Sentara Maternity Services

Guide to successful breastfeeding





Table of contents

Advantages to breastfeeding

For the newborn	5
For the mother	5

Anatomy of the breast

Milk supply	6
Colostrum: Baby's first milk	6
Factors that affect milk supply	7
Consequences	7
Newborn stomach capacity	8

Beginning to breastfeed

Baby-led attachment	_ 9
Skin to skin	_ 9
Early feeding cues	10
Crying	10
To awaken a sleepy baby	10

Positioning and latching on

Baby-led	11
Football hold	11
Cross cradle hold	11
Side-lying	11
Cradle hold	11

Supporting your breasts

Helping your baby latch	12
Signs of an effective latch	12
Signs of an ineffective latch	13
Nipple pain	13

Length and frequency of feeding

Burping	 14

Simple guide to breastfeeding in the first week______15

How to tell if baby is getting enough milk

Growth spurts	16
Manual expression of breast milk	_17
Draining the milk reservoirs	_17
Assisting the milk ejection reflex	_17

Common concerns

Nipple soreness	18
Flat/inverted nipples	18
Treatment for engorgement	19
Breast/nipple swelling	19
Reverse pressure softening	19
Areolar compression	19
Clogged milk ducts/breast infection_	20
Treatment for clogged milk ducts/ breast infection	20
Mastitis (breast infection)	21
Yeast infection (candida albicans)/	21

Breast surgeries	_ 22
Postpartum depression, mood and anxiety disorders	_ 22
Nutrition	_ 22
Medications	_ 23
Caffeine	_ 23
Alcohol and drugs	_ 23
Contraception	_ 24
Safe sleeping and breastfeeding	_ 25
Pacifier use	25

Special considerations

Twins/multiples	27
Late pre-term infants	27

Table of contents (cont.)

Milk collection and storage

Pumping guidelines	_ 28
Pump settings	_ 28
Renting a breast pump	_ 29
Exclusively pumping parent	_ 29
Tips for increasing milk production when pumping	_ 29
Simple/easy breast milk storage guidelines	_ 30
Medically indicated reasons to supplement	_ 30
Guidelines for complementary feedings	_ 30



Blood sugar monitoring	31
Alternative methods of supplementation	
Pace bottle feeding	32
Spoon feeding	32
Cup feeding	32
Syringe feeds (finger feeding)	33
Weaning	33
Additional resources	34
References	34
Special instructions	35
First two weeks: daily breastfeeding log	36

 Baby's second night
 38

 Notes
 39

Advantages to breastfeeding

Congratulations on your decision to breastfeed your newborn. While breastfeeding is the most natural way to feed your baby, it is also a learning experience for the two of you. This book has been prepared to give you the confidence and the information you need to successfully breastfeed your baby.

The best reason to breastfeed your newborn is the strong desire to do so. The first several weeks are a period of adjustment for you and your baby. As the weeks continue and a routine begins to develop, the rough edges begin to smooth. The enjoyment you feel in your relationship with your baby grows stronger as each day passes.

For the newborn

- Due to breastmilk's protective mechanisms (antibodies), breastfed babies are less likely to develop ear infections, respiratory illnesses and gastrointestinal diseases
- Breastmilk is easily digested. Breastfed babies are rarely constipated and have a lower incidence of stomach upsets and diarrhea
- The incidence of allergies is decreased
- Breastfeeding is excellent for jaw and tooth development
- It's difficult to overfeed a breastfed baby, which may decrease the incidence of obesity
- Evidence indicates that breastfed babies have lower cholesterol levels as adults, and decreased incidence of adult onset diabetes and childhood cancers
- Babies love to breastfeed

For the mother

- Encourages bonding between mother and baby
- Helps the mother's uterus return faster to its pre-pregnant size
- Breastfeeding full time burns up to 500 calories/day, aiding in mom's after delivery weight loss

- Encourages rest periods
- Is more cost-effective and saves time
- Decreases the chance of developing ovarian and breast cancer, and osteoporosis. The longer a woman breastfeeds, the lower the risk.

Anatomy of the breast

When your baby begins sucking, milk flows from the back of the breasts forward. The milk travels down the ducts behind the areola (the dark skin behind the nipple). Your baby's mouth and jaw movements will press the milk out of the ducts. These compressions allow the milk to flow out of the nipple openings into the baby's mouth.

Milk supply

A mother's milk supply depends on frequent, regular stimulation and emptying of the breasts. The law of supply and demand will continue as long as you:

- Breastfeed on demand or every 2 to 3 hours
- If separated from the infant; breast massage, hand expression, and pumping within the first 6 hours will establish milk supply
- This means more breastfeeding equals more milk

Colostrum: Baby's first milk

Also known as liquid gold, due to its color and benefits for baby. All mothers have colostrum, a sticky yellow or clear liquid you may or may not have noticed before delivery. It can leak from your breasts as early as 5 months into your pregnancy.

Babies need colostrum because it:

- Contains antibodies that help protect them from illness
- Builds the immune system
- Has a laxative effect that helps clear the baby's digestive tract and helps the baby pass the meconium
- Is high in protein and is easily digested
- Is present and ready for baby at birth
- Becomes transitional milk (a mixture of colostrum and mature milk) on day 2 to 5
- Becomes mature milk between days 5 to 7





Factors that can affect and/or delay your mature milk supply

- Baby not nursing well/sleepy baby
- Supplemental formula feeding
- High blood pressure and swelling
- Gestational diabetes
- Cesarean section
- Excessive blood loss
- History of breast surgery especially breast reduction
- Shallow latch
- Pumping less than 8 to 10 times in 24 hours
- Early pacifier use
- Delayed breastfeeding or pumping if you are separated from your baby

Your nurse or lactation consultant may recommend and assist you with using a hospital grade breast pump to stimulate your milk supply. Pumping in place of missed feedings can help your body produce more of the hormones that make milk.

Consequences of giving bottles and formula before breastfeeding is well established

- The baby may develop a preference for firmer, faster flow bottle nipples
- Sucking on a bottle nipple causes the baby's tongue to go back in mouth to control the fast flow from the bottle nipple which is the opposite of breastfeeding. During breastfeeding, baby's tongue must go forward to cover the lower gum and suckle at the breast.
- Less stimulation of the breast equals less milk produced
- Increase risk of severe engorgement of breast tissue
 once milk does come in

Let down reflex

Breastfeeding on demand or every 2 to 3 hours stimulates your body to release the two hormones that help your body produce milk for your baby.

- **Prolactin** increases the milk supply and helps with relaxation. It is also called the mothering hormone.
- **Oxytocin** contracts the muscle around your milk cell, releasing the milk into the ducts. Also known as the "milk ejection reflex" or "let down" reflex.

Some women feel a tingling sensation or an ache in their breast as the milk lets down, while others feel nothing. Once your milk is in, your breast may:

- Feel firm to hard and lumpy
- Feel warm to hot
- Feel uncomfortable to painful
- Leak milk

As you breastfeed your baby, your breast should soften and you should listen for swallows. Another effect of your breastfeeding hormones is an increase in the level of bonding and the peacefulness and comfort you feel as you breastfeed. Research shows that breastfeeding actually:

- Reduces stress hormones in both mom and baby
- Helps both mom and baby rest better and go to sleep easily after breastfeeding

Newborn stomach capacity

Most full-term newborns:

- Have a strong sucking need
- Are not hungry in the first day or two of life
- Swallow amniotic fluid prior to birth
- Are born with extra fluid and fat stored to help prevent any dehydration until breastfeeding and breast milk gets established

The following "belly ball" educational tool helps demonstrate a newborn's stomach capacity.

- Ask that your baby's bath be delayed until you can at least attempt to breastfeed, even if it is in the recovery room after a Cesarean birth
- Please avoid bottles for the first feeding, even if supplementation is medically necessary. Introducing an artificial nipple before breastfeeding is established can make it more difficult for the baby to learn how to latch on and suck properly on the breast. Your nurse can assist with alternative feeding methods such as a cup or syringe feed (See page 32-33).



Small marble = Stomach capacity of a newborn on day 1 (5-7 mL) $\,$

Shooter marble = Stomach capacity on day 3 (22-27 mL)

Ping pong ball = Stomach capacity on day 10 (60-81 mL)

Softball = Stomach capacity of an adult



Beginning to breastfeed

When your baby begins sucking, milk flows from the back of the breasts forward. The milk travels down the ducts behind the areola (the dark skin behind the nipple). Your baby's mouth and jaw movements will press the milk out of the ducts. These compressions allow the milk to flow out of the nipple openings into the baby's mouth.

