



Providing Breast Milk for Premature and Ill Newborns

Providing breast milk for a premature or seriously ill newborn may be a challenge, but it is usually possible and it is certainly an effective way to enhance your baby's health, growth, and development. Even if your baby is unable to breastfeed at first, you can begin expressing your milk immediately after giving birth. When your baby is stable, you can have the milk fed to them by a tube or by letting them sip the milk from a tiny cup or bottle.

No matter how your breast milk is delivered to them, it provides the best nourishment possible at a time when it can make a big difference.



How premature breast milk meets your baby's special needs

Mothers of premature babies (</english/ages-stages/baby/preemie/Pages/default.aspx>) produce breast milk that is slightly different in composition, at least for the first several weeks. This difference is designed to meet your baby's particular needs. Premature breast milk is higher in protein and minerals, such as salt, and contains different types of fat that your baby can more easily digest and absorb.

The fat in human milk helps to enhance the development of a baby's brain and neurologic tissues, which is especially important for premature infants. Human milk is easier for them to digest than formula. It also avoids exposing their immature intestinal lining to the cow's milk proteins that are found in baby formula created for premature infants. Premature babies who are breastfed are less likely to develop intestinal infections than are babies who are formula-fed. The breast milk you produce in the first few days contains high concentrations of antibodies to help your baby fight infection (</English/ages-stages/baby/breastfeeding/Pages/Breastfeeding-Benefits-Your-Babys-Immune-System.aspx>). Even if your baby cannot breastfeed yet, expressing breast milk from the beginning will ensure that your milk supply is kept up until your baby is able to nurse.

Breastfeeding support for you and your preemie

Your first step in providing your baby with breast milk is to enlist the support of professionals on the medical team who will care for your infant at the hospital. Notify your baby's pediatrician and neonatologist, if one is caring for your baby, that you want to breastfeed and to provide your expressed breast milk for your baby. Your doctors can arrange to have your expressed milk fed to your baby or for you to breastfeed your infant in the neonatal intensive care unit (NICU).

Many hospitals now provide private areas for nursing and trained specialists to assist breastfeeding mothers. These experienced members of your support team can show you how to assemble and use an electric breast pump, teach you to express milk efficiently, and give you advice on storing breast milk (</English/ages-stages/baby/breastfeeding/Pages/Storing-and-Preparing-Expressed-Breast-Milk.aspx>). As your baby gets more mature, if you are able to directly breastfeed, they can help you adjust your nursing position to your infant's small size.

Many NICUs encourage parents to room-in continuously and keep the baby skin to skin (</English/ages-stages/baby/preemie/pages/About-Skin-to-Skin-Care.aspx>) (sometimes referred to as kangaroo care (</English/ages-stages/baby/preemie/Pages/About-Skin-to-Skin-Care.aspx>)), because this has been shown to be beneficial for stability and optimal growth and development of premature babies. Breast milk pumping, or expression, immediately after holding your baby skin-to-skin is a very effective way to increase your milk supply. Some mothers find pumping at their baby's bedside in the NICU very helpful as well.

Expressing breast milk

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If your newborn is too small or ill to breastfeed at first, or if a birth condition prevents them from breastfeeding directly, a hospital-grade electric breast pump is an effective option to express milk and establish and maintain an adequate milk supply. Your hospital will provide you with a pump while you are there, and you can rent or purchase one to use at home later.

The pump you use should create a milking action and not simply be a sucking device. Beginning as soon as possible after your baby's birth, express your milk at regular intervals, at approximately the times when your baby would usually feed. Aim to pump at least 6 to 8 times a day; this provides nipple stimulation and encourages milk production. You should pump at regular intervals throughout the night for the first few weeks, not going for more than 4 or 5 hours without pumping. If you wake up each morning and your breasts feel full, then you are sleeping too long through the night; this fullness will actually decrease your milk production.

Maintaining your breast milk supply

For mothers of preterm babies, the minimum amount of time to try to pump throughout a twenty-four-hour period is one hundred minutes. This much breast stimulation and milk expression is the minimum required to maintain breast milk supply over many weeks (if your baby is very small, premature, or ill).

Using a double-pump setup lets you express milk from both breasts at the same time. Most women find that the double pump produces the most milk in the least amount of time. When using the pump, continue to pump for several minutes after your milk has stopped flowing to stimulate increased milk production.

Breast massage before and during the use of the pump has been shown to improve your milk flow and may even boost your milk production. To do this, make small, circular motions with your fingertips, starting at the outer edges of your breast near the chest wall, and slowly make your way toward the center. The massage should always be gentle to avoid producing friction on the skin surface or massaging so deeply that it causes pain.

