Feeding in the NICU

Before your baby was born, you may have thought about what it would be like to hold and feed him. And you may have decided if you were going to breastfeed or bottlefeed your baby. But now that your baby is in the NICU, you may need to change your plans. This can be upsetting for many parents. Going to a feeding class in the NICU can give you more information and support.

The way your baby is fed depends on his medical condition and his ability to suck and swallow. Here are some different ways your baby may be fed in the NICU:

Intravenous feeding

Babies who are very small or sick are often fed through an IV (also called intravenous line). A provider places a small catheter in a vein in the baby's hand, foot, scalp or belly button. The provider will then tape the catheter in place and attach the IV tubing and bag to it.

A baby receives fluids and important nutrients through the IV to help him grow. The IV fluid may be yellow in color. It also may include a white liquid called lipids, which provides your baby with a fat that helps him grow. This type of nutrition through an IV is called TPN or total parenteral nutrition.

Tube feeding

Babies who are too sick or weak to breastfeed or drink from a bottle may need to be fed through a thin tube. The tube is put in the baby's nose or mouth, down the esophagus, and into the stomach. If the tube is put in the baby's nose, it's called a nasogastric tube (also called NG tube). If the tube is put in the baby's mouth, it's called an orogastric tube (also called OG tube). Many babies who are tube fed can breastfeed or bottlefeed. Sometimes babies are fed through an IV catheter and a feeding tube.

Your baby may have a medical condition that requires a different kind of feeding tube, called a gastrostomy tube (also called G-tube or gastric feeding tube). Surgery is done to put the tube directly into the baby's stomach. NICU staff will teach you how to feed your baby using the G-tube and how to care for it. Babies with a G-tube may still be able to breastfeed and bottlefeed.

Notes			



Breastfeeding

Breast milk is the best food for your baby. It has vitamins, nutrients and antibodies that can help her get stronger. Some babies can breastfeed in the NICU, while others may need to get breast milk from a bottle or feeding tube. Ask your nurse or lactation consultant:

- If you can breastfeed your baby
- How to breastfeed your baby
- How often to breastfeed your baby
- How to make sure your baby is getting enough milk
- How to pump and store your breast milk for later use, if your baby is not ready to breastfeed



Breast milk changes as your baby grows so your baby gets exactly what she needs at the right time. This is true even if your baby was born early. For the first few days after giving birth, your breasts make a thick, yellowish breast milk called colostrum. It has nutrients and antibodies that your baby needs. Even if you make only a few drops, use it to feed your baby. Your body starts to make breast milk in about 3 to 4 days.

Some moms may have trouble making breast milk. It can be really hard for moms who had health problems before, during or after their baby was born. If you're having problems or are worried that you're not making enough milk, talk with your nurse or lactation consultant.

You may be able to build up your milk supply by:

- Getting rest
- Eating well and drinking a lot of fluid, like water, juice or milk
- Using a breast pump after or between feedings
- Pumping your breasts until they're empty each time you pump
- Doing kangaroo care

As soon as your baby can, let her practice sucking at your breast to get ready for breastfeeding. Pump your breasts until they are empty. Then, let your baby touch and taste your breast to get used to what breastfeeding is like. This is called non-nutritive sucking.

Breastfeeding a baby with special needs

Because your baby is in the NICU, you may need extra help to make breastfeeding work. Having a baby born with a birth defect, like a cleft lip also can make it hard to breastfeed. Ask the nurse or lactation consultant how to hold and feed your baby.

If your baby has special needs, a nipple shield may help her securely attach to the area around your nipple and get enough milk. A nipple shield is a piece of soft, thin plastic that fits over the nipple. It has holes in it that let milk flow to your baby.

Using a breast pump

If you're planning to breastfeed and your baby isn't ready, you can pump your milk. A breast pump helps remove milk from your breasts. Using a breast pump may feel awkward at first. But with practice, pumping becomes easier and more comfortable. Your nurse or lactation consultant can show you how to use the pump. It's best to use a hospital-grade electric pump. It gets the most milk from your breasts in the shortest amount of time.