Baby-led attachment

All newborns are "hard-wired" to breastfeed and possess the instincts needed to latch-on to mother's breast.

Breastfeeding happens more naturally when both mom and baby are calm and comfortable. This can be accomplished easily by placing baby, wearing only his diaper, on moms bare chest, "skin to skin" or "heart to heart." Baby feels his mother's breathing and heartbeat, just like when he was still attached in the womb. Mom can snuggle her baby and respond to his early feeding cues.

Skin to skin as soon as possible after birth has positive effects

- Awakens baby's rooting instincts. Babies "root" for the breast by opening mouth wide and bobbing head or squirming towards nipple
- Many babies will self attach to the nipple with a wide open mouth when rooting
- Baby is less likely to cry and is more calm and content
- Baby maintains body temperature, has normal respiratory and heart rates and stable blood sugars
- When separated from their mother, babies will cry more, have lower blood sugars and take longer to adjust to their new environment
- Studies show that skin to skin contact for at least 20 minutes after birth increases the duration that babies are exclusively breastfed

Early feeding cues

Mother needs to learn to feed in response to her baby's early feeding cues such as:

- Moving head side to side with a wide open mouth
- · Licking and sucking motions with tongue and mouth
- Trying to get hands or fingers in mouth

Crying

Crying is a late feeding cue, and a crying baby has a harder time trying to latch on to your breast and have an organized suck. A crying baby also can wear out and go to sleep quickly once brought to your breast.

A good way to calm a crying baby is to let the baby suck on your clean finger. Just gently place your finger in baby's mouth and with the pad of your finger gently massage the roof of the mouth which will elicit the sucking reflex. Gently rocking baby and making shushing sounds as loud as the cries also helps calm baby.

To awaken a sleeping baby

Most newborns are typically very sleepy the first 24 hours after birth. Their journey into the world often just wears them out. They are overwhelmed by so many new sensations, touch, sights, sounds, bathing, etc. When they go to your breast, they are comforted by your smell, breathing and heartbeat and would rather sleep than eat. Let baby have some snuggle time skin to skin, and that often will wake up their instinct to breastfeed. When it is time to wake a sleepy baby for a feeding, here are some tips:

- Unwrap the blanket, remove hat, and change the diaper if necessary
- Dim the light, so the baby will open his or her eyes
- Talk to your baby
- Play with the baby's mouth or lips
- Exercise baby's arms and legs, or do gentle "baby sit-ups"
- Gently rub baby's back
- Wipe baby's face with a cool cloth
- Undress the baby down to the diaper

Positioning and latching on

- Bring the baby to breast level using pillows or blankets
- Baby should be facing Mom (tummy to tummy)
- Do not lean over baby, remember baby to breast, not breast to baby
- Baby's nose to mom's nipple
- Baby led attachment, don't force nipple into mouth but be patient and wait for rooting and latching on with wide open mouth
- Support your breast throughout the feeding
- Once latched the infant's mouth should be wide open, lips flared out, cheeks rounded and tongue down over the gum line
- Mom should feel strong tugging, but no biting or pinching pain throughout the feeding

Positions at the breast

There are several different positions for breast feeding. Experiment to find what is comfortable and what works best for you and your baby. It is a good idea to rotate these positions to help prevent sore nipples. For all positions you can use pillows or a boppy to raise baby to breast level. This will allow you to more fully relax your arms and shoulders after the baby has latched on. Remember leaning forward over your baby inhibits his rooting reflexes and will leave you with an aching back.

Baby-led

Recline in the bed or on the sofa, about half way back. Place your baby skin to skin with you, between your breasts. Your baby will begin to root and move to the breast. You provide support as baby finds the breast and latches by himself.



Football hold

This works best with Mom in a comfortable chair. It is especially helpful for women who have had a cesarean, for those who have large breasts or for women with a small baby. Make sure your hand is between the baby's shoulder blades, with your fingers supporting his head.



Cross cradle hold

The baby's body is supported by mom's forearm and baby's head is supported by mom's hand. Mom's arm that goes across her body supports the baby and mom's other hand supports her breast.



Side-lying

This encourages Mom to rest during feeds. It works well for women with large breasts or women who are uncomfortable sitting after delivery.

Cradle hold

Position baby's head on your forearm just below the crook of the elbow. Your hand supports baby's bottom with baby's stomach turned towards your stomach. This keeps baby's body in a straight line. Your opposite hand supports the breast in a "C" hold.





Supporting your breasts

You should support your breasts during your baby's feedings for the first few weeks. Your newborn's suck is not strong enough to support the weight of your breast at first. When you hold your breasts, you can use either a "C" or a "U" hold. Be sure your fingers are far enough away from the areola, so they don't interfere with the ability of your baby's gums to compress the milk ducts that are behind your areola.

Although your baby's nose may be touching your breasts, all newborns have flared nostrils so they can still breathe if their nose is on your breast. If they can't breathe, they can move their head. If a baby is sucking, they are breathing. It is not necessary to push firmly down on your breast tissue to clear the space at the nose. This often adds tension to your nipple, increasing nipple soreness. Many very large breasted women do need to be sure the baby's nose is not covered too much. A good tip for large breasted women is to place a rolled washcloth or receiving blanket under your breast. This supports the breast and lifts the nipple up, making it easier to latch your baby on.



Helping your baby latch

- Hold your baby close to your body with their tummy facing yours and nose across from your nipple
- Gently tickle their upper lip with the tip of your nipple and **wait** for a wide open mouth like a yawn
- Quickly pull baby in close, chin first, so they get a mouthful of breast

Do not try to force your nipple into his mouth.

This will cause baby to clamp down on your nipple leading to a painful latch and a decreased flow of colostrum/breast milk. A shallow latch also leads to pinched, cracked, and very painful nipples.

Remember - baby to breast, not breast to baby.

Leaning over your baby inhibits their rooting instincts. Leaning back and bringing baby onto your breast helps awaken rooting instincts.

Signs of an effective latch

- Baby's nose, chin, lower lip, and possibly cheeks are touching the breast
- Baby's lips are rolled outward
- You may feel an initial mild discomfort on the nipple which quickly subsides
- You feel a rhythmic tug on your nipple as baby suckles
- Baby's jaw and ear move as they suck
- You see and hear (once milk is in) swallowing
- Your nipple appears rounded and elongated after the feeding



Signs of an ineffective latch

- Baby's mouth is only on your nipple and small amount of areola
- You experience discomfort throughout the feeding
- As the baby nurses you hear clicking, smacking sounds
- After breastfeeding your nipple appears pinched or misshaped
- Your experience prolonged nipple soreness and/ or trauma

Nipple pain

When your baby first latches on you may feel some tenderness due to nipple stretching; however, this should go away within 30-40 seconds. Painful sucking usually indicates a shallow latch. You should re-latch but be careful not to just pull baby off. It is best to break the suction first by inserting your finger in the side of the baby's mouth, then remove the baby from your breast.

Persistent nipple pain that is uncorrected by a deeper latch could indicate an issue with the baby's oral anatomy. Some babies have a lack of tongue mobility due to a tight frenulum (the tissue that connects the baby's tongue to his base of his mouth) also called a "tongue tie." Your baby's pediatrician will evaluate if any intervention is necessary to correct this.

Length and frequency of feeding

Babies need 8 to 12 feedings every 24 hours in the first 4 to 6 weeks.

- Time a feeding from the beginning of one feeding to the beginning of the next
- If your baby has gone more than 3 hours without a feeding, wake your baby
- During the first few days of life, the length and frequency of your baby's feedings may vary greatly. At times your baby may only nurse a few minutes and other times he/she may nurse longer.
- A feeding session can take 40 minutes or more in the first weeks while babies are still sleepy
- Your baby may also have periods of cluster feedings when he/she is more awake and wanting to nurse much more frequently. This often occurs in the evening and or night. Remember to watch your baby, not the clock, and breastfeed according to his feeding cues.

Offer both breasts at each feeding. Alternate which breast you begin each feeding with.

- Some babies will consistently nurse on both breasts, while others will not
- Consider the first breast the "meal" and the second breast the "dessert"
- Babies nurse most vigorously at the beginning of a feeding, then slower at the end
- There is more fat content at the end of each feeding Switching breasts too soon can possibly not satisfy a baby's hunger and lead to more fussiness and more frequent feedings
- If your baby only nurses from one breast during a feeding, start on the other breast at the next feeding

Limiting breastfeeding times will delay your milk coming in, cause engorgement or decrease your supply.

