

## Feeding Infant Formula to Newborns

### *Getting started*

*This handout explains how to safely prepare, feed, and store formula.*

### What type of formula is best for newborns?

Any formula sold in U.S. stores must meet federal standards, so all brands are safe. But, the Centers for Disease Control and Prevention and the World Health Organization advise using **liquid formula** for infants less than 3 months old.

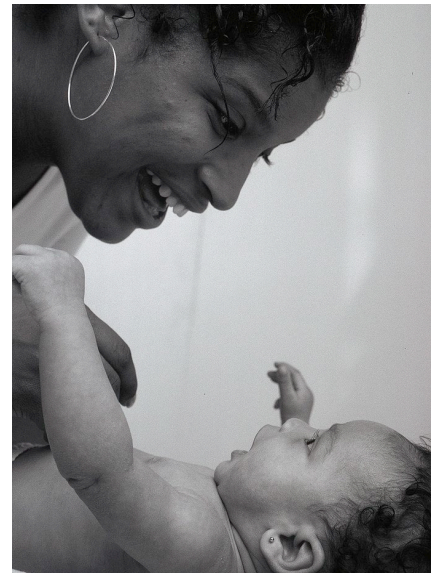
#### Liquid Formula

Liquid formula comes 2 ways:

- **Ready-to-feed** does not need mixing. It usually costs the most.
- **Liquid concentrate** *must* be mixed with just the right amount of water. It usually costs less than ready-to-feed.

#### Powdered Formula

You can also buy **powdered** formula. It **must** be mixed with just the right amount of water and shaken before feeding. Powdered formula is the least costly, but it is not sterilized. (See “How do I prepare the formula?” on page 2.)



*During feeding time, give your baby your full attention and love.*

### How do I prepare the feeding equipment?

Clean all feeding items before you prepare the formula:

- **When using a tube and syringe:** Wash, rinse, and dry as you learned in the hospital.
- When using bottles and nipples:
  - Wash all the feeding items by hand at the sink. Use hot, soapy water and a bottle brush to remove dried milk or other residue.
  - Or, you may wash them in a dishwasher, using the hottest temperature water and drying cycle.

- Do **not** use a dish towel to dry feeding items. Towel-drying can move more germs onto them. Air drying is best.

## How do I prepare the formula?

- Wash your hands with soap and water before preparing the formula.
- It is safest to prepare 1 feeding at a time and give it to your baby right away.
- If you need to prepare feedings in advance for use later:
  - Prepare the feedings in individual containers.
  - Store them in the refrigerator **right away**.
  - Throw away any refrigerated formula that you do not use within 24 hours.

## Ready-to-feed Formula

Ready-to-feed formula does not need mixing. You can feed it to your baby at room temperature. To prepare it, just shake the container. This will dissolve any milk solids that may have settled to the bottom.

Women, Infants, and Children (WIC) clinics do not usually provide ready-to-feed formula. If you are a WIC client, talk with your baby's care provider about your options.

## Concentrated Liquid or Powdered Formulas

Both liquid and powdered concentrated formulas need to be mixed with water. **Carefully follow the directions on the container.** Use **exactly** the amount of water the directions say to use. If you use more or less water, it could make your baby sick.

- **Liquid concentrate formula** is made to be germ-free. Mix it using water from a safe source.
- **Powdered formula is not sterile.** If your baby is 3 months old or younger, was born preterm, or has a health condition, take these **extra steps**:
  - Heat the water to boiling. Pour the correct amount into the container **right away** (within 5 minutes), while it is still hot enough to kill any bacteria in the powder (158°F/70°C).
  - Add the correct amount of powdered formula. Carefully **shake** the container. Do **not** stir.
  - Cool the formula to make sure it is not too hot. Before feeding your baby, shake a few drops onto your wrist to test how warm it is.

## How do I store leftover or opened formula?

- Store **unopened** infant formula containers in a cool, dry, indoor place. Do not store in vehicles, garages, or outdoors. Check the expiration date and make sure to use the formula before it expires.
- **Prepared infant formula** can spoil if it is left at room temperature for too long. Use prepared infant formula:
  - Within 2 hours of when you prepared it, and
  - Within 1 hour from when the feeding begins.

If you do not use the prepared infant formula within 2 hours, put the container in the refrigerator **right away**. Use it within 24 hours.

- If your baby does not drink all of the formula during a feeding, throw away the leftover formula. Bacteria can grow when infant formula and your baby's saliva mix.

## How do I feed the formula to my baby?

- Give your baby your full attention and love during feeding time. Hold your baby so that you can look at each other during feedings. Talk to your baby, or even sing!
- You can feed formula to your baby at room temperature or slightly warmer. If you warm the formula, check before feeding to make sure it is not too hot.
- **Never heat formula in the microwave.** Microwaves heat milk and food unevenly. This results in "hot spots" that can scald your baby's mouth and throat.
- Follow your baby's feeding cues to decide when to feed and when to finish the feeding:
  - Most babies show they are ready to eat by moving their lips and mouth.
  - When your baby is finished, sucking will slow and then stop.
- Make sure your baby has a deep attachment and strong suck so they can control the flow of formula and swallow safely.

### ***To feed by tube at your breast or to finger feed:***

- Place the tube at your breast or on a clean finger, as you learned in the hospital. Your baby will suck at your breast or on your finger and then take the formula from the tube.
- Avoid pushing formula through the tube into your baby's mouth.
- Adjust how the tube is placed as needed. Your baby's sucking should safely draw the formula into their mouth.



*During feedings, hold your baby so that you can look at each other.*

### ***To feed by bottle:***

- First, hold your baby in a semi-upright position. Then, tickle your baby’s mouth with the nipple. Allow your baby to open their mouth wide before you put the bottle into their mouth. Do **not** push a nipple into a baby’s mouth.
- To avoid choking or over feeding your baby, always hold the bottle while feeding.

### **To Learn More**

Read these online articles:

- “How to Clean, Sanitize, and Store Infant Feeding Items” by the Centers for Disease Control and Prevention:  
[www.cdc.gov/healthywater/hygiene/healthychildcare/infantfeeding/cleansanitize.html](http://www.cdc.gov/healthywater/hygiene/healthychildcare/infantfeeding/cleansanitize.html)
- “How to Prepare Formula for Bottle Feeding at Home” by the World Health Organization:  
[www.who.int/foodsafety/publications/micro/PIF\\_Bottle\\_en.pdf](http://www.who.int/foodsafety/publications/micro/PIF_Bottle_en.pdf)

### **Questions?**

Your questions are important. Call your doctor or healthcare provider if you have questions or concerns.