



Townsville
Hospital
and Health
Service

Expressing your breast milk

For mothers of the Neonatal Unit

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Expressing breast milk for your baby



Healthy full-term babies usually begin feeding from the breast shortly after birth. However, unwell or pre-term babies admitted to the neonatal unit may sometimes have their feeds delayed. If your baby is unable to breastfeed initially, you still have the option of providing breast milk. This is done by expressing your breasts soon after delivery. Ideally, you need to start and express as soon as possible after the birth of your baby, and preferably within six hours after birth. The aim is to establish and maintain a full expressed breast milk supply and ultimately breastfeed your baby. Nursing/Midwifery staff can assist you with expressing.

Benefits of breast milk

- Breast milk provides all the nutrients a baby needs in exactly the right proportions, whether for a full-term or a pre-term baby.
- Breast milk is easily digested.
- Breast milk has infection-fighting properties.
- Babies who are breastfed have a decreased incidence of some childhood diseases.
- Babies who are breastfed have a decreased incidence of food and other allergies.
- Breast milk helps in baby's brain development and is the mother's unique contribution to her baby's wellbeing.

How the breast works

Breast milk production is stimulated shortly after birth in response to baby sucking, or stimulating the nipple and breast when expressing. Your breast milk supply is maintained by the regular removal of milk from the breast. The more often you feed or express, the greater your breast milk supply.

When your baby sucks at the breast or you express, hormones are released. These hormones make milk and cause the milk to 'let down' or flow.

There are many ways to help the milk 'let down' or milk to flow;

- visiting baby
- expressing sitting next to your baby's cot/incubator
- looking at a photo/video of your baby
- kangaroo cuddles/skin to skin (baby dressed in a nappy only and being held skin to skin on your chest)
- relaxation
- gentle massage of the breast
- apply a warm pack to your breast or have a warm shower prior to expressing
- eating or drinking while expressing.

You will learn from experience when your let-down reflex is working well and when it is not. If you are tense or stressed, the let-down reflex can be hindered or delayed. This let-down reflex together with regular and frequent emptying of the breast, while relaxing, will establish and maintain your milk supply.

Methods of expressing

There are many ways to express breast milk including hand expression, and using manual, battery or electric pumps. Hand expression is the most economical means of expressing, and most closely mimics the baby's suckling action. This method is also helpful in learning how your breasts feel while you are lactating. Combining hand expressing with hand/electric pump expressing gives the best results for on-going expressing but it is up to you to decide which method you prefer and find easiest. If you prefer to use a breast pump, it is a good idea to always finish the expressions by hand. This will ensure that the last drops are expressed. The milk that comes at the end of the expression has a higher fat content than the milk at the start and this provides extra calories for your baby.

How to express by hand

Hand expressing takes a little while to learn, however it requires no equipment and some women find it the easiest method.

- Wash your hands with soap and water then dry thoroughly
- Have some sterile containers or syringes ready to use
- Gently massage your breast, starting from the top, stroking towards your nipple (keep fingernails short and smooth)
- Hold breast between thumb and forefinger, approximately 2-3 cm away from the nipple and keep the thumb in line with the forefinger, as if an imaginary line is running through them (see diagram 1).
- Gently press your thumb and forefinger into the breast tissue, towards your chest (see diagram 2)
- Then, gently squeeze your thumb and forefinger together (see diagram 2). This compresses the milk ducts behind the nipple area.

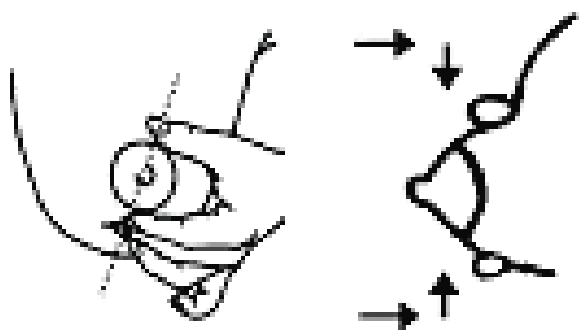


Diagram 1

Diagram 2

- Repeat squeezing rhythmically and gently – **your fingers should not slide on your skin.**
- At first you may only express a few drops of milk. Gradually the flow of milk increases as your milk supply increases. Collect the milk in a sterile container or syringe.
- When the flow eases off, alter the position

of your fingers around the breast to empty other milk ducts.

