

# making milk © 2023



Developed by a team of Saskatchewan NICU care providers and Lactation Consultants, combining current resources to provide optimal care for Saskatchewan families

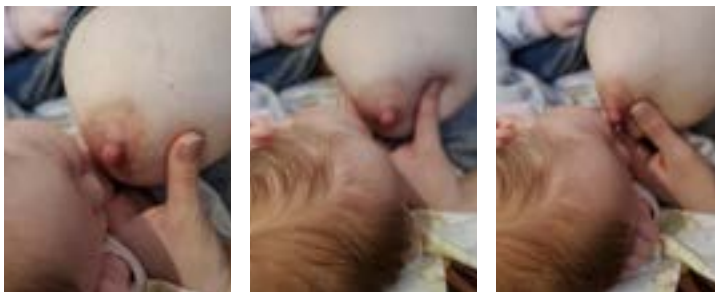
## TIME FOR EXPRESSING

- My day-old full term baby hasn't made good connections at the breast
- My baby is a little 'early' and appears to be trying hard but may not be strong enough yet to get the milk needed
- My baby is in NICU and not yet ready to breastfeed
- I choose to exclusively pump my breastmilk for baby

## FIRST: HAND EXPRESS

- Before, during & after pumping equals more milk
- Wash your hands thoroughly
- 'Wake the breast' with gentle massage & light strokes like baby's touch to breast and nipples. Sending this message before you begin is worth the small effort
- Place thumb and finger pads opposite the nipple, just like baby's nose & chin would be, about an inch from the base of the nipple
- Press toward your chest wall, then compress the breast between your thumb and finger pads as you roll your thumb in place... like the wave of baby's tongue!
- Rotate around the breast and change hands to help move the milk from all around each breast
- Switch sides often when no milk drips
- AVOID squeezing so tight that it hurts
- AVOID dragging your thumb

**Hand Expressing & Pumping:**  
**Start with a faster rhythm, then slow it down.**  
**These motions imitate how baby sucks...**  
**faster to bring the milk down**  
**and slower when the milk is flowing**



## SPECIAL CARE FOR BABY IN NICU

All babies need to feel safe in order to grow and thrive. Holding your baby skin-to-skin or touching baby skin-to-skin, depending on baby's condition, helps prepare you and baby for breastfeeding, decrease stress, aid in sleep and brain development, and stimulate growth and milk production. Skin-to-skin, called **Kangaroo Care**, is supported whenever possible.

If your baby is not receiving any feeds (NPO) or is being tube fed, some of your breastmilk can provide mouth care for your baby by using a swab or or syringe. Most importantly, your breastmilk boosts baby's protection from infection while supporting baby's immune system and gut maturity.

This is called **Oral Immune Therapy**.

## THE FIRST 4 DAYS...

**If your baby is preterm or in NICU...**

- Start hand expressing within 1 hour after birth or as soon as possible. Save all your drops for baby
- Within 6 hours, or as soon as possible, using **'Hands on Pumping'** pump both breasts at once, using a hospital-grade breast pump 8 or more times/24 hours including *at least* once at night, when your milk-making hormone 'prolactin' is highest
- Pump 15 minutes using the 'Hands-on-Pumping' method'
- Hand express any remaining milk into the pump flange
- Try to pump at least every 3 hours
- 8 or more pumping sessions/day is your goal. If you miss a pumping session, try to add another later
- Read on for more about **'Hands-on-Pumping'**

**Scan here for access to more parent resources, videos and information on expressing**



## STEPS TO SUCCESSFUL PUMPING

You will probably make more milk than the pump will get out. Help the pump express more milk and with higher fat content by using **'Hands-on-Pumping'**. Hand express before, during, and after pumping to help better drain the breast.

- Take a minute to have a drink & snack, use the bathroom
- Wash your hands thoroughly, assemble the pump parts
- Be close to baby or look at a picture; smell one of baby's blankets; close your eyes, imagine baby drinking at your breast, listen to your favorite music, take deep breaths
- Gentle massage and a *light touch (like baby's)* to the breast and nipple helps send the message to *'let milk down'*
- Hand express a drop. *Now breasts are ready for the pump*
- Warm the pump flange with your hands or warm cloth
- Center your nipple into the pump flange (size is the diameter of your firm nipple)

### ***Try to imitate the rhythm & strength of baby's suck***

- Start the pump at a fast speed and low suction. This is like what baby would do to get the milk flowing
- After a minute or two, or when the first drops appear, slow the speed down to medium and increase the suction to the highest level that is *comfortable for you. It takes time for your body to learn to respond to the pump. Drops are normal*
- Massage and gently compress your breast while pumping to remove more milk. This is **'Hands-on-Pumping'**. Your partner may be helpful here