 Only your baby can tell you when he/she is hungry or full. Watch your baby and not the clock to assess when the feeding is done. Once satisfied, most babies will come off the breast or fall asleep.

- Limiting feedings in the first few days will delay the transition from colostrum to mature milk, as well as limit the amount of colostrum your newborn will receive
- Longer feedings will increase your prolactin level, enabling you to make more milk for the next feeding, as well as emptying your breasts (remember supply and demand)
- If breastfeeding hurts, call for help

Burping

- After feeding on one breast, attempt to burp your baby over your shoulder, lying on your lap or sitting up in your lap
- Gently pat or rub your baby's back for several minutes
- If your baby burps, air that leaves the stomach will make room for more. It also helps to renew your baby's interest in feeding from the second breast
- If your baby does not burp and is awake, don't worry. Go ahead and offer the second breast
- At the end of the feeding, you may try to burp your baby if he or she is awake. If your baby is asleep, do not awaken to burp; just lay your baby on his or her back as recommended by the American Academy of Pediatrics.



A simple guide to breastfeeding in the first week

	Day 1	Day 2	Day 3	Day 4	Day 5	Day 6	Day 7
Breast milk	A few drops to a teaspoon per feeding, gold, clear	A few drops to a teaspoon per feeding, gold, clear	More colostrum with some milk, lighter golden color more creamy	More colostrum with some milk, lighter golden color more creamy	Good volume of transitional milk, more opaque, light yellow and creamy	Good volume of transitional milk, more opaque, light yellow and creamy	Good volume of transitional milk, more opaque, light yellow and creamy
Breasts	Soft	Soft	Heaviness, soft with areas of fullness before feedings	Heaviness, fullness throughout before feeding	Fullness throughout before feeding, softer after	Fullness throughout before feeding, softer after	Fullness throughout before feeding, softer after
Baby Behavior	Sleepy, multiple attempts, 1 or more successful feeds	More alert, 8-12 attempts, several successful feeds, cluster feeds	Alert for feedings, 8-12 feeds, fussy at night	Alert for feedings, 8-12 feeds, more satisfied after feeds	Alert for feedings, 8-12 successful feeds	Alert for feedings, 8-12 successful feeds	Alert for feedings, 8-12 successful feeds
Suckling and swallowing	Bursts of sucks followed by pause	Bursts of sucks followed by pause	Bursts of sucks, followed by pause, swallowing every 1-3 sucks	Bursts of sucks, followed by pause, swallowing every 1-3 sucks	Bursts of sucks, followed by pause, frequent swallowing throughout feeding	Bursts of sucks, followed by pause, frequent swallowing throughout feeding	Bursts of sucks, followed by pause, frequent swallowing throughout feeding
Length of feed	5-45 minutes	10-45 minutes	10-45 minutes	10-45 minutes	10-45 minutes	10-45 minutes	10-45 minutes
Urine	1 wet diaper	2 wet diapers	3 wet diapers	4 wet diapers	5 wet diapers	6 wet diapers	6 or more wet diapers
Stool	Minimum of one but usually several dark black, sticky meconium stools	Minimum of two but usually several dark black, sticky meconium stools	Usually 1-2 or more dark green or slightly brownish stools	Usually 1-2 or more slightly brownish or bright green loose stools	Usually several bright yellow, loose, maybe "seedy" stools	Several bright yellow, loose, maybe "seedy" stools	Several bright yellow, loose, "seedy" stools
Weight	Weight loss	Weight loss	Less weight Loss	Weight stable	Weight stable	Weight gain	Weight gain

How to tell if baby is getting enough milk

- The baby nurses at least 8 times in 24 hours (First day may be sleepy, recovering from birth)
- The baby has as many wet diapers as days old
- After 5 days, the baby has 6 very wet diapers every 24 hours. (See breastfeeding log, page 36). It may be difficult to assess wetness with some brands of disposable diapers. If unsure, place a folded tissue in the fresh diaper.
- Remember the first day an infant's stool is black and tarry. More brown green on day 2-3, becoming more yellow and seedy by day 5. It is even considered normal for your baby to stool after each feeding. Occasionally an older breastfed baby will have a stool every 3 to 5 days. As long as the stool is soft, this is normal.
- You can hear your baby swallowing (after your milk is in at 3 to 5 days) at a rate of one suck per second for the first half of the feed on that breast
- If your baby is not eating well or is hard to awaken, call your pediatrician
- Baby should be back to birth weight by 10-14 days

Growth spurts

When a baby goes through a growth spurt, he or she may want to nurse more frequently.

These occur approximately when baby is:

- 2-3 weeks
- 6 weeks
- 3 months
- 6 months old

Continue nursing as needed by your baby. Your body will begin to produce more milk to meet his/her nutritional needs within 24 to 48 hours.

Manual expression of breast milk

Draining the milk reservoirs

- Position the thumb (above the nipple) and first two fingers (below the nipple) about 1" to 1-1/2" from the nipple, though not necessarily at the outer edges of the areola. Use this measurement as a guide, since breasts and areolas vary in size from one woman to another. Be sure the hand forms the letter "C" and the finger pads are at 6 and 12 o'clock in line with the nipple. Note the fingers are positioned so that the milk reservoirs lie beneath them. Avoid cupping the breast.
- 2. Push straight into the chest wall. Avoid spreading the fingers apart. For large breasts, first lift and then push into the chest wall.
- 3. Roll thumb forward as if making a thumbprint and change finger pressure from middle to first finger at the same time. This rolling motion compresses and empties milk ducts without injuring sensitive breast tissue. Note the moving position of the thumb and fingernails as shown in the illustration.
- 4. Repeat rhythmically to completely drain milk ducts: position, push, roll...position, push, roll



3

Roll







Push into Chest Wall

Finish Roll

Avoid these motions

- Do not squeeze the breast, as this can cause bruising
- Avoid sliding hands over the breast as it may cause painful skin burns
- Avoid pulling the nipple and breast, which may result in tissue damage



Assisting the milk ejection reflex: Gentle massage

- Massage the milk producing cells and ducts by pressing the breast firmly with the flat of the fingers into the chest wall, beginning at the top. Move fingers in a circular motion, concentrating on one spot at a time for a few seconds before moving on to another spot. Spiral around the breast toward the areola as you massage. The motion is similar to that used in a breast examination.
- Stroke the breast area from the top of the breast to the nipple, using a light tickle touch. Continue the stroking motion to help you relax,







which in turn will stimulate the milk ejection reflex.

• Shake the breast while leaning forward so that gravity will help the eject

Manual expression images source: The Marmet Technique, Copyright 1978, revised 1979, 1981 and 1988. Used with permission of Chele Marmet and The Lactation Institute, 16430 Ventura Blvd., Suite 303, Encino, California 91436, 818-995-1913.

Right hand

Left hand

Common concerns

Nipple soreness

- Nipple soreness can often be avoided by proper positioning, latching on, and rotation of feeding positions. Baby's nose should be near the breast, and chin and cheeks should touch the breast. Baby's mouth should be opened wide, and lips flared outward.
- To break the baby's suction, place your little finger between the gums before pulling baby off or pull down on the chin
- If your nipples become sore or cracked, feed on the least sore side first
- Avoid drying agents or blowing air on nipples. Apply expressed colostrum to nipples after each feeding to soothe sore or cracked nipples. Hydrogels, Nipple Cream or Lanolin may also be used. Lanolin is not recommended if allergic to wool.
- Breast shells may be used if nipples are very tender and any contact with nipples causes greater discomfort

- Your nipples need only be washed with water. Rinsing during your daily shower is sufficient. If there are open cracks, nipples should be gently washed with a mild soap and rinsed with clean water daily.
- You may find that feeding more often will help nipple soreness. Your baby may not nurse as vigorously if fed more often.
- If your nipple sticks to the nursing pad, moisten the pad until it comes off easily. Change wet nursing pads with every feeding.
- For persistent sore or cracked nipples, contact a lactation consultant. Additional treatment may be necessary

Flat/inverted nipples

Every woman's nipples are different. Some protrude (stick out), some are flat, and some are inverted (push in). All of these are normal. Remember to support/ compress your breast tissue (sandwiching of breast) and bring baby to breast, not breast to baby. Most newborns will be able to latch regardless of the shape of the nipple when self-attaching and laying skin to skin with mom in a laid-back position.

