

Expressed Breast Milk Diary

Neonatal Unit
Cork University Maternity Hospital

This diary / booklet should be used in conjunction with the HSE Booklet, Breastfeeding and Expressing for your Premature or Sick Baby.



Introduction

Congratulations on the birth of your baby/babies. Staff in the Neonatal Unit really value your breast milk as the best feed for your baby. It is easily digested, contains high concentrations of antibodies which helps your baby fight infections, and will help them to continue to grow and develop.

When your baby is born prematurely your milk has even greater potential to prevent infection. This is very significant as pre-term infants are more vulnerable to infection.

Remember

Your milk is an important part of your baby's treatment plan, providing life saving benefits

Using this diary will help you to monitor the volume of milk you are producing. Sharing this information with the staff will help us to assist you in modifying your pumping schedule, according to the amount of milk you are producing.



Expressing your Breast Milk

The first 48 hours

The first milk you produce is called colostrum and it is yellow instead of white. Every drop of colostrum is precious and makes a difference to your baby.

It is recommended to commence massage and hand expressing within the first hour of life. The midwife will teach you about hand expressing and also check out

HSE Breastfeeding Videos

<http://www.breastfeeding.ie/Getting-Started/expressing>

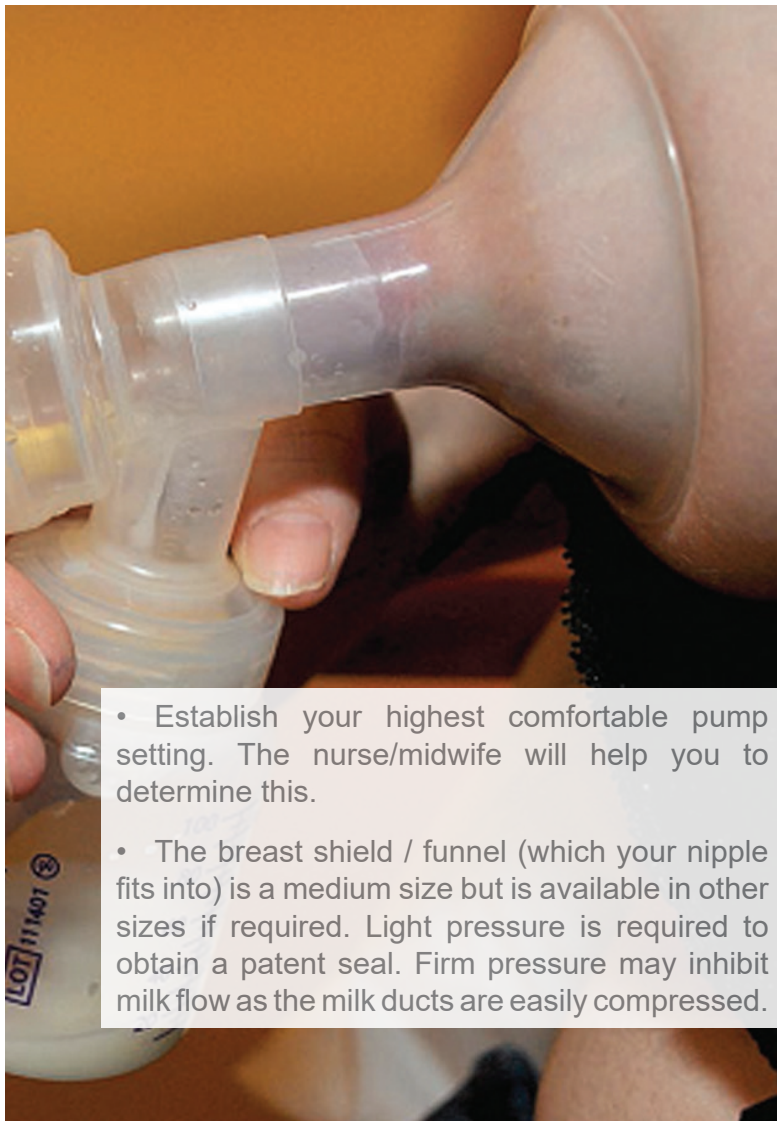


The midwife will provide you with sterile syringes and containers to collect and store your colostrum. Aim to hand express 8 times in the first 24 hours, once during the night when the hormones that influence milk production are high. You may only get a few drops initially, but this early milk is rich in nutrients for your baby. Please refer to the following link on MyChild.ie <https://www2.hse.ie/wellbeing/child-health/expressing-breast-milk-for-premature-or-ill-babies.html>

After 48 hours

- Commence pumping with a hospital grade double electric pump.
- Express 8-10 times in 24 hours (every 2 hours), including once during the night. Avoid a gap of more than 5 to 6 hours overnight. Pump for 15-20 minutes.





