

# Cow's milk protein allergy & my baby



A parent's guide  
to cow's milk protein allergy

# How is CMPA managed?

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If your doctor believes your baby has cow's milk protein allergy, the first step he or she will likely recommend is to eliminate cow's milk protein from your infant's diet. The only way to manage CMPA is the **complete avoidance** of cow's milk protein including cow's milk-protein based formula, dairy products and any other product that contains cow's milk protein.

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## If you're breastfeeding:

Although it's uncommon, breastfed babies can develop CMPA. The cow's milk protein you ingest can cross into your breast milk, causing an allergic reaction in your baby. If this is the case, eliminating milk and milk products from your diet may help. Discuss this with your baby's doctor and/or dietitian, who may suggest finding alternative sources of calcium and other nutrients to replace what you were getting from dairy products.

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## If you're formula feeding or supplementing:

Since nutritional requirements for babies with CMPA are the same as for those without, it is important that you replace your baby's cow's milk formula with a suitable, nutritionally complete, extensively hydrolyzed formulation. The cow's milk protein in these formulas has been extensively broken down or hydrolyzed into small pieces, so they are less likely to cause allergic reactions.

An extensively hydrolyzed formula is suitable for babies with CMPA.

**Whole  
proteins**



Such as:  
**Enfamil A+®**

**Extensively  
hydrolyzed**



Such as:  
**Nutramigen® A+®  
with LGG®**

# Cow's milk protein allergy (CMPA) & my baby

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Although a diagnosis can bring a sense of relief, it also brings up a lot of concerns.

You may be wondering what to expect in the near future, as well as down the road as your child gets older and eventually reaches school age.

This guide addresses many aspects of the diagnosis and management of CMPA.

While your child's doctor is the expert, please refer to this guide between visits or whenever a question comes up.

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## My baby appointments

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Date of visit: .....

Date of next visit: .....

Notes: .....

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**CMPA**

(Cow's milk Protein Allergy)

Delayed symptoms may also lead to waking up and crying during the night, crying or distress during feeding or poor weight gain. These symptoms can also occur for reasons other than CMPA, so it's important to discuss all symptoms with your baby's doctor.

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## How common is CMPA?

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CMPA affects between 2.2% and 2.8% of all babies.<sup>1-3</sup>

The good news is that CMPA is usually a temporary condition that most children will outgrow by the time they reach school age.<sup>4-6</sup>



# What is cow's milk protein allergy (CMPA)?

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**CMPA** is the most common food allergy in the first year of life. It results from a hypersensitivity of the baby's immune system to the protein in cow's milk.

When a child has this condition, the immune system mistakenly sees the cow's milk protein (in cow's milk, dairy products or other products containing milk) as being harmful. It tries to protect the body by fighting off the protein, which leads to an allergic reaction that can affect different body parts.

The exact causes of CMPA are unknown and it can develop for no apparent reason – usually within the first three years of life. Allergies do tend to run in families so there is a higher chance a baby might develop CMPA if his parents suffer from conditions like hay fever, eczema or food allergies.



# What are the symptoms?

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The symptoms of CMPA can appear within minutes and/or up to four hours after consuming cow's milk protein in the immediate type of reaction but can occur over days and weeks in the delayed type of reaction.

Babies with CMPA can react to cow's milk protein in many different ways, and these may affect skin, respiratory and gastrointestinal systems.



One or more of the symptoms listed below may appear. What's more, symptoms can vary in severity, being mild at times and more severe at other times.

## Immediate symptoms may include:

- breathing difficulties
- hives, rash, redness or itching
- runny nose, chronic cough or recurrent wheezing
- swollen lips, tongue or face
- eczema flare-up
- diarrhea

## Delayed symptoms may include:

- eczema, itching or redness
- stomach pain
- chronic diarrhea
- colic symptoms with excessive crying
- vomiting
- constipation
- blood in stools



# Management of Cow's Milk Protein Allergy (CMPA)



Nutramigen® A+® with LGG® is an extensively hydrolyzed, hypoallergenic formula that contains a clinically proven level of DHA (a type of Omega-3 fat) an important building block of baby's developing brain. Most babies do well on an extensively hydrolyzed formula like Nutramigen® A+® with LGG® but in more severe cases, an amino acid formula might be recommended (such as PURAMINO A+®).



## **Nutramigen® A+® with LGG®**

The **ONLY** extensively hydrolyzed formula with LGG® culture.

**Nutramigen® A+® with LGG® is clinically proven to reduce colic due to cow's milk protein allergy fast... often within 48 hours.\*7,8**

Since its introduction over 75 years ago as the first formula for the dietary management of cow's milk protein allergy, Nutramigen® has been at the forefront of innovation and scientific advancement. Nutramigen® A+® with LGG® is clinically supported in 75 clinical studies\*. Many parents rely on Nutramigen® A+® with LGG® to help reduce colic† and satisfy the dietary needs of their baby.

