How to Prepare Formula for Cup-Feeding at Home
New safety advice

Powdered infant formula is not sterile\(^1\). It may contain bacteria that can cause serious illness in infants. By preparing and storing powdered infant formula correctly, you can reduce the risk of illness. This leaflet contains new information to help you prepare cup feeds from powdered infant formula as safely as possible.

Breast is best
The World Health Organization (WHO) recommends that infants are exclusively breastfed for the first six months of life. Babies that are exclusively breastfed will get the best start for growth, development and health. Infants who are not breastfed need a suitable breast-milk substitute, for example, infant formula.

Should I feed formula from cups or from bottles?
If you live in an area where sanitation and clean water are a problem, cup-feeding is a safer option than bottle-feeding. This is because the teats and screw tops of bottles are more difficult to clean and can trap harmful bacteria that could make infants ill.

Cleaning, sterilizing & storing

It is very important that all the equipment used to feed and to prepare feeds for infants (for example, cups and spoons) has been thoroughly cleaned and sterilized before use. Cleaning and sterilizing equipment removes harmful bacteria that could grow in the feed and make infants ill.

Cleaning

**Step 1**
Wash your hands with soap and water and dry using a clean cloth.

**Step 2**
Wash all feeding and preparation equipment thoroughly in hot soapy water.

**Step 3**
Rinse thoroughly in safe water.
Sterilizing

Cleaned equipment can be sterilized using a commercial sterilizer (follow manufacturer's instructions), or a pan and boiling water:

**Step 1**
Fill a large pan with water.

**Step 2**
Place the cleaned feeding and preparation equipment into the water. Make sure that the equipment is completely covered with water and that no air bubbles are trapped.

**Step 3**
Cover the pan with a lid and bring to a rolling boil, making sure the pan does not boil dry.

**Step 4**
Keep the pan covered until the feeding equipment is needed.

Storing

Wash and dry your hands before handling sterilized equipment. It is recommended that you use sterilized forceps for handling sterilized equipment. If you remove feeding and preparation equipment from the sterilizer before you need it, keep it covered in a clean place.
How to prepare a cup feed

Step 1
Clean and disinfect a surface on which to prepare the feed.

Step 2
Wash your hands with soap and water, and dry with a clean or disposable cloth.

Step 3
Boil some safe water. If using an automatic kettle, wait until the kettle switches off. If using a pan to boil water, make sure the water comes to a rolling boil.

Step 4
Read the instructions on the formula’s packaging to find out how much water and how much powder you need. Adding more or less formula than instructed could make infants ill.

Step 5
Taking care to avoid scalds, pour the correct amount of boiled water into a cleaned and sterilized feeding cup. The water should be no cooler than 70°C, so do not leave it for more than 30 minutes after boiling.

Step 6
Add the exact amount of formula to the water in the feeding cup.
Step 7
Mix thoroughly by stirring with a cleaned and sterilized spoon.

Step 8
Immediately cool to feeding temperature by holding the cup under cold running tap water, or by placing in a container of cold or iced water. So that you do not contaminate the feed, make sure that the level of the cooling water is below the top of the cup.

Step 9
Dry the outside of the cup with a clean or disposable cloth.

Step 10
Check the temperature of the feed by dripping a little onto the inside of your wrist. It should feel lukewarm, not hot. If it still feels hot, cool some more before feeding.

Step 11
Feed infant.

Step 12
Throw away any feed that has not been consumed within two hours.

Warning: Never use a microwave to prepare or warm-up feeds. Microwaves heat unevenly and may cause ‘hot spots’ that could scald the infant’s mouth.
Can I store cup feeds to use later?

It is safest to prepare a fresh feed each time one is needed, and to consume immediately. This is because prepared feeds provide ideal conditions for bacteria to grow - especially when kept at room temperature. For convenience, you can prepare a number of feeds (batch) in one larger container, instead of in individual cups. The container can be stored in the refrigerator for use later.

When preparing a batch of cup feeds in a larger container always:

• Carefully work out how much water and how much formula you need for the batch of feeds. The instructions on the formula’s packaging will tell you how much water is needed for one feed. Adding more or less formula than instructed could make infants ill.

• Use a cleaned and sterilized container that is made from food-grade material, and has a lid. The container should be no larger than 1 litre. If you use a larger container, the hot feed will take longer to cool down and harmful bacteria may grow in it.

• Throw away any refrigerated feed that has not been used within 24 hours.

**Warning:** If you do not have a refrigerator it is not safe to prepare feeds in advance - always prepare a fresh feed as it is needed.
How do I re-warm refrigerated cup feeds?

• Remove the container of pre-prepared formula from the refrigerator, just before it is needed and pour the amount you need into a clean, sterilized feeding cup.

• Replace the lid on the container and put the remaining feed back into the refrigerator.

• Re-warm for no more than 15 minutes. Feeds can be re-warmed by placing in a container of warm water, making sure the level of the water is below the top of the cup. Occasionally shake or swirl the feed in its cup to make sure that it heats evenly.

• Check the temperature of the feed by dripping a little onto the inside of your wrist. It should feel lukewarm, not hot.

• Throw away any re-warmed feed that has not been consumed within two hours.

**Warning:** Never use a microwave oven to re-warm feeds. Microwave ovens heat unevenly, and may cause ‘hot spots’ that can scald the infant’s mouth.

What do I do if I do not have access to boiling water?

The safest way to prepare a feed is using water that has been boiled and cooled to no less than 70°C.

• If you do not have access to boiling water, you may wish to use sterile liquid infant formula.

• Alternatively, you can prepare feeds using fresh, safe water at room temperature and consume immediately.

• Feeds prepared with water cooler than 70°C should not be stored for use later.

• Throw away any left-over feed after two hours.
Can I bring a container of pre-prepared feed with me when I am travelling?

Yes - but make sure the feed is cold before it is transported and is kept cold during transport. This will slow down or stop the growth of harmful bacteria.

- Prepare the container of feed as normal, cool quickly and place in the refrigerator (no warmer than 5ºC).

- Immediately before you leave home, remove the container of feed from the refrigerator and place in a cool bag with ice packs.

- You can then place the container in a refrigerator at your destination, or re-warm a portion of feed when you need it.

If your trip is longer than two hours, you may not be able to keep the container of feed cold. In this case, you should prepare feeds as you need them. Bring individual portions of powdered formula with you in a cleaned and sterilized container, and prepare feeds as normal using boiled water that has been cooled to no less than 70ºC.

More advice on preparing powdered infant formula: