



Do you suspect that your child has
COW'S MILK PROTEIN ALLERGY?



Information for you as the parent or caregiver
of a child for whom healthcare professionals
have recommended a dairy-free diet.

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Could it be

COW'S MILK PROTEIN ALLERGY?

That is a question which is not always easy to answer. But if it's possible to find an answer, it may also solve many of the concerns which you and your child are going through.

In this booklet, we have compiled information about cow's milk protein allergy: what it is, which symptoms are common and what you as a parent may benefit from considering.

We hope you'll get the answers to some of the questions you certainly must have. If you have other concerns regarding your child, do not hesitate to contact your healthcare professional.

We wish you good luck with your child's future food experiences!

The Paediatric Team

Nestlé Health Science

What is

COW'S MILK PROTEIN ALLERGY?



Cow's milk protein allergy occurs in approximately 3% of all children under the age of one.¹ This makes it one of the most common food allergies in infants. Thankfully, most of the children outgrow this before reaching school age.

How rapidly

DO THE SYMPTOMS APPEAR?

Depending upon the type of reaction, the allergic symptoms may appear immediately, that is to say, within minutes of the child consuming the cow's milk protein. However, the symptoms may not appear for several hours or days.

COW'S MILK PROTEIN ALLERGY AND LACTOSE INTOLERANCE ARE NOT THE SAME THING!



Although certain symptoms of milk allergy and lactose intolerance are similar, the causes are completely different. Lactose intolerance occurs due to a reduced ability of the bowel to break down the natural milk sugar (lactose) which is found in both cow's milk and breast milk. On the other hand, the symptoms of cow's milk allergy occur when the immune system reacts to certain proteins which exist in cow's milk. Lactose intolerance is also extremely uncommon in children prior to the age of 3, even in children with cow's milk allergy.



A close-up photograph of a baby's face, looking up with an open mouth, ready to be fed. A hand is holding a blue spoon with a small amount of food on it, positioned near the baby's mouth. The background is softly blurred, showing a colorful patterned object. The overall scene is warm and intimate.

How do

FOOD ALLERGIES OCCUR?

Anyone may develop food allergies; however, if there is an infant with a food allergy in the family, there is an increased risk. Cow's milk protein allergy specifically occurs when the child's immune system reacts adversely to the protein in cow's milk.

A breastfeeding child reacts to the milk protein which passes through the mother and into the breast milk. If the child is formula-fed, the reaction occurs to the milk protein in the formula.

In both cases, the child's immune system reacts to the milk protein as a foreign object it must defend against. Protective mechanisms are then released in the form of natural substances, such as histamine. These substances in turn cause the allergic symptoms which the child may experience.

Which symptoms

SHOULD YOU LOOK OUT FOR?

As a parent, you immediately sense when your child is not happy, or when he/she is in pain. As the symptoms from cow's milk protein allergy may vary widely, both in how they manifest themselves and in their severity, finding the reason that your child is unhappy can be difficult. Each child also reacts individually to cow's milk protein allergy. Therefore, it may help to be familiar with all the different symptoms associated with cow's milk protein allergy, so that you can look out for them.

The symptoms of cow's milk protein allergy are primarily divided into four areas. Many children with cow's milk protein allergy have multiple symptoms, most often from more than one symptom area.²

RESPIRATORY

- Hissing, wheezing or difficulty in breathing
- Runny nose
- Chronic cough (not transient)

SKIN

- Urticaria (hives), nettle rash (rash with raised red lumps)
- Angioedema (swelling of the lips or eyelids)
- Eczema (dry, chapped or itchy and red skin)

COW'S MILK PROTEIN ALLERGY MUST BE DIAGNOSED BY HEALTHCARE PROFESSIONALS

GASTROINTESTINAL

- Vomiting
- Recurring regurgitation
- Reflux
- Refusal to eat
- Colic (together with inconsolable crying*)
 - Diarrhoea
 - Blood in the stool
 - Constipation
 - Dysphagia (difficulty swallowing)
 - Stomach pain

GENERAL

- Lack of weight gain
- Fatigue, lethargy
- Restlessness
- Unhappiness
- Insomnia
- Anaphylaxis (occurs only in serious cases; a rapid reaction with swelling and an itchy rash)



In the event of acute symptoms and shortness of breath, SEEK MEDICAL ATTENTION

* Infantile colic is predominantly associated with crying for a regular period during the day, and occurs during the first months of life.

