How to express and store your breast milk





Purpose of this booklet

This booklet was written for those mothers who are expressing to provide milk for their baby, in particular for babies in a neonatal unit.

Mothers who choose to express for other reasons may also find this information useful, but are advised to seek further support from their midwife or community child health nurse.

For further information about expressing when your baby is not in a neonatal unit or in hospital, contact:

- Community Child Health 13HEALTH (13 43 25 84)
- Queensland Health booklet "Child Health Information Your guide to the first 12 months"
- Queensland Health Breastfeeding website: http://www.health. qld.gov.au/breastfeeding/
- Australian Breastfeeding Association 1800 MUM 2 MUM (1800 686 268) https://www.breastfeeding.asn.au/

The importance of breast milk and breastfeeding

Healthy full term babies are born with the ability to search, find and feed from their mother's breast. Breast milk is an unequalled way to provide nutrition to help babies grow. It has antibodies that protect against ear infections, asthma, chest infections, obesity, gastro-intestinal infections, childhood diabetes and urine infections. It changes to meet babies' needs as they grow.

Assistance is available

When a baby is born early, is unwell or the mother has had health complications, starting to breastfeed can be challenging.

We are here to provide you with the support, information and guideance to make it as easy as possible.

Designed to make milk

During pregnancy, the body prepares itself to make milk for babies. Colostrum, a yellow/clear/sticky fluid, is made by the breast by the 16th week of pregnancy. It is ready for baby, even if baby is born early. In fact, it is even higher in protective properties for the vulnerable preterm baby.

Once the placenta has been born, the hormones change and stimulate milk to "come in". Over the first few days your milk will change from colostrum and become thinner, and have a more "milky" appearance.. More milk will be made to meet the changing needs of baby.

There are two important hormones that help with breastfeeding: prolactin (tells the breasts to make milk) and oxytocin (stimulates the release of milk, known as the milk ejection reflex or milk "letdown"). They are both produced when the baby sucks or when the mother expresses.

There are many ways to enhance the release of oxytocin, such as:

- kangaroo cuddles/skin-to-skin contact between mother and baby
- practicing relaxation techniques
- · gentle stroking of your breast while expressing

If your baby is staying in the neonatal unit you might also try:

- expressing while sitting next to baby when you visit please ask for a screen if you would like more privacy
- looking at a photo/video of baby
- holding/smelling an article of clothing which has been with baby

Plenty of milk can be made through regular and effective removal of milk from the breast.

The more often milk is removed, the more milk is made.

Expressing breast milk for baby

Even if a baby is not able to feed directly from the breast (e.g. baby is born early, has medical issues or the mother is unwell) it is important to begin frequent expressing as soon as possible, starting within the first hour after the birth

To begin with, hand expressing will be the best way to collect milk. It is a useful skill to have and gets easier with practice.

Please ask the nurse/midwife to provide collection containers and show you how to express milk.

Refer to poster in centre of this booklet for instructions on how to hand express.

As your milk changes you may feel some changes in your breasts and an increase in the amount of milk you make. At this time please speak with your midwife or nurse to receive education about using breast pumps. As more milk is made, combining a breast pump with hand expressing can help to keep up the milk supply.

When using a pump, the length of time you spend pumping can vary throughout the day and between your breasts. You may pump one breast at a time or both breasts at the same time. Switching between each breasts when the milk flow slows can be helpful too.

As a rough guide, if you are expressing from one breast at a time it will take around 30 minutes (in total). If you can express from both breasts at the same time (double pumping), it may take up to 15-20 minutes.

Breast milk expressing kits

- Expressing kits are available for use in the hospital. Please ask your nurse/midwife where to get expressing kits from.
- Expressing kits purchased for use at home are reusable and need to be cleaned and decontaminated between each use.
 (Information on cleaning your equipment at home appears later in this booklet)

Hire or buy a breast pump?

If you will be expressing for a long period of time (such as for a sick or early baby) it is best to use a pump that has a big motor and can cope with being used regularly (such as with "hospital grade pumps"). If you are only expressing once or twice a day (such as when you return to work) you might find that a manual pump or a mini-electric pump will work for you.

Some parents choose to buy their own breast pump. Before making a decision to buy a pump, please speak with a lactation consultant or contact the Australian Breastfeeding Association's helpline to discuss your options.

