Expressing Breast Milk for Your Hospitalized Baby

Read this handout before or soon after your first pumping session.

To Do:
- Start hand expressing within 1 hour of giving birth.
- Learn to use a breast pump.
- Order a hospital-grade breast pump to use at home. Lactation Services will help you with this.
- Track your pumping sessions. Use the pumping record on page 31 of this book.
- Begin holding your baby skin-to-skin as soon as your baby is ready.

Building Your Milk Supply

The first days and weeks after birth are a critical time to start building a good, healthy milk supply. It is important to start hand expressing and pumping within 1 hour of giving birth.

Your first pumping will produce tiny drops of thick, yellowish milk called colostrum. You may see a decrease in colostrum after hand-expressing or pumping the 1st or 2nd time. Do not worry. This is common.

- By the 4th day after birth, most mothers produce an ounce or more of milk each time they pump.
- By the end of the 1st week, most mothers produce 500 ml (16 ounces) of milk a day.
- By the end of the 2nd week, you will likely produce about 750 ml (25 ounces) a day.

By the 4th day after giving birth, most mothers produce an ounce or more of milk each time they pump.
Tiny babies do not need that much milk every day. But, it will not be long before they do. That is why it is so important to maintain a good supply.

**Hand Expression**

Hand expression is another way to remove milk from the breast. It often works better than using a pump in the first few days after birth.

- Begin by massaging your breast, starting at the back of the breast and moving toward the nipple. Use a stroking or circular motion.

- Next, make a “U” with your thumb and fingers and place the “U” just behind the areola (the dark area around the nipple). Lift and press toward the back of the breast. (See the drawing below.)

- Finally, gently press or squeeze your fingers together without moving your fingers across your skin. Do this several times in the same place.

- Rotate your fingers around the areola and repeat until the breast is empty.

- Ask a partner or friend to help you collect the small drops of colostrum from the nipple tip with a syringe. Or, if you are hand-expressing mature milk, collect the milk in a clean container as it sprays from outlets in your nipple.

Kangaroo Care

- Kangaroo care is also called “skin-to-skin holding.” It is simply holding your baby on your bare chest with your baby dressed only in a diaper. You will both be covered in warm blankets.

- Kangaroo care helps your milk supply by stimulating oxytocin. Oxytocin is another hormone that helps lactation.

- We know that mothers who provide regular kangaroo care make up to 200 ml (about 7 oz.) more milk and are more successful when they start full breastfeeding.

- Kangaroo care can begin as soon as your baby is medically stable.

- Hold your baby skin-to-skin for at least 30 to 60 minutes each day, or as long as you and your baby are comfortable.

- Skin-to-skin holding has other medical benefits, too. It will:
  - Help regulate your baby’s temperature
  - Improve your baby’s breathing.
  - Help you produce more antibodies (infection-fighting factors). You will share these antibodies with your baby through your breast milk. Antibodies protect your baby against germs.

How to Maintain Your Milk Supply

Here are some important tips for maintaining your milk supply:

- Use a hospital-grade electric breast pump that lets you “double pump.” Double pumping means pumping both breasts at the same time.

- Besides saving time, double pumping is important because it stimulates release of prolactin better than single pumping. Prolactin is a hormone that tells your breasts to make milk.

- Start expressing right after giving birth, within the first hour if possible.

- Pump at least 8 times a day (or every 3 hours, even at night). Pump for 15 minutes each time or until flow stops. Then stop the pump, massage, and hand express.

- We know that you need to pump at least 100 minutes a day to maintain your milk supply. Pumping less than this means you will probably have a low milk supply.

- We also know that mothers who combine hand expression, “hands-on” pumping, and use an electric breast pump make more milk than mothers who do not.
“Hands-on” pumping will increase your milk supply. To learn more, watch the video by Jane Morten on “Maximizing Milk Supply” at http://newborns.stanford.edu/Breastfeeding/MaxProduction.html.

Remember that the first 2 weeks after birth are the best time to create a full milk supply. Start a regular pumping routine now to maintain your supply.

**Pump and Empty Your Breasts Often!**

Pump often, until your breasts are empty.