Document

YOUR CHILD'S SYMPTOMS

Fill in the adjacent symptom diary; enter your next healthcare visit.

By following your child's symptoms for a few days prior to the visit, you can assist with a possible diagnosis.



* Adapted from "The European Society of Paediatric Gastroenterology", Hepatology and Nutrition (ESPGHAN) Guidelines 2012.

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SYMPTOM DIARY

NAME Breastfeeding

AGE DATE Breast milk substitute

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- Restlessness
- Unhappiness
- Insomnia
- Deviating growth/weight loss

NAPPY CHANGES

Number of changes.....

Stool colour and consistency

Tips and advice for

AVOIDING COW'S MILK PROTEIN

If you or your child have been advised to eat a diet free of cow's milk protein, it is important to exclude all products containing cow's milk. Please note: milk from other animals, such as sheep and goats, is not tolerated any better and should therefore be excluded. Lactose-free and lactose-reduced products must be excluded as well. Because milk as a basic food is included in many other foods, you should seek individual advice from a dietician or doctor.



FOOD SUPPLEMENTS

If your diet is free of cow's milk protein, you may require an extra supplement of vitamins and/or minerals. Many of the vegetable alternatives used as milk substitutes are enriched with calcium, Vitamin B12 and Vitamin D and reproduce the nutritional content of cow's milk. Speak with your doctor or dietician.



SPECIAL HYPOALLERGENIC FORMULAS IN THE EVENT OF COW'S MILK PROTEIN ALLERGY

Oat, rice, soy and similar vegetable-based drinks contain fewer nutrients and in lower quantities compared to special hypoallergenic formula. Special hypoallergenic formulas must follow certain rules and are well-controlled in their composition. Rice drinks should not be used as a drink or as a substitute for milk in the child's gruel or porridge, as these may contain excessive quantities of heavy metals and minerals. This particularly applies to children under the age of 1. For children aged between 1 and 3, small quantities of these foods may be used. Discuss alternatives with the child's dietician.³

LABELLING

Pursuant to EU legislation, all packaged foods must be clearly shown as containing milk, or traces of milk, in the list of ingredients. If you travel outside the EU, you need to carefully look out for ingredients which contain milk in the list of ingredients.

THE FOLLOWING INGREDIENTS CONTAIN MILK:

- Crème fraiche, sour milk, sour cream
- Margarine, fat spread or blended spread
- Milk, milk powder, buttermilk powder, skimmed milk powder, desiccated milk
- Cream, coffee creamer, yoghurt, ice cream
- Milk protein, lactalbumin
- Cheese - all sorts, whey butter, whey cheese
- Casein, caseinate, sodium caseinate, calcium caseinate
- Butter, butter fat
- Cottage cheese, low-fat cottage cheese, quark
- Whey, whey powder, whey protein
- Colostrum/beestings

NOTE: THE FOLLOWING PRODUCTS MAY ALSO CONTAIN MILK PROTEIN:

- Bread may contain milk. This applies to bread, pastries, biscuits and rusks
- Stock cubes, broth and spice mixtures
- Processed meats, such as sausages and liver pâté
- Chocolate powder and products containing chocolate
- Processed and semi-processed products, such as powdered sauces, fish balls
- Meringues may be baked with milk protein rather than eggs
- Muesli, cereal flakes, breadcrumbs, and breadcrumb coatings
- Sorbet

