
Expressing and Storing Breast Milk

Learning how to express breast milk is an important skill for parents to learn.

Expressing Breast Milk

Whether you are hand expressing or using a pump, it may take a few minutes for your milk to flow. At times, your milk will come faster, then slower, then faster again. This is normal. With practice, you will find out what works best for you.

Colostrum is the first milk your body makes and is a rich, yellowish fluid. Colostrum is sometimes described as “liquid gold” because it is perfectly suited for your newborn baby. It is very nourishing, contains important immune boosting substances, and is easy for your baby to digest.

Reasons for Expressing Breast Milk

Expressing breast milk helps you to:

- Get your baby interested in latching when you express a few drops before breastfeeding as your baby will smell and taste your milk.
- Soften your breasts near your nipples before latching your baby, if your breasts are very full.
- Collect and store your milk to feed your baby if you need to be separated from them.
- Increase your milk supply.

Getting Ready

When you are ready to express your milk, try to relax so that your milk will flow easily. Always wash your hands before expressing milk. You can try some or all of these things to see what works best for you:

- Find a place where you are comfortable and relaxed.
- Hold your baby skin-to-skin before expressing breast milk. If your baby is not with you or you are not able to hold your baby, think about your baby, look at a photo or hold an item that has been close to your baby.
- Gently stroke and massage your breasts moving from the chest wall toward the nipple. Massage can help milk to flow.
- Place a warm towel on your breast for a few minutes, or have a warm shower to help your milk flow.
- Think about things that relax you, listen to music or visualize your milk flowing from your breasts.



Expressing by Hand

Expressing by hand is convenient and free. Try the following tips:

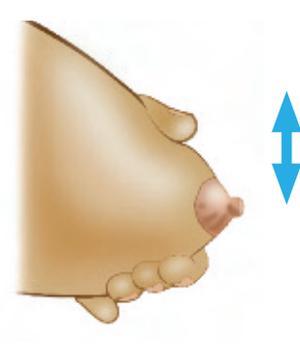
- Hold your breast with one hand. The thumb and fingers of your hand should be opposite each other (form a "C" with your fingers) and about 2 ½ – 4 cm (1 to 1½ inches) back from the nipple. Lift your breast slightly, and gently **press** the breast back towards your chest.
- Lightly **compress** your thumb and fingers together moving them towards each other, without rubbing the skin.
- **Relax** your fingers then repeat the same motion. Do not squeeze the base of your nipple, as this will stop the flow of milk and it could make you sore.
- Move around your breast to express milk from all parts of the breast. Express in one area for about a minute or until milk stops flowing before moving your fingers around to another area of your breast.
- Switch back and forth between breasts as often as you like.
- Collect the milk on a spoon if small amounts or a container with a wide mouth if larger amounts. You can feed your baby the colostrum or breast milk. You can also save your breast milk if your baby doesn't need it right away.



Press
(back towards your chest)



Compress



Relax

Expressing breast milk should be comfortable, not painful.

Expressing with a Breast Pump

If you decide to use a breast pump, you can choose a manual or an electric pump. Talk to someone knowledgeable about breast pumps, such as a International Board Certified Lactation Consultant, before you decide what pump is best for your situation. Combining hand expression, breast massage, and pumping has been found by many parents to be helpful in obtaining more milk.

Whether you decide on a manual or an electric pump:

- Check with a International Board Certified Lactation Consultant to discuss options.
- Check consumer reports and talk with other parents who have pumped.
- Check that the pump will allow you to adjust the amount of suction.
- Check that the pump has the option to use a different size of pump kit if the kit that comes with it doesn't fit you properly.

It should not hurt to pump. If it hurts and you cannot fix the problem yourself be sure to get help. The *Bilingual Online Ontario Breastfeeding Services* directory at www.ontariobreastfeeds.ca can help you connect and get help and support from professionals, experts and peers.

How long and how often you need to pump depends on:

- How often your baby is breastfeeding.
- How well your baby is sucking and swallowing.
- Your milk supply.

Manual pumps

There are a variety of manual breastfeeding pumps available in the marketplace. It is wise to talk with someone knowledgeable about breastfeeding such as a International Board Certified Lactation Consultant to help you find the breast pump that is best suited for you. Most manual breast pumps use either arm or hand action to create suction. If you have arm or hand problems, you may find it easier to use an electric breast pump.

Electric breast pump

If you only need to pump for a few days or weeks, you may decide to rent a hospital-grade electric breast pump. Hospital-grade electric breast pumps are also recommended if you are pumping for a baby with special needs such as a premature infant or a baby who is unable to breastfeed.