- Repeat the above steps with the other breast. It is helpful to change hands and breasts frequently during an expression period, (every 3 to 5 minutes or when your milk flow slows).

REMEMBER: Hand expressing is a very useful learned skill, and it gets easier with constant practice.

Manual/electric breast pumps

There are several different pump types available for hire or purchase. You can hire from the many local pharmacies or the Australian Breastfeeding Association. Recommending one specific electric pump over another is difficult, as they each have their own advantages and disadvantages. An important feature is adjustable suction pressure - it should be cyclical (i.e. mimic the sucking action of a baby) and not constant.

Some mothers find electric breast pumps very easy and efficient. If you need to do a lot of expressing then a pump with dual cups (expressing both breasts at the same time) can halve the time involved.





Using a breast pump

- When using a pump for the first time, seek assistance from your midwife/registered nurse, to ensure correct usage
- Hand expressing should be used both before and after using the pump. This helps with the milk 'let-down'
- To prevent damage to the nipple, ensure that the pump's breast cup is the correct size¹ and is placed centrally over the nipple before using the pump
- If you have sore or damaged nipples it is best to hand express as pumping can damage them further. If pain continues contact your lactation consultant
- Ensure the suction pressure is comfortable
- 'Switch pumping' and 'double pumping' can further establish your milk supply.

'Switch pumping' is when you use a single kit to express one breast until the flow slows, then switch to the other breast for a similar length of time, then repeat these steps for a short period.

For example, express the left breast for 10 minutes then right breast for 10 minutes; switch back to express the left breast again for five minutes and then the right breast for five minutes.

'Double pumping' is when you express both breasts at the same time using dual cups (e.g. pumping both breasts at the same time for 20 minutes). Double pumping is beneficial because it makes expressing more manageable as it halves the time of single expressing.

How often and for how long should I express?

Full-term babies 'demand feed' an average of eight to ten times every 24 hours so you can use this as an initial guide to how frequently you should express.

- Try to express at least eight times in a 24-hour period, including once during the night. If your breasts become uncomfortable, you will need to express
- The time gap between expressing does not need to be exact. This allows you some flexibility to fit in other day-to-day activities
- Avoid long periods between expressing (no longer than five hours and only this long once per day)
- Pump/hand express for approximately 20 minutes per breast but this can vary from woman to woman once lactation is established, some women may need less time to achieve emptying.

REMEMBER: When expressing you are trying to mimic a baby's feeding patterns. Frequent and thorough removal of milk from the breasts is very important for milk production.

How much breast milk should I expect to express?

The first milk you produce is called colostrum. The appearance of colostrum may vary from dark yellow to clear; it can also be quite thick and sticky. It can vary in amount from a few drops to a few millilitres. It is important to feed and help protect your baby from getting sick. This milk slowly becomes thinner and more watery looking, but it has everything your baby needs to grow. It is very important that the first amounts of colostrum, no matter how small, are always saved and given to the Neonatal Nursery for current or future use, as it is very valuable for your baby.

The amount expressed each time may vary. Do not worry about this variation - the overall 24-hour amount is what is important. Once or twice a week, make a note of how much you produce each time you express over a 24 hour period, then add it up.

The following suggestions give a general idea of what the body can produce. It is intended to be used as a guide, so that you have some idea of what to expect.

- By day 5: 300mls per 24 hours
- By day 8: 500mls per 24 hours
- By day 14: 600mls per 24 hours
- Thereafter: 600-800mls per 24 hours

Ideally, the aim is for you to produce enough milk to meet the requirements of your baby at discharge. By the time of discharge, most pre-term infants require about 500ml of milk per day, full-term infants will require more.

