



STRONGER WITH BREASTMILK ONLY

No water until 6 months for a healthier baby



Fact sheet

Breastmilk Expression, Storage and Feeding

This fact sheet answers the following questions:

- > **When should a mother express breastmilk?**
- > **What are the benefits of expressing breastmilk?**
- > **How is breastmilk expressed?**
- > **How is expressed breastmilk stored?**
- > **How is a baby fed expressed milk?**

Breastfeeding is one of the most effective interventions for child survival, growth and overall healthy development. Extensive research and documentation of good practices have generated evidence that breastfeeding saves lives, benefitting both children's and mother's health and development, and reduces health care costs.

Yet, although breastfeeding is common in West and Central Africa, just three out of 10 babies aged six months or younger are exclusively breastfed in the region.¹ Giving babies water, other liquids and foods during these critical first six months of life can have a negative impact, exposing them to illness and malnutrition and threatening their lives. Since milk supply is dependent on how much time an infant suckles, giving water, other liquids and foods, decreases the amount of milk produced. This initiates a perilous cycle that challenges the growth, health and survival of infants.

Research shows that feeding expressed breastmilk contributes to higher exclusive breastfeeding rates.² Expressing breastmilk enables mothers of infants younger than six months to sustain exclusive breastfeeding on returning to work, school or other responsibilities, as their babies can be fed with the expressed milk in their absence by another person.

When should a mother express breastmilk?

While breastfeeding is the most efficient way of stimulating the mother's milk supply, all breastfeeding mothers should be encouraged to learn how to express breastmilk when needed. Expressing breastmilk is a practical way that mothers and their families can ensure the baby receives only breastmilk in the first six months of life.

There are situations in which expressing breastmilk can be useful; for example, when...

- > The mother is separated from her baby, due to prematurity, sickness, surgery, returning to work or school, or other responsibilities.
- > A low-birth-weight baby is unable to breastfeed.
- > A baby has difficulty breastfeeding due to inability to latch, blocked ducts, mastitis or engorged breasts.
- > A mother is taking a medication that is incompatible to feed the baby directly at breast and for which there is no safe alternative prescribed to enable the baby to suckle.

What are the benefits of expressing breastmilk?

Expressing breastmilk is useful:

For the mother because it...

- Prevents the nipple and areola from becoming dry and sore
- Prevents leaking when she is away from her baby
- Sustains breastfeeding
- Maintains or increases milk supply

For the baby because it...

- Allows baby to be fed with mother's milk
- Allows a sick baby, who cannot suckle enough, to feed
- Maintains or increases milk supply
- Allows a baby to feed while learning to suckle from an inverted nipple

How is breastmilk expressed?

The reason a mother is expressing her breastmilk will determine the method she uses, whether and how she stores the breastmilk, and whether it is long-term or occasional.

Expressing breastmilk, both by hand and mechanically, is a learned skill. It will become easier and faster as the mother gains experience. Mothers should be encouraged to persevere even if it may be challenging at first.

Nevertheless, the easiest way for a mother to express milk is by hand. It does not require an appliance; so the mother can do it anywhere and at any time. Hand expressing is readily available, convenient, and effective - plus, it costs nothing. It can also be less time-consuming than using a breast pump, as there are no parts to be put together or washed. If hand expression is difficult, then a mother can use a breast pump (manual or electric).



Health workers should help mothers understand the method of expression she chooses as most suited for her personal situation.

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Does feeding a baby expressed breastmilk deplete the mother's breastmilk supply?

The quantity of milk extracted from hand expression or pumping is not an indication of the mother's milk supply. Milk production is a demand and supply process: The removal of milk from the mother's breasts signals her body to make more milk. The more thoroughly and frequently she removes milk from her breasts, especially in the early days and weeks after birth, the more milk she will make and the greater the benefit for her long-term supply. Although a well-attached baby can feed far more effectively than any expressing breastmilk method, expressing milk by hand or with a pump helps to establish, increase and maintain breastmilk production if the mother is separated from her baby or if the baby isn't breastfeeding well.

A mother may need to stimulate the oxytocin reflex before expressing breastmilk

Before the mother expresses her milk, she should stimulate her oxytocin reflex to help the milk flow. She may do this herself by lightly massaging her breasts, or stimulating her nipples, and at the same time thinking about the baby, watching him or her if nearby, or looking at a photograph of him or her. She can also ask a helper to massage up and down her back on either side of her spine between her shoulder blades.

How to express breastmilk by hand³

The mother should:

- Have a clean, dry, wide-necked container for the expressed breastmilk
- Wash her hands thoroughly
- Sit or stand comfortably and hold the container under her nipple and areola
- Put her thumb on top of her breast and her first finger on the underside of her breast so that they are opposite each other about 4 cm from the tip of the nipple
- Compress and release her breast between her finger and thumb a few times. If milk does not appear, reposition her thumb and finger a little closer or further away from the nipple and compress and release a number of times as before. This should not hurt – if it hurts, the technique is wrong. At first no milk may come, but after compressing a few times, milk starts to drip out. It may flow in streams if the oxytocin reflex is active. Compress and release all the way around her breast, with her finger and thumb at the same distance from the nipple.