You will need a kit to use with the hospital-grade electric breast pump. Most facilities that rent or loan hospital-grade electric breast pumps have kits available to use with the pump. Hospital-grade electric breast pumps allow you to pump one breast or both breasts at a time. Pumping both breasts at once saves time and can also help you obtain more milk. This is sometimes called double pumping.

Purchased electric breast pumps are not the same as hospital-grade electric breast pumps. Purchasing an electric breast pump may be a good choice if you have a plentiful milk supply and have had lots of milk for several days or weeks. Store bought breast pumps, including electric breast pumps, are intended to be used by one person. It can be unsafe for you and your baby to



“ *It took me 6 weeks to get my baby to breastfeed. I had to pump and feed breast milk while we both learned to breastfeed. It was nice to have the support. Something so natural, it's not always easy, but you can learn, if you have the right resources, support and lots of patience.* **”**

pump and feed milk from a store bought pump that has been used by another person.

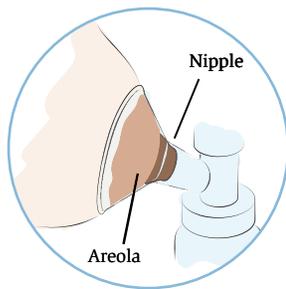
If you are wanting to pump milk when you return to work, you might find that double pumping will save time. You can do this by using 2 manual (hand) pumps or a double electric breast pump.

When you are using a pump, make sure your whole nipple area is centered inside the flange. Some breast pumps have flanges available in various sizes so that you can use the size best suited for you. When you are using the proper flange size, you will be able to see space around your nipple as you pump. Adjust the pump to its lowest setting, and increase the pressure as your milk starts to flow. Use as much pressure as is needed to keep your milk flowing. If you feel any pain of the breast or nipple, reduce the pressure. If the pain continues, contact your health care provider or someone skilled with helping to resolve problems with pumping.

It is often best to pump both breasts at the same time. Double pumping is faster than pumping one breast at a time. You can pump each breast for 10-15 minutes. It is helpful to combine pumping with hand expression to increase your milk supply.

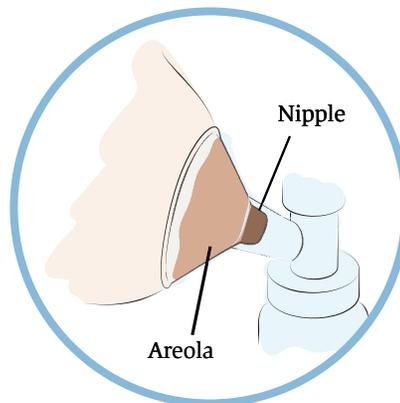


Proper fitting



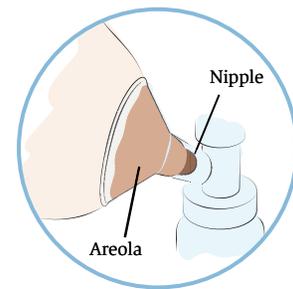
Too small

The nipple rubs along the side of the tunnel.
Try a larger size. Sometimes a different size is needed for each breast.



Correct fit

The nipple is centred and moves freely.



Too big

The nipple and excessive areola are pulled into the tunnel.
Try a smaller size. Sometimes a different size is needed for each breast.

Signs that you need a larger or smaller flange size

A larger flange size may be needed if:

- Nipple rubs along the tunnel of the flange, despite efforts to centre it.
- Nipple blanches or turns white.
- Nipple does not move freely in the tunnel of the flange.
- Discomfort around the nipple and areola, even on low suction settings

A smaller flange size may be needed if:

- Areola is going into the flange and getting hurt, pinched, or bruised.
- Nipple bounces in and out of the nipple tunnel of the flange.
- Air seal is difficult to maintain.

Adapted from: Mohrbacher, N. (2010). *Breastfeeding Answers Made Simple*. Texas: Hale Publishing.

Expressing Milk When Your Baby Is Not Able to Breastfeed

Begin with early and frequent hand expression and pumping. Try to start in the first hour after birth. You should express your milk at least 8 or more times in 24 hours (day and night), until your baby is breastfeeding effectively from your breasts.

To ensure that you have a steady supply of milk, express regularly during the day and at least once during the night. Your milk production is greatest during the night. Expressing during the night helps you to make more milk.

If your baby is sick or born prematurely, it may not be possible to breastfeed right away.