Some moms and babies will need help with latching when they have flat or inverted nipples. Here are some helpful tips:

- Before feeding, gently tug and roll your nipple at its base to help draw your nipple out
- Pumping your breasts using a pump prior to feeding can also help draw your nipple out
- If your nipples are swollen see the section below on reverse pressure softening
- Talk with your Lactation Consultant for latching aids if needed

Treatment for engorgement

- It is normal for your breasts to become warm, full, and heavy when your milk comes in. You may feel uncomfortable.
- It is not normal for your breasts to feel red, hot and painful
- The best treatment for engorgement is prevention by frequent, on demand feedings and not setting time limits on feeding length (average newborns can empty the breast in 15 – 20 minutes)
- If your nipples flatten out as your breasts become hard, your baby may have difficulty latching on. You may need to release some milk from the ducts by massaging your breasts using warm, moist heat.
 Such as in the shower or with a compress, for only 2 to 3 minutes, or by expressing some milk by hand.
- Gentle massage and compression during the breastfeeding session can help the infant remove more milk from your breast
- Use deep breathing, soft music, or other techniques to relax before and during nursing
- Most women are more comfortable with a bra on at this time. Do not wear tight, restrictive bras or clothing.
- Ice packs after feedings are comforting (can use bags of frozen vegetables)

If your breasts become severely engorged (skin tight, shiny, hard), you should call your Lactation Consultant for additional assistance. You may need a hospital grade/rental electric pump to help relieve this.

Breast/nipple swelling

- Often caused by the large volumes of the IV fluid some moms, with longer labors and epidurals and/ or C-sections, receive
- May interfere with baby's ability to latch

Reverse pressure softening or areolar compression can be used to help relieve this swelling (used with permission from Jane Cotterman IBCLC).

Reverse pressure softening two thumb method

- Position the base of the thumbnail at the base of the nipple on opposite sides
- Apply gentle inward pressure for 1-3 minutes until pits are formed



Change position as
 needed until the central areola is soft enough to try
 latching infant

Areolar compression

- Using 2 or 3 straight fingers on each side
- Hold until edema is felt to give way
- Observe for "pitting"
 representing edema
- Apply pressure again behind the pitted spot
- Continue to press and hold in this fashion working around the areola/breast
- Continue until areola is softened enough for infant to latch





Clogged milk ducts/breast infection

Lumps in the breast may be a sign of clogged milk ducts. This can occur when feedings are spread out (more than 4 hours in between feeds), a feeding is skipped, a breast is not emptied, or you are wearing restrictive clothing or an under wire bra.

Treatment for clogged milk ducts/ breast infection

Blocked ducts

Milk flows through a system of microscopic-sized tubes—ducts—in your breasts, which are easily compressed. When more milk is produced than your baby drinks (for example, if you're pumping in addition to breastfeeding), this can produce pressure which your body responds to as a threat. Inflammatory cells and fluids rush into the area to help repair the damage and fight off bacteria. The swelling that occurs from this inflammation presses on some of the ducts, which slows or blocks the milk from flowing well. The skin in this area may appear darker, redder, or pinker than usual. In darker skin, redness may not be as easily detected or may not be visible at all. It may feel warm to the touch. If this inflammation is not treated, the area can become more inflamed or infected. This can occur any time your breasts become overly full, Possible factors include:

- You and your baby are separated for longer stretches than usual between feedings
- · Your baby starts sleeping longer at night
- Your baby is teething, has a stuffy nose, or is otherwise feeling out of sorts and nursing less

Treatment for what we know as blocked/clogged/ plugged ducts and mastitis is similar. You may want to try the following ideas:

- Consider yourself sick, and rest. Focus on caring for yourself, your breasts, and your baby
- Apply cold or ice packs to the affected area after breastfeeding or pumping
- Be aware that antibiotics may not be recommended right away. This is not an infection when it starts. Taking unnecessary antibiotics may encourage

resistant strains of bacteria to thrive and may make you more likely to have recurrent mastitis or an abscess in the future.

- Make sure you are breastfeeding responsively to your baby (on cue) so that you don't unintentionally go too long between feedings. You want a good match between your baby's needs and the rate at which your breasts are producing milk.
- Avoid excessive pumping. Pumping more than your baby needs may create too much milk, also known as hyperlactation.
- Check to see that your baby or child is wellpositioned and has a good latch or attachment. This helps the baby to take more of your milk
- Change positions when you feed your baby to increase your comfort
- If you wear a bra, make sure it is well-fitting, supportive, and not tight. Avoid clothing or straps that are tight on the breast, chest, and underarm area.

If you have frequent blocked ducts that are not helped by the above recommendations, taking a lecithin supplement may help. The supplement may be sunflower lecithin or soy lecithin, if you do not have sensitivities or allergies to soy or dairy. The evidence for this supplement is not strong. You can find more information about this in the ABM protocol. (Academy of Breastfeeding Medicine, 2022)

Mastitis (breast infection)

If a milk duct remains clogged after several feedings and the lump does not disappear, mastitis (a breast infection) may occur. Breast infections are more common in women who are fatigued, stressed, or not eating well. The symptoms may include:

- Flu-like symptoms such as general body aches and a headache, often with a temperature of 101° or higher. Chills often accompany the fever.
- There may be a painful or tender reddened area on the breast
- It usually occurs in one breast only

At home remedies to try for the first 24 hrs:

- Apply ice after breastfeeding or pumping for 10-15 minutes. Ice can be applied every hour or more frequently if desired.
- Take nonsteroidal anti-inflammatory drugs (such as Motrin) to reduce edema and inflammation and provide symptomatic relief
- Sunflower or soy lecithin 5–10 g daily by mouth may be taken to reduce inflammation in ducts and emulsify milk
- Continue to breastfeed on demand or pump 8-12 times in a 24-hour period
- Avoid aggressive massaging of the breast as this may worsen the inflammation
- If your symptoms have not resolved in 24 hours after implementing the above recommendations call your obstetrician.

If you have any of these symptoms call your obstetrician. You probably will be placed on antibiotics for 7 to 10 days. During this time it is important that you:

- Continue nursing to keep the ducts empty (your milk is not infected)
- Get plenty of rest
- Drink plenty of fluids

Yeast infection (candida albicans)/ thrush

A yeast infection can occur on the nipple if it is spread from your baby's mouth, after antibiotic therapy, or from damaged nipples left untreated. The symptoms include:

- Reddened, swollen, tender, or cracked nipples
- Burning, itching, shooting pain deep in the breast, tenderness during or immediately after feedings

If you have any of these symptoms call your obstetrician or your baby's pediatrician for antifungal treatment. It is important that you:

- Wash your hands before feeding your baby
- Change your breast pads at each feeding

- Boil items such as pacifiers, bottle nipples, breast shells, breast shields for breast pumps, and anything else that comes in contact with the baby's mouth and/or your milk for 5 minutes daily.
- Decrease concentrated sweets in your diet. Add acidophilus to your diet (found in active culture yogurt or acidophilus milk).
- Treat you and your baby at the same time.
- Avoid freezing any milk pumped during a yeast infection as freezing does not kill yeast.
- Keep breastfeeding.

Breast surgeries

Please let your nurse and or lactation consultant know if you have had any breast surgeries. Breast implants or biopsies usually do not have any effect on milk production. However, breast lumpectomies or breast reduction surgeries often can affect milk production. The site <u>www.bfar.org</u> (breastfeeding after reduction) is a website with more information.

Postpartum depression, mood and anxiety disorders

Postpartum depression/anxiety is the #1 complication of pregnancy and childbirth. One in five new mothers will have this challenge. New breastfeeding moms can often have excessive anxiety and stress if breastfeeding's not going well and are often sleep deprived. Be sure you are getting enough rest, napping when your baby naps. If treatment is needed:

- Contact your doctor or obstetrician for recommendations for support groups or counseling.
- Medications are a safe treatment option with breastfeeding. Your doctor will know which medication will work best for you when breastfeeding.
- Studies show that moms who resolve breastfeeding issues, or are successfully breastfeeding right from the start, have less incidence of postpartum depression (postpartumva.org).

Nutrition

Continue with prenatal vitamins.

There is no special diet for breastfeeding mothers. Most nursing moms are thirsty, drinking approximately 2 quarts of liquid per 24 hours. If your urine is concentrated (dark amber with a strong, noticeable odor) you are not drinking enough.

Breastfeeding requires approximately 300 to 500 extra calories per day over your pre-pregnancy diet. Continue eating a regular wholesome diet, adding an extra serving of protein and calcium-rich foods. There are no foods that you must eat and no foods that you cannot eat. Babies tend to handle mom's regular diet without trouble. Do not go on a diet while lactating.



Breastfeeding mothers may include fish, sushi and shellfish in their diets. The FDA advises eating fish known to be low in mercury.

