Formula Feeding Your Baby

Breast is best
The World Health Organization and the American Academy of Pediatrics recommend that infants be exclusively breastfed for the first six months of life. Babies who are exclusively breastfed will get the best start for growth, development and health. Infants who are not breastfed need a suitable breastmilk substitute, such as infant formula for example.

When to feed your baby
The best time to feed your baby is during the “quiet alert” state. However, he may not be in the perfect state when he needs to eat. You may need to wake him if too much time has passed, or calm him if he is crying. Early hunger cues you may notice are:
- “Rooting” toward a touch on his cheek
- Opening his mouth, moving the tongue or licking his lips
- Lifting hands to mouth, trying to suck on them

Late-hunger cues are stomach growling (often mistaken for gas pains) and crying.

You will need:
- 6 to 8 bottles that are bisphenol A (BPA) free
- 6 to 12 nipples that are latex free
- Bottle brush and nipple brush, for cleaning equipment
- A commercial sterilizer or large pot with a lid to sterilize bottles and nipples
- Tongs

Types of formula
- Use the brand of formula recommended by your baby’s health care provider.
- Formula comes in three forms: powdered, liquid concentrate and ready-to-feed.
  - Powdered formula is the least expensive per ounce and is mixed with hot water over (158° F or 70° C). Powdered formula is not sterile.
  - Liquid concentrate is mixed with safe water before feeding. Liquid formulas are sterile.
  - Ready-to-feed is the most expensive per ounce and is sterile.

Keep everything clean
- Before preparing formula or feeding your baby, always wash your hands.

Use safe water to mix your baby’s formula
If your baby is under 4 months of age:
- Run cold tap water for two minutes before using it for formula. In some houses, lead can get in the tap water when water sits in metal water pipes overnight.
- If you have well water, make sure it has been tested for nitrates and bacteria.
- Boil the water for 10 minutes to get rid of bacteria or use bottled sterile water.
- Or, use water treated by reverse osmosis.

As the baby gets older, discuss this with your health care provider.

Mix carefully
- Check the expiration date on the can of formula and never use expired formula.
- Keep track of lot numbers in case of recall.
- If not using ready-to-feed formula, read the directions carefully on the can to know what amount of formula and water to use. Manufacturers may change these instructions from time to time, and incorrect amounts of water and formula can cause problems for your baby, such as:
  - Dehydration
  - Diarrhea
  - Poor growth
New safety advice

Powdered infant formula is not sterile. 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.

Sterilize bottles and nipples prior to each use

If using a commercial home sterilizer (electric or microwave steam sterilizer, or chemical sterilizer), follow manufacturer’s instructions. Feeding and preparation equipment can also be sterilized by boiling in safe water.

a. Fill a large pan with water and completely submerge all washed feeding and preparation equipment, being sure there are no trapped air bubbles in the bottles or nipples.

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

c. Keep the pan covered until the feeding and preparation equipment is needed. The tongs to remove bottles and nipples from the pan can be boiled with the other equipment.

Storing sterilized bottles and nipples

Wash and dry your hands before handling sterilized equipment. It is recommended that you use sterilized tongs 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. Fully assemble feeding bottles if you remove them from the sterilizer before you need them. This prevents the inside of the bottle, and the inside and outside of the nipple, from becoming dirty again.

How to prepare a bottle feed with powdered formula

- Clean a surface with soap and hot water where you will prepare the feeding.
- Wash your hands with soap and water, and dry with a clean or disposable towel.
- Boil some safe water. If using an automatic kettle, wait until the kettle switches off. If using a commercial sterilizer, follow the manufacturer’s directions. If using a pan to boil water, make sure the water comes to a rolling boil.
- 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 your baby ill.
- Taking care to avoid burns, pour the correct amount of boiled water into a cleaned and sterilized feeding bottle. The water should be no cooler than 158 °F or 70 °C, so do not leave it to cool for more than 30 minutes after boiling.
- Add the exact amount of formula to the water in the bottle.
- Mix thoroughly by gently shaking or swirling the bottle.
- Immediately cool to feeding temperature by holding the bottle under cold running tap water, or by placing in a container of cold or iced water. So that you do not contaminate the formula, make sure that the level of the cooling water is below the ring and nipple of the bottle.
- Dry the outside of the bottle with a clean or disposable towel.
- Check the temperature of the formula by dripping a little onto the inside of your inner lower arm. It should feel lukewarm, not hot. If it feels hot, cool some more before feeding.
- Feed your baby.
- Throw away any formula left in the bottle that has not been eaten within one hour.

Warning: Never use a microwave to prepare or warm up feeds. Microwaves heat unevenly and may cause “hot spots” that could burn the infant’s mouth.

Can I store bottle feeds to use later?