Pumping breast milk provides your baby with something only you can give. It also allows you to feed your milk to your baby at a later time. If you plan to store breast milk, you need a few supplies to keep your breast milk safe:

- Bottles or bags These are made just to store pumped breast milk. The bags are plastic, and the bottles are plastic or glass. You can buy them at most grocery or drug stores.
- Cooler You may need a small cooler to keep your pumped milk cold until you get it home or to the NICU.

To store your breast milk safely, after you pump, put your breast milk in bottles or bags. Put just the amount of milk your baby needs for each feeding in the bottle or bag. Be sure to write the date on the bottle or bag before you store it in the refrigerator or freezer. Ask your nurse the best way to label your milk.



Manual breast pump



Electric breast pump

Here's how long you can store breast milk							
Place	Temperature	How long					
Countertop (not refrigerated)	77 F or colder	Up to 4 hours					
Refrigerator	40 F	Up to 4 days					
Freezer	0 F or colder	Up to 6 months is best; up to 12 months is OK					

When to pump

You can begin pumping within 2 to 4 hours after your baby is born. Pump every 2 to 3 hours during the day. When using an electric breast pump, start at a low setting so you don't hurt yourself. It may take a few minutes for your milk to let down or flow, so be patient as you begin to pump.

Pump right before you go to bed, once or twice in the middle of the night and when you wake up in the morning. You may need to pump more often if you're trying to make more milk. Keep a record of when you pump. Write down the date, time and how much milk you pump.

Fortified breast milk

Human milk fortifier is a liquid or powder added to breast milk. It has important nutrients to help your baby grow. You baby's provider will add the fortifier to your pumped breast milk. Your baby will get the breast milk in a bottle or through a tube.

Donor breast milk

Your baby's provider may recommend that your baby receive milk from a donor (also called donor breast milk). Donor breast milk is breast milk that's been donated to a milk bank. A milk bank receives and stores donated breast milk, tests it to make sure it's safe and sends it to families of babies who need it. Donor breast milk is prescribed by your baby's health care provider. It has all the benefits of your own breast milk. Your baby will get the donor breast milk through a tube or a bottle.

Formula feeding

If you want or need to use formula, talk to your NICU team about which formula is best for your baby. The team will work with you to ensure your baby is getting the food he needs. They also can tell you how much formula to feed your baby.



When you have more than one baby, feeding can be a challenge. You may find that one baby feeds better from the breast and another from the bottle. Or one baby may do better on breast milk and the other on formula. You may decide to pump milk for all your babies and only use formula when needed. Ask your nurse or lactation consultant for help.

Notes			

5 steps to help you breastfeed









- **1. Get skin to skin with your baby.** First find a comfortable place to sit with your baby. Lay your baby between your breasts so that your tummies are touching. Skin to skin contact helps your baby get comfortable.
- **2. Tickle your baby's lips.** Gently guide your baby so that his nose is close to your nipple. With one hand, support his head. With the other hand, hold your breast and tickle his lip with your nipple.
- **3. Get a good latch.** When your baby opens his mouth, bring him to your breast. He should have a good mouthful of your areola. This is called latching on. When your baby has a good latch, his tongue pulls your breast deep into his mouth. If you feel his tongue at the tip of your nipple, it's not a good latch. His nose and chin should touch your breast.
- **4. Burp your baby.** When your baby stops feeding, burp him. Sit him on your lap. Support his chest and head with one hand and pat or rub his back with your other hand. After he burps, offer him the other breast. It's OK if he doesn't want it.
- **5. Release the latch.** If you need to stop nursing, don't try to pull your baby off your breast. Instead, put your pinkie finger in the side of his mouth to release the latch.

How do you hold your baby when you breastfeed?