- Empty your breasts well. This is important because it removes the feedback inhibitor of lactation (FIL). FIL is a protein in your milk that tells the breasts to stop making milk. When your breasts are filled with milk, the milk production is lower because there are high levels of FIL. Pump often to get the FIL out.

- Remember, pumping also releases prolactin, the hormone that tells your breasts to make milk. Prolactin must be released often for your body to produce milk.

Without complete emptying and frequent release of prolactin, your breasts will begin to involute. This means your breasts stop producing milk. It is very hard for your breasts to start producing milk again once they have stopped. That is why it is important to stick to your pumping schedule.

- Another good reason to empty your breasts all the way when you pump is because it increases the calories in the milk. Emptying your breasts each time means you will be collecting hindmilk, the milk that is released last. It is high in fat and contains the calories your baby needs to grow well.

**Funnel Size**

The funnel is the part of the pump that fits over your nipples. It is also called a breast shield. Getting the right size funnel is very important:

- The right size funnel will help you empty your breasts all the way.
- Using the right size funnel will help if you have sore nipples.

Talk with a lactation consultant for help with fitting the funnel.

**Tips**

- If you must travel a long way to visit your baby, consider pumping during your trip if you are the passenger. You can use a hand pump to empty your breasts. Also, some electric pumps have adapters that can be used in cars.
• Try a hands-free bra for double pumping. This is a bra that holds the breast funnel in place for you, so that you can use your hands for other tasks. Or, buy nursing bras that close in front, in the center. This way, you can close the flaps around the pump funnels and pump with your hands free.

• Consider buying a second set of pumping equipment that you can use if the first set is dirty.

**Milk Let-Down**

Milk let-down is the release or flow of milk that occurs after you begin pumping or nursing your baby. For some moms, it is hard to let down while pumping. Here are a few tips to make let-down easier:

• Massage your breasts:
  - Start your pumping session by massaging the breast.
  - Massage each breast gently but firmly, using a circular or stroking motion. Start at the back of the breast and move forward. Rotate your hands to get all around the breast.
  - Also, stop the pump to massage your breast about halfway through the pumping session. This will help you completely empty the breast.

• Pump right after enjoying skin-to-skin holding with your baby.

• Pump while at your baby’s bedside in the NICU.

• Eat or drink something while pumping.

• Keep a favorite picture or other item nearby that reminds you of your baby.

• Try watching a short video of your baby.

• Pump in a comfortable spot where you feel relaxed.

• Use warm compresses on your breasts before pumping.

• Talk with a lactation consultant if you are still having problems with let-down.

**Keep Your Milk Safe for Your Baby**

**Wash Your Hands**

• Washing your hands is the most important thing you can do to keep your baby’s milk safe from germs.

• Wash your hands well with soap and water before pumping.
Clean Your Pumping Equipment

- After each pump session, take apart all the pump pieces and wash them in hot soapy water. Rinse them well. Place the clean pieces on a clean towel to dry.

- Tubing usually does not need to be cleaned. But, you may notice that condensation (drops of water) forms inside the tube. This can cause mildew to grow over time. If you notice condensation, let the pump run for a few minutes (with tubing connected) while you clean up the other pump parts. This will help dry out the tubing.

Storage

<table>
<thead>
<tr>
<th>When breast milk is:</th>
<th>It is safe for:</th>
</tr>
</thead>
<tbody>
<tr>
<td>• Room temperature (freshly pumped milk only)</td>
<td>• 4 hours</td>
</tr>
<tr>
<td>• Refrigerated (4°C or 36 to 40°F)</td>
<td>• 48 hours</td>
</tr>
<tr>
<td>• Frozen (in a freezer with a separate door from the refrigerator section)</td>
<td>• 6 months</td>
</tr>
<tr>
<td>• Deep freeze (-20°C or 0°F)</td>
<td>• 12 months</td>
</tr>
<tr>
<td>• Thawed (but not warmed)</td>
<td>• 24 hours in refrigerator (do not refreeze)</td>
</tr>
<tr>
<td>• Warmed for a feeding (use medium-warm water to warm milk; do not boil or microwave)</td>
<td>• 1 hour at room temperature</td>
</tr>
<tr>
<td></td>
<td>• 4 hours in refrigerator</td>
</tr>
</tbody>
</table>

- Use Medela Pump & Save bags to store milk for your baby in the hospital. Your nurse or lactation consultant can show you how to use these bags.