Foods

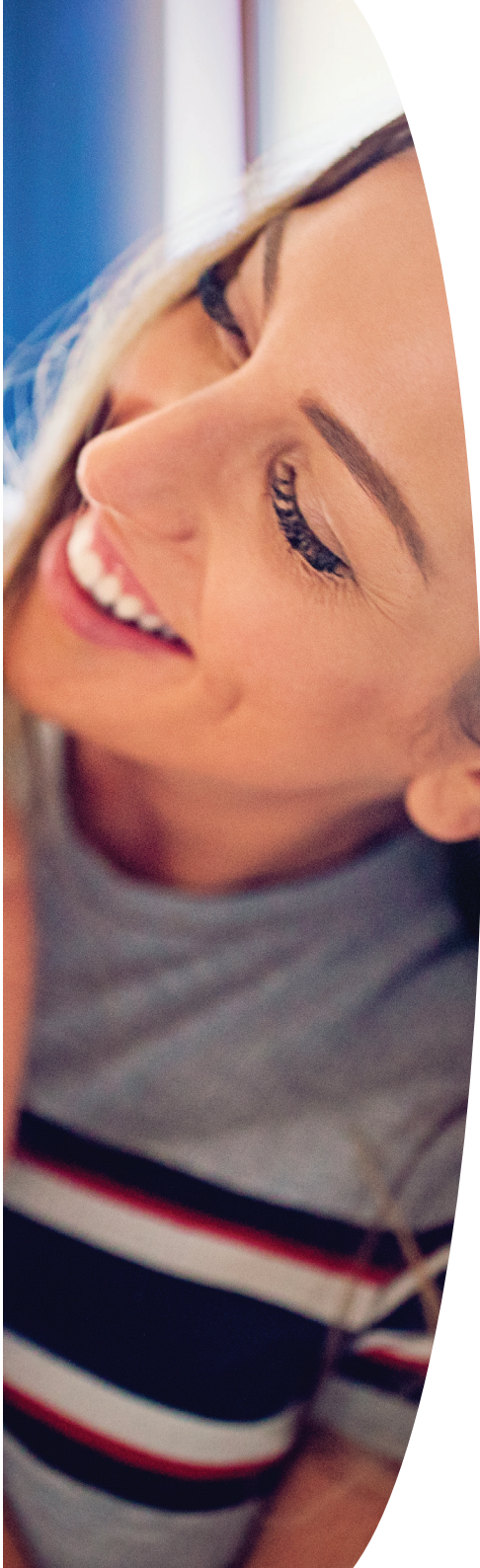
YOU SHOULD KEEP AN EYE ON

Do not make major changes to your child's diet without consulting your healthcare professional.

IF YOU WANT TO USE...	EXCLUDE*	USE INSTEAD
Porridge and gruel	Gruel and/or porridge powder containing milk. Porridge made from milk (semolina or rice porridge).	Porridge made from a milk-free substitute. Milk-free alternatives to porridge based on oats, soya etc.
Dairy products	Milk, sour milk, yoghurt, vanilla sauce, cream, lactose-free alternatives etc.	Products based on oats, soya, rice**, coconut etc.
Fat spreads	Butter, margarine, blends of oil and butter.	All vegetable-based oils and milk-free margarine.
Bread, cakes, pastries, flour, pasta, grains and cereals	Ready-made mixes for bread, cakes, pancakes, waffles, pizza etc., based on milk. Ready meals, such as cheese-filled tortellini, lasagne, pies etc., based on milk.	Bread, pasta and crispbreads are often prepared without milk. Check the list of ingredients.
Toppings	All cheese and milk-based toppings, such as butter. Blended products made from milk, e.g. liver pâté and caviar.	Milk-free margarine, ham, milk-free processed meat, such as liver pâté, caviar, eggs. Vegetable dips, such as ajvar relish, mashed avocado or hummus without milk protein.
Meat, fish, poultry and eggs	Ready meals and blended products which are prepared with milk or cheese, e.g. fish balls, meatballs and some sausages.	Pure, unblended products made from fish and meat. Watch how foods are handled at e.g. the deli counter.
Ice cream, sweets and snacks	Ice cream, sorbet, chocolate, nougat, pick & mix sweets (bear hygiene in mind when picking) crisps, cheese puffs etc.	Milk-free sorbet, oat and soya ice cream.
Miscellaneous	Stock cubes, broth, powdered sauces, instant soups.	Milk-free stock/broth, ready-made sauces without milk.

* Always read the list of ingredients.

**No rice as a drink for children under the age of 6.

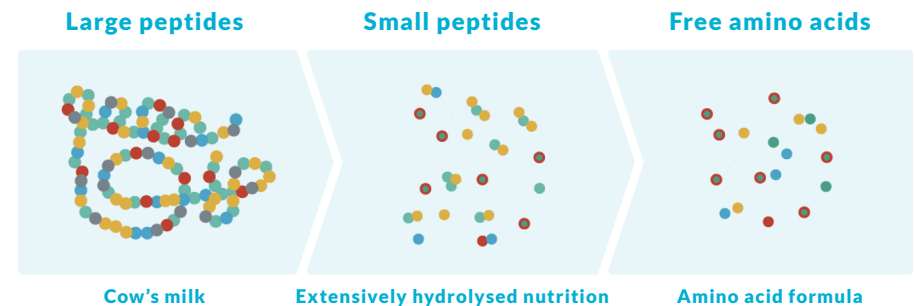


If your child is under 6 months old **AND THE BREAST MILK IS NOT ENOUGH**

Breastfeeding is the best way of feeding your baby during the first months of life and is preferred whenever possible.

