

# Bottlefeeding



Public Health  
Agency

# Bottlefeeding

**The information in this booklet comes from the Public Health Agency and the Food Standards Agency. It will help you to bottlefeed your baby as safely as possible.**

It is very important that you follow the instructions in this booklet when you are:

- sterilising feeding bottles, teats and equipment;
- preparing formula feeds; and
- bottlefeeding your baby.

Before you go home from hospital, the maternity staff should discuss this leaflet with you. Ask your midwife or health visitor if you need any help with learning how to bottlefeed.

## Choosing a brand of infant formula

There are several different brands of infant milks available to buy. While you may be tempted to buy the most expensive brand thinking it must be the best or perhaps most like breastmilk, this is not actually the case. Formula manufacturers claim that they have added special ingredients to their brand that makes it better. However any claims on these 'special ingredients' are often not adequately scientifically proven to make a difference and in fact it is impossible to make a formula that is like breastmilk.

All infant formula in the UK must meet compositional regulations: more expensive brands have to meet the same compositional standards as cheaper brands. Own brand infant formula is considerably less expensive and will adequately meet the nutritional needs of your baby.

So choosing a brand is up to you but the most important thing to remember is that your baby should have first milk for the first year.

# What is infant formula?

## Main types of infant formula

Infant formula is available in two forms:

- ready-to-feed liquid infant formula, sold in cartons, which is sterile;
- powdered infant formula, which is not sterile.

### First infant formula

This is often described as suitable for newborns and should always be the first formula you give to your baby.

Your baby can stay on this formula when you start to introduce solid foods at around six months, and continue on it throughout the first year. When your baby is one year old, he or she can start to drink whole cows' milk.

### 'Hungry baby milks' or 'second milks'

These contain more of a protein called casein than first infant formula and this is thought to make your baby feel fuller. However, there is no evidence that babies settle better or sleep longer when fed this formula. Unless your doctor or health visitor gives you different advice, there is no need to switch to these milks. Babies can drink first infant formula until they are one year old.

### Follow-on formula, 'toddler' and 'growing up' milk

Other milks are available that are labelled as being suitable for babies aged six months and over, such as 'follow-on milk', 'toddler milk' and 'growing up milk'. They should never be fed to babies under six months old and there is no need to switch to these milks after six months. Your baby can have first infant formula up until the time when ordinary cows' milk can be introduced (at one year old). However, the labels on these milks can look very similar to those on first infant formula, so read them carefully to avoid making a mistake. Like powdered infant formula, follow-on formula is not sterile.

## Other types of formula

Some follow-on formula has cereal added to it, and is described as a 'night-time feed for babies'. This type of formula is not necessary and there is no evidence that babies settle better or sleep longer when fed this. It should never be given to babies under six months.

If you think your baby might be allergic to cows' milk-based formula, talk to your GP. They can prescribe special formula feeds for babies with cows' milk allergy. Some formulas in the shops are labelled as being 'hypoallergenic' but they are not suitable for babies diagnosed with a cows' milk allergy.

You should not give your baby soya-based infant formula unless your GP or a dietitian has advised you to.

Infant formula can also be made from goats' milk. Goats' milk-based formulas should not be given to infants with a cows' milk protein allergy, unless directed by a healthcare professional. Remember, if you have any questions about the infant formula you are giving your baby, you can ask your midwife, health visitor or GP for information and help.

Some baby milks claim to help hungry babies or prevent colic, wind, reflux or allergies. There is little evidence that most of these 'special' milks do any good, and they might not be safe for your baby. Ask your GP or other health professional if you think your baby might need a different milk. If you want to find out more about infant milks you can download a leaflet by First Steps Nutrition Trust called *Infant Milks: A simple guide to infant formula, follow on formula and other infant milks* from [www.firststepsnutrition.org/newpages/Infants/infant\\_milks\\_simple\\_guide.html](http://www.firststepsnutrition.org/newpages/Infants/infant_milks_simple_guide.html)

## Milks **not** suitable for babies

Types of milk which should **never** be given to a baby under one year old include:

- goats' milk
- sheep's milk
- soya milk (unless advised by your GP or health visitor)
- rice, oat or almond milk
- dried milk
- evaporated milk
- condensed milk.

# Preparing infant formula

Powdered infant formula is usually made from cows' milk that has been treated to make it suitable for babies. It isn't a sterile product and, even though tins and packets of formula are sealed, the powder can contain bacteria called *Cronobacter sakazakii* (formerly known as *Enterobacter sakazakii*) and *Salmonella*.

Infections caused by these bacteria are very rare, but when they do happen it can be fatal. Young babies less than six weeks old and low birth weight babies are most at risk from serious infections if bottlefeeds are not prepared correctly.

You can make bottlefeeding safer by:

- always making up feeds with hot water of at least 70°C (to do this, boil a kettle of at least 1 litre of water and leave it to cool for no longer than 30 minutes);
- making one feed at a time and avoiding storing formula before feeding it to your baby;
- cooling the bottle under a cold running tap with the cap covering the teat;
- always checking the temperature of the feed before giving it to your baby.