For a preterm baby refer to *Breastfeeding Your Early Preterm Baby* or *Breastfeeding Your Late Preterm Baby* at http://en.beststart.org/for_parents/do-you-have-baby-0-12-months.



Expressing Milk When Your Breasts Are Too Full

Hand expression is an important skill for parents to learn. Sometimes, when your breasts are too full, babies find it difficult to latch. If your areola is so firm that your baby cannot latch, express enough to soften the area around your nipple. Breast fullness is common and may last a few days to two weeks after giving birth. After this stage passes your breasts will feel softer and less full. It does not mean you are losing your milk supply. If your breasts are uncomfortable, express enough to make them comfortable. As your baby learns to latch and breastfeed, you will notice that your breasts become softer as baby drinks your milk.

Reverse Pressure Softening

This is a really effective and easy way to soften your areola. Once it is softened, your baby can more easily latch.



1. Place your fingers on each side of your nipple.
2. Push towards your ribs. Hold for about a minute.
3. Rotate your fingers around the nipple and repeat.
4. If part of your areola is still firm, repeat on that area.
5. Reverse pressure softening may be a bit uncomfortable but should not hurt.
6. Remember that you are pushing fluid away from the areola.

If breast fullness or engorgement continue to be a problem, be sure to talk to your health care provider.

Expressing Milk If Your Baby Needs Extra Breast Milk

Sometimes there is a reason your baby needs extra breast milk. They may be having trouble latching, tire easily during feeds, or not be gaining enough weight due to being born early or other health issues. You can offer your baby expressed breast milk after they have breastfed. Expressing milk after each feed will also increase your supply.

Expressing Milk When You Have To Be Away From Your Baby

While you are away from your baby, be sure to express milk each time your baby would have fed. Expressing regularly will make you feel comfortable, keep up your milk supply, and prevent problems such as blocked ducts or mastitis. For more information on mastitis and blocked ducts see the fact sheets *Block Ducts and Breast Infection (Mastitis)* and the *Breastfeeding Matters* booklet at http://en.beststart.org/for_parents/do-you-have-baby-0-12-months.

Some parents like to store some breast milk as a backup supply. If you want to store some extra breast milk, it may be easiest to express milk when your breasts are fullest, usually in the morning. Your milk supply will adjust and produce the extra milk for you to store.

If you have trouble getting your milk to flow, try pumping one breast while your baby breastfeeds from the other. Massaging the breast and combining hand expression with pumping can also be helpful. You may find that the amount you get depends on the time of day and whether you are tired or stressed. If you want to express more milk, think of ways to help you relax, take a break, and try again.

How To Feed Expressed Breast Milk To Your Baby

First, try to offer your baby your own fresh breast milk, or if not possible, your own breast milk that has been frozen and thawed. It is important to think about how you will feed the expressed breast milk to your baby. Here are some methods used by parents:

- Open cup or spoon.
- Lactation aid using a small tube at the breast.
- Finger feeder with a small tube attached to your clean finger.
- Bottle.

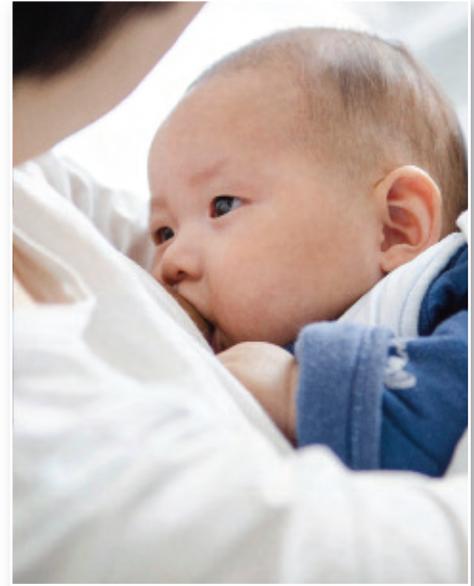
Storing Breast Milk

Fresh breast milk is better for your baby than frozen breast milk that has been thawed. Previously frozen breast milk that has been thawed is much better for your baby than infant formula. Use infant formula only if there is no breast milk available for your baby.

How long you can safely store breast milk depends on where you store it, and whether your baby is healthy or sick.

Here are helpful tips for storing your breast milk:

- After your baby is finished feeding, discard the remaining milk within 1–2 hours.
- Store breast milk in small amounts so that you can more easily feed the amount that your baby wants and not waste much milk.
- Cool down newly expressed milk before adding it to stored milk.