It is safest to prepare a fresh bottle of formula each time one is needed, and to feed the baby immediately. This is because after the formula is prepared, it provides ideal conditions for bacteria to grow – especially when kept at room temperature. If you need to prepare bottles of formula in advance for use later, they should be prepared in individual bottles, cooled quickly and placed in the refrigerator. Throw away any refrigerated, prepared powdered formula 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 feeding as it is needed.
How do I rewarm refrigerated bottles of prepared formula?
• Remove a bottle of prepared formula from the refrigerator just before it is needed.
• Rewarm for no more than 15 minutes. Bottles can be rewarmed by placing in a container of warm water, making sure the level of the water is below the ring of the bottle and nipple. If you use an electric bottle warmer, make sure it does not heat the formula too hot. Occasionally shake or swirl the bottle to make sure that it heats evenly.
• Check the temperature of the formula by dripping a little on to the inside of your inner lower arm. It should feel lukewarm, not hot.
• Throw away any rewarmed formula that has not been eaten within one hour.

Can I bring pre-prepared bottles of formula with me when I am traveling?
Yes – but make sure the formula 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 formula as normal, cool quickly and place in the refrigerator (must be a temperature no higher than 41° F or 5° C).
• Immediately before you leave home, remove the cold bottles of formula from the refrigerator and place in an insulated bag with ice packs.
• You can then place the bottles in a refrigerator at your destination and rewarm a bottle when you need one.
• If your trip is longer than 2 hours, you may not be able to keep the pre-prepared formula cold. In this case, you should prepare the bottles of formula as you need them. Bring individual portions of powdered formula with you in the original container or a cleaned and sterilized container, and prepare the formula as normal using hot, boiled water that has not been allowed to cool more than 30 minutes or less than 158° F or 70° C.

Feeding your baby
• Feed your baby on demand, but don’t let the baby go without a feeding for longer than 5 hours during the day. Most full-term, formula-fed babies will want to eat every 2 to 4 hours. It is OK to let the baby sleep longer at night. If your baby is premature or small at birth, follow the health care provider’s instructions for feeding frequency and amounts.
• Hold your baby in a semi-upright position and close enough to see you. Holding your baby for feeding promotes bonding and the comfort the baby needs.
• Never prop a bottle. Propping a bottle for feeding may lead to ear infections and dental cavities, as well as a feeling of abandonment for the baby.
• Hold the bottle so milk is always filling the nipple. This prevents the baby from sucking in air, which may cause an upset stomach.
• The flow of bubbles in the bottle will tell you your baby is eating.
• Check the bottle nipple. The formula should drop out of the nipple slowly, but not run out in a stream. If the nipple hole is too small, it can be enlarged with a clean needle. If the hole is too large, replace the nipple to prevent an upset stomach from feeding too fast.
• A feeding is finished when your baby no longer sucks when the nipple is in the mouth, there are no signs of rooting, or the baby falls asleep. Your baby may also clamp his lips and turn his head away when full.
• You may want to burp your baby often during and at the end of the feeding. Do not be alarmed if your baby spits up a small amount of formula with a burp. Place a cloth under the baby’s chin to catch anything that is spit up.
• After feeding, throw away leftover formula, rinse the bottle, and squirt water through the nipple hole. Wash and sterilize as recommended in the previous section before reusing.
• Never switch formula type or brand without contacting your baby’s health care provider. Follow the care provider’s guidelines for when to begin feeding solids and how long to feed formula before switching to cow’s milk. The American Academy of Pediatrics recommends that no cow’s milk be given for the entire first year, and no solids before 4 to 6 months.
• Newborns do not need any extra water. Your baby will get the water he needs in the formula. Giving water bottles may make your baby skip feedings and not gain weight properly.
**Getting enough to eat**

Make sure you are feeding your baby in appropriate amounts for his age and weight. Newborn infants will eat a minimum of 6 to 8 times in a 24-hour period and approximately ¼ ounce to 1 ounce at each feeding. Feeding amounts will gradually increase and feedings may be less often as your baby gets older. By 3 to 4 weeks of age, most babies will be taking 3 to 4 ounces at each feeding. Your baby is getting enough to eat when he or she is:

- Wetting diapers and having bowel movements frequently (See “Getting to Know Your Baby”)
- Gaining weight

The amount you feed your baby depends on your baby’s size, age and appetite. Call your baby’s health care provider if you are concerned about your baby’s eating, weight gain or health.

**Burping your baby**

Burping your baby helps him remove air swallowed during feeding. You may either offer the baby a chance to burp whenever he slows down or stops feeding, or you may burp your baby about halfway through the feeding and at the end of a feeding. Initially, you may want to burp after each ½ ounce. The need to burp lessens as your baby gets older.

**Helpful hints**

- Burp your baby more frequently if he tends to spit up often.
- Spend only 1 to 5 minutes firmly patting or rubbing your baby’s back. If no burp occurs in that time, your baby may not need to burp.
- After your baby has finished eating, hold him in an upright position for 5 to 10 minutes before putting him down to sleep.
- Your baby may need to burp if he is not content after a feeding signaled by squirming, grimacing and groaning when you lay him down, or refusing to complete a feeding.
- Gentle pressure on the baby’s abdomen, as in the following positions, helps with burping.

**Three ways to burp your baby**

1. Place your baby on his tummy across your thighs and pat his back.
2. Sit your baby on your lap supporting his head, and gently pat or rub your baby’s back with your other hand.
3. Place your baby against your shoulder and pat his back.