Occasionally your baby may experience extreme gassiness/fussiness. Most foods pass through breast milk within the first three hours up to 24 hours. If you suspect a certain food in your diet is causing a problem, contact your Pediatrician or your Lactation Consultant for guidance. Some foods that you may suspect are:

- Dairy products (for example milk, cheese, yogurt).
- Green leafy vegetables.
- Overly spiced foods.
- Caffeinated beverage and chocolate. Keep in mind that caffeine levels peak in 45 minutes to 2 hours after ingestion.

Medications

Most medications are safe to take while breastfeeding. Consult with your Pediatrician or Lactation Consultant before taking a prescription medication while breastfeeding. Over-the-counter medications that are safe to take while breastfeeding include:

- Acetaminophen
- Prenatal vitamins
- Robitussin
- Ibuprofen
- Stool softeners

Cold medicines containing pseudoephedrine or antihistamines may decrease your milk supply.

Source: www.nlmnih.gov/lactmed

Caffeine

Caffeine may keep your baby awake or make them fussy. Limit coffee to one or two cups a day and remember that sodas, teas, energy drinks and chocolate contain caffeine too.

Alcohol and drugs

- The use of any illegal drugs while breastfeeding is contraindicated and could result in serious problems to your baby, not to mention legal consequences for you.
- Nicotine is considered a drug and having a baby is a great time to quit smoking. However, if you cannot stop smoking, the benefits to your baby out weighs any risks with breastfeeding. Formula fed babies of smoking mothers are much more likely to be sick, develop asthma and respiratory problems compared to breastfed babies of mothers who smoke. Please limit smoking to after a feed, outside and away from the baby and use a cover jacket to decrease the risk of second hand smoke, which increases the risk for SIDS.
- As with most everything, moderation is the key when drinking alcohol. The amount of alcohol transferred into breast milk is generally low. An adult will break down 1 ounce of alcohol in about

3 hours, so mothers who drink small amounts can return to breastfeeding/pumping when they are no longer feeling the effects. (Chronic heavy drinkers shouldn't breastfeed.)

- Rule of thumb: You may have one 12 ounce beer, a 6 ounce glass of wine or one ounce of alcohol. If drinking more than one serving, it is safest to "pump and dump" the next feeding.
- Alcohol does inhibit the release of oxytocin which will reduce letdown. This appears to be dose related and usually is seen with moderate to heavy drinking. Other studies show that alcohol changes the taste of milk and baby will nurse less and then nurse more as the alcohol level decreases.

Contraception

During breastfeeding, the chance of getting pregnant may be lower; however, you can still get pregnant. It is a good idea to discuss contraception with your physician before or just after you give birth. Be aware of the many choices you have.

- Nonhormonal methods of birth control such as condoms, spermicides, diaphragms, IUD's, and sponges have the least effect on breastfeeding as there is nothing to pass into the milk supply, affect milk production or alter milk composition
- Progesterone only birth control is the next choice as combination birth control with estrogen has been found to decrease milk production and is not recommended for use until after the baby is 6 months old

Remember, baby sleeps alone on his/her back in the crib.

- There is controversy over when to begin progesterone only birth control. There is a possible risk of decreased milk supply when hormonal contraception is started before milk production is well established. Most professional organizations and birth control drug manufacturers recommend waiting for at least 2 weeks postpartum to avoid a possible negative impact on lactation.
- Talk with your OB or Lactation Consultant regarding birth control options and how it could affect your milk production

Safe sleeping and breastfeeding

The American Academy of Pediatrics recommends that mothers and infants sleep near one another but in separate beds for the first 6 months of life and ideally, the first year of life. Room-sharing and breastfeeding decrease your infant's risk of SIDS.

- Studies show that when mothers and babies sleep in the same room, with baby in a bedside crib or bassinet, nighttime feedings are easier, mothers and babies get more sleep, and babies have a lower risk of SIDS
- As a breastfeeding mother, you may be breastfeeding in bed. If there is a possibility of you falling asleep while breastfeeding, feed your baby in your bed rather than moving to a chair or sofa. The bed should have no pillows, blankets, sheets, people or other items that could block your baby's ability to breathe or cause overheating.
- There have been cases of babies suffocating or falling off unsafe places, like chairs, sofas, recliners or water beds

Babies have been found suffocated when a parent in the bed has taken medications or is intoxicated and rolled over on top of their baby.

- Avoid baby's exposure to cigarette or cigar smoke, alcohol or illegal drugs
- Never leave your baby alone on an adult bed

Pacifier use

Studies have shown that early pacifier use can interfere with your infant's latch and/or your milk supply. It may seem like all you are doing is feeding your baby. Those first several weeks are very busy. Not only is your baby nursing for nutrition, he/she is establishing your milk supply for months to come. A pacifier should not be used to replace or delay a meal. It may be tempting to give a pacifier when it is convenient for your schedule. It is best to watch for hunger cues and feed on demand. Settle into an effective nursing routine. Your baby nurses differently at the breast then with a pacifier. At the breast, your baby takes the nipple into the junction of the soft and hard palate. A pacifier encourages thrusting motion with the tongue. Four weeks is an appropriate time to introduce a pacifier if you desire. Strive for success at the breast.

Infants are learning to breastfeed and need to have time to learn your breast. Your breasts need frequent stimulation to get your supply well established. Your milk "comes in" by day 5, but your supply may take up to 4 weeks to be well established.

Sucking on a pacifier releases the same digestive enzyme as sucking at the breast. This enzyme can cause the infant to feel like he/she is full and content. This can cause your infant to miss a feeding, and your breast will miss being stimulated.

The AAP recommendations for SIDS prevention suggests waiting until your milk supply and breastfeeding is well established before introducing a pacifier. Generally that could take up to 4 weeks.



Special considerations

There are some circumstances that can take a mother and her newborn off the usual course for establishing breastfeeding such as:

- Prematurity, illness, or birth defect that results in admission to Neonatal Intensive Care Unit (NICU) or Special Care Nursery (SCN)
- Conditions that require blood sugar testing prior to feedings for infants that are still able to be in normal nursery or mother-baby rooming in
- Newborn jaundice requiring phototherapy/bili lights

- Infants who are unable to adequately breastfeed results in excessive weight loss or inadequate output
- Inadequate milk supply due to maternal conditions such as breast surgeries, high blood pressure, excessive swelling, blood loss and recovery from Cesarean section or other surgery
- Infants having withdrawal symptoms from maternal medications or drug/nicotine use

Many of these situations may require intravenous (IV) fluids, feeding of formula or pumped breast milk or medications.

Twins/multiples

Many mothers delivering twins or even triplets are overwhelmed with the thought of how to manage breastfeeding. They often have babies that are premature or late pre-term. They have to use a breast pump to help establish their milk supply. When the babies are unable to breastfeed due to their prematurity, low birth weight or decreased stamina, mothers often are encouraged to pump and supplement with their own expressed breast milk or additional formula. Refer to section on "Alternate Methods of Supplementation" for different feeding methods.

The good news is there is no expiration date on babies being able to learn how to breastfeed, even after weeks of having tube feedings or bottles. Your babies' nurses and the lactation consultants will be able to help you. Some important points to remember:

- Your body knows there is more than one baby to feed, and many moms with multiples can produce all the milk their babies need. (Just know it often takes a week of exclusively pumping to get that milk supply established)
- Each baby has to learn individually how to breastfeed before trying to feed two babies at the same time
- Working with a Lactation Consultant can help you develop a plan

Late pre-term infants

Babies born a few weeks early, 34-37 weeks gestation, are known as "late pre-term infants." They often can be in the normal newborn nursery but cannot be treated the same as a full term newborn. Because they are early, they are often small and immature in many of their abilities. Late pre-term infants can have the following issues:

- Inability to maintain their body temperatures (because they have less fat deposits)
- Inability to have stable blood sugars (because they are burning more calories to stay warm)
- Are very sleepy, tire more easily because they do not have the same strength and stamina as a bigger more mature newborn

- Can have more respiratory problems
- Higher risk for jaundice
- May not be able to coordinate their suck, swallow, and breathing reflexes, causing difficulties with sustaining breastfeeding or even bottle feeding
- · Are more easily fatigued or overstimulated

Patience is needed as your baby has to learn abilities before they have completely matured. Skin to skin is very important with helping to awaken feeding behaviors, and regulating breathing, temperature and blood sugars.

Late pre-term babies will need to be awakened every 3 hours for feedings. They are more likely to require supplemental feedings of pumped breast milk or formula. Pumping after breastfeeding often is recommended to help establish a plentiful milk supply.



