

## Plant-based formula milks

### Neonatal Services

If providing a vegan diet for your baby is an important consideration for you, and you follow a vegan diet yourself, then breastfeeding your baby will ensure this. If you are unable to breastfeed, cannot express enough milk, or choose not to breastfeed this leaflet will provide you with more information about formula options while your baby is at home or in hospital.

Please share any specific nutritional considerations with the team caring for your baby. We can discuss these with you and help find a suitable feeding plan.

### Introduction

There are no baby formulas available for sale in the UK that are 100% vegan. Although some formulas do not contain animal-derived milk products (for example: rice or soy-based formula), the vitamin D added to these formulas (vitamin D3) may come from sheep's wool (lanolin).

If you have decided you would like to give your baby a plant-based formula, there are several factors to consider while your baby is in hospital and once at home.

### Milk preparation facilities

Plant-based formulas are usually available as a powder. Powdered infant formulas need to be prepared carefully to avoid contamination and reduce the risk of infection. On our neonatal and postnatal wards, facilities for safely preparing powdered formula are limited. For this reason, we use ready-to-feed formulas wherever possible.

In some cases, babies may have specific medical needs (such as liver conditions, allergies, or severe feed intolerance) that require specialist formulas that are not available in a ready-to-feed version. In these specific situations we will use powdered formula that is prepared in a Special Feed Unit.

### Rice-based formula

The Food Standards Agency does not recommend giving rice milk to children under 5 as it may contain too much arsenic.

Rice-based formulas are not currently approved for sale in the UK, although they are available in Europe. We will respect your decision regarding your baby's milk and if you provide your own rice-based powdered formula, we may be able to prepare it safely for your baby.

### Preterm babies

If your baby was born prematurely, it is important to know that rice-based formula milks do not meet the enhanced nutritional needs of premature babies. Formula milks designed for premature babies, that meet their nutritional needs, are recommended.

### Soy-based formula

The British Dietetic Association (BDA) Paediatric Group advises that soy-based formula should be avoided in the first 6 months of life due to potential effects from plant compounds called phytoestrogens. There are concerns that these could have long-term effects if consumed during infancy.

These potential long-term effects include:

- **in adult women:** an increase in prolonged and painful periods (menstruation)
- **in men:** suppressed male hormone (testosterone)

More research is needed on the long-term effects of consuming soy-based formula in early infancy. The BDA Paediatric Group recommendations are in line with other UK and international professional organisations including:

- American Academy of Paediatrics (AAP, 2008)
- Committee on Toxicity of Chemicals in Food, Consumer products and the Environment (COT, 2003)
- European Society for Paediatric Gastroenterology, Hepatology and Nutrition (ESPGHAN, 2006)
- Scientific Advisory Committee on Nutrition (SACN, 2018)

### **Preterm babies**

Preterm babies have specific nutritional needs and soy-based infant formulas are not recommended for preterm babies. Formula milks designed for premature babies, that meet their nutritional needs, are recommended.

### **Term babies**

For term babies, soy-based formula could be used once your baby is over 6 months of age. This is because it is possible that there are reduced risks after 6 months of age as the phytoestrogens per kg of body weight will be lower when formula intake decreases, and solid food intake increases. Your baby's organ systems that are potentially vulnerable are also likely to have matured. This reduces the long-term risk of harm.

We will respect your decision regarding your baby's milk and if you provide your own soy-based powdered formula, we may be able to prepare it safely for your baby.

### **Donor breast milk**

While NHS Greater Glasgow and Clyde has a donor milk bank for those babies born very early or very sick, the mothers who donate breast milk are likely eating a diet containing animal products. Vegan donors cannot be identified for your baby and as such donor breast milk is not vegan.

### **Useful resources**

First Steps Nutrition Trust – Eating well: vegan infants and under 5s

🌐 <https://www.firststepsnutrition.org/vegan-infants>

### **Alternative formats**

This leaflet can be provided on request in large print or easy read, as a sound recording, in Braille or in alternative languages. Please ask the staff to arrange this.

Published: March 2026

Review date: March 2029

Adapted from 🌐 <https://www.imperial.nhs.uk/-/media/website/patient-information-leaflets/childrens-services/neonatology/plant-based-formula-milks.pdf> Our thanks to the authors at ICH.