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- Express each breast until the milk drips slowly
- Repeat expressing from each breast 5 to 6 times
- Stop expressing when milk drips slowly from the start of compression and does not flow
- Avoid rubbing or

sliding her fingers along the skin

- Avoid squeezing or pinching the nipple itself.

What is the recommended time to express breastmilk?

If a baby is not able to breastfeed, the mother should begin as soon as possible after birth.

A mother who is separated from her baby (for whatever reason) should begin to express her breastmilk about two weeks before she plans to return to work, school or other responsibilities.

How should expressed breastmilk be stored?

In what types of containers can expressed breastmilk be stored?

Hard-sided containers, either glass or plastic (cup, glass, jug or jar) are best to protect expressed breastmilk. Containers should also have well-fitting lids. Before use, it is important to wash containers in hot, soapy water; rinse them well; and allow them to air-dry, away from wind, dust, insects, etc. to reduce the risk of contamination. Avoid bags that are not designed for freezing as they may burst or tear.

Mothers should date the containers and add their baby's name if she/he will receive the milk in a childcare or nursery.

How much milk should be stored in a container?

Unless the mother knows how much milk her baby takes at a feed, it is recommended to store milk in 60 to 120 ml quantities to avoid waste. Small quantities thaw quickly and can be combined if needed.

Storage conditions and hygiene

Breastmilk's antibacterial properties help it stay fresh. The live cells and antibodies that discourage the growth of bacteria in the baby's intestines also guard against bacterial growth when breastmilk is expressed and stored in a clean container.

The best time to start expressing is right before anticipated feeding times, while the baby is still sleeping. Early mornings are also usually a good time because the breasts will feel heavy with breastmilk.

What is the recommended duration and frequency of expressing breastmilk?

To express breastmilk adequately takes 20 - 30 minutes, especially in the first few days when only a little milk may be produced. It is important not to try to express in a shorter time. To maintain milk production, a mother should express as much as she can as often as her baby would feed, at least every three hours during daytime, and once at night, with a total of about 6-8 times per 24 hours.

Breastmilk may look different when expressed

It's perfectly normal for expressed milk to look thin, bluish, yellowish or even brownish in colour, and for it to separate into a milk layer and a cream layer when stored.



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Although a mother's breasts and nipples do not need to be washed or cleaned, good hygiene is important when storing her milk. To avoid contaminating her milk, it is essential to:

- Wash hands before expressing or handling milk.
- When using a breastmilk pump, keep it clean by using hot soapy water for all parts which come into contact with the milk. It can be sterilized as well.
- Keep fridge, freezer, cool bag and icepacks clean.
- Place containers of the milk in a clean bag or lidded box before storing.
- Keep the milk away from meat, eggs, etc.

At what temperature should expressed breastmilk be stored?

Breastmilk is remarkably resilient - it stores well due to its antibacterial properties. Breastmilk's antibacterial properties help it stay fresh, so it can be safely stored in a closed container or covered with a cloth or plate for some time depending on the room temperature.

If stored in a sterile container, expressed breastmilk can be kept for:

- 2 hours at 37° C in a shady place
- about 72 hours in a refrigerator (at 4–5°C)
- about four months in a freezer (at -18° to -20°C).

The mother can use an insulated bag with ice packs if the milk will not be used within 8 hours or temperatures are high and the expressed breastmilk can be kept for up to 24 hours. The fresher your milk, the better.

Should a mother store her milk in a fridge or a freezer?

Breastmilk stored in the fridge will be of higher quality than frozen milk. Some of the anti-infective properties are lost when milk is frozen—but it still helps protect babies from disease and allergies and is far superior to any formula.

Expressed breastmilk can be kept in a common fridge at home, at work or at the childcare centre and labeled clearly. If a fridge isn't available, it can be placed in an insulated container with deep frozen ice packs. With enough icepacks, expressed breastmilk can be kept for up to 24 hours. Icepacks are also useful

when carrying milk home from work or to childcare, especially on warm days. Breastmilk can be safely refrigerated or frozen after short periods of storage at higher temperatures.

Overall, it's always preferable to store breastmilk for as short a time as possible to ensure the best maintenance of its beneficial properties.

Mothers should be advised on more specific storage guidelines to ensure that their baby gets as much benefit from their milk as possible.

CAUTION:

- Frozen breast milk should never be left to thaw at room temperature, as this will increase the bacterial count in the breastmilk
- Never re-freeze thawed breast milk. Do not return it to the fridge after it has been warmed.
- Do not heat breastmilk in a microwave or in a pan on a cooker. High temperatures or even moderate temperatures over a period of time affect many of the beneficial properties of breastmilk.

How should frozen breastmilk be thawed?