Milk collection and storage

When mom and baby are separated due to baby's admission to NICU or SCN, pumping should be initiated within 6 hours of birth.

Pumping guidelines

- Use a medical/hospital grade breast pump to initiate your milk supply
- Wash your hands before pumping
- Pump both breasts (double pumping) at the same time:
 - » Double pumping increases the amount of the hormone prolactin and will help to stimulate and increase your milk supply

It is normal not to see any expressed colostrum/breast milk for the first 2 to 3 days. Keep pumping.

Pump settings

- Pump on maximum comfortable suction if the suction is too strong or painful turn it down
- Pump cycles set cycles to maximum to stimulate supply. Once milk is in adjust to comfort, often slower cycles and more suction helps milk let down better.
- Pumping should not be uncomfortable even on low setting. If pumping is uncomfortable let your Lactation Consultant or nurse know. You may need a different flange size.
- Pump 8-10 times in 24 hours (about every 2 to 3 hours)*
- Pump a minimum of 1 time between midnight/12 am and 5 am
- Pump for 15 minutes each time you pump, using the collection containers provided
- All pumped breast milk must be labeled with name, date, and time milk collected

*These instructions may be changed by your lactation consultant based upon your medical condition.

After each use, rinse your breast pump kit pieces that touch your breast or come in contact with milk in cold water (flanges, valve/filter and bottle). Then wash with hot soapy water in a basin. Rinse with hot water and dry with a paper towel or place kit pieces to air dry on a towel. Do not wash or get the tubing wet. You can use a dishwasher per the manufacturer guidelines. For more specific instruction, go to <u>www.cdc.gov</u> and refer to instructions on "how to keep your breast pump kit clean."

It is recommended to sanitize your pump parts at least once daily per the CDC. After the pump kit has been cleaned it can be sanitized using steam, boiling water or in a dishwasher with a sanitizing setting. It is particularly important to sanitize pump pieces if your baby is less than 3 months old, was born prematurely, or has a weakened immune system due to illness or medical treatment. For more specific instructions on sanitizing go to <u>www.cdc.gov/healthywater/hygiene/ healthychildcare/infantfeeding.html</u>.

Renting a breastpump

Refer to your local Lactation Consultant for a list a breast pump rental stations. Check with your insurance company regarding what breast pump coverage you may have.

Breast pumps may be available through WIC for mothers who qualify. Types of pumps: Breast pumps are not all equal in quality and use.

- Hospital grade/rental pumps are best for a hospitalized premature or ill infant or when a mom is exclusively pumping. Using a hospital grade rental pump is the best option. Studies show these pumps establish a better and more plentiful milk supply. Hospital grade pumps have a larger, stronger motor and are designed to be used around the clock every 2-3 hours.
- Personal use double electric pumps are generally used for employed mothers who will be pumping while at work; and are not designed to be used around the clock every 2-3 hours, as the motor is not strong enough

- Single electric or battery pumps are designed for occasional, not daily use. They take twice the time to use because each breast is pumped separately.
- Manual/hand operated pumps are also best for occasional use

Used/borrowed breast pumps are not hygienically safe and are not recommended.

Exclusively pumping parent

- Pump or hand express within 6 hours of delivery
- If unable to hand express or pump an adequate amount for baby, you may have to supplement with formula as it may take 3-5 days for your milk to come in
- You may get varying amounts of colostrum/milk with each pump
- By day 2 you will need to stimulate and or pump every 2-3 hours (8-12 times in a 24-hour period)
- Pump for 15-20 minutes per pumping session
- Encouraged to use a double electric pump (wearable not recommended until milk supply is established)
- Reach out to an IBCLC for proper flange fit

Tips for increasing milk production when pumping

- If able, do skin to skin or kangaroo care in nursery and pump at baby's bedside, helps stimulate hormones
- Breast massage and hand expression can also help stimulate hormones and help with let down
- Make sure you are drinking to your thirst, and eating nutritious foods

Simple/easy breast milk storage guidelines

In the hospital setting, please make sure your freshly pumped breast milk is stored in the breast milk refrigerator in the Nursery within four hours of pumping. Only milk properly labeled with name and date and time pumped can be accepted. (If your baby was born prematurely or is hospitalized, check with your healthcare provider for guidelines for your specific situation. Refer to <u>www.cdc.gov</u> for further breastmilk storage guidelines.)

Human Milk Storage Guidelines

1.1	STORAGE LOCATIONS AND TEMPERATURES						
TYPE OF BREAST MILK	Countertop 77°F (25°C) or colder (room temperature)	Refrigerator 40 °F (4°C)	Freezer 0°F (-18°C) or colder				
reshly Expressed or Pumped	Up to 4 Hours	Up to 4 Days	Within 6 months is best Up to 12 months is acceptable				
Thawed, Previously Frozen	1–2 Hours	Up to 1 Day (24 hours)	NEVER refreeze human milk after it has been thawed				
Leftover from a Feeding baby did not finish the bottle)	Use within 2 hours after the baby is finished feeding						

These guidelines are for healthy full-term babies and may vary for premature or sick babies. Check with your health care provider.

Find more breastfeeding resources at: <u>WICBreastfeeding.fns.usda.gov</u> <u>www.cdc.gov/breastfeeding/</u>



Medically indicated reasons to supplement

- Infant's low blood sugar
- Inadequate urine output/dehydration
- Weight loss of 10% of birth weight
- Jaundice
- Infant with temperature instability
- Late pre-term Infant

If your infant requires supplementation, ask your nurse or lactation consultant about alternatives to bottle feeding:

- Spoon or cup feeding
- Finger feeding with a periodontal syringe
- Supplemental feeding system (SNS)
- Paced bottle feeding

Try hand/manual expression of your breasts (see page 17) or ask to use a breast pump so baby can be supplemented with your colostrum or breast milk.

Guidelines for complementary feedings (offering something after baby has been at breast)

- First 24 hours: 2-10 mL per feeding
- 24-48 hours: 5-15 mL per feeding
- 48-72 hours: 15-30 mL per feeding
- 72-96 hours: 30-60 mL per feeding

Supplementary feedings are designed to replace breastfeeding for those mothers who are unable to breastfeed. The volume is based on a newborn's stomach capacity.

Complementary feedings should be given by an alternative feeding method. Please see pages 32-33.

Blood sugar monitoring

There are several circumstances that can result in your baby's pediatrician to order blood sugar monitoring for your baby. Low blood sugars can be dangerous for newborns, even resulting in seizures if gets too low. Blood sugars are tested by collecting a small drop of blood with a heel prick. Some of the reasons for this monitoring are:

- Infants of diabetic mothers. Because of the higher insulin levels a baby produces when the mother has diabetes, once born, these babies can have unstable blood sugars
- Large for gestational age babies (typically over 9 pounds) because these babies may burn and also need more calories to stay warm
- Small for gestational age/low birth weight babies (typically less than 6 lbs) because they have less fat stores, also may burn/need more calories to stay warm
- Late pre-term babies (born between 35 and 37 weeks):
 - » Often are smaller, less fat stores
 - » More sleepy, less energy and stamina to breastfeed well
 - » Sometimes have poor sucking skills due to immaturity

All of the above babies may need blood sugar monitoring for 12-24 hours or as ordered by your pediatrician. For low blood sugars, supplementation with expressed breast milk or formula may be required for your infant's health and safety.

Your nurse should let you know what is considered low blood sugar and help you with your infant's feeding plan as needed. Blood sugars that do not respond to your feeding plan may result in your infant being admitted to the SCN/NICU for IV glucose.



Some tips for helping decrease the risk for low blood sugars

- Keep baby warm and skin on skin
- Delay giving a bath until it is known sugars are stable as bathing can stress baby and lower temperature, therefore lowering blood sugars
- Use awakening techniques for sleepy babies
- Hand express colostrum into baby's mouth if baby's not interested in breastfeeding

Reduce risk of nipple preference by supplementing using one of the following alternative feeding methods.

Alternative methods of supplementation

Pace bottle feeding

Pace bottle feeding is a supplemental method of feeding that can help reduce the risk of nipple confusion in baby's that are breast/bottle feeding.

- Wash hands, gather equipment bottle with an appropriate nipple (preferably slow flow nipple) and expressed breast milk or formula
- Place swaddled infant in an upright position and hold bottle at a 90 degree angle
- Introduce nipple to baby and slowly place into mouth
- Every 2-3 sucks tilt bottle downward at a 45 degree angle to give baby a pause in the flow of milk. Care must be taken to prevent the baby from swallowing too much air.
- Remove the nipple or slip it out while the tip touches infants lower lip every 6-10 sucks in order to give a rest of 3-5 seconds between sucking bursts. This method should not be used with baby's with a disorganized suck as it can make it worse.

