

# Methodist Health System

## Infant Formula Preparation, Storage and Bottle Feeding

If you have made the decision that formula feeding is the best choice for you, you will be given instruction by your nurse on the safe preparation, storage and feeding of the formula you and your baby's doctor have chosen. After discharge please ask your baby's doctor if you have any additional questions about formula feeding your baby.

### Formula Preparation:

- **Proper formula preparation is imperative to the proper growth and development of your baby.**
- Wash your hands with soap and water. Wash the top of the formula can before opening to prevent germs getting into the formula. Use clean measuring utensils, bottles and nipples. Feeding equipment and preparation supplies should be cleaned using bottle brushes with hot soapy water and then rinsing well after each use. They can also be cleaned using a microwave steam bag to sterilize after use or may be placed in a dishwasher. Supplies should be allowed to air dry and then be stored in a dry place.
- Clean and disinfect the preparation surface.
- Further instructions are on the can of formula as well.
- Use the formula brand/type that you and/or your baby's doctor has recommended. Do not change formula brand without consulting your baby's physician. Babies receiving formula should do so for the first year of life. No substitutions for formula such as cow's milk, instant dry milk, canned or condensed milk should be used.
- Be aware of occasional recalls on infant formulas. [www.fda.gov](http://www.fda.gov) and [www.cpsc.gov](http://www.cpsc.gov) are two websites you can utilize to access recall information.

### Formula Types:

You will be instructed on the type of formula that you plan to use at home. The three types of formula are: ready to feed, liquid concentrate and powder.

- **Ready to Feed:** As it implies, this formula is ready to use right from the container. It is the most expensive form. The formula can be placed in bottles, capped and stored for 48 hours. Do not store remaining formula in the can. Place it all in bottles or place it in another clean container, cover and refrigerate. It must be used within 48 hours.
- **Liquid Concentrate:** This type of formula is prepared mixing together equal parts water to liquid concentrate. Example: 2 oz water to 2 oz concentrate, mix well, cover and refrigerate. Formula must be used within 48 hours. This is less expensive than ready to feed but more expensive than powder.
- **Powdered:** Powdered formula is most economical. Mix well. Using at least room temperature water helps to dissolve the powder. Add the exact amount of formula as instructed on the label. It is preferred that each bottle is prepared fresh for each feeding. Mixing can be done in the bottle that the baby is to be fed from. Be sure the formula is at

the appropriate temperature before feeding, especially if warmer water was used in the preparation. Larger 24 hour volumes of formula can be mixed using the proper recipe according to the instructions on the can, covered tightly and refrigerated for use within 24 hours. Any unused powder formula should be discarded one month after opening the can. Do not store the scoop in the can.

### **Specialty Formula/Fortification:**

If your baby's doctor has ordered any specialty formula or fortification, preparation/use will be taught according to the MD/dietitian special instruction. This includes the use of fortifiers in human milk to increase calorie content.

### **Water for Mixing Formula:**

If well water or water that has not been treated is being used, water should be boiled before mixing with powdered or concentrate formula. When water comes from a well, remember to have the well tested regularly. If there is the presence of nitrates in the water, bottled water will need to be used with formula preparation.

City water supply should be safe to use without boiling. However, heating the water to  $>70^{\circ}\text{C}$  ( $158^{\circ}\text{F}$ ) that will be used to mix with the formula has been shown to kill any bacteria in the powdered formula.

If using hot water to prep formula, cool prepared formula under cool running water prior to refrigeration.

### **Bottle and Nipple Types:**

Bottles and nipples are a parent's personal choice unless your baby has a need for a specialty bottle/nipple that would be prescribed by your baby's doctor or feeding specialist. Choose bottles that are Bisphenol-A (BPA) free. The nipple should allow milk to drip slowly when held upside down.

### **Refrigeration:**

Refrigerator temperature for formula storage should be no more than  $5^{\circ}\text{C}$  ( $41^{\circ}\text{F}$ ).

Label the expiration date and time on prepared formula.

### **Warming and Use:**

For any formula that has been stored in the refrigerator, re-warming should be done at the time of the feeding. Formula should be warmed in warm water for no more than 15 minutes. Periodic swirling the formula will help it to heat evenly. **DO NOT microwave.** Hot spots can scald the infant's mouth. Check formula temperature prior to feeding. Discard any leftover formula that is not consumed within the hour. Leftover feeds should never be saved for later or added to freshly prepared feedings.

### **Transporting Previously Prepared Feedings:**

Refrigerate formula prior to transporting it. Place in transport bag with ice packs immediately prior to leaving. Any prepared formula in a cool bag should be used within 2 hours or placed in a refrigerator upon arrival.

### **Feeding From a Bottle:**

Your baby should be held for all feedings. Do not bottle-prop. Do not leave your baby unattended. Cradle your baby in your arms. Keep your baby's head higher than the rest of her body during the feeding. Keep the bottle tipped up during the feeding to keep the nipple filled with formula. Cuddling your baby during feedings and even holding your baby "skin to skin" will give your baby the closeness to you that she needs. Cradle your baby's head in your left arm and alternate to the right arm at other feedings. This is thought to aide in the development of your baby's eyes. This special feeding time with you promotes bonding, enhances brain development and provides you with long lasting memories.

### **How Often and How Much to Feed:**

Feed your baby on demand. This is usually 8-12 times in 24 hours. In the early days, begin with a half to one ounce and increase gradually as your baby tolerates. Do not overfeed by encouraging your baby to take more than she wants. Your baby should act satisfied after a feeding. After feeding, throw away any leftover formula in the bottle. Talk to your baby's doctor if you have additional feeding questions.

### **Burping:**

Burp baby frequently throughout the feeding. This may be done a couple of ways.

#1: Hold baby close and upright, with your shoulder supporting the head and neck while you gently pat the baby's back.

#2: Sit with your baby on your lap. Support the chest and head with one hand while gently patting the back with your other hand.

Your baby may not always burp. If after a couple minutes he does not, discontinue trying.

### **Hiccups and Spitting Up:**

Hiccups are normal for babies. If your baby will not feed with the hiccups, wait until they are gone and continue with feeding. A small amount of spitting up after a feeding where the formula "rolls" out of the baby's mouth can be normal and can be due to eating too much or air in the tummy. If the amount of spit up is large or becomes projectile, notify you baby's doctor.

**Questions?** Please ask your nurse or contact your baby's physician for any additional questions or concerns you may have regarding feeding your baby.