When it is time to feed the baby, the frozen breastmilk should be thawed by first placing the container in the refrigerator for at least four hours. Thawed breastmilk should be used immediately or stored in the refrigerator for no longer than 24 hours. Breastmilk that has been frozen and thawed will separate into layers, with the fat rising to the top. The breastmilk should be gently shaken or mixed before it is fed to the baby. Thawed breastmilk may have a different smell and taste than freshly expressed breast milk. It is still safe for use if the date of the thawed breast milk has not expired, with respect to storage times mentioned above. Thawed or refrigerated breastmilk should be warmed by placing it in a bowl of warm water. The warmed breastmilk should be used within an hour.

How to feed a baby expressed milk?

Feeding a baby from a bottle with an artificial teat may make it more difficult for the baby to learn to attach at the breast and more difficult to establish breastfeeding satisfactorily. If an infant cannot feed from the breast, then the safest alternative is to feed from a cup. Even low birthweight and premature babies can cup feed.

The reasons to feed breastmilk with a cup include:

- Cups are easier to clean, and can be cleaned with soap and water, if boiling is not possible.

- Cups are less likely than bottles to be carried around for a long time, giving bacteria time to breed.
- Cup-feeding is associated with less risk of diarrhoea, ear infections and tooth decay.
- Feeding from a cup does not interfere with the baby learning to suckle at the breast.
- A cup cannot be left for the baby to feed him- or herself. Someone has to hold the baby and give him some of the contact that he needs.
- Cup feeding is generally easier and better than spoon feeding: spoon feeding takes longer and requires an extra hand, and sometimes a baby does not get enough milk by spoon.

Mothers should be encouraged to learn how to express and store breastmilk, but feeding a baby directly at breast is far more effective than expressing breastmilk. Breastfeeding helps build a strong immune system, has no cost, and no storage concerns.

The Stronger With Breastmilk Only initiative calls for support at all levels from government leaders and policy makers, programme managers, businesses, health workers, communities and families to support breastfeeding – one of the smartest investments a country can make.



How to feed a baby by cup

- > Wash your hands.
- > Hold the baby sitting upright or semi-upright on your lap.
- > Place the estimated amount of milk for one feed into the cup.
- > Hold the small cup of milk to the baby's lips. Tip the cup so that the milk just reaches the baby's lips. The cup rests lightly on the baby's lower lip, and the edges of the cup touch the outer part of the baby's upper lip.
 - > The baby becomes alert and opens his mouth and eyes. A low-birthweight (LBW) baby starts to take the milk into his mouth with his tongue. A full term or older baby sucks the milk, spilling some of it.
- > DO NOT POUR the milk into the baby's mouth. Just hold the cup to his lips and let him take it himself.
- > When the baby has had enough, he closes his mouth and will not take any more. If he has not taken the calculated amount, he may take more next time, or you may need to feed him more often.
 - > Measure his intake over 24 hours - not just at each feed.

Useful resources

> How to express your first milk:

<https://globalhealthmedia.org/portfolio-items/how-to-express-your-first-milk/?portfolioCats=191%2C94%2C13%2C23%2C65>

> Breastfeeding When You Go Back to Work - Nutrition Series:

<https://globalhealthmedia.org/portfolio-items/breastfeeding-when-you-go-back-to-work/?portfolioCats=191%2C94%2C13%2C23%2C65>

> Breastfeeding for working mothers:

<https://globalhealthmedia.org/portfolio-items/breastfeeding-for-working-mothers/?portfolioCats=191%2C94%2C13%2C23%2C65>

> How to express breastmilk:

<https://globalhealthmedia.org/portfolio-items/how-to-express-breastmilk/?portfolioCats=191%2C94%2C13%2C23%2C65>

> Making enough milk:

<https://globalhealthmedia.org/portfolio-items/not-enough-milk/?portfolioCats=191%2C94%2C13%2C23%2C65>

> Providing the right volume of milk:

<https://globalhealthmedia.org/portfolio-items/is-your-baby-getting-enough-milk/?portfolioCats=191%2C94%2C13%2C23%2C65>

> Storing breastmilk safely:

<https://globalhealthmedia.org/portfolio-items/storing-breastmilk-safely/?portfolioCats=191%2C94%2C13%2C23%2C65>

> Expressing and storing breastmilk:

<https://globalhealthmedia.org/portfolio-items/expressing-and-storing-breastmilk/?portfolioCats=191%2C94%2C13%2C23%2C65>

> Increasing your milk supply:

<https://globalhealthmedia.org/portfolio-items/increasing-your-milk-supply/?portfolioCats=191%2C94%2C13%2C23%2C65>

This document is adapted from La Leche League GB:
<https://www.laleche.org.uk/category/breastfeeding-information/>

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Endnotes

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STRONGER WITH BREASTMILK ONLY

**No water until 6 months
for a healthier baby**

**Protecting, promoting and supporting giving babies breastmilk only,
no water for the first six months of life in West And Central Africa.**

Consult the *Stronger With Breastmilk Only*
Reference List for more information

www.breastmilkonly.com
www.globalbreastfeedingcollective.org