How to use an electric breast pump

If you expect to be separated from your baby for a long time (e.g. if baby is unwell or in the neonatal unit, or if baby's mother is unwell) a "hospital grade" electric breast pump is preferred to support milk production

- Start with hand expressing
- Centre the nipple inside the opening of the pump's breast shield, positioning the shield flat against the breast to maintain vacuum
- Adjust the pump's vacuum to a level you are comfortable with, which should feel like a pulling sensation but not painful
- Turn on start with a gentle vacuum and slowly increase, making sure it is comfortable. (Using the maximum vacuum, while staying comfortable, will give the best results)
- Start with setting the suck cycle frequency to a fast speed this will copy baby's sucking action to stimulate milk release
- Change to a slower speed when milk begins to flow

- With some pumps these previous two steps happen automatically
- Use breast compressions and massage to enhance milk flow (refer to the "Making More Milk" fact sheet)
- Do the same on other breast and continue swapping between sides when milk flow slows
- Some mothers find "double pumping" gets the best result when expressing - when both breasts are pumped at the same time, it can be faster to empty the breasts.

How often to express?

- Express at least 8 times in 24 hours in order to establish a good milk supply
- Time between expressions does not need to be equal
- Avoid long periods between expressions (no longer than one 5-hour gap in a 24 hour period)
- Keep a record of your expressing times and expressed volumes each day (Refer to the expressing "log" at the back of this booklet or record your progress in an breast milk expressing app)

How much milk?

The amount of breast milk made by each mother will vary and some mothers will take longer to establish their supply.

Mothers with babies in a neonatal unit may have issues with expressing at some point. Many things can impact on how much breast milk can be expressed.

In the first 2-3 days, each expression will produce small amounts

of colostrum ranging from a few drops to a few mls. With effective and regular expressing, more milk will be made.

By 10 days after the birth you would expect to be expressing 500 ml or more per day.

By 14 days this would be expected to increase to over 800ml/day, and 1000 ml/day or more if you are feeding twins.

These suggested daily volumes are based on research looking at how much milk **term babies** take from the breast in the first months. The aim of expressing 8 or more times each day is to stimulate your breasts in the same way as a term baby feeds and to support your lactation in the long term.

It is recommended that you record how much you express each time and total up the daily amount (using the expressing "logs" at the back of this booklet or an expressing app). This can help you to note your overall progress with expressing.

If you are not meeting the expected daily volumes or you are concerned about expressing, it is important to talk with your nurse/midwife and get further advice and support early.

Storing breast milk for babies in the neonatal unit

In most instances fresh breast milk is used first, before frozen milk. Freshly expressed breast milk must be used within 48 hours in the hospital. If baby does not start milk feeds right away, the colostrum will be frozen and later defrosted when baby can start feeds.

Instructions:

- Mothers are encouraged to bring in expressed milk each day and anything more than what baby needs will be stored in a freezer
- If milk is unable to be brought in each day, it needs to be frozen immediately, in a suitable decontaminated/sterile container (small bottles, sterile containers and oral dispensers are available in the hospital) – your nurse/midwife can help you with this
- Breast milk for sick or premature babies which has been stored in the refrigerator will be used within 48 hours of being expressed
- Frozen milk can be stored in the freezer section of a refrigerator (with a separate freezer door) for 3 months, or a deep freezer (minus 18 degrees celsius or lower) for 6-12 months
- Freezers used in the neonatal units are deep freezers and are only used to store breast milk
- Label all storage containers with a hospital identification sticker which will include:
 - o B/O (Baby of..." mother's first and last name)
 - o Address
 - o UR (Unit Record) number
 - o Write in pen the date and the time the milk was expressed
 - o Ask the nurse for a supply of the printed stickers

Extra frozen breast milk may need to be stored at home if there is limited freezer space in the neonatal unit.

Once baby is home, some mothers find they do not need the frozen breast milk because the baby is breastfeeding. It may be tempting to offer the baby some of the frozen milk instead of breastfeeding from time to time. It is best to avoid doing this because it may lead to a decrease in milk supply because the breasts won't be receiving their signal to keep making milk.

Hand Expressing Technique



Wash hands before expressing. Gently massage the breast in a circular motion, from the outer aspect of the breast in toward the nipple



Place your thumb and forefinger flat on your breast, approximately 3 cm back from the nipple, keeping the thumb in line with the forefinger, as if an imaginary line is running through them



Position a clean/decontaminated container resting on the breast, under the nipple, to collect the milk



Collection by oral dispenser is useful for smaller volumes of milk (colostrum)



Press the thumb and forefinger towards the chest ...



...then compress the thumb and forefinger directly together and hold for 2-3 seconds before releasing. Do not pull your nipple or roll your fingers forward. This compression should not hurt if it is tender, reassess the position of your fingers



Once the flow slows, move your fingers around slightly so you compress a different area (refer back to step 2)

Ensure that all milk containers are labelled with your/your baby's name, time and date of the expression.

