There are a couple of ways for moms to express their breastmilk. Some moms may not have access to or the money to pay for a breast pump. Hand expression can be used in place of a pump for a few reasons.

**When to Use Hand Expression:**

- To relieve breast fullness/engorgement
- To stimulate milk production
- During the first few days or colostrum phase (Colostrum is thicker and comes in small, high-calorie quantities that can stick to the sides of the bottle; hand expressing into a spoon or small cup is better at this time.)
- To provide supplemental feeds to baby

Hand expression techniques vary by instructor. The following technique is a combination of several, including one from the World Health Organization (WHO); 2009.

1. Before expressing, spend some time gently massaging the breasts with hands and fingertips, a soft baby brush, or a warm towel.
2. Sit up, leaning slightly forward to allow gravity to help milk flow.
3. At the first expression, to find the “sweet spots” on the breast, start by putting thumb on top of the breast and fingers below the breast about 1.5 inches from the nipple. Apply steady pressure into the breast toward the chest wall a few times. If no milk comes, shift finger and thumb placement farther away or closer to the nipple and compress again a few times. Repeat, moving finger and thumb until slightly firmer breast tissue is felt and pressure yields milk. At future hand expressions, skip the “finding” phase and place fingers directly on this area.
4. Apply steady pressure into the breast toward the chest wall, not toward the nipple. The idea is to put pressure on areas of milk within the breast.
5. As the inward pressure is applied, compress the pads of the thumb and fingers together (pushing in, not pulling out toward the nipple), finding a good rhythm of press-compress-relax, like a baby’s suckling pattern.
6. Alternate breasts every few minutes (5 or 6 times total at each expression), rotating finger position, so that all areas of the breast are expressed and feel soft, which usually takes about 20-30 minutes.

Avoid sliding the fingers along the skin. If it becomes painful or uncomfortable, you may be compressing too hard, sliding your fingers along the skin, or squeezing the nipple itself.

**Using a breast pump to express milk**

It is important to find a breast pump that will work best for your needs. You may want to read the section on “Choosing a breast pump” to know which pump is best for you, depending on your circumstances. Using the right breast pump can be crucial to keeping up your milk supply when you are separated from your baby.
Some reasons you may need to pump your milk include but are not limited to:

- Hospitalization of mother or baby
- Returning to work or school
- Premature baby with difficulty latching and/or sucking
- Baby is having difficulty latching, sucking, or removing milk well
- Any other separation of mom and baby that could result in missed feedings

Pumping is not always an easy task, as it requires a little more work than just placing baby to breast. However, pumps are important to help maintain and/or increase supply, depending on your needs as a pumping mom.

One important step in pumping is establishing the right schedule for you. The amount of times you may need to pump will depend on how many hours a day you are separated from your baby, either due to your work schedule or baby being in NICU. It is important to breastfeed/pump in combination up to 8-12 times per day. You do not want to wait too long, about 4 hours maximum, between pumping sessions, as this can slow your milk supply and cause you to become engorged. If you have any questions regarding your pumping schedule for your individual circumstances, call the 24-Hour Breastfeeding Hotline at 1-800-833-4642.

Here is how you can get started with pumping:

- Make sure your flange sizes are appropriately sized for your nipples. The opening of the flange for your nipple should be big enough to allow for free movement; you should not experience any rubbing.
- Make sure you are not pressing the flange too hard onto your breast; just lightly press it around your breast to provide suction.
- Find a comfortable and preferably familiar place to pump.
- Minimize distractions.
- Wash your hands prior to pumping.
- Try to pump at various times of the day to get both lower and higher calorie milk (amount may vary by time of day).
- Follow a pre-expression ritual that might include: putting a blanket around your shoulders to keep warm, using gentle breast massage (this can yield more milk), or spending a minute or two relaxing.
- Use your senses to trigger greater milk ejection.
  - Sight: Look at your baby or a picture of your baby.
  - Smell: Smell your baby’s clothing or blanket.
  - Touch: Apply a warm compress or massage breast.
  - Taste: Drink your favorite drink or have a snack.
  - Hearing: Record your baby cooing or crying.
  - Mind/Feelings: Close your eyes, relax, and think about your baby and how much you love him.
When finished pumping your milk, remember that it is important to safely store your breastmilk. Remember to clean your breast pump parts throughout the day with soap and hot water. If you are pumping for a baby that is hospitalized, it is important to sanitize your pump parts throughout the day; ask your hospital about their sanitation guidelines. You will also need to ask the hospital for special sterile storage containers and also milk storage guidelines.

Other helpful information:

- Your breastmilk may separate into layers; this separation is normal and you can gently swirl the milk to mix the layers. Do not shake your breastmilk, as it can destroy some immune properties.
- Your breastmilk may have different color tints at times. Your milk can change colors, depending on what you have eaten or medications you may be taking.

Here is a video by Stanford University that demonstrates hand expression. Information adapted from *Breastfeeding Answers Made Simple* by Mohrbacher.