Spoon feeding

- Wash hands and plastic spoon in warm soapy water and rinse well
- Hand express (see section in the Guide for Successful Breastfeeding booklet on hand expression) colostrum with plastic spoon under nipple to collect droplets of colostrum
- Place spoon at baby's lips so that baby will slurp, sip or lick colostrum from spoon
- Alternatively, mom can place colostrum on her finger and have baby suck from finger. Wash the spoon in warm soapy water after each use.
- Record the time and how many spoonfuls your infant took

Cup feeding

Cup feeding best simulates the tongue and jaw movements like when baby breastfeeds.

- Wash hands and gather equipment expressed breast milk or formula and cup (medicine cup may be used)
- Fill cup with expressed breast milk or formula
- Swaddle baby in blanket and hold baby in upright position
- Do not poor milk into baby's mouth
- Put cup to baby's lower lip, tip cup slightly so that milk touches upper lip. Allow baby to slurp, sip or lap liquid with tongue. Allow baby to pace feed allowing time to swallow. Leave cup at lip for entire feed
- Refill cup as needed, once cup becomes 1/2 empty to avoid having to tilt too far
- Burp baby from time to time
- Clean the cup in warm soapy water after each use
- Record amount and the time infant ate



Syringe feeds (finger feeding)

Syringe/finger feeds are used to feed baby's with a poor dysfunctional and/ or uncoordinated suck as part of suck training.

- Gather equipment periodontal/curve tip syringe, expressed breast milk or formula
- Wash your hands. Make sure your fingernails are short and clean
- Fill syringe with expressed breast milk or formula
- Swaddle baby, place in semi-upright position in arms or lap
- Slide finger into baby's mouth about an inch to an inch and a half with nail bed resting on baby's tongue. Gently massage the roof of baby's mouth about half an inch.
- After baby sucks 3-4 times, slide the curved section of the syringe tip along the side of finger into corner of baby's mouth about half an inch
- Gently compress plunger slowly when baby sucks.
 When baby stops sucking stop pressing plunger
- Do not press plunger faster than baby sucks and swallows. Do not press the plunger hard if plunger sticks. It may force too much milk, and baby may choke.
- Tickle roof of baby's mouth with your finger, not the syringe if baby stops sucking
- If baby holds tongue behind his lower gums, place slight downward pressure on back of tongue. This is necessary for proper breast feeding.
- Burp baby after each syringe of milk. Record the time baby was fed and amounts.
- Clean syringe take syringe apart washing in hot water with mild liquid soap. Rinse well and air dry.

Weaning

When to start weaning is a personal decision. Some infants may start the process around six months when solid foods are introduced. Some mothers set a goal to wean by one year. However, many babies love to breastfeed and may continue morning, nap time, and bedtime feeds until two or older. Whatever the reason, the key to weaning success is to make it a slow gradual process for both mom and baby.

- If your infant is nursing (or you are pumping) eight times per day, take away one feeding (or pump session) and hold off nursing or pumping until next feeding
- Use ice packs for any discomfort or relief of swelling
- Continue the process gradually, taking away another feeding or pump session every 2-3 days (or your body is comfortable withholding the breastfeeding or pump session)
- As your body gets the message of decreased emptying, milk production slows
- If at any time, you get uncomfortable holding milk and tenderness is not relieved by ice packs, hand express or pump just enough milk to make yourself comfortable. Be careful not to empty breast completely, or this will encourage more milk production.
- When ready to completely stop breastfeeding, you may use cabbage leaves to help the drying process. Apply clean refrigerated leaves of green cabbage next to the breast tissue under bra and change when wilted. May apply ice packs over cabbage for added relief.
- Watch for painful lumps/clogged milk ducts during the weaning process. Massage tender lumps while nursing or pumping to help express milk. Apply cabbage/ice packs treatment for relief.
- Some women find non-steroidal anti-inflammatory medicines, such as ibuprofen, to be helpful during the weaning process to control inflammation. Check with your care provider as needed to determine if this is a good option for you.
- Sunflower Seed Lecithin is a vitamin supplement found in vitamin and health food stores or on-line. It is used as an emulsifier, added in foods to help ingredients to mix more easily. In breastfeeding, it can help during engorgement, plugged ducts, mastitis, and weaning to prevent and ease those problems.

Contact your Lactation Consultant or care provider if you develop a fever above 101 Fahrenheit. Or flu-like symptoms, or plugged ducts or discomfort that is not relieved by the suggestions listed above.

Additional resources

WIC (Women, Infants and Children)

If you qualify for WIC, you have access to all of the breastfeeding services they provide. WIC has breastfeeding peer counselors, electric pumps available for mothers of infants still hospitalized, classes and various support groups. Call your WIC office for further program details, or call your local Health Department to sign up or to see if you qualify.

- Mom's doctor and phone number
- Baby's first appointment*
- Baby's discharge weight
- Baby's doctor and phone number
- Baby's birth weight

*It is recommended your baby should be seen by their pediatrician within 24-48 hours after discharge for a weight check.

Internet resources

- www.ilca.org
- La Leche League USA (<u>Illusa.org</u>)
- Office on Women's Health (womenshealth.gov)
- Breastfeeding CDC (<u>cdc.gov/breastfeeding</u>)
- <u>www.lowmilksupply.org</u>
- BFAR Breastfeeding After Breast and Nipple Surgeries (<u>bfar.org</u>)
- Parent Handouts Lactation Education Resources
 (lactationtraining.com)
- www.kellymom.com
- AAP American Academy of Pediatrics (<u>aap.org</u>)
- Drugs and Lactation Database (LactMed[®]) NCBI Bookshelf (<u>nih.gov</u>)
- Postpartum Support Virginia You're not alone.
 We can help. (postpartumva.org)

References

- Lawrence, Ruth and Lawrence, Robert. (2022). Breastfeeding: A Guide for the Medical Professional, (9th ed.). Elsevier Health Sciences
- 2. Newman, Jack. (2021). Lactation and Feeding Management. Ibconline. Ca
- 3. Centers for Disease Control and Prevention. (2023, March 3). Hand expression. Centers for Disease Control and Prevention. <u>https://www.cdc.gov/</u> <u>nutrition/emergencies-infant-feeding/hand-</u> <u>expression.html</u>
- Huggins, K. (2022). Nursing Mother's Companion 8th Edition: The Breastfeeding Book Mothers Trust, from Pregnancy Through Weaning.
- Cluster feeding and growth spurts. WIC Breastfeeding Support - U.S. Department of Agriculture. (n.d.). <u>https://wicbreastfeeding.fns.usda.</u> gov/cluster-feeding-and-growth-spurts
- Hand expressing. La Leche League International. (2023a, September 26). <u>https://llli.org/</u> <u>breastfeeding-info/hand-expressing/</u>
- Signs baby isn't getting enough breastmilk. La Leche League International. (2023b, September 21). <u>https://llli.org/breastfeeding-info/is-baby-getting-enough/</u>
- 8. Mastitis And Sore Breasts. La Leche League International. (2024, October 30). <u>https://Illi.org/</u> <u>breastgeeding-info/mastitis</u>
- Mitchell, K.B., Johnson, H.M., Rodriguez, J.M., Eglash, A., Scherzinger, C., Zakarija-Grkovic, et al. 2022. Academy of breastfeeding Medicine clinical protocol #36: The mastitis spectrum, revised 2022. Breastfeeding Medicine, 17(5), 360376. Doi: 10.1089/ bfm.2022.29207.kbm
- Mitchell, Katrina. (2024). Physician Guide to Breastfeeding. Retrieved from <u>https://</u> physicianguidetobreastfeeding.org/maternalconcerns/nipples/ date 1/14/2024

Special instructions

Name

 Boies, E. G., & Vaucher, Y. E. (2016b). ABM Clinical Protocol #10: Breastfeeding the late pre-term (34–36 6/7 weeks of gestation) and early term infants (37–38 6/7 weeks of gestation), second revision 2016. Breastfeeding Medicine, 11(10), 494–500. <u>https://doi.org/10.1089/</u> <u>bfm.2016.29031.egb</u>

