



# Behind the hype: **Milk for infants and toddlers**

## Why is this an issue?

Breastfeeding provides optimum nutrition for infants. Current advice is to aim to exclusively breastfeed infants up to around six months of age, and ideally, to continue to breastfeed for up to two years or longer. However, for mums who are not breastfeeding, there may be confusion about which milk to provide to their infants and toddlers at each age and stage.

## Types of milks available for infants and toddlers

- **Breast milk** should be promoted as the first-choice milk for babies up to 12 months old, and if breastfeeding is continued, for toddlers (up to two years or older).
- For babies who are not breastfed, **commercial infant formula** is the only recommended alternative to breast milk for babies up to 12 months of age.
- **Cow's milk and other milks such as condensed, evaporated or plant-based** should not be given to infants under 12 months as a drink. See *Behind the hype: Plant-based milk alternatives* for more information.

Breast milk (or commercial infant formula if necessary) provides the sole source of all nutrients for the first six months of life. From around six months of age, once solid foods can be introduced, milk continues to be an important source of nutrition. However, as solid food intake increases, less milk is needed. The recommended milks for each age group are shown in Table 1. The different types of formula milk are shown in Table 2. Only breast milk, cow's milk, or water should be offered to toddlers as a drink.

**Table 1: Recommended milks for each age group**

Age of child	Recommended Milks	Further advice
0-6 months	Breast milk (or commercial infant formula Stage 1 [from birth]) only	If formula feeding, a cow's milk-based formula is recommended unless otherwise advised by a health professional. Do not give cow's milk to infants under 12 months as a main drink.
7-12 months	Breast milk (or commercial infant formula Stage 1 [from birth])	If baby is already established on a commercial infant formula (Stage 1 milk) before six months, then there is no need to change to a follow-on formula (Stage 2 milk).
12-24 months	Breast milk, cow's milk	If not breastfeeding, homogenised standard cow's milk is best, not reduced fat.

## In a nutshell

- Breast milk should be the first-choice milk for infants. If a baby is not breast-fed, then commercial infant formula is the only recommended alternative for babies up to 12 months of age.
- Toddlers can obtain all the required nutrients for growth by being offered, and eating, a healthy, varied range of foods and small amounts of cow's milk. Toddler milks are not a necessary addition to a healthy diet for toddlers.
- Do not give infants and toddlers sugary drinks. Avoid fruit juice, soft drink, cordials, and flavoured milks. Also steer clear of drinks containing intense sweeteners, tea, coffee, caffeinated drinks, homemade infant formula and raw milk.

## Other milks promoted to infants and toddlers

- **Specialised formulas** are available for infants with cow's milk allergy, lactose intolerance and metabolic disorders. These should only be used under advice from an allergy specialist, paediatrician, or dietitian.
- **Soy-based formula** is not suitable for infants under six months. After six months, soy-based formulas may be introduced as an alternative to cow's milk-based formulas for infants with cow's milk allergy or lactose intolerance, if advised by an allergy specialist, paediatrician or dietitian.
- **Goat and sheep milk formula** (Stage 1-3) are promoted as easier for young children to digest. However, there is no convincing evidence to suggest that sheep or goat milk formulas are superior to cow's milk-based formulas. Goat and sheep milk formula are also more expensive and are not suitable for infants with allergies to cow's milk or lactose intolerance.
- **A2 cow's milk** contains only A2 beta casein protein. It is considerably more expensive than cow's milk, with little evidence of additional health benefits.

## Drinks to avoid

- Sugary drinks increase the risk of tooth decay and obesity. Avoid fruit juice, soft drinks, cordials, flavoured milk, drinks containing sweeteners, tea, coffee or energy drinks.
- Raw milk (including from registered raw milk vendors) is not recommended for young children because of the potential for this age group to become very sick.
- Homemade infant formula should be avoided as it may lack the required nutrients and be unsafe.



Free nutrition and physical activity resources are available from:  
[www.nutritionandactivity.govt.nz](http://www.nutritionandactivity.govt.nz)

**Table 2: Types of formula milk**

Formula Stage	Age group	Nutrient differences	Advice
Stage 1 (infant formula)	0-12 months	Whey-based cow's milk protein modified so that it can be more easily digested by infants. Most Stage 1 brands are higher in fat than Stage 2 and 3.	If a baby starts on a commercial infant formula before six months this formula can be continued until 12 months.
Stage 2 (follow-on formula)	From six months	Casein-based milk protein. Slightly higher protein, iron, other minerals and some vitamins compared to Stage 1.	Most babies do not need to change to a Stage 2 formula. Avoid giving Stage 2 formulas to babies under six months.
Stage 3 (toddler milk or growing up milks*)	From 12 months	Similar amounts of casein-based milk protein to Stage 2 milk. Lower fat, higher mineral and vitamin content compared to Stage 1 and 2.	Toddler milks are not necessary for toddlers.

\* Toddler milks are promoted by manufacturers to provide a nutritional 'safety net' for inadequate intakes of key nutrients. However, toddlers can obtain all the nutrients they need from a healthy varied diet that contains the recommended amount of cow's milk. Toddler milks may also prolong dependence on beverages in the diet when food should be the main source of nutrients.

## References

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