

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?

- Always buy formula from a safe source, like a grocery store or pharmacy. Formula sold in stores must follow safety and nutrition rules from the FDA (Food and Drug Administration).
- For babies younger than 2 months old, the Centers for Disease Control recommends using ready-to-feed or concentrated liquid formula. Liquid formula is *sterile* (without germs), but powdered formula is not sterile and has a higher risk of making a newborn baby sick.
- We do not recommend a specific brand.

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 exactly the right amount of water. It usually costs less than ready-to-feed.

Powdered Formula

Read the section, "How do I prepare the formula?" below and the CDC article about preventing Cronobacter infection (page 3).



Feeding is a special time to connect and bond with your baby.

How do I prepare the feeding items?

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 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 put more germs onto them. Air drying is best.

How do I prepare the formula?

- Wash your hands with soap and water.
- It is safest to prepare 1 feeding (bottle or syringe) at a time and give it to your baby right away.



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of this handout.

- If you need to prepare feedings to use later:
 - Store each feeding in an individual container.
 - Store them in the refrigerator **right away**.
 - Throw away any refrigerated formula that you do not use within 24 hours.

Ready-to-feed Formula

You do **not** need to add water to ready-to-feed formula, just shake the container to mix it. You can feed it to your baby at room temperature.

WIC (Women, Infants, and Children) 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.

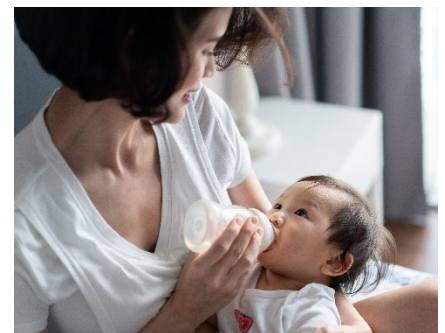
Concentrated Liquid or Powdered Formulas

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 with clean tap water.
- **Powdered formula is not sterile.** If your baby is 3 months old or younger, was born preterm (early), 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 check how warm it is.

How do I store leftover or opened formula?

- Store unopened infant formula containers in a cool, dry place indoors. Do not keep them in cars, garages, or outside. Check the expiration date and use the formula before it expires.
- Use prepared infant formula within 1 hour of starting to feed your baby and within 2 hours of making it. It's a good idea to label the bottle with the time you made it.
- Throw away any formula your baby does not finish. Do **not** refrigerate leftover formula to save it for later. Germs can grow after the bottle has touched your baby's mouth.
- If you do not plan to start feeding your baby with the prepared formula right away, label it with the date and time and put it in the refrigerator right away. Use formula in the refrigerator within 24 hours. Throw out formula if you do not remember how long it has been in the refrigerator. Do not feed it to your baby.
- Check the formula expiration date and recalls to check that it is safe to use (visit fda.gov to see recalls). The container should be in good condition with no dents, puffy ends, or rust spots.



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

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.



Finger feeding

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 articles from the CDC (Centers for Disease Control and Prevention):

- Infant Formula Preparation and Storage: www.cdc.gov/cronobacter/prevention/index.html
- Protect Your Baby from Cronobacter: www.cdc.gov/hygiene/media/pdfs/2024/04/Cronobacter-prevention-infographic-html.pdf