Breast Milk Storage Guidelines for Healthy Full-Term Babies at Home Academy of Breastfeeding Medicine (2017)

Human Milk	Room Temp. (20°C)	Room Temp. (4°C)	Freezer (separate door freezer of refrigerator) (-18°C)	Deep Freezer (-20°C)
Freshly expressed	≤6 hours	≤5 days	≤6 months	≤12 months
Thawed in refrigerator, but not warmed	≤4 hours	≤24 hours	Do not refreeze	
Thawed and brought to room temperature or warmed	≤1 hour (then discard)	≤4 hours	Do not refreeze	
Freshly expressed milk that infant has started feeding	For completion of feed, then discard	Discard	Do not refreeze	
Thawed, previously frozen, pasteurized donor human milk	≤4 hours	≤24 hours	Do not refreeze	
Frozen, pasteurized donor human milk	Not applicable	Not applicable	No recommendation provided	9-12 months from pumping date

- Use clean glass containers or sturdy bags made for freezing breast milk that seal well. Avoid using baby bottle liners because they often break and may not seal tightly.
- Use plastic containers that are BPA-free.
- Use a new clean container each time you express milk.
- Label containers for storage with the date of milk expression.
- Store breast milk near the back of the refrigerator where it is the coldest. Don't store it in the fridge door where it is not as cold.

Throw out any breast milk that is older than recommended storage times!



If you plan to freeze your breast milk, remember to:

- Leave a 1.5 cm ($\frac{1}{2}$ inch) space at the top of the container. This will help prevent the bag from breaking as breast milk will expand when it freezes.
- Always cool your freshly expressed breast milk before adding it to milk that is stored.
- Place your milk on a shelf at the back of the freezer and away from the walls of self-defrosting freezers. You want expressed breast milk to stay frozen and not begin to thaw when your freezer defrosts.

Breast Milk Storage When Your Baby Is In Hospital

- Use single-use, sterile containers recommended by the hospital.
- Clearly label your breast milk containers according to hospital instructions. Be sure to include your baby's name, date and time you expressed.
- Fresh breast milk is best for your baby. Refrigerate breast milk right after pumping. Freeze breast milk that will not be used within 24-48 hours.
- Pour your freshly expressed breast milk into a new storage container each time you pump. Do not mix breast milk from different pumping sessions.
- Storage times may vary based on your baby's special needs, so ask about your hospital's guidelines.
- Transport any breast milk that was expressed at home to the hospital according to instructions provided by the hospital.

Sick or premature babies in hospital especially need to be protected from harmful germs. Be careful to follow the instructions of the hospital or your baby's health care provider when expressing, storing and transporting breast milk. Refer to *Breastfeeding Your Early Preterm Baby* or *Breastfeeding Your Late Preterm Baby* at http://en.beststart.org/for_parents/do-you-have-baby-0-12-months to find more information about expressing and storing of breast milk.

Thawed Breast Milk (Previously Frozen)

You can thaw frozen breast milk by:

- Placing the container in the refrigerator overnight.
- Holding the container under running warm water.
- Setting the container in a pan or bowl of warm water.
- Using a waterless warmer.

Thawed breast milk may taste or smell different than fresh breast milk. It can also look slightly blue, yellow or brown, depending on what the person who produced the milk ate.

Here are other helpful tips to prepare thawed milk for feeding and to avoid wasting any breast milk:

- Slowly thaw milk in the refrigerator. This method causes less fat loss than thawing in warm water.
- Warm thawed milk to body temperature over a period of 20 minutes in lukewarm water (at most 40°C).
- Breast milk that has been thawed and brought to room temperature or warmed can be put back in the refrigerator for 4 hours as long as your baby has not touched the breast milk being returned to the refrigerator.
- When milk is thawed, swirl it to mix in the fat.
- Throw away any milk which has been thawed longer than 24 hours.
- Throw away milk within 1–2 hours after the baby is finished feeding.

Cleaning

For your baby's safety, your breast pump, milk storage containers and feeding equipment used to feed your baby should be cleaned with warm soapy water. If you cannot clean an item with soap, then place the item in boiling water for 2 minutes before using it whenever possible. Clean breast pumps parts as per the pump manufacturer's instructions.

Health and Support

- The *Bilingual Online Ontario Breastfeeding Services* directory at www.ontariobreastfeeds.ca can help you connect and get support from professionals, peers and other people experienced with helping with breastfeeding.
- *Telehealth Ontario 24/7 Breastfeeding Supports* – free access to a registered nurse (24 hours a day) or registered dietitian, call 1-866-797-0000
www.health.gov.on.ca/en/public/programs/healthykids/breastfeeding.aspx.