Infants who have cow's milk protein allergy should start to feel better shortly after a switch to Nutramigen® A+® with LGG® formula.

\*Studied before the addition of DHA and ARA and Lactobacillus rhamnosus GG

† Due to cow's milk protein allergy.

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## Feeding Tips

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### Getting started with Extensively Hydrolyzed Formula (EHF):

Due to their special formulation, EHF smells and tastes different from routine formulas. Although the smell bothers some parents, most babies adapt quickly and do not have a problem with the taste. All EHF have a unique bitter taste, and scientific studies have shown that most babies usually adapt quickly (and do not dislike them).<sup>9</sup> Babies easily adapt to new tastes, and the earlier they start tasting these formulas, the more likely they are to accept them.<sup>10</sup>

### Tips to Help Things Along:

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- 1** Babies should switch from their routine formula to Extensively Hydrolyzed Formula (EHF) such as Nutramigen<sup>®</sup> A+<sup>®</sup> with LGG<sup>®</sup> as soon as possible after diagnosis.  
Please do not stop the use of EHF until instructed by doctor.
- 2** Make sure your baby is hungry when trying the formula for the first time.
- 3** Please be patient. It might take several exposures for your baby to get used to a new taste.
- 4** Senses of taste and smell of babies are different from adults. Please be positive during feeding times, as babies can pick up on your reactions.

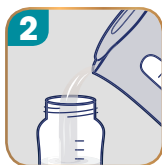
## Mixing/Preparation instructions

Please note that once heated above 40°C, the benefits of the LGG® culture in Nutramigen® A+® with LGG® would be reduced or completely lost.

### Instructions for preparation and use



1 Wash hands thoroughly with soap and water before preparing formula. Boil clean bottles, nipples, caps, scoop and utensils in water (2 minutes at a rolling boil).



2 Boil fresh water at a rolling boil for 2 minutes. Cool to room temperature prior to mixing.



3 Pour desired amount of the cooled water into the bottle. Add powder.



4 Cap bottle and SHAKE WELL.

**WARNING:** Do not warm the prepared formula beyond preparation temperature of 40°C (104°F); this may limit the benefits of LGG® culture. Microwaving formula may cause serious burns to baby.

Failure to follow these instructions could result in severe harm. Once prepared, infant formula can spoil quickly. Either feed immediately or cover and store in refrigerator at 2-4°C (35-40°F) for no longer than 24 hours. Do not use prepared formula if it is unrefrigerated for more than a total of 2 hours. Do not freeze prepared formula. After feeding begins, use formula within one hour or discard.

**Powder Storage:** Store cans at room temperature. After opening can, keep tightly covered, store in dry area and use contents within 1 month. Do not freeze powder and avoid excessive heat.

Use the chart below for the correct amounts of cooled, boiled water and powder.

Only use scoop provided in can to measure powder. Store DRY scoop in can.

| To Make       | Boiled Water             | Powder                |
|---------------|--------------------------|-----------------------|
| 60 mL bottle  | 60 mL $\frac{1}{4}$ cup  | 1 packed level scoop  |
| 120 mL bottle | 120 mL $\frac{1}{2}$ cup | 2 packed level scoops |

See product label for complete preparation and use instructions.





Quality of Life

# Outgrowing the allergy

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CMPA is usually a temporary condition that most children outgrow by the time they reach school age. When your baby reaches 1 year of age (the age may vary based on the doctor's recommendation), your baby's doctor may recommend that you try reintroducing foods with cow's milk. This should always be done carefully and under the supervision of the doctor, who may perform further allergy tests. If no reactions occur, many children who had CMPA as babies can begin to eat a normal diet, including milk and dairy products.

Ask your baby's doctor when you should try reintroducing foods with cow's milk.

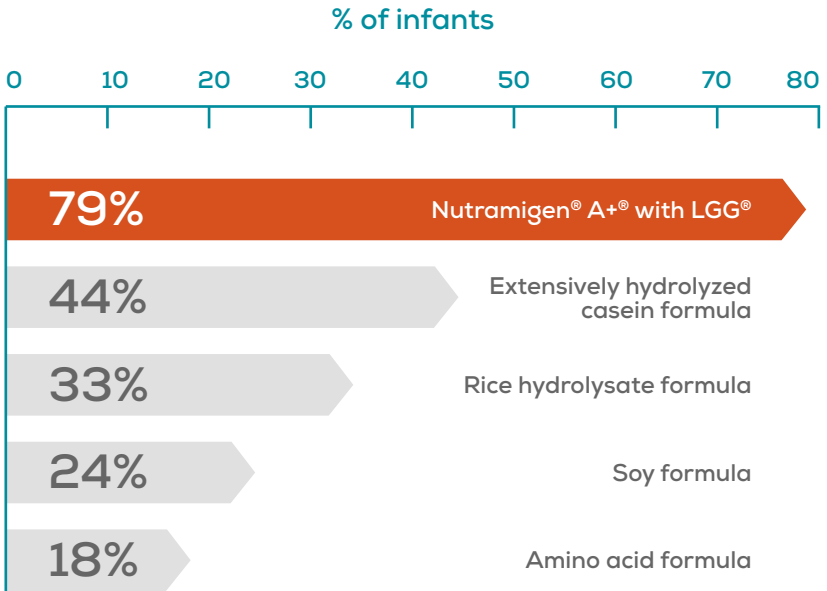
When should I reintroduce cow's milk?