The equipment you will need for formula feeding:

- Feeding bottles with teats and covers
- Bottle and teat brush
- Formula milk powder or ready-to-feed liquid formula
- Sterilising equipment (a cold-water steriliser, microwave or a steam steriliser)

# Cleaning and sterilising your feeding equipment



The cleaning and sterilising instructions are the same, whether you are using expressed breastmilk or infant formula milk.

All the equipment you use for bottlefeeding your baby needs to be washed in hot soapy water, rinsed and then sterilised.

You need to keep sterilising your bottlefeeding equipment until your baby is at least 12 months old.

# Methods of sterilising

## Steam sterilising (electric or microwave)

Follow the manufacturer's instructions.

Make sure the feeding equipment is thoroughly clean.

Place the bottle and teat into the steriliser with the open ends facing downwards.

Check the manufacturer's instructions to find out how long feeding equipment remains sterile in an unopened steriliser, as it varies from one make to another. It's best to sterilise equipment just before you want to use it.



## Cold water chemical sterilising

Follow the manufacturer's instructions.

Make sure the feeding equipment is thoroughly clean.

Make up new sterilising solution every 24 hours.

Place the bottles and teats in the solution. Make sure that no air bubbles are trapped by lowering the bottles in slowly so that they fill up with the sterilising solution.

Place a floating cover over the equipment to make sure that it remains submerged in sterilising solution.

Leave feeding equipment in the sterilising solution for at least 30 minutes before use.





# Making up a bottle of infant formula milk

Please follow the guidance below from the Food Standards Agency and the Department of Health. The use of formula preparation machines is not recommended as there is not enough evidence on their safety.

Fill the kettle with at least 1 litre of fresh water from the tap (don't use water that has been boiled before). Do not use bottled mineral water or artificially softened water as these can contain a high concentration of minerals that are unsuitable for babies.

Boil the kettle and leave it to cool for **no more than 30 minutes**. It is important that the water is still hot, otherwise any bacteria in the milk powder may not be destroyed. Always take care, as at 70°C water is still hot enough to scald.

Read the instructions on the tin or packet to find out how much water and milk powder you will need.

Before starting to make up the feed, wipe down the work surfaces you are going to use with a clean cloth.

Wash your hands with soap and hot water.



If the bottle has been sterilised using sterilising fluid, shake the bottle to remove any excess fluid from inside and outside the bottle. Or rinse the bottle using cooled boiled water from the kettle (not tap water).



If you have used a steam sterilising unit, remove the bottle from the unit. Place the teat and cap in the lid of the steriliser, not directly on the work surface.



Place the empty bottle on a clean flat surface and pour in the cooled boiled water up to the required mark.



### Important

Always make up feeds using water that has just been boiled and left for no more than 30 minutes.

Always pour the water into the bottle first and check that the water level is correct before adding the milk powder.

### Important

Don't boil the kettle and store water in sterilised bottles in the fridge. The water used to mix the formula needs to be hot to kill any bacteria that could be present in the milk powder.



### Important

Only use the scoop that comes with each new packet of formula milk.



Loosely fill the scoop with milk powder and level it off with a plastic knife which has been sterilised.

Make sure you use the scoop that comes with that particular packet or tin of milk. Do not swap scoops from one milk brand to another - they may not be the same size.

Add the milk powder to the water. Ensure you add one scoop to 1 fl oz or 30ml of water. Never use more or less than this (unless recommended by a dietitian) or you will make your baby ill. Never add sugar or cereals to the bottle.



### Important

Make sure you add the right number of scoops, as too many can make your baby ill and too few will mean the baby doesn't get enough nutrients.



Cover the bottle with the supplied disc and screw ring. Shake well until all the powder is dissolved.

Remove the disc and holding the edge of the teat place it on the bottle. Place the screw ring over the top of the teat and tighten in place.

# Feeding your baby

## Important

**Before feeding, always check the milk temperature on the inside of your wrist. It should feel only warm (not hot).**

**Never heat a bottle of milk in the microwave as it can have hot spots and continues to heat up after it has been taken out of the microwave, which could scald your baby.**

If you need to cool the milk, hold the bottle under cold running water, with the cap covering the teat.

## Important

Don't add anything else to the bottle such as baby rice or sugar.



If your baby doesn't finish the bottle within two hours of it being made, throw any left over milk away.

# Bottlefeeding when out and about

If you are bottlefeeding away from home or travelling with your baby, it is safest to take an individual pre-sealed carton of readymade formula milk. The next safest alternative is to carry a measured amount of milk powder in a small sterilised container, a flask of hot water which has been boiled and an empty sterilised feeding bottle. The flask used should be kept solely for this purpose.

The formula should then be made up immediately before it is needed. The water must still be hot when you use it, otherwise any bacteria in the milk powder may not be destroyed. Always put the water in first and then add the milk powder. Cool the formula to the required temperature in a jug of cold water.

