



Breastfeeding Your Baby

How to express and store your milk

Kaiser Permanente recommends the American Academy of Pediatrics' guidelines to exclusively breastfeed your baby for the first 6 months of life and, if possible, the first year of life. Breastfeeding is the natural way to provide all the nutrition your baby needs. Expressing (pumping) your breast milk is a great way to be sure that your baby receives the full benefit of your milk, even if you need to be away due to work or other commitments. You can begin expressing milk around 2 weeks before your return to work to give yourself plenty of time to learn what works best for you and your baby. Lactation consultants are available to assist you if you have any concerns.

How can I express (pump) my breastmilk?

There are 4 ways to express breast milk. (See the methods outlined below.) The reason for pumping will determine the type of pump that best suits your needs.

No matter which method you use, always wash your hands and any pumping equipment before you begin to express your milk. Make sure to follow the manufacturer's directions that come with the pump.

Methods of expressing (pumping) breastmilk:

- *Hand or manual expression.* Expressing milk from your breasts with your hands doesn't require any batteries or electricity, and there is no equipment to buy. All it requires is bottles to store the milk. It may take some time to learn how to do this efficiently. However, help is available. If you will miss more than 1 or 2 feedings a day, manual expression may not help you keep up your milk supply as well as a pump would. Have a clean container ready to collect the milk.
- *Hand-operated breast pumps.* These pumps may be helpful for mothers with an established milk supply who don't need to pump very often. They are more time-consuming than mechanical pumps because they express one breast at a time. Also, if you need to pump during your lunch break, they may not be very practical because it's difficult to eat and use your hands to pump at the same time.
- *Hand-held battery-operated pumps.* These pumps also express one breast at a time, but they cost more than the hand-operated pumps. Their advantage is that they give you a free hand. If you have a private space at work, you can also eat your lunch, answer your phone, or work on a computer. However, pumping and working at the same time is not the ideal way to maintain a milk supply. It is beneficial if you can use a break time to relax and pump. The batteries in these pumps need to be changed after every 2 to 4 hours of use. Both manual and hand-held battery-operated pumps are usually lightweight and can easily be taken with you wherever you go. Some women find these methods don't provide enough stimulation to keep up their milk supply. If this is the case for you, consider an electric pump.
- *Electric double pumps.* These are more expensive pumps and express milk from both breasts at the same time. They're efficient and help ensure a good milk supply. They are slightly larger than the battery operated models and come in either large shoulder bag or backpack styles that also store the pumped milk. Some women decide to buy one if they plan on having more children and breastfeeding in the future. Double pumps can also be rented.

Many Kaiser Permanente facilities rent and/or sell breast pumps. For more information, call your local Health Education Center.

How do I store my breast milk once I have pumped?

Once it has been expressed, breast milk can be stored in containers for future use. Always use containers that have been washed in hot, soapy water and have been rinsed well.

You may store your expressed milk in the following ways:

- Use glass or hard plastic bottles with tight-fitting lids, or plastic milk storage bags made specifically for freezing and storing breast milk. Disposable bottle liners are not a good way to store breast milk.
- Store milk in small amounts (2 to 4 ounces) to limit waste.
- First, cool each batch of milk in the fridge, and then freeze right away.
- Do not add fresh milk to already frozen milk.
- Label the container with the date when the milk was pumped. When using your stored milk, use the oldest milk first. This ensures that you are giving your baby fresh milk, not milk that has already expired.

How long can I store my breastmilk?

This depends on where you store the breast milk. Breast milk may be stored in the following ways for healthy (non-hospitalized) babies:

- At room temperature (66-72°F) for 6-8 hours. In warm rooms (79°F) for 3-4 hours.
- In a refrigerator (32-39°F) for up to 7 days.
- In the freezer compartment inside a refrigerator up to 2 weeks.
- In a freezer compartment with a separate door for 3-4 months.
- In a separate deep freeze or chest freezer for 6 months or more.

How do I prepare the frozen milk to feed my baby?

To defrost frozen milk for feeding, hold the container under warm running water or place it in a bowl of warm tap water. Slowly add more warm tap water around the container until the milk reaches room temperature. (You may need to test it on the inside of your wrist.) You can store thawed milk in a refrigerator for 24 hours, or leave it out at room temperature for 1 hour. **Do not refreeze thawed breast milk.**

If your baby drinks from a bottle but doesn't finish all of the milk, throw the remaining milk away. To minimize waste, put only the amount of milk that your baby is most likely to drink in the bottle. Do not use the same bottle again without washing the bottle first with hot, soapy water. Even small amounts of milk can cause bacteria to grow in the bottle over time.

Never microwave breast milk! This can cause overheating which destroys nutrients. Microwaves don't heat evenly; therefore milk warmed in a microwave can produce "hot spots" in the milk that can burn your baby's mouth.

Pumping takes practice

Learning to express your breast milk can take some practice and patience! Many mothers find that they need some time and support to learn the ‘art’ of expressing their milk. When you start, take a deep breath, look at a picture of your baby, hold or smell your baby’s blanket, and pump in a quiet, relaxed setting to help you with good milk expression.

If you have any questions or concerns, contact your lactation consultant who will be glad to support you in all aspects of breastfeeding.

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Additional resources:

- Visit the La Leche League Foundation web site at **lalecheleague.org** or call the 24-hour Breastfeeding Helpline: 877-4-LALECHE
- Connect to our Web site at **kp.org** to access health and drug encyclopedias, interactive programs, health classes, and much more.
- Websites for breastfeeding legislation for the workplace:
 - **aap.org** Search: ‘breastfeeding legislation’
 - **illi.org/Law/LawUS.html**
- Check your *Kaiser Permanente Healthwise Handbook*.
- Contact your Kaiser Permanente Health Education Center or Department for health information, programs, and other resources.

This information is not intended to diagnose health problems or to take the place of medical advice or care you receive from your physician or other health care professional. If you have persistent health problems, or if you have additional questions, please consult with your doctor.