Date: .....



More infants were able to get back to cow's milk proteins with Nutramigen® A+® with LGG® than with any other CMPA formula option used in the study.<sup>11</sup>

79% of infants on Nutramigen® A+® with LGG® are tolerant to cow's milk protein after 12 months of formula intake<sup>11\*</sup>



\*Formulas included in the study: extensively hydrolyzed formula: Nutramigen and Nutribén hydrolyzed; Nutramigen LGG; hydrolyzed rice formula: Risolac; soy formula: Isomil, Sinelac, and Nutrilon Soya; amino acid formula: Neocate, Nutramigen AA, and Sineall. All copyrights belong to their respective owners.

# A better quality of life

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Outgrowing allergies fast means reaching a life free from the burden of CMPA quicker.<sup>12</sup>

- Return to a **normal diet** with a greater variety of foods
- **No fear** of accidental cow's milk protein allergen exposure and return of symptoms
- **Can eat the same** as other children/go to parties/visit other people's homes **without the risk** of accidental cow's milk protein allergen exposure
- **No need for constant vigilance** to avoid cow's milk protein allergens, making shopping and eating out easier







## Frequently Asked Questions

## 1 What are the common sources of cow's milk?

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- All cow's milk (skim, 1%, 2%, 3.25%)
- Other types of cow's milk (Buttermilk, chocolate milk, evaporated milk, lactose-free milk, organic milk, powdered milk (skim or whole milk powder), sweetened condensed milk)
- Butter
- Cheese, curds, cottage cheese
- Cream, ice cream, frozen yogurts
- Custard
- Pudding (from milk)
- Sour cream
- Yogurt (from milk)

## 2 Will my baby always be allergic to cow's milk protein?

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Probably not. Most children will outgrow cow's milk protein allergy by school age.<sup>12,13</sup> You should introduce your baby to foods made with cow's milk only while under a doctor's supervision.

## 3 Is my baby at increased risk of food allergies?

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Allergies tend to be genetic. A baby is at increased risk of food allergies if a doctor has ever diagnosed one or more parents, brothers or sisters with a food allergy or allergic condition such as eczema, asthma or hay fever.

Discuss your family history with your doctor to find out if your baby is at increased risk.

## 4 Can I feed my baby soy milk?

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Babies with CMPA may also be allergic to soy formula. The Canadian Pediatric Society recommends that soy be limited to babies with galactosemia or those who do not consume dairy products for health or cultural reasons.<sup>13</sup> Goat's milk, sheep's milk and milk from any other animal is not recommended for babies with CMPA. That's because the protein in these milk products are very similar to that found in cow's milk.

Extensively hydrolyzed formula with LGG® culture is an excellent option for CMPA.

## 5 What is LGG®?

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LGG® culture is one of the most extensively studied friendly bacteria for dietary allergy management. The unique combination of Nutramigen® A+® and the friendly bacteria LGG® has been shown to manage CMPA effectively.

LGG® is a trademark of Chr. Hansen A/S, for their *Lactobacillus rhamnosus* GG culture.

## 6 Can I cook with Nutramigen® A+® with LGG® in recipes?

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Yes, you can use Nutramigen® A+® with LGG® in recipes.

Use in cooler recipes helps preserve the effect of the LGG® culture. Hot foods still benefit from fortification from the nutritional content of the Nutramigen® A+® with LGG® formula.



Recipes

# You can use Nutramigen® A+® with LGG® in recipes

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These recipes are designed to be specifically milk free and dairy free. Many are also free of other common allergens, but you must check the ingredients carefully if your child has allergies to any other foods.

## Tips

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- Always prepare formula according to label.
- Try to add Nutramigen® A+® with LGG® to recipes as late as possible, to help preserve the effect of the LGG® culture.
- Purée, mash or chop food to the correct consistency for your baby. If any of the recipes need thickening you can use baby rice cereal to do this.
- Stir dishes well before serving and check the food is not too hot before giving it to your baby.
- The portion sizes given are approximate: your baby may want more or less than the amount suggested, and it is usually best to let them decide when they have had enough.