- Establish your highest comfortable pump setting. The nurse/midwife will help you to determine this.
- The breast shield / funnel (which your nipple fits into) is a medium size but is available in other sizes if required. Light pressure is required to obtain a patent seal. Firm pressure may inhibit milk flow as the milk ducts are easily compressed.

- Continue to pump 8-10 times in 24 hours for 10-14 days. Your pumping schedule will then be reassessed, depending on the milk volume you are producing. After the initial few weeks, when milk supply is established, many mothers find that they can reduce the frequency of expressing and still maintain a full milk supply.

- Aim for a supply of 750mls per day by the time baby is 10-14 days old. Some mothers may not reach this amount but continue to pump as often as you can, as every drop helps your baby.

- Watch the Stanford Medical 'How to use your hands while you pump' video.

<https://med.stanford.edu/newborns/professional-education/breastfeeding/maximizing-milk-production.html>

- Use the breast milk diary to keep a record of your milk supply. Take it with you every time you visit your baby. If necessary, nursing/midwifery staff will be happy to provide support/advice regarding boosting your supply.

- Pumping at the cotside can also help increase supply. You can also use the Expressing Room in the Neonatal Unit (NNU). Only mums are allowed in the Expressing Room.

Tips for Increasing/ maintaining your milk supply

- **Express minimum 8 times in 24 hours** for 15-20 minutes.
- **Hold baby skin-to-skin** as frequently as possible, depending on how well your baby is.
- **Suckling at the breast.** Although your baby may not be ready to breastfeed, it may be possible to allow your baby to suckle at your breast. This suckling action stimulates milk production.
- **Focus on baby.** Think of your baby while expressing milk. Have a photograph of your baby in front of you as you express.
- **Use relaxation techniques** such as listening to music and slow deep breathing. Sit comfortably with your back straight and well supported.
- **Apply warmth to the breast** (i.e. warm flannels) or take a warm bath/shower prior to expressing. This can help your milk to flow.



• **Massage.** Gently massage your breasts in order to encourage your milk to flow. This can be done with your fingertips or by rolling your closed fist over your breast towards your nipple. Do not slide your fingers along your breast as this can cause skin damage. Work around the whole breast. After massaging your breasts, gently roll your nipple between your thumb and first finger. This encourages the release of hormones, that stimulate your breasts to produce and release the milk.

Once your milk volume increases, a combination of pump suction, breast compression, massage and hand expression, collectively referred to as 'hands-on pumping' may remove a greater amount of milk. If the flow of milk reduces while you are expressing, it may be helpful to pause expressing to massage your breasts again.

Breast massage in conjunction with double expressing has been shown to increase milk supply and fat content.

• **Shield size.** Ensure correct breastshield / funnel size.

• **Pump.** If you need to express frequently or long term (for a premature or ill baby) you will need to use a hospital-grade double electric pump. These pumps are available for your use in the NNU. When you are discharged, a pump will be loaned to you for the duration of your baby's stay in the NNU, if available. Pumps can be rented out locally or may be available from premature baby charities.



Wear a bra that allows you to hold the breast shield / funnel in place to allow you to be hand free.

Staff on the unit will give you this information. The NNU will also supply you with sterile breastshields/funnels, and sterile containers. You will also be given two caps and tubing that you place inside the pump each time you use it and these are single person use only. While pumping in the hospital, please use a fresh sterile breastshield/funnel for each pumping session. After use, wash and dry it and place in the grey box or collection bag.

At home after use, wash the breastshield/funnel, valve and membrane with washing-up liquid and water rinse and sterilise for next use. Follow the manufacturer's instructions for your steriliser. The caps and tubing are not sterilised; just wiped clean with an alcohol wipe.