## Storing formula milk

All feeds should be freshly made up to reduce the risk of infection. If you have no choice and need to store a feed, it should always be stored at the back of the fridge and for no longer than 24 hours. Any infant formula left in the bottle after a feed should be thrown away. Infant formula that has been kept at room temperature and has not been used within two hours must be thrown away. Bacteria multiply very fast at room temperature. Even if a feed is kept in a fridge, bacteria can still survive and multiply, although they do this more slowly. The risk of infection increases over time so that is why it is important to make up the feed each time your baby needs it.

If you are leaving your baby in a nursery and you need to bring prepared milk with you every day, use ready-to-feed cartons of formula or make sure your baby is not being fed milk that has been prepared more than 24 hours previously and that the milk is stored at the back of the fridge in your childcare provider's premises.

# Responsive bottlefeeding

- Avoid a strict schedule when feeding your baby, let your baby lead and feed your baby when he or she shows signs of being hungry, such as when they start moving their head from side to side or try to suck their hands. Particularly in the early days your baby will want to feed little and often.
- Crying in babies is a communication of need. Parents who respond quickly to this need will help that baby grow up to be confident and happy. Crying is the last sign that your baby wants to be fed, so try and feed your baby before he or she starts crying.
- When you are feeding, make this a special snuggly time for you both, get you and your baby comfortable, hold your baby facing you and close, look into your baby's eyes and talk to your baby. This helps your baby feel loved and safe.
- Hold the baby semi upright during the feed and make sure the bottle is in a horizontal position, just slightly tipped with the teat at least half full of milk.
- Brush the teat against the baby's lips and when your baby opens their mouth, gently place the teat in their mouth.
- If your baby stops sucking during the feed, they may need to burp so remove the teat and hold the baby upright or over your shoulder and gently pat the baby's back to bring up any wind.
- Try to make feeding time an opportunity to feel close to your baby and try to limit the number of different people involved in feeding your baby.
- Never try to force your baby to finish a feed or to take more than they need as this is distressing for them and they will be overfed which can cause vomiting.

## Important

- Never leave your baby to feed with a propped-up bottle as they may choke on the milk.
- Never expect your older baby to feed themselves with a bottle as there is a risk of choking.

# How much milk and how many feeds?

The guidance below is what health professionals recommend. All babies are different and your baby may need less or more in the first few weeks and months. Some babies prefer smaller feeds but more often. Let your baby decide, but check with your health visitor if you think your baby is taking too much or too little.

Age	Number of feeds and amount each feed	Total amount each day
<b>Up to 2 weeks</b>	7–8 feeds per day 60–70ml per feed	420–560ml per day
<b>2–8 weeks</b>	6–7 feeds per day 75–105ml per feed	450–735ml per day
<b>2–3 months (9–14 weeks)</b>	5–6 feeds per day 105–180ml per feed	525–1,080ml per day
<b>3–5 months (15–25 weeks)</b>	5 feeds per day 180–210ml per feed	900–1,050ml per day
<b>About 6 months (26 weeks)</b>	4 feeds per day 210–240ml per feed	840–960ml per day
<b>Feeding after 6 months</b>		
<b>7–9 months</b>	Milk could be offered at breakfast (150ml), lunch (150ml), tea (150ml) and before bed (150ml).	About 600ml per day
<b>10–12 months</b>	Milk could be offered at breakfast (100ml), tea (100ml) and before bed (200ml).	About 400ml per day
<b>1–2 years</b>	Milk could be offered at snack times twice a day (100ml x 2) and as a drink before bed (200ml).	About 400ml per day of whole cows' milk or another suitable milk drink



# Weaning

The recommended age for weaning babies is six months. All the nourishment your baby needs for the first six months comes from either breastmilk or infant formula milk.

Once you start weaning, carry on breast and/or bottlefeeding your baby alongside introducing solid foods.

For more information, ask your health visitor for a copy of the leaflet *Weaning made easy: moving from milk to family meals* or visit [www.pha.site/weaning-made-easy](http://www.pha.site/weaning-made-easy)

# Breastfeeding

Breastfeeding is the healthiest and least expensive way to feed your baby. If you use formula milk, it is very important for your baby's health that you follow all instructions carefully. It is possible, but difficult, to reverse a decision not to breastfeed or to re-start breastfeeding once you have stopped. Introducing partial bottlefeeding will reduce a mother's breastmilk supply. Breastfeeding mothers don't need to eat any special foods but, just like everyone else, they are advised to eat a healthy diet.

# Healthy Start

Women who are pregnant and on benefits or have children under 4 years old or pregnant and under 18 are entitled to Healthy Start vouchers. The free vouchers can be exchanged for milk, fruit, vegetables and infant formula. You can also get free vitamins.

Visit [www.healthystart.nhs.uk](http://www.healthystart.nhs.uk) or ask a health professional for more information.



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