There are different ways to hold your baby when you breastfeed. Try them all to find out which one you and your baby like best. You may want to use a pillow to help support your baby. The cross-cradle and football holds let you have the best control of your breast and your baby's head. These are the easiest holds for breastfeeding when you're just starting out.



Cross-cradle hold

Cradle hold



Football or clutch hold





Side-lying hold

Holds for breastfeeding multiples

When your babies are ready to breastfeed, try feeding one at a time first. This helps each baby learn to latch on. Later you can feed both at the same time.



Double clutch hold



Cradle and clutch hold

Words to know

antibodies (AN-tee-bah-deez) — Cells in the body that fight off infections.

catheter (KATH-uh-tur) — A thin plastic tube through which fluids are given or taken from the body.

cleft lip (kleft lip) — A birth defect in which a baby's upper lip doesn't form completely and has an opening in it.

colostrum (kuh-LAH-strum) — A clear, sticky liquid that comes out of a mother's breasts soon after she gives birth and before her breast milk comes in. It's food for the baby and helps protect him from infection. Her body starts making it during the last few months of pregnancy.

esophagus (i-SOF-uh-guhss) — The part of the body that carries food from the throat to the stomach.

formula — A milk product that can be fed to a baby instead of breast milk.

health care provider — Also called provider. The person who gives medical care.

gastric feeding tube — See gastrostomy tube.

gastrostomy tube (gass-TRAWSS-tuh-mee toob) — Also called a G-tube or gastric feeding tube. A tube that goes into a baby's stomach for feeding. Liquids, like breast milk and formula, are put into the tube to feed the baby.

intravenous feeding (in-truh-VEE-nuhs feed-EENG) — When a baby is fed through a thin plastic tube that is placed in a vein in the baby's hand, foot, scalp or belly button.

intravenous line (in-truh-VEE-nuhs line) —

Also called IV. A tube inserted with a needle into your baby's vein. A vein is a blood vessel that brings blood back to the heart. Your baby can get fluids, medicine and blood through an IV.

IV — See intravenous line.

kangaroo care — Also called skin-to-skin care. Putting a baby dressed only in a diaper on his parent's bare chest.

lactation consultant (lak-TAY-shuhn kuhn-SUHL-tuhnt) — A person with special training to help women breastfeed.

lipids (LIH-pids) — Fats needed by most babies.

nasogastric tube (NAY-zoh-gass-trik toob)

— Also called NG tube. A feeding tube that goes through your baby's nose, down the esophagus and into the stomach. The esophagus is the tube in your baby's body that carries food from the throat to the stomach. Your baby can get breast milk, formula and medicine through the tube. When your baby is fed breast milk or formula though an NG tube, it's called gavage feeding.

NG tube — See nasogastric tube.

NICU — Also called the neonatal or newborn intensive care unit. The place in the hospital where newborns go for special care.

nipple shield — A piece of soft, thin plastic that fits over the nipple. It has holes in it that let milk flow to the baby.

non-nutritive sucking (nahn-NU-tri-tiv

SUHKeeng) — Sucking that a baby does but not for feeding. A baby can suck at his mom's breast or suck his thumb, fingers or a pacifier.

nutrients (NU-tree-entz) — Nutrients, like vitamins and minerals, help the body grow and stay healthy.

OG tube — See orogastric tube.

orogastric tube (OR-oh-gass-trik toob) —

Also called OG tube. A feeding tube that goes in your baby's mouth, down the esophagus and into the stomach. The esophagus is the tube in your baby's body that carries food from the throat to the stomach. Your baby can get breast milk, formula and medicine through an OG tube. When a baby is fed breast milk or formula though an OG tube, it's called gavage feeding.

provider — See health care provider.

total parenteral nutrition (toe-TAL pa-

RENter-ull new-TRI-shuhn) — When a baby gets all of his nutrition through an IV. The IV solution will provide the baby with all or most of his calories and nutrients.

TPN — See total parenteral nutrition.

vein — A blood vessel that brings blood back to the heart.