- Kellams, A., Harrel, C., Omage, S., Gregory, C., Rosen-Carole, C., & Academy of Breastfeeding Medicine. (2017). ABM Clinical Protocol #3: Supplementary Feedings in the Healthy Term Breastfed Neonate, Revised 2017. Breastfeeding Medicine, 12(3). <u>https://doi.org/10.1089/</u> <u>bfm.2017.29038.ajk</u>
- Lactation Education Accreditation and Approval Review Committee (LEAARC), Suzanne Hetzel Campbell, Judith Lauwers, & Rebecca Mannel. (2019). Core Curriculum for Interdisciplinary Lactation Care. Jones & Bartlett Learning.
- Lawrence, R. A., & Lawrence, R. M. (2022). Breastfeeding: A Guide for the Medical Professional. Elsevier Health Sciences.
- Proper storage and preparation of breast milk. (2023, April 17). Centers for Disease Control and Prevention. <u>https://www.cdc.gov/breastfeeding/</u> recommendations/handling_breastmilk.htm
- Walker, Marsha. (2023). Breastfeeding management for the clinician: Using the evidence 5th ed. Jones and Bartlett Learning.
- 17. Wambach, Karen & Spencer, Becky (2021) Breastfeeding and Human Lactation, (6th Ed.), Jones & Bartlett.
- Mitchell, K. B., Johnson, H. M., Rodríguez, J. M., Eglash, A., Scherzinger, C., Zakarija-Grkovic, I., Cash, K. W., Berens, P., & Miller, B. (2022). Academy of Breastfeeding Medicine Clinical Protocol #36: The Mastitis Spectrum, Revised 2022. Breastfeeding Medicine, 17(5), 360–376. <u>https://doi.org/10.1089/bfm.2022.29207.kbm</u>

Phone

Please call the hospital breastfeeding resource and/or your OB or pediatrician for any breastfeeding problems you may encounter, including:

- 3-5 day old sleepy baby that will not eat.
- Baby wetting less than 6 diapers and/or no stools in 24 hour period (only a concern after the baby is 5 days old).
- Baby accepts bottle but not breast.
- Mother experiencing cracked nipples beyond 2 weeks postpartum.
- Severe engorgement.
- Baby is fussy and you are concerned.
- Signs of mastitis: fever above 101, flu-like symptoms, painful breasts, breasts that are hard and hot to the touch.
- No changes in your breasts by day 5.

Call 911

Baby symptoms:

Difficulty waking baby Difficulty breathing, choking Bright red bleeding from circumcision that will not stop

Call your doctor

Baby symptoms:

Temperature below 97 F or above 100.4 F No wet diapers within 24 hours Persistent vomiting Refuses feedings Bright red bleeding from umbilical stump Foul odor or drainage from umbilical stump Any rash that does not clear up Signs of jaundice (yellow eyes/skin) If you believe your baby to be in pain

First two weeks: Daily breastfeeding log

Day 1	Hour:		 			 				
Day	Hour:									
2										
Day	Hour:									
3										
Day	Hour:									
4										
Day	Hour:									
5										
Day	Hour:									
6										
Dav	Hour:									
7										
Devi	Herm									
8	Hour:									
Day 9	Hour:					 				
Day 10	Hour:									
Day	Hour:									
Day	Hour:									
12										
Day	Hour:									
13										
Day	Hour:									
14										

Day	Wet diapers	W					
1	Black or brown tarry soiled diapers	S					
Day	Wet diapers	W	w				
2	Black or brown tarry soiled diapers	S	S				
Day	Wet diapers	W	w	W			
3	Brownish-green to yellow soiled diapers	S	S				
Day	Wet diapers	W	w	W	w		
4	Green/yellow soiled diapers	S	S				
Day	Wet diapers	w	w	W	w	w	
5	Yellow soiled diapers	S	S				
Day	Wet diapers	W	W	W	W	W	w
6	Yellow soiled diapers	S	S				
Day	Wet diapers	W	W	W	W	W	w
7	Yellow soiled diapers	S	S				
Day	Wet diapers	W	W	W	W	W	w
8	Yellow soiled diapers	S	S				
Day	Wet diapers	W	W	W	W	W	w
9	Yellow soiled diapers	S	S				
Day	Wet diapers	W	w	W	W	w	W
10	Yellow soiled diapers	S	S				
Day	Wet diapers	W	W	W	W	W	w
11	Yellow soiled diapers	S	S				
Day	Wet diapers	W	w	W	W	W	w
12	Yellow soiled diapers	S	S				
Day	Wet diapers	W	w	W	W	W	W
13	Yellow soiled diapers	S	S				
Day	Wet diapers	W	w	W	W	W	W
14	Yellow soiled diapers	S	s				

Directions

- Fill in the hour above the box each time your baby nurses.
- Fill in the number of minutes on each breast inside the box.
- Circle the W when your baby has a wet diaper.
- Circle the S when your baby has a soiled diaper.
- The days start from time of birth so if your baby is born at 8pm, day 2 won't begin until 8pm the next day.

Goal: 8 to 12 feedings every 24 hours

- Day 1 remember it is expected that newborns do not have a good appetite and most would rather sleep and snuggle than eat. Wake baby every 3 hours to offer breast, but don't force. Your baby's appetite will perk up after the first 24 hours.
- It's okay if your baby has more wet or soiled diapers than indicated here. You should call your doctor if your baby has less than the number on this log. If you cannot tell that the diaper is wet, do not count it. Your baby should have at least 1-2 stools, with all stools totaling at least a palm size amount, in a 24-hour period. See page 16 for signs that the baby is getting enough to eat.

Baby's second night

You've made it through your first 24 hours as a new mom. Maybe you have other children, but you are a new mom all over again and now its your baby's second night.

All of a sudden, your little one discovers that he's no longer back in the warmth and comfort—albeit a bit crowded—womb where he has spent the last 8 ½ or 9 months—and it is SCARY out here. He isn't hearing your familiar heartbeat, the swooshing of the placental arteries, the soothing sound of your lungs or the comforting gurgling of your intestines. Instead, he's in a crib, swaddled in a diaper, a tee-shirt, a hat and a blanket. All sorts of people have been handling him, and he's not yet become accustomed to the new noises, lights, sounds and smells. He has found one thing though, and that's his voice…and you find that each time you take him off the breast where he comfortably drifted off to sleep, and put him in the bassinet—he protests, loudly.

In fact, each time you put him back on the breast he nurses for a little bit and then goes to sleep. As you take him off and put him back to bed—he cries again... and starts rooting around, looking for you. This goes on—seemingly for hours. A lot of moms are convinced it is because their milk isn't "in" yet, and the baby is starving. However, it isn't that, but the baby's sudden awakening to the fact that the most comforting and comfortable place for him to be is at the breast. It's the closest to "home" he can get. It seems that this is pretty universal among babies—lactation consultants all over the world have noticed the same thing.

So, what do you do? When he drifts off to sleep at the breast after a good feed, break the suction and slide your nipple gently out of his mouth. Don't move him except to pillow his head more comfortably on your breast. Don't try and burp him—just snuggle with him until he falls into a deep sleep where he won't be disturbed by being moved. Babies go into a light sleep state (REM) first, and then cycle in and out of REM and deep sleep about every ½ hour or so. If he starts to root and act as though he wants to go back to breast, that's fine...this is his way of settling and comforting. During deep sleep, the baby's breathing is very quiet and regular, and there is no movement beneath his eyelids.

Another helpful hint...his hands were his best friends in utero...he could suck on his thumb or his fingers anytime he was the slightest bit disturbed or uncomfortable. And all of a sudden he's had them taken away from him and someone has put mittens on him. He has no way of soothing himself with those mittens on. Babies need to touch—to feel—and even his touch on your breast will increase your oxytocin levels which will help boost your milk supply. So take the mittens off and loosen his blanket so he can get to his hands. He might scratch himself, but it will heal very rapidly—after all, he had fingernails when he was inside you, and no one put mittens on him then.



© 2012/Lactation Education Consultants May be copied and distributed freely. May not be sold.

Atención: si habla español, tiene a su disposición servicios lingüísticos gratuitos. Llame al 844-809-6648.

주의: 한국어를 사용하시는 경우, 언어 지원 서비스를 무료로 이용하실 수 있습니다. 844-809-6648 번으로 전화해 주십시오.

注意:如果您讲中文普通话,则将为您提供免费的语言辅助服务。请致电 844-809-6648。

ATTENTION: Language assistance services are available to you free of charge. Call 844-809-6648.

Sentara complies with applicable Federal Civil Rights Laws and does not exclude, deny benefits to, or otherwise discriminate against any person on the grounds of race, culture, color, religion, marital status, age, sex, sexual orientation, gender identity, gender expression, national origin, disability, or source of payment.

