



Breastfeeding at Home: Information for the Healthcare Team

Prior to discharge from the neonatal intensive care unit, an individualized feeding plan should be discussed and written out for the family. The infant's gestational age, feeding endurance, and the mother's milk supply should be considered. A breastfeeding assessment, which includes a pre- and postweight, will allow the practitioner to provide guidelines for supplementation after breastfeeding (Meier, Johnson, Patel, & Rossman, 2017; Spatz & Edwards, 2016).

Parents benefit from receiving realistic expectations related to breastfeeding after discharge and need a clear understanding of the process for transitioning their infant from bottle feeding with expressed breast milk (EBM) to full feedings at the breast (Callen & Pinelli, 2005; Spatz & Edwards, 2016). The nurse should explain to parents that many preterm infants are discharged home with a feeding plan that includes alternating breastfeeding with bottle feeding while offering a supplement of fortified EBM to the infant after each breastfeeding session. Long-term fortification of EBM often is necessary to promote adequate growth and development of the preterm infant who has increased nutritional demands compared with the full-term infant (Mangili & Garzoli, 2017).

The length of time needed to fortify EBM varies from infant to infant and must be done on an individual basis with close monitoring of the infant by the pediatrician. Readiness to decrease fortification is done by evaluating the infant for sustained adequate growth, the ability to take in adequate milk volume, and having lab values within normal limits. Depending on the infant's gestational age at birth, fortification may be indicated for 2–3 months or, in extreme cases, up to a year following discharge. For the infant who is nursing well but has a continued need for fortification, the healthcare provider may suggest a concentration of EBM to 24, 26, or 30 calories to maximize nutrition in a limited number of bottles.

A revised individual feeding plan should be assessed within 1–2 weeks of discharge by the pediatrician or a board-certified lactation consultant. The mother should be informed that with close follow-up, most preterm infants will gradually transition to full breastfeeding shortly after their due date.

The healthcare team and parents should discuss options for providing supplementation. Options include supplementing at the breast with a supplemental nursing system (SNS) or a feeding tube, or supplementing by bottle. If supplementation is provided by bottle, the nurse, lactation consultant, or feeding specialist should discuss bottle feeding system options. Wide-based nipples, which often are recommended for the breastfed full-term infant, may not be appropriate for the preterm infant after discharge. In general, if it takes longer than 30 minutes to complete the bottle feeding, the infant may need a different bottle system. A standard or narrow-based nipple may be more appropriate during the early weeks following discharge. The mother may decide to transition to a wide-based nipple at a later date when the infant has gained additional weight and endurance.

Alternative options, such as use of a nipple shield during breastfeeding or supplementation with an SNS, should be considered on an individual basis with close outpatient follow-up to monitor weight gain. A nipple shield, which is frequently discouraged for the full-term infant, has been shown to allow the preterm infant to maintain better attachment to the breast and increase milk transfer while decreasing infant fatigue. The parents should demonstrate all skills related to infant feedings and use of alternative devices prior to their infant's discharge home.

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Breastfeeding at Home: Information for Parents

Many mothers of premature and special care babies feel a little nervous about how they will manage breastfeeding once their baby is discharged home. To help with this transition, we encourage you to spend as much time in the neonatal intensive care unit as you are able during the final weeks of your baby's hospital stay. The health-care team will help you create a feeding plan and determine whether you need to add any supplements to your milk to help your baby grow. The team also will discuss ways to tell if your baby is drinking enough milk while feeding at the breast. Your NICU's lactation consultant is a wonderful resource to use when breastfeeding or pumping. Ask your nurse to schedule an appointment as soon as your baby is ready to start breastfeeding, several days prior to his or her discharge, and any time in between when you need additional support.

Breastfeeding begins with lots of skin-to-skin (STS) time and some nuzzling. Nuzzling is the suckling by a baby at the breast without taking more than a few drops of milk. When your baby is ready to begin nuzzling, the nurse will ask you to pump immediately before STS to empty your breasts. Once your baby is placed STS, if he or she shows signs of interest in suckling, you can allow your baby to attach to the breast. When your baby is ready to feed from a fuller breast and drink milk, your doctor or nurse should schedule an appointment with the lactation consultant to assist you in starting to breastfeed. In some situations, if your baby is able to feed by mouth, he or she can begin breastfeeding. This may happen at 34 weeks gestational age. It may take some time because your baby has to learn how to coordinate their suck and swallow in a rhythmic pattern to move milk out of the breast. As your baby gets closer to his or her due date, your baby will have more endurance and coordination and drink more milk when feeding at the breast.

Breastfeeding is an important developmental task for your baby. Because your baby is relaxed when in your arms, he or she may fall asleep before taking a full feeding. Don't give up! Over time your baby will drink as much milk

when feeding from the breast as he or she does when feeding from the bottle.