### ***Vary the pumping stimulation just like baby would to stimulate milk to let down***

- When milk slows, try increasing pump speed for about 30 seconds, then return to slower speed pump settings. Always adjust the suction for comfort. *Pumping shouldn't hurt.*

### ***The pump may have a 'let down' button that shifts speeds from fast gentle sucks to slower stronger sucks***

- Occasionally break the suction (like baby coming off), come back
- **Single pumping:** Pump one side for about 10 minutes using **'Hands on Pumping'** as described above. Then, turn pump off, break the suction, hand express remaining milk into the flange and switch sides
- **Double pumping:** After hand expressing a drop, pump both breasts together until milk stops dripping or about 15 minutes. Your partner can help massage and compress your breasts too. A gentle 'milk shake' and a moment to hand express after pumping helps remove more milk! Your hand can compress the breast like baby's mouth would do



## DAY 4 TO 6 WEEKS

When your milk production shifts from drops to ounces around day 3-4, keep doing your **'Hands on Pumping'** and, make these changes to your routine...

- Pump for 2 more minutes after the milk stops flowing or until breasts feel soft
- Focus on the total number of pumping/24 hours (8 or more)
- Don't let more than 5 hours pass between pumping sessions and pump at least once at night when milk-making hormones are highest
- Pumping early and often now will secure more milk later
- Keep a pumping record with volumes you total each day

***A pumping bra/top helps hold the flanges in place...  
This frees your hands to move the milk for  
'Hands on Pumping'***

## REACHING YOUR GOAL

***Between 2 and 6 weeks and when you reach 25-35 oz (750-1050 mL) per baby/24 hour period, you've met your goal!***

At this stage...

- Keep doing what you've been doing to maintain your goal
- Continue to hand express remaining milk
- Pump at least once during the night when the milk-making hormone, prolactin, is highest
- Once a week, add up the milk you pump in a 24-hour period. Write it down and compare your weekly totals. You'll know if your production has dropped or if you have room to drop a pumping session to adjust your production
- Some moms can drop one pumping session and still maintain supply
- Other moms need to continue pumping 8 or more times per day
- Add or reduce pumping sessions depending on weekly totals and your milk expressing goals

***After reaching a full supply of 25-35oz,  
each mom finds her own 'magic number'  
of pumping per day to maintain supply***





## YOU'RE ON TRACK WHEN...

First few days: Drops to a few mL per pump session

By day 7: 350 mL total over 24 hours for *premature infants*

By day 7: 500 mL total over 24 hours for *term infants*

By day 14: 750 mL total over 24 hours for *all infants*

***Your 6 week old baby takes about the same amount of milk as a 6 month old baby  
Express early & often to build supply***

## SPECIAL CARE FOR MOM IN NICU

It can be stressful to have baby in NICU... many parents feel overwhelmed, sad or angry. These emotions are normal. Ask questions of hospital staff and have them explain in words you can understand. When you are ready, ask to learn and become involved in your baby's care. This is a great way to gain confidence in caring for your baby.

You've worked hard to have your baby. Listen to your body. Manage your pain, drink to thirst, eat well. Frequent pumping can be tiring! Allow time for rest. A relaxing bath or shower may help you feel restored.

***When mom can feel relaxed...  
the milk can let down***

## KEEP A JOURNAL FOR YOU AND BABY

Writing a journal can give you a chance to express feelings, reflect on what's happening, and keep track of your sick or premature baby's journey. It can also lift your mood. The journal might be for your eyes only, or you might plan to share it with others at some later stage, including your baby when they're older. Some parents write a journal in the form of letters to their baby.



## GET THE RIGHT FIT!

A proper fitting flange will be comfortable and make a big difference in the volume of milk that can be removed. The size of the flange should measure as close as possible to the diameter of your firm nipple (*Your nipples may be two sizes!*). Over time, if more of your breast appears to be moving into the narrow part of the flange, and you notice discomfort or your volume is dropping, you may need a smaller size flange.

## DO YOU HAVE PAIN?

Pain or blisters can mean the pump suction is too strong, or excessive pumping

Pain can be from your nipple rubbing inside the flange or too much breast is being pulled into the flange.

Pain and tension can interfere with your 'let down'

Ask for support from a Lactation Consultant

***You may notice your breasts feel fuller in the morning and the volumes expressed may decrease over the day  
This is normal  
Evening milk volume is usually less, but tends to contain more healthy fat  
A few pumpings close together, later in the day would mimic typical feedings***

## BREAST CHANGES

Your breasts will become fuller with the message to make milk. If your breasts become tight and shiny so much that your nipple doesn't protrude, or your fingers leave a dent in your fluid-filled breast tissue (edema), a cold compress can calm the breast, relieve swelling and congestion, allow the nipple to protrude, and the pump to be more effective.

