



Preparing Formula for Your Baby

Powdered infant formula may contain Cronobacter, a bacterium that can cause a very rare but serious illness in infants. If your baby is a preemie or newborn, you may choose liquid formula that is sterile and should not transmit Cronobacter bacteria. The World Health Organization (WHO) and the Centers for Disease Control (CDC) recommend powdered formula be prepared in the following way to prevent your baby from getting this illness:

Practice Proper Hygiene

- Wash your hands carefully with soap and water, especially after using the toilet or changing diapers, and always before preparing and feeding bottles or foods to your infant.
- If soap and water are not available, use an alcohol-based hand sanitizer (these products quickly reduce the number of germs on your hands).
- Clean work surfaces, such as sinks and countertops.
- Clean bottles in a dishwasher with hot water and a heated drying cycle, or scrub bottles in hot, soapy water, then sterilize them.
- If not using a dishwasher or baby bottle sterilizer, sterilize by covering bottles, nipples, and rings with water and heat to boiling.
- Keep all objects clean that enter your baby's mouth, such as pacifiers and teething toys.

Prepare Safely

- Wash the top of the can before opening and keep powdered formula lids and scoops clean (be careful what they touch).
- Close containers of infant formula or bottled water as soon as possible.
- To make formula with tap water: Boil fresh, **cold water** and use it within 30 minutes of boiling (**after 30 minutes the water is too cool to kill bacteria**).
- **Do not use hot tap water** (it may contain lead which can cause brain damage).
- Carefully shake (don't stir) formula in the bottle.
- **Cool formula to ensure it is not too hot before feeding your baby** by running the prepared, capped bottle under cold water or placing it into an ice bath (make sure to keep the cold water from getting into the bottle or on the nipple).
- Before feeding, test the temperature by putting a small drop on the inside of your wrist.

Use Quickly or Store Safely

- Use formula within 2 hours of preparation. If the baby does not finish the bottle, discard unused formula or refrigerate it immediately and use it within 24 hours.

How to Bottle Feed a Newborn

Which Bottles/Nipples to Buy: Bottles and nipples come in many different shapes and types. You may need to experiment with different nipples to find the one your baby likes. If your baby seems to be gagging or gulping, the nipple hole may be too large. If your baby is sucking hard and seems frustrated, the hole may be too small. As your baby grows you may need to adjust the size of the nipple.

How Much to Feed Your Baby: Newborn infants will eat a minimum of 6 – 8 times in a 24 hour period. In the first few days your baby will eat about ¼ to 1 ounce each feeding. Feeding amounts will increase gradually and feedings may be less often as the baby grows. Most babies 3 – 4 weeks of age will take 3 – 4 ounces at each feeding. Your baby is getting enough to eat when they are gaining weight and having regular wet diapers and bowel movements. The amount you feed your baby depends on their size, age, and appetite. Call your health care provider if you have any concerns about your baby's health. Remember, babies cry for reasons other than hunger, such as being cold, wet, lonely, or needing to burp. Avoid the temptation to always finish the bottle. End the feeding if your baby falls asleep.

Burping: Offer your baby the chance to burp frequently. Some babies require a lot of burping, others little or none. If your baby doesn't burp in a few minutes, continue with the feeding. A newborn bottle-fed baby should have the opportunity to burp after every ½ to 1 ounce of formula. Some babies do not burp immediately and may need to be put in several positions.

Paced Bottle Feeding (for babies who need extra help with flow): With paced bottle feeding, your baby will be able to determine how quickly, or slowly, they eat by controlling the flow of milk. Paced feeding is needed when your newborn sucks without pausing and ends up with too much milk in their mouth.

To begin, hold your baby in a slightly upright position that is comfortable for you (your baby's head should be aligned with rest of their body). Touch the nipple of the bottle to baby's lips until they open their mouth. Wait for the baby to open wide and put the nipple in their mouth. Make certain that the nipple is all the way in, on top of their tongue, so they'll suck in as little air as possible. While they are eating, keep the bottle parallel to the ground. Allow your baby to suck 5 – 10 times, then gently pull the bottle out of their mouth, keeping it so that it's touching their lower lip. This will allow your baby to suck the nipple back in when they are ready for more.

If your baby gets upset when you pull the bottle out of their mouth, you can also tilt the bottle so that the flow lessens to give them a rest. When they start sucking harder to get more milk, you can tilt it back up again to help quicken the flow a little bit.

Follow Your Baby's Cues: If your baby is slowing down their pace and resting more, let them finish at their own pace. Allow your baby to stop eating when they are full and take breaks along the way. There should always be a small amount of milk left in the bottle at the end of the feed. Never leave your baby alone with a bottle propped for them to drink. Remember that the time you spend feeding your baby is not only important for healthy growth and development but is also an important time of bonding.