

Flinders Women & Children

Formula feeding

If a mother decides to formula feed her baby, staff at Flinders Medical Centre will support her in this decision. Using infant formula requires a good understanding of how to prepare formula using cleaned and sterilised equipment.

Choosing an infant formula

Breast milk is the best food for infants and the only food necessary for growth and development during the first six months of life. If breast milk is not available, infants can also do well if fed a milk that is specially made to meet the baby's needs. Infant formulas are modified to resemble breast milk as closely as possible although they still lack many factors which are present in breast milk. All infant formulas sold in Australia meet the relevant nutritional and quality control standards and are suitable for infants in the age group specified on the can.

There are many brands of infant formula available in Australia. Most are very similar if made up according to the instructions on the can. The nutritional value of a formula should not be judged either by its price or the nature of the retail outlet from which it is purchased. Formulas labelled 'suitable from birth' are for infants from birth to 12 months.

Formulas based on cows milk are suitable for most healthy infants and are recommended. Formulas made from soy beans or goats milk and formulas designed for babies with medical problems such as lactose intolerance or a strong family history of allergic disease should only be used on the advice of a dietician or medical practitioner with special expertise in the care of children.

Cows milk should not be used as an alternative to breast milk or infant formula until at least 12 months of age. However cows milk can be used in the preparation of some solid baby foods for infants older than six months.

For more information about the range of different formulas, visit the [Child & Youth Health](#) website and search for 'bottle feeding'.

Equipment required for formula feeding

- teats
- bottles and lids with caps
- knife used for levelling powder
- kettle or pot to boil water
- sterilising equipment

Cleaning equipment

All equipment used in formula preparation or during feeding should be cleaned after use.

The best method to clean equipment is to:

- rinse all equipment in cold water
- wash all equipment with detergent in hot water
- use a bottle brush to clean bottles and scrub the inside and around the neck of the bottle
- clean the inside and outside of teats and turn teats inside out and squirt water through the holes
- rinse all equipment well to remove detergent

Careful cleaning of equipment should continue as long as bottles and teats are used.

Sterilising methods

Bottles, caps, teats, knives and any container used to store prepared formula need to be sterilised before preparing formula until the baby is about six months old. There are a number of different ways to sterilise equipment, but for any method to be effective equipment must be thoroughly cleaned first. After sterilising, assemble and store capped bottles and teats in the fridge until needed.

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Sterilising by boiling:

- place all cleaned equipment into a saucepan filled with water and ensure that all equipment is completely submerged
- bring water to the boil
- boil for five minutes
- cover saucepan and leave until water is cool enough for handling, or use tongs to remove equipment
- wash hands before removing equipment

Sterilising with chemicals

Anti-bacterial solution and tablets to sterilise bottles, teats and other feeding utensils are available from the chemist or the supermarket. Special sterilising units are available from chemists, or a large plastic or glass container can be used:

- read instructions on bottle or packet
- wash hands
- make up solutions following manufacturers instructions
- immerse bottles, tops, teats or any other equipment
- squirt solution through the teats
- ensure that equipment is fully covered with the solution
- leave articles to soak for at least one hour
- wash hands before removing articles from solution
- shake equipment to remove excess, but do not rinse or dry
- discard old solution and make up a new solution every 24 hours

Note: Do not soak metal objects

Sterilising with steam

A range of steam sterilising kits (microwave and electrical) are available. It is important to follow the manufacturers instructions carefully and always:

- use the amount of water specified
- sterilise for the length of time specified

Note: Sterilising equipment in a microwave is only effective using a special microwave sterilising kit. Glass bottles or metal objects cannot be sterilised in a microwave steriliser.

Formula preparation

Always wash hands before preparing formula. As with any food preparation the work area should be clean, wiped over with detergent and dried with a clean towel.

Collect all equipment required for formula preparation:

- kettle or saucepan to boil water
- cleaned and sterilised bottles, caps, disks and knife
- can of formula

Read the instructions on each can of formula carefully. It is important to make up the right strength of formula. Incorrect dilution of formula can make the baby ill. Different brands may use different quantities of water and powder, and scoop sizes can vary.

Therefore:

- prepare each bottle individually
- check quantity of water and number of scoops of formula required using the feeding table on each new can
- use only the scoop enclosed with each individual can

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To prepare formula:

- boil fresh water in kettle or saucepan
- allow water to cool (lukewarm)
- check amount of water and powder required
- pour correct amount of lukewarm water into the bottle
- check the level of water in the bottles at eye level for accuracy
- scoop and level powder by passing the knife blade across the rim of measuring scoop
- do not pack down the powder into the scoop
- add the right number of scoops of powder to the water
- cap the bottle and shake until powder has dissolved

Remember: Always add water before the powder. Use lukewarm water as powder may be difficult to mix if the water is too hot or too cold.

Storage and transport of formula

Prepared formula should be kept refrigerated in the back of the fridge (not the door) and discarded after 24 hours. Any formula remaining after feeding should also be discarded.

Prepared bottles of formula must be transported in an insulated pack to keep cold. Alternatively, formula powder and bottles with boiled water can be taken separately and mixed just before feeding.

Cans of formula should be:

- stored in a cool, dry place (opened and unopened cans)
- kept closed with the plastic cover after opening
- used within four weeks once opened
- discarded after the use-by date

Warming of formula

It is not necessary to warm up formula, but many babies prefer warm milk. Warmed milk must be checked to ensure that it is not too hot. Dropping a few drops of milk onto the inside of the wrist is the safest way to check.

Formula can be warmed by standing the bottle in a container of hot water for a few minutes. Ensure that the hot water is out of reach of small children.

Caution – it is better not to use a microwave to warm up milk. However, if a microwave is used, care must be taken not to overheat the milk. Milk in bottles heats unevenly forming 'hot spots' in the middle, while the outside of the bottle still feels cool. To avoid burning the baby's mouth and throat, the bottle must be shaken well first before checking the milk temperature.

The length of time needed to warm formula in a microwave oven will depend on:

- how cold the milk is (fridge cold or not)
- the amount of formula in the bottle
- the type of microwave oven used

How to bottle feed

Infants need to be held while feeding, so they can look at and communicate with the person giving the feed. Holding the baby close during feeding also provides the baby with a sense of security. It is not safe to prop up the bottle and leave the baby because the baby could choke on the milk.

The flow and temperature of the milk should always be tested before offering the bottle. The milk should feel just warm when tested on the wrist and drip steadily from the teat. The milk flow depends on the number and size of holes in the teat and the tightness of the bottle cap. Loosening the cap makes the milk flow faster. The bottle should be held firmly at an angle so that there is always milk in the teat. As the baby takes the milk, bubbles form around the neck of the bottle.

During feeding babies swallow air. This air must be brought up (burping) during or after the feed. It is normal for babies to spit up some milk when 'burped'.

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How much milk to feed

Bottle fed babies should be offered formula on demand. The amount of formula the baby takes will depend on the baby's age and weight. As the baby grows the baby will gradually demand more milk. The feeding table on the can of formula should only be used as a guide as some babies need more and some need less. If the baby is unsettled after a feed, the baby may not be satisfied with the amount of milk offered and needs a little more.

Caution - the strength of the formula is always the same and must be made up according to the instructions on the can. Changing the strength of the formula (stronger or weaker) can make the baby ill.