To establish your milk supply when baby isn't feeding from your breast, it is necessary to express at least 8 times a day.

more milk removed = more milk made

For more information

- Oueensland Health booklet "Child Health Information Your guide to the first 12 months"
- · Queensland Health Breastfeeding website: https://www.qld.gov.au/health/children/ babies/breastfeeding
- The Australian Breastfeeding Association's Helpline 1800 mum 2 mum (1800 686 268) or https://www.breastfeeding.asn.au/



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There may come a time when frozen milk needs to be thrown away. This can be emotionally difficult when so much time and effort has been spent expressing, but remember, the work of expressing is the reason baby is feeding now. Once the milk has expired, some mothers mark the occasion by finding their own special way of letting go of this milk.

Storing breast milk when home

Storing expressed breast milk at home differ slightly from storage requirements in hospital.

For more information on how to store your breast milk once baby is at home, please refer to the Queensland Health booklet "Child Health Information Your guide to the first 12 months", call 13HEALTH (13 43 25 84) or the Australian Breastfeeding Association (1800 686 268)

Cleaning and decontamination of expressing equipment

The following information is to assist you with cleaning your expressing equipment at home. Preparing your expressing equipment is a two phase cycle (1) cleaning the equipment, and (2) decontamination of equipment.

 Hand hygiene is one of the best ways of protecting baby from infection. Be sure to wash hands well with soap and water and dry thoroughly (or use hand sanitiser) before and after expressing or handling equipment. Cleaning equipment is the first step in the decontamination process of equipment.

(This is sometimes referred to as 'sterilisation' of equipment, however the correct term is decontamination)

- Clean working surfaces with warm soapy water and dry thoroughly with paper towel
- Separate parts of equipment and rinse in cold water to remove milk residue.
- Wash in warm soapy water (a small amount of dishwashing detergent in a clean bowl of warm water) using a soft bottle brush/cloth to access hard to reach surfaces
- Rinse parts with water to remove detergent
- Drain on clean cloth/paper towel
- Equipment is now ready to be decontaminated
- Decontamination is the next step in the process and must be done each time you clean your equipment.
- Decontamination can be done by boiling, steaming or cold water chemical (hypochlorite solution) method:

Boiling

- Fill a clean large saucepan/pot with cold water
- Put all cleaned equipment under the water, making sure there are no air bubbles
- Put lid on saucepan and boil the water for 5 minutes
 (Do not leave boiling water unattended) Turn off heat and let water cool
- When water is cool, remove equipment with clean tongs or leave equipment in saucepan with lid on until needed
- Don't touch inside surfaces of equipment

Steam

 There are a number of electric and microwave steam sterilisers/bags available to buy - Follow manufacturer's instructions on how to safely decontaminate the expressing equipment

Cold Water Chemical (Hypochlorite solution)

- This method of decontamination is no longer used in hospitals, however it may be suitable at home
- Follow manufacturer's instructions, making sure the dilution of chemical to water is correct
- As with other methods, equipment must be thoroughly cleaned prior to putting it in the solution
- Make sure there are no air bubbles trapped in equipment
- Read the manufacturer's instructions to find how long to leave the equipment in the solution
- When ready to use, remove without touching the inside surfaces and shake off excess solution (do not rinse with water)
- Make up new solution every 24hrs (active ingredient isn't effective after this time)
- Clean container with detergent and water before making up new solution
- Do not put metal objects in solution as they will corrode

Emergency cleaning of equipment

- There may be times when equipment cannot be decontaminated using the above methods
- In such cases, follow the instructions to clean the equipment and allow to air dry
- Decontaminate equipment as soon as possible
- **Note:** this is only to be used in emergency situations only

Transporting expressed breast milk

- Place the containers of labelled milk in a cooler bag or small esky with an ice brick
- Make sure the nurse knows you have brought in your breast milk – give the milk to nursing staff on arrival in the unit so it can be placed in the fridge or freezer as soon as possible
- If bringing in frozen milk, ensure it is well iced and insulated to reduce the risk of any defrosting.
- If there is partial defrosting, that milk will need to be used within 24hrs because defrosted milk is never re-frozen.
- Please talk nurse/midwife about options for transporting breast milk over long distances

Need more help?

If you have any further questions about expressing your breast milk or how much milk you are expressing, please discuss your concerns with your nurse or midwife. If required, your nurse/midwife may refer you to the lactation consultant for further support and advice.

Notes			

Notes

Breast Milk Expressing Log

- This Log is to help keep track of how often you are expressing breast milk for your baby
- Amounts expressed may vary throughout the day
- Aim to express at least 8 times a day
- No longer than a 5 hour gap overnight

Date:			Date:		
Time	Amount Expressed	Comments eg; Hand express, pump,skin to skin	Time	Amount Expressed	Comments eg; Hand express, pump,skin to skin
Daily Total:	<u></u>		Daily Total:		

More milk removed = More milk made

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