What to know about colostrum

Keep in mind that you will express only small amounts of colostrum at first, but this immune-boosting substance is extremely beneficial for your baby. Some mothers find that expressing the colostrum by hand massage into a small cup or spoon is easier than using an electric pump in the first few days. Hand expression into a cup also allows you to save each drop, instead of losing milk that is trapped within the tubing of the pump.

Once your milk supply increases, the amount of milk you can express will probably fluctuate from day to day. As a result, you will need to increase the number of times per day you express milk to maintain an optimal milk supply. These fluctuations are normal—just more easily observed when expressing milk than when breastfeeding. Once your baby begins breastfeeding, your milk production is likely to increase. To maximize your milk production, try to get as much rest as possible, take your prescribed pain medication, drink adequate fluids and minimize stress.

Feeding your your premature baby in the hospital

Your breast milk can be fed to your baby through a tube that passes through their nose or mouth into their stomach or from a tiny cup or bottle. The feeding route will depend on the degree of prematurity of your infant and on the policies in the NICU at your hospital.

Occasionally young infants fed by bottle may start to prefer the bottle, which delivers milk faster and with less effort than feeding at the breast. Some of these babies later refuse to breastfeed—a situation called *nipple confusion* or *nipple preference*. During this period when your baby is using an alternative feeding method, you can introduce them to breastfeeding by holding them skin to skin against your chest whenever possible and allowing them to nuzzle and suckle at your breast. This, of course, should be done only when the neonatologist or pediatrician has given approval.

Soon you may be able to progress to a at-breast nursing supplementer or other device that will deliver your expressed breast milk from a bottle or syringe through a tiny tube that is taped next to your nipple. With this method, your baby should begin to feed partly from the tube and partly from your breast as they latch on to your breast and actively nurse.

Helping your baby latch on

Early breastfeeding sessions will probably be more successful if you time them for when your baby is most awake and alert but calm. Experiment with different nursing positions to discover which works best for the two of you. Mothers of preterm babies often find the cross-cradle hold to be the easiest to use while "teaching" their baby how to latch on. If your baby doesn't suckle at the breast, you can express some milk onto your nipple, so your baby tastes your milk when they come into contact with the areola and nipple.

A premature baby often tires rather easily, so these early feedings are likely to be brief. (You can use your remaining time together to hold, rock, sing to and cuddle your newborn.) Try to breastfeed as often as possible and continue to express milk for feedings in your absence. Frequent nursing and milk expression, as well as regular skin-to-skin holding, will help maintain your milk supply. [Back to Top](#)

Rooming in with your preemie

An increasing number of hospitals allow mothers to room in, or stay overnight with their babies, on the night or two prior to discharge from the NICU. This can help you start to learn your infants' round-the-clock hunger cues and breastfeeding rhythms. This experience can ease the transition from hospital to home life for you and your baby.

Skin-to-skin or "kangaroo" care

Rooming in also enables skin-to-skin care (sometimes referred to as kangaroo care).

This is shown to be beneficial for stability and optimal growth and development of premature babies. Breast milk pumping, or expression, immediately after holding your baby skin-to-skin is a very effective way to increase your milk supply. Some mothers find pumping at their baby's bedside in the NICU very helpful, as well.

Supplemental nutrition your baby may need in the NICU

You will naturally want to focus on making the transition from feeding your expressed breast milk to direct breastfeeding, but understand that your hospital's medical staff wants to make sure your infant receives adequate calories and nutrition before they go home. To have adequate growth and strong bones with enough calcium being deposited in them, neonatologists may enrich the diet of tiny preterm babies by adding special supplemental nutrients to the mothers' breast milk, often in the form of commercially available milk fortifiers. Occasionally the doctors may decide to feed an infant with special baby formulas for premature infants, sometimes alternating the formula with your breast milk.

Even if your baby is not getting feedings at all due to medical complications, continue to express your breast milk and freeze it for later use to help maintain your milk production.

Feeding your premature baby at home

After your baby is home from the hospital, you may need to keep using your breast pump until your baby is exclusively breastfeeding (actually nursing) and growing well without the need for any supplemental bottles or formula. This lets you store breast milk for extra feedings and maintain an adequate milk supply, especially as your baby grows and their needs increase.

Try to nurse whenever your baby shows an interest—even if it's every hour or hour and a half during the early weeks. If your premature baby is exclusively breastfed, your pediatrician should recommend a multivitamin and iron supplement. Finally, have your breastfeeding technique rechecked by your pediatrician or a lactation specialist shortly after your baby's homecoming.

Remember

Caring for and learning to breastfeed a premature or ill newborn is emotionally taxing for any new mother. It's a good idea to contact support groups in your area that specialize in your baby's condition. Other mothers are often the most valuable sources of information. Make sure, too, that your partner and other family members understand the enormous advantages of breastfeeding a preterm baby or an ill hospitalized newborn. The emotional and practical support of your loved ones will go a long way in helping you achieve your breastfeeding goals.

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