REMEMBER: You are an individual and the amount of breast milk you are able to produce will vary. There are also many things that may contribute to how much breast milk you can express. Please talk to the staff caring for your baby if you have any concerns.

Expressing overnight

When the milk supply is well established and the initial swelling of the breasts has settled down, you can experiment with the frequency of night expressions. Some mothers can go six or seven hours without being woken by uncomfortable breasts and find time during the day to express frequently enough to maintain the level of milk production. Other mothers cannot go more than four or five hours without being woken by discomfort and/or leaking milk.

Some mothers do not have these problems, but find that their overall milk production drops if they do not express during the night. This may relate to the production of the milk hormone prolactin, which is highest at night. You will work out which pattern of frequency applies to you.

Storing your breast milk



Storing breast milk for unwell or pre-term babies

Breast milk is best when used fresh. Your colostrum is used first. Your freshly expressed breast milk (EBM) will always be used before defrosting any of your frozen expressed breast milk.

Your breast milk should be kept in sterile hard clear plastic containers or syringes. You may ask the staff for a small supply of containers and the correct labels, each day.

The Townsville Hospital supply three containers that hold different amounts:

- Small yellow topped container: about 50mls
- Tall clear container: about 120mls
- Extra large clear container: about 200mls

You will need to carefully label all containers clearly with:

Your baby's name and hospital number (U.R. Number)

Your baby's date of birth

Your name

The date and time you expressed

EBM can be refrigerated for 3 days. However, if you are not able to visit your sick or pre-term baby every day and provide fresh EBM, then it is important for you to freeze your breast milk.

EBM can be stored in the freezer as follows:

- A freezer that is inside a single door refrigerator for two weeks.
- A freezer with a separate door for three months.
- A deep freeze (minus 18 degrees Celsius or lower), for six to 12 months.
- **All freezers used in The Townsville Hospital Neonatal Unit are deep freezers.**

The staff in the Neonatal Unit will endeavour to use all your fresh expressed breast milk before needing to defrost your frozen EBM.

How is my EBM defrosted and used in the hospital?

If your frozen EBM is needed, it may be defrosted in two ways.

Option 1: Remove from the freezer and place in the refrigerator. Defrosted EBM must then be used within 24 hours, and unused amounts discarded. (This is the preferred method for Neonatal Unit)

Option 2: Place frozen EBM in a container of cool or lukewarm water until EBM is at room temperature. Defrosted EBM must then be used within four hours, and unused amounts discarded. (This method is used if time is limited for defrosting. It is not recommended for everyday use, as breast milk may be wasted.)

Excessive heat should NOT be used to defrost or warm EBM.

(*N.B. The Neonatal Unit will provide storage space for some of your frozen EBM. Due to limited storage, it is advisable to send excess milk home with family members when possible. Please discuss this with your nurse or lactation consultant).

How do I transport my EBM from home?

You will need to put the fresh or frozen EBM in a cooler bag or small esky-type container with either an ice brick or ice when transporting your EBM to the hospital.

Please note the time you removed your EBM from the freezer and make sure you bring it directly to the hospital.

If frozen EBM arrives partially or totally defrosted it will need to be used within 24 hours and must not be re-frozen.

REMEMBER: Please give your EBM to Neonatal Unit staff when you arrive at the hospital, so that it may be placed directly into the refrigerator or freezer.



Other information

Cleaning equipment used for expressing and storing breast milk

Hygiene is of the utmost importance when handling breast milk and equipment used for expressing and storing expressed breast milk (EBM). It is important to take precautions to prevent possible contamination of your expressed breast milk.