For children with milk allergy, where the breast milk is not enough, or when breastfeeding is not possible for any reason, there are special hypoallergenic formulas.

There are two types of special hypoallergenic formula which are appropriate in the event of an allergy:



In an extensive hydrolysate, the protein has been broken down into small protein portions to prevent the immune system from recognising them and reacting. For the majority of infants, this is the first choice for special hypoallergenic special formula.

In amino acid formula, there are only free amino acids - the protein's smallest building blocks. Your doctor/dietician may recommend this in case of a severe allergy.

When it's time

TO INTRODUCE SOLID FOODS

A number of children take an early interest in food. From the age of four months, children can begin their taste adventure with small taste tests of normal food, such as a small dollop of purée on a finger. Even if you give small taste tests, it is important to continue with full breastfeeding, or special formula, usually until the child reaches 6 months of age. At approx. 6 months, it is time to start getting your child accustomed to eating normal food. Continue breastfeeding or providing special formula as usual throughout this period as well. (Read more at www.livsmedelsverket.se)



In recipes containing milk and milk products, you can use ready-blended special formula in the same quantity instead. Adding a little neutral oil to the child's food is also fine to increase the energy content.

Did you know?

Food introduction is so much more than just food and nutrition:

- It is an opportunity to discover new tastes and consistencies during the time the child is most receptive
- Practising eating helps your child learn to swallow food safely
- Oral motor skills develop at the same time as the child learns to chew and swallow
- During mealtimes, the child learns social interaction and to recognise a sense of community

The following daily menu is an example that meets the nutritional recommendations, including calcium, for a child aged between 1 and 3 years old.

EXAMPLE OF A DAILY MENU

MORNING

200 ml ready-blended special formula.

BREAKFAST

1 serving of oatmeal porridge with 100 ml ready-blended special nutrition and fruit purée, or 1 serving of fruit porridge.

SNACK

1 banana.

LUNCH

1 serving of turkey stew with rice and vegetables. 100 ml enriched oat drink.

SNACK

1 sandwich with milk-free margarine and ham. 150 ml special nutrition.

DINNER

1 serving of fish stew with potato.
100 ml enriched oat drink.

SUPPER

1 serving of milk-free porridge with fruit purée.

References: 1. Tindberg, T. et al. (2020) Milk protein allergy. Available at: www.rikshandboken-bhv.se/pediatrik/allergier-och-intolerans/mjolkproteinallergi/ 2. 1177 Care guide (2020) Cow's milk allergy. Available at: www.1177.se/sjukdomar-besvar/allergier-och-overkanslighet/komjolksallergi/ 3. Swedish National Food Administration. Good food for children aged 0 to 5 - guidelines for paediatric health care. Swedish National Food Administration; 2020.



Would you like tips about
**RECIPES OR DO YOU
HAVE QUESTIONS ABOUT
ANY OF OUR PRODUCTS?**

Please contact our Consumer Contact Centre:

Sweden: **020-78 00 20**

Norway: 800 31 425

Denmark: **3546 0167**

Sweden: **nestlehealthscience@se.nestle.com**

Norway: **nestlehealthscience@no.nestle.com**

Denmark: **nestlehealthscience@dk.nestle.com**

IMPORTANT INFORMATION:

Mothers are encouraged to continue breastfeeding their infant, even if the child has cow's milk protein allergy. This often requires advice from a dietitian, to enable the mother to exclude dairy products completely from her own diet. If a decision is made to use special nutrition as the infant's dietary treatment, it is important to follow the instructions on the product label. Unboiled water, unsterilised bottles or inadequate cleaning may lead to the child becoming ill. Incorrect storage, handling, preparation and serving may gradually lead to adverse effects on the infant's health. Foods for special medical purposes (FSMP), which have been developed to meet the needs of infants, must be used under medical supervision.