheat.

Aim to introduce these foods ideally from 4-6 months of age and before 12 months of age, one new food at a time. Once these foods are in the weaning diet, it's very important to continue to give them to your infant regularly (several times a week and indefinitely) as part of their usual diet.

If your infant has a diagnosed allergy to any of the above-mentioned allergenic foods, they should be strictly avoided as per your doctor's/dietitian's advice. Never give whole or chopped nuts before 5 years of age due to choking risk.

Introducing foods typically associated with allergies into your infant's weaning diet when they're so young can sound counterintuitive and it is normal to feel anxious. It is strongly advised that you discuss introducing these foods into your infant's weaning diet with your doctor/dietitian before you do so.

## FAQ

SHOULD MY INFANT STAY ON APTAMIL PEPTI AFTER 12 MONTHS OF AGE?

Infants can continue to have Pepti 2 as their main milk drink as part of a balanced diet even after 12 months of age right up until they outgrow their CMA. The most recent guidelines from the Food Safety Authority of Ireland advise against the use of plant-based milk alternatives for 1-5 year olds as they are not nutritionally adequate. These include almond 'milk', coconut 'milk' and rice 'milk'8.

Made-up formula can be used in cooking as soon as infant starts weaning and for as long as is necessary. Speak to your Healthcare Professional about whether your infant should stay on Aptamil Pepti 2 after 12 months; every case is individual

WHEN WILL I SEE AN IMPACT OF SWITCHING TO APTAMIL PEPTI?

A Every infant is different. Some symptoms may resolve very quickly, others may take longer. As a guideline you can expect most symptoms to improve within 2 weeks.

If symptoms seem to get worse, do not show signs of improvement or you have any concerns it is important that you consult a Healthcare Professional.

#### Q I HAVE HEARD OF THE MILK I ADDER - WHAT IS THIS?

This is the re-introduction of cows' milk into the baby's diet starting with baked cows' milk where it is an ingredient in foods. The end of the milk ladder is when your baby is able to drink cows' milk. This is something your Healthcare Professional or dietitian can help you with. Do not start without having sought professional advice as some babies may not be ready to start the milk ladder.

### WHY HAS MY BABY'S POOTURNED GREEN?

A When switching formula, your baby will need up to 2 weeks to adjust. You may notice some differences in their nappies – their stools may change in frequency, consistency and

In Aptamil Pepti 1 & 2 the broken down proteins may cause your baby's poo to turn green. This is normal and shouldn't be a cause for concern. For anything else out of the ordinary, we recommend you get in touch with your Healthcare Professional.

## FAQ

- WHAT IF I DON'T SEE A CHANGE IN INFANT WHEN MOVING TO APTAMIL PEPTI?
- A If you see no signs of improvement or you have any concerns, it is important you consult your Healthcare Professional who may advise a formula for severe cow's milk allergy.
- WHAT IF MY INFANT DOESN'T SEEM TO LIKE THE TASTE OF APTAMIL PEPTI?
- A ptamil Pepti does taste different to other Aptamil formulas due to the broken down proteins but this is normal.

- WHAT DOES APTAMIL PEPTI CONTAIN THAT OTHER STANDARD FORMULAS DON'T?
  - A Aptamil Pepti is similar in composition to our standard infant formulas, apart from the protein which has been broken down (extensively hydrolysed) to make it less likely to cause an allergic reaction.

#### HOW MUCH FORMULA SHOULD I BE GIVING MY INFANT AT EACH STAGE OF WEANING?

As a guide the table below can be found on the back of each pack of Aptamil Pepti. However always use the quantity of Aptamil Pepti as advised by your Healthcare Professional

#### FFFDING GUIDE 0-12 MONTHS

Approx. age	Approx. weight		No. of feeds per 24 hours	No. of level scoops per feed (1 scoop=4.5g)	Quantity of water per feed	
						fl oz
Birth	3.5	7.5	6	3	90	3
2 weeks	4.0	8.8	6	4	120	4
2 mths	5.0	11.0	5	6	180	6
4 mths	6.5	14.5	5	7	210	7
6 mths*	7.5	16.5	4	8	240	8
7-12 mths	-	-	3	7	210	7

IS THERE ANY DIFFERENCE IN THE PREPARATION OF APTAMIL PEPTI VS. OTHER APTAMIL FORMULAS?

A You may find Aptamil Pepti requires a longer period of vigorous shaking than some other formulas, so we recommend shaking for 25 seconds or until all of the powder is dissolved.

Many formulas have different preparation instructions so it is always important to check the back of pack instructions before preparing.

<sup>\*</sup> Assumes weaning at 6 months.

# NOTES



#### **VISIT APTACLUB**

for further information on

#### **COW'S MILK ALLERGY & WEANING**



#### www.aptaclub.ie

#### References:

- 1. Koletzko S et al. J Pediatr Gastroenterol Nutr 2012;55:221-229
- 2. Luyt D et al. Clinical & Experimental Allergy. 2014;44(5):642-672
- 3. World Allergy Organization (WAO) Diagnosis and Rationale for Action against Cow's Milk Allergy (DRACMA) Guidelines. *Pediatric Allergy and Immunology*. 2010; 211-125.
- 4. Du Toit G et al. N.Engl. J.Med. 2015; 26:372(9):803-813.
- 5. Perkin MR et al. J. Allergy Clin. Immunol. 2016; 137(5):1477-1486.e8.
- 6. Irish College of General Practitioners Quick Reference Guide (ICGP QRG). Food Allergy in Children. Dublin: ICGP; 2020. Available from www.icgp.ie
- 7. Food Allergy Specialist Group of the British Dietetic Association and Paediatric Allergy Group of the British Society for Allergy & Clinical Immunology. Preventing food allergy in higher risk infants: guidance for healthcare professionals. [Internet] London: British Society for Allergy & Clinical Immunology (BSACI); 2018. Available from: https://www.bsaci.org/pdf/Early-feeding-guidance-for-HCPs.pdf
- 8. Food Safety Authority of Ireland, Scientific Committee Report. Scientific Recommendations for Food-Based Dietary Guidelines for 1 to 5 Year-Olds in Ireland. FSAI; 2020.

  Available from: www.fsai.je