Power pumping (not recommended in the first week). If you need to boost your supply, increase the frequency of expressing and include "power pumping". A power pumping session consists of: Pumping for 10 minutes/resting for 10 minutes. Repeat over one hour. Only one regular session per day should be replaced with a power pumping session for 3-7 days.

• **Take breaks.** It may be beneficial to take one minute breaks during an expressing session, and to massage both breasts during these breaks.

• **Rest/Diet.** Rest and sleep whenever you can. Try to eat a balanced diet.

• **Empty breasts.** Breast emptying time varies. After each expressing session, breasts should feel soft and well drained. Continue to express for approx 2 minutes after the milk has ceased to flow. Emptying your breasts helps to encourage milk production for the next expressing session. The last few drops of milk at the end of an expressing session are high in fat and calories which are important for your baby's growth.

Expressing breast milk requires commitment. However, the effort you put into the first 10-14 days after your baby's birth will be rewarded. The more breast milk you express in the first two weeks, the more breast milk you will make later.

See example on the following page of how to use the diary.

SAMPLE PAGE DAY 1

Today's Date: _____

Time of Day	Circle Method of Expressing	Duration	Volume from Left Breast	Volume from Right Breast	Circle where you expressed
1. Day 1	Hand/Pump	15mins	1mls	1mls	Hospital/Home/Other
2.	Hand/Pump	17mins	1.5mls	1.5mls	Hospital/Home/Other
3.	Hand/Pump	16mins	2mls	2mls	Hospital/Home/Other
4.	Hand/Pump	15mins	2.5mls	2.5mls	Hospital/Home/Other
5.	Hand/Pump	16mins	2.5mls	2.5mls	Hospital/Home/Other
6.	Hand/Pump	15mins	2mls	2mls	Hospital/Home/Other
7.	Hand/Pump	17mins	3.5mls	3.5mls	Hospital/Home/Other
8.	Hand/Pump	17mins	5mls	5mls	Hospital/Home/Other
9. Day 2	Hand/Pump	15mins	5mls	5mls	Hospital/Home/Other
10.	Hand/Pump	15mins	7mls	7mls	Hospital/Home/Other
Total Volume					

Today's Date: _____

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1.	Hand/ Pump				Hospital/ Home/ Other
2.	Hand/ Pump				Hospital/ Home/ Other
3.	Hand/ Pump				Hospital/ Home/ Other
4.	Hand/ Pump				Hospital/ Home/ Other
5.	Hand/ Pump				Hospital/ Home/ Other
6.	Hand/ Pump				Hospital/ Home/ Other
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Storing Breast Milk

- Store breast milk in the fridge / freezer as per the current hospital guidelines.

48 hours fresh in fridge.

24 hours in fridge from time of removal from freezer.

3-6 months in a deep freezer.

Once milk reaches room temperature it should be used within 4 hours.

- Please ensure your hands are clean when you handle your breastmilk.
- During the first few days after giving birth, mothers produce small amounts of colostrum.
- This can be stored in the sterile syringe in which it was collected or in the sterile disposable bottles which are provided.
- Containers should be labelled with the baby's hospital identification labels.

- The date and time you expressed your milk should be recorded on the label.

- For the first few days, as your baby will only be given small amounts of milk, store the milk in small volumes.



- When your milk becomes more plentiful and you fill a bottle, leave at least 1 - 2cm of space at the top of the container. This space allows for the milk to expand if it is frozen.

- Secure lids of bottles tightly.

- Use breast milk stored in the fridge / freezer in rotation - use the oldest stored milk first.



Transporting Breast Milk to Hospital

- When you are discharged from hospital, the nurse in the Neonatal Unit will provide you with sterile disposable bottles and your baby's identification labels. Continue to record the date and time of milk collection on the labels.
- Refrigerate milk at home after pumping. Freeze milk that will not be used within 48 hours.
- Bring freshly pumped milk to the hospital each day in an insulated cooler bag. Ice packs should be used to keep the milk cool in the bag.
- If you freeze your milk at home, make sure that it does not thaw on the way to the hospital.
- Breast milk should never be refrozen.
- Never heat breast milk in a microwave. This can destroy the nutrients and can cause hot spots which can burn your baby's mouth.
- Breast milk is kept in room air for a maximum of four hours and if thawed in a fridge it is used in 24 hours.



*Thank you to NICU Galway
for sharing their version of the diary with us*



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