***Seek help from a health care professional if you develop a fever, flu-like symptoms, or if you notice a warm, tender lump, redness or a red streak on your breast***

***Breastmilk provides protective antibodies specific to germs mom or baby are exposed to***



## PUMPING & CLEANING PUMP PARTS IN HOSPITAL & HOME

- NICU provides one double pump kit and a replacement kit every 72 hours. Discard your old pump kit
- There will be a double electric breast pump in your baby's NICU room for your use
- While you have a room on Maternal Services, please ask your nurse for a breast pump and double flange kit
- NICU has a Breast Pump Cleaning Room where you will find instructions on cleaning the breast pump kits
- After each use, take the pump apart. Wash all pump parts (except the tubing) in warm, soapy water, rinse well, and rinse again. Air dry on a clean towel
- You will be provided a basin to transport/store your breast pump parts. After cleaning the pump parts, put them in the basin to air dry and cover them with a disposable towel until your next pumping session
- At home, in addition to washing after each use, *once a day*, sanitize pump flanges, bottles, bottle brush, etc by one of these methods: (pump tubing does not need sanitizing)
  1. Submerge in water and bring to boil for 5 minutes. After water has cooled, transfer to clean towel to air dry
  2. Use top rack of dishwasher with hot water and heat drying cycle (or sanitize setting) to clean pump parts and infant feeding items. (Smaller items, valve membranes, nipples, nipple shields, soothers etc can be placed in the cutlery section)

## A LITTLE PUMPING REVIEW

- Breathe, look after your needs, eat well and stay hydrated!
- Clean hands and equipment are very important
- Hand express drops of milk before pumping says 'let down'
- Adjust pump settings to imitate what baby does at the breast
- Gently massage and compress the breast while pumping
- Hand express milk after pumping to help drain the breast
- Pumping should not be painful
- Keep a daily pumping record to help you stay on track to reach your goals

*Start pumping as soon as possible*

*Pump often (8 or more times/day) to imitate baby's frequent feeding pattern and send the message to bring in the milk!*

*Watch your supply quickly grow from drops to ounces by day 4*

*A full milk supply is 25-35 oz/24 hours (750-1050 mls)*

## SAFE COLLECTION

- Always use clean hands, equipment & containers
  - Use glass, hard plastic (BPA free) containers or milk collection storage bags
  - Milk from pumping both breasts can be combined
  - Chilled milk can be added to refrigerated milk
  - Save 2-4 oz/container to avoid wastage
  - Label with baby's name if taking milk to NICU and date collected, use the oldest milk first
  - If freezing, leave space in container or bag for expansion
  - Store milk in the back of refrigerator or freezer
  - Thaw frozen breastmilk in the fridge for 24 hours or by running warm water over the container until the milk becomes slushy. You can then heat the container gently in a bowl of warm water until the milk is slightly warm to the touch
- Never use the microwave!***
- Do not refreeze thawed milk***
- Breastmilk will separate because the fat floats to the top. This separation is normal. Gently swirl container to re-mix

## SAFELY STORE BREASTMILK

**On your Counter: 16° - 29°C: 4 hours**

**Insulated cooler with ice packs: -15° to 4°C: up to 24 hrs**

**In back of fridge: 4°C: 4 days**

**In your Freezer:**

**Freezer door inside the fridge: temp varies: 2 weeks**

**Separate freezer section of fridge: -18°C: 3-6 months**

**Chest type freezer: -20°C: 6-12 months**

**Thawed milk in fridge: 24 hours after completely thawed**

## RENT OR BUY A BREAST PUMP

Electric double breast pumps are the most effective for longer term pumping. Pumps are available for rent or purchase from most larger drug stores and online. Ask baby's nurse for a list of local vendors.

**Hand Expressing  
Video**



**Hands-on-Pumping  
Video**





# BREAST PUMPING LOG

DATE: \_\_\_\_\_

24 HOUR MILK TOTAL: \_\_\_\_\_

TIME OF DAY:

MINUTES OF PUMPING:

AMOUNT OF MILK:


DATE: \_\_\_\_\_

24 HOUR MILK TOTAL: \_\_\_\_\_

TIME OF DAY:

MINUTES OF PUMPING:

AMOUNT OF MILK:


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24 HOUR MILK TOTAL: \_\_\_\_\_

TIME OF DAY:

MINUTES OF PUMPING:

AMOUNT OF MILK:


WEEK # \_\_\_\_\_

WEEKLY TOTAL: \_\_\_\_\_

*Scan here for access to more parent resources, videos and information on expressing*



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DATE: \_\_\_\_\_

24 HOUR MILK TOTAL: \_\_\_\_\_

TIME OF DAY:

MINUTES OF PUMPING:

AMOUNT OF MILK:


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