Your baby's healthcare provider may recommend that you fortify your breast milk with a powdered formula when you bottle feed. Discuss the types of fortification that are available and be sure to ask about the risks and benefits of fortification with your baby's healthcare provider. The growth of your preterm infant in his or her first year of life requires extra nutrients such as protein, calcium, and phosphorus for bone and brain development. Your pediatric providers can help you monitor your baby's growth and feeding requirements. Do not stop any additives to your baby's feeding without first discussing with your health-care provider.

The journey toward full breastfeeding takes time. Be patient with yourself and your baby. Most babies who are born premature are not ready to fully breastfeed until they are 1–2 weeks past their due date. Term babies who have been very ill or have had surgery may need extra help to learn to breastfeed. This means your baby may be 41–42 weeks gestation before he or she is breastfeeding without the need for additional supplements by bottle.

Pumping and Breastfeeding

It is natural to think that once your baby starts to feed at the breast, you can stop pumping. In fact, most mothers cannot wait to stop pumping. Remember, your baby may not be strong enough to empty your breast, and you have worked so hard to get your milk supply where it is. It is important to continue to pump your breasts after your baby has nursed to make sure that your breasts are empty. This will make sure you continue to make enough milk. Stopping too quickly may cause your milk to dry up.

Before you stop pumping, make sure your baby is getting enough milk when nursing and gaining weight. During the first week at home you may be pumping six to seven times per day in addition to breastfeeding. If your baby gains weight that first week, talk to your lactation consultant or your baby's provider to help you taper off pumping



in a manner that will work for you and your baby and talk about any concerns you have with breastfeeding.

Some mothers choose to continue to pump and bottle feed their expressed milk instead of breastfeeding. When bottle feeding breast milk there is some loss of nutrients due to the storing and warming of the milk. Discuss this option with a lactation consultant to learn how to preserve as many nutrients as possible. If you choose to pump only, you may want to schedule your pumping session 30 minutes before your baby's feeding time. This will allow you to feed fresh breastmilk several times per day while at the other feedings you will want to feed your baby your oldest frozen milk.

Your nurse will provide you with outpatient resources and support groups to help you with breastfeeding after discharge. Remember to ask for the name and contact information of a board certified lactation consultant who can answer questions or provide one-on-one assistance.

How to Tell If Your Baby Is Getting Enough Milk

The following signs indicate that your baby is getting enough milk when breastfeeding:

- Your baby wakes up on his or her own every 2–3 hours.
- Your baby latches and stays on the breast sucking and swallowing for more than 10 minutes before falling asleep.
- Your baby sucks and swallows in a nice rhythmic pattern, taking 8–10 bursts of sucking and swallowing before pausing for 5–10 seconds.
- You can hear swallowing.
- Your breast softens during and after breastfeeding.
- When you pump after breastfeeding, you remove less milk than you do if you did not breastfeed.
- Your baby is having 6–8 wet diapers and several dirty diapers every day.
- Your baby is gaining weight—6–8 ounces per week—and growing well.

If your baby does not wake up on his or her own to feed, has a weak suck, or falls asleep after only 5 minutes at the breast, it is likely that he or she is not drinking enough milk during the breastfeeding and will need a supplemental bottle after nursing. Be sure to discuss your concerns with your baby's healthcare provider if your baby is not feeding well.

Diet and Breastfeeding

It takes energy to make breast milk. You will need to get at least 1,500–1,800 calories per day while breastfeeding. Eating a healthy balanced diet, similar to what was recommended when you were pregnant, is important. Continue to take your prenatal vitamins and drink plenty of fluids. Do not plan on dieting for at least 2 months after having the baby. There are many resources on dieting while breastfeeding. One resource can be found at <http://kellymom.com/nutrition/mothers-diet/mom-weightloss>.

Many women have questions related to eating fish while pregnant or breastfeeding due to concerns about mercury exposure. In January 2017, the U.S. Food and Drug Administration and U.S. Environmental Protection Agency issued advice on eating fish with an easy-to-use reference chart. They list three categories: best choices, good choices, and fish to avoid. The advice recommends 2–3 servings of low-mercury fish per week or 8–12 ounces per week. Lower-mercury fish are the most commonly eaten fish and include shrimp, pollock, salmon, canned light tuna, tilapia, catfish, and cod. Higher-mercury fish include tilefish from the Gulf of Mexico, shark, swordfish, orange roughy, bigeye tuna, marlin, and king mackerel.

Resources

Eating Fish: What Pregnant Women and Parents Should Know www.fda.gov/Food/FoodborneIllnessContaminants/Metals/ucm393070.htm

Advice about Eating Fish: From the Environmental Protection Agency (EPA) and the Food and Drug Administration (FDA); Revised Fish Advice. www.federalregister.gov/documents/2017/01/19/2017-01073/advice-about-eating-fish