To clean all equipment exposed to breast milk:

- Thoroughly wash and dry hands before and after handling your breasts, expressing, storing your EBM and cleaning your equipment
- Separate all parts of your expressing equipment
- Rinse each piece that comes into contact with breast milk in cool water as soon as possible after pumping to remove all milk residue
- Wash each piece separately using dishwashing liquid and warm water. Use a bottle brush to thoroughly clean all parts
- Rinse parts with hot water again, to remove dishwashing liquid residue
- At home, parts can be air dried and stored in a clean container with a lid.

Parts should be sterilised after each use or at a minimum of once a day by boiling, steam sterilising or microwave sterilising, it is important you follow recommended manufacturers instructions

The Neonatal Unit has a separate fact sheet on accessing and cleaning expressing equipment in the unit, please obtain this from your nurse caring for your baby.

If you are staying at Ronald McDonald House (RMH) you may only take two expressing kits at a time. Wash and air dry them after use and return them to the Neonatal Unit daily for reprocessing. Sterilise them as often as possible at RMH – there is a microwave steriliser available for your use in the Mother's Room. RMH will provide you with a double electric pump while you are staying there.

If your breast milk supply dwindles

As time passes, some mothers find that their milk supply drops because they are not able to express often enough. You can increase your supply, especially in the early weeks, by increasing the amount of times you express. Encouragement from partners or family members may really help mothers to continue expressing.

Your aim is for your breast milk supply to be about equal to your baby's requirement when your baby is ready to go home.

If you are having problems with your milk supply, discuss it with your baby's nurse or request to see a Lactation Consultant who can offer some helpful advice.

If your milk supply gradually dwindles while only expressing, you may find that when your baby starts breastfeeding your milk supply will increase. Continue expressing as any breast milk is valuable to your baby, you can only do your best in trying to keep up a reasonable supply. Whatever you achieve, you can be happy with your efforts, which have helped your baby so much.

Nutrition and diet

It is recommended to drink at least eight standard glasses of water a day. A good habit is to have a glass handy while expressing.

As well as needing fluids your body also needs nutrients. Fast foods and caffeinated drinks are not good for producing milk. Having six meals a day (breakfast, morning tea, lunch, afternoon tea, dinner and supper) can be very effective in maintaining a milk supply. Increasing your daily intake of grains, leafy vegetable and fruit will further help boost your milk supply. It is best to avoid smoking, alcohol and illicit drugs while you are breastfeeding.

Daily physical activity is good for your health and can assist in post pregnancy weight loss.

Mother's medication

If you are on any medication, please talk to your doctor, nurse or lactation consultant, to check that your breast milk can be used for your baby.

Support & information

13HEALTH (13 43 25 84) is a phone line that provides health information, referral and services to the Queensland public. For breastfeeding support and child health advice ask for a child health nurse.

Child Health Service for early feeding support (drop-in clinics) and other services
www.childrens.health.qld.gov.au/community-health/child-health-service/

Child Health Information: Your guide to the first 12 months. A booklet inserted in the cover pocket of your baby's Personal Health Record

Australian Breastfeeding Association Helpline 1800 mum 2 mum or 1800 686 268. Community based self-help group offers information, counselling, and support services, on breastfeeding issues.
www.breastfeeding.asn.au/

Pregnancy, Birth & Baby Helpline 1800 882 436 (free call) offers free, confidential, professional information and counselling for women, their partners and families relating to issues of conception, pregnancy, birthing and postnatal care.
www.health.gov.au/pregnancyhelpline

Raising Children Network
www.raisingchildren.net.au/
Information and links to videos

Acknowledgments

This booklet is consistent with current Infant Feeding Guidelines and Dietary Guidelines for Children and Adolescents in Australia, as produced by the National Health and Medical Research Council.

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Expressing record

Date:

Time	Right Breast	Left Breast	Total	Comments

Expressing record

Date:

Time	Right Breast	Left Breast	Total	Comments

Expressing record

Date:

Time	Right Breast	Left Breast	Total	Comments

‘Outstanding People, Genuine Care’

Neonatal Unit
The Townsville Hospital
May 2018



This publication has been reviewed and approved by Townsville HHS consumers.