## Recipes can be frozen unless indicated

Freeze puréed foods in small containers or ice cube trays then empty into labelled bags.

Recipes are ideally frozen before the Nutramigen® A+® with LGG® is added and then, once defrosted, the Nutramigen® A+® with LGG® powder is stirred in at the end of reheating, just before serving.

- Store food in the freezer for no more than a month.
- Before mealtimes ensure food is completely defrosted, then reheat thoroughly.
- Foods can be mashed or chopped after defrosting to obtain the desired consistency.

Please note that once heated above 40°C, the benefits of the LGG® culture in Nutramigen® A+® with LGG® would be reduced or completely lost.

Nutramigen® A+® with LGG® can still be used in hot recipes because your child will still benefit from the nutritional content of the formula, but you'll need to continue with normal bottle feeds of Nutramigen® A+® with LGG® to benefit from the friendly bacteria.

Using Nutramigen® A+® with LGG® in cooler recipes will help preserve the effects of the LGG® culture.

This recipe section contains a variety of **hot** and **cool** recipes.

Hot recipes are indicated by a:



Cold recipes are indicated by a:



Additional recipes can be found at [enfamil.ca/allergy/recipes](https://www.enfamil.ca/allergy/recipes)

# 1 Baby Rice Cereal 6 months+



## INGREDIENTS

- 3 tsp of baby rice cereal
- 3 tbsp Nutramigen® A+® with LGG® powder
- Water



## DIRECTIONS

- 1 Add the baby rice cereal to the Nutramigen® A+® with LGG® powder.
- 2 Add water to desired consistency.
- 3 Mix together well.
- 4 Leave to thicken, which takes around 5–10 minutes.

## TIPS

- Baby rice cereal can be used to thicken any food when sprinkled over it and stirred in.
- Remember to check the ingredients.

## 2 Fruit Smoothie and Ice Pops 8-10 months+



Makes 1 glass of smoothie or 2 ice pops

### INGREDIENTS

- 200 ml cold Nutramigen® A+® with LGG® (3 packed level scoops powder to 180 ml of water)
- 3 big strawberries
- 1/2 a pear – a ripe fresh pear or canned pear (in natural juice)



### DIRECTIONS

- 1 Mix all the ingredients using a blender.
- 2 Serve as a smoothie or freeze in ice moulds.

### VARIATIONS

- **Banana:** 1/2 a banana and a pinch of cinnamon (optional)
- **Peach and banana:** 1/2 a banana and 1/2 a peach
- **Mango and banana:** 1/2 a banana and 1/4 a mango
- Also try raspberries, kiwis, apricots, blueberries



# 3 Banana Pancakes 8-10 months+



*These nutritious pancakes made with Nutramigen® A+® with LGG® can be served with a variety of fruit. This adds to the vitamin content, and is a fun and easy way to introduce new types of fresh or stewed fruit to your child's diet.*

Makes 4 big or 12 small pancakes

## INGREDIENTS

- 75 g plain flour
- 1 tbsp sugar
- 1 very ripe banana (mashed)
- 200 ml Nutramigen® A+® with LGG® (3 packed level scoops powder to 180 ml water)
- Vegetable oil for lightly oiling the pan



## DIRECTIONS

- 1 Mix all ingredients together.
- 2 Lightly brush the pan with oil and heat.
- 3 Use a large spoon to ladle the mixture into the frying pan (1 or 2 tbsp per pancake depending on the size desired).
- 4 Cook the pancakes for a few minutes each side until golden brown.

## TIP

- Serve with fruit.

More milk-free and dairy-free recipes are available for you at [enfamil.ca/allergy/recipes](http://enfamil.ca/allergy/recipes)



**Nutramigen® A+® with LGG®**  
 is available at your local store or ask your Pharmacist

Nutramigen® A+® with LGG® can be ordered easily from your pharmacist by calling or visiting your pharmacy with the following bar code and item number.



561 g unit powder



561 g x 4 powder case

| Wholesaler Item # |                | McKesson | McMahon  | Kohl & Frisch | Jean Coutu | Familiprix |
|-------------------|----------------|----------|----------|---------------|------------|------------|
| Format            | Powder (561 g) | 093739   | 31047201 | 156721        | 324714     | 061868     |

| Online |                | London Drugs   | Value Drug Mart  |
|--------|----------------|--|--|
| Format | Powder (561 g) | <a href="http://www.londondrugs.com">www.londondrugs.com</a> | <a href="http://www.valuevalet.ca">www.valuevalet.ca</a> |

# Your Doctor has recommended Nutramigen® A+® with LGG® as your first choice formula for cow's milk protein allergy

For more information on feeding questions  
concerning cow's milk protein allergy call  
1 800 361-6323 or visit [enfamil.ca/allergy](http://enfamil.ca/allergy)



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