

Specialist Formula Milks for babies who do not tolerate cow's milk

Cow's milk provides an important source of protein and certain vitamins and minerals. It is therefore important not to just eliminate this from your child's diet without a reason but to discuss your concerns with your healthcare professional, before eliminating milk from your child's diet. If your child is not able to tolerate cow's milk, it is very important to replace it with a suitable alternative.

There is a wide range of cow's milk alternatives that are available. It is vital that you discuss the available options with your child's GP, Paediatrician, Dietitian or Allergist.

This sheet is a guide to the range of options that are available.

From birth to two years

- Breast milk is the ideal milk for babies. It provides all the nourishment that a young baby requires in their early months and the composition continually changes to meet your baby's needs.
- When a baby is diagnosed as having a cow's milk protein allergy (CMPA), mothers who are breast-feeding may be advised to exclude cow's milk from their own diet. This should only be done after discussion with a dietitian, as it is important that breast-feeding mums eat a nutritionally balanced diet. Suitable supplements providing calcium and iodine in addition to vitamin D may be required.

If you need to give a formula milk in addition to breast milk or as an alternative, a range of hypoallergenic formulas especially designed for infants with cow's milk protein allergy (CMPA) are available on prescription. These are extensively hydrolysed formulas and amino acid formula.

Extensively Hydrolysed Formulas

- These formulas contain proteins that have been broken down (hydrolysed) into smaller segments so that the body does not recognise them as allergens. Therefore this type of formula is very unlikely to cause an allergic reaction.
- There are different types of these formulas. Some are based on whey and others are based on casein which are both proteins found in milk. Some hydrolysed formulas contain lactose and some do not. The majority of children with CMPA will have symptom resolution on an extensively hydrolysed formula.

Amino Acid Formulas

- These formulas are based on the individual building blocks (amino acids) that make up a protein and are used for children with severe CMPA that do not have symptom improvement on extensively hydrolysed formulas.

Soya based Formulas

- Infant formulas based on soya milk are not recommended as a first line alternative, especially in infants under 6 months old. The effects of certain chemicals (phyto-oestrogens) in soya products on hormone balance do not pose a problem for young babies but the Department of Health advises that soya formulas should only be used in children under 6 months if other alternatives have proved unsuccessful, or if the family want a formula suitable for vegans.
- Some infants under and over 6 months of age with CMPA are advised not to use soya milk or foods containing soya because in some infants there is a risk of soya allergy along with CMPA. The risk is about 50% in infants with a non-IgE mediated delayed CMPA. The risk is much lower in infants with an immediate type (immunoglobulin E mediated) CMPA allergy.

Other mammalian milks (goat's milk formula, sheep's milk, buffalo milk etc) are not suitable for CMPA because the proteins in all mammalian milks are very similar and therefore children with CMPA will also react to all mammalian milks.

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From birth to two years

**Table 1 Specialist Formula Milks that can be prescribed
for CMPA – June 2017**

	Brand	Manufacturer
Extensively Hydrolysed Formulas	Aptamil Pepti 1 & 2	Aptamil
	Nutramigen 1 & 2 with LGG	Mead Johnson
	Pepti Junior	Cow & Gate
	Pregestimil Lipil	Mead Johnson
	Similac Alimentum	Abbott
	SMA Althera	Nestle UK
Amino Acid Formulas	Nutramigen Puramino	Mead Johnson
	Neocate range of formulas	Nutricia
	SMA Alfamino	Nestle UK
Soya Formula	SMA Wysoy	Nestle UK

Top tips

- Many formula milk substitutes have a very different taste and smell compared to breast milk or cow's milk. Some children take time to get used to this when they are first started on a new product.
- Use the milk substitute until your child is 2 years of age.
- If you are unable to get your child to take any of the above milk substitutes it is important to seek advice from a dietitian as it may be necessary to start a vitamin and mineral supplement.

Lactose intolerance

- Lactose intolerance occurs when someone cannot digest the sugar in cow's milk and is different to CMPA, which is an immune mediated response to the protein in cow's milk. It is therefore important to ensure that you have the right formula for the right diagnosis.
- Lactose free formulas may contain whole cow's milk protein and are not suitable for children with CMPA.
- There are a number of lactose free formulas that are available to buy over the counter or on prescription. Ready-made low lactose milks are suitable for children over 1 year old.

Children over 2 years old

- Non dairy alternatives to milk based on soya, pea, nuts or cereals should not be used for children as they do not provide all the nutrients found in cow's milk. If needed for a child with CMPA, use a brand that is fortified with calcium and iodine. If the product is not fortified with calcium and iodine, or your child will only take a small amount of the fortified milk, they will need a supplement. A dietitian can recommend one after reviewing your child's diet.
- Rice based milk alternatives are not recommended for children before 4.5 years of age because they may contain small amounts of arsenic.

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This fact sheet is intended as a basic guide to the cow's milk substitutes that are available.

If you require any further information please ask to be referred to a Paediatric Dietitian by your child's GP or Health Visitor.

Breast-feeding is best for babies and provides many benefits. It is important that, in preparation for and during breast-feeding, you eat a healthy, balanced diet. Combined breast and bottle feeding in the first weeks of life may reduce the supply of your own breastmilk, and reversing the decision not to breast-feed is difficult. The social and financial implications of using an infant milk should be considered. Improper use of an infant milk or inappropriate foods or feeding methods may present a health hazard. If you use an infant milk, you should follow manufacturer's instructions for use carefully – failure to follow the instructions may make your baby ill. Always consult your Doctor, Midwife or Health Visitor for advice about feeding your baby.