Transport Milk Correctly

- When possible, transport breast milk before freezing it.

- Place the milk in an insulated bag with a frozen gel pack.

- When traveling long distances with frozen milk, follow these steps to keep the milk from thawing:
  - Keep the milk bags together in a cooler.
  - Put frozen gel packs all around the bags.
- Fill any extra space in the cooler with crumpled paper or towels to help insulate the milk.

- Do not use ice cubes to keep milk frozen. They will speed up the thawing of your frozen milk.

**Labeling**

To make sure stored breast milk is used safely, **make sure all bags are properly labeled:**

- Place a bar code sticker with your baby’s name on each milk bag. Ask a nurse for these stickers when you visit your baby in the NICU.

- Write the date and time of collection on each sticker.

**Time-Saving Tricks**

- To make your nighttime pumping easier, prepare your equipment before going to bed. Remember, fresh breast milk is fine at room temperature for 4 hours. You can simply pump and go back to sleep. Place your milk in the refrigerator as soon as you get up for the day. This will reduce extra steps in the middle of the night.

- Try Medela Quick Clean antibacterial wipes for cleaning pump parts quickly.

**Common Questions**

**Q. It has been 2 days since my baby’s birth, but I haven’t been pumping because I don’t have milk yet. Is that OK?**

No, you should still use the pump every 3 hours. It is common for moms to pump only small amounts or even just a few small drops in the first days after birth. This liquid is called *colostrum* and it should be collected and given to your baby. Don’t worry if there are not enough drops to collect. You should pump anyway to ensure that prolactin has been stimulated and that your body is getting the message to make milk. Your milk volume should increase between days 3 and 5 after giving birth.

**Q: Does my baby really need these tiny drops of colostrum?**

Yes, your baby should receive this special milk for the first feedings (either fresh or thawed after being frozen). Colostrum is high in protein and has special anti-infection and anti-inflammatory properties.

**Q: My first pumping session produced colostrum, but now I’m not pumping any colostrum. What happened to my milk?**

Don’t worry – this happens to many mothers. It does not affect how much milk you will be making starting on days 3 to 5. Pump every 3 hours and expect your milk supply to begin to increase on day 3. Call Lactation Services if your supply has not increased by 5 days after birth.
Q: Do I need to pump at night?
Yes, it is a good idea to pump once each night. Remember, you need to remove FIL from your breast and stimulate prolactin to maintain your milk supply. Try not to let more than 4 or 5 hours pass between nighttime pumping sessions. (See “Time-Saving Tricks” above.)

Q: What is the difference between foremilk and hindmilk?
Foremilk is the milk that is released first when you pump, and hindmilk is milk released at the end of a pumping session. Hindmilk is higher in calories and fat content. It is important that you pump your breasts to empty them so that your baby will get this nutritious hindmilk. Your infant needs these extra fats and calories for growth.

Q: Is freshly pumped milk better than milk that has been stored?
Freshly pumped milk should be used whenever possible. Use milk that has been refrigerated or frozen only when fresh is not available.

Q: Do I need to bring my pump when I come to visit my baby?
No, the NICU has all the equipment you need for pumping when you visit your baby. Ask for a pump to be rolled into your baby’s room.

Q: I have an electric breast pump at home. Can I use it?
We advise using a hospital-grade pump. Electric pumps bought for home use do not work well for a mom who is relying only on a pump to maintain her milk supply.

Most insurance plans pay for the rental of a hospital-grade pump while your baby is in the hospital. The lactation consultant will help you arrange for a rental pump before you are discharged from the hospital.

Q: Where do I get more storage bags?
We will provide storage bags while your baby is in the hospital. Ask your baby’s nurse for more when you need them. You will use about 1 box of bags every 3 days.