

A close-up photograph of a Black woman with curly hair, smiling warmly as she breastfeeds her baby. She is wearing a white tank top. The baby is wrapped in a white cloth. The background is a soft, out-of-focus white.

Breastfeeding  
Care Center  
513 862 7867

Essentials of Breastfeeding  
and Pumping



Congratulations on your decision to breastfeed! We want you to be successful with your breastfeeding experience, as it provides many health benefits for you and your baby. This booklet was written to help you understand the basics of breastfeeding, including:

- Knowing that you are making enough milk and that your baby is getting enough of it
- Positioning your baby for breastfeeding
- Care Plans for early postpartum period
- Expressing your milk and storing it for preterm and full-term babies.

If you would like to read more about breastfeeding, go to [www.TriHealth.com](http://www.TriHealth.com) *Breastfeeding Resources*. If you need more personalized attention, please contact us at TriHealth Breastfeeding Care Center.

—*TriHealth Lactation Consultants*

## TriHealth Breastfeeding Care Center

Our experienced International Board Certified Lactation Consultants can assist mom and baby with a variety of simple and complex breastfeeding problems including:

- Managing engorgement, mastitis, or sore nipples
- Evaluating and managing under or over production of milk
- Transitioning to breastfeeding with preterm, late preterm, or multiple infants
- Identifying oral structural challenges which may interfere with breastfeeding
- Choosing appropriate methods or bottles for supplementing baby that support transition to breastfeeding

Our International Board Certified Lactation Consultants have more training and experience assisting families with breastfeeding than any area hospital. We are at the cutting edge of evidence-based research and practice.

Our Services include:

### 1) Breastfeeding Helpline

If you are experiencing a breastfeeding problem, you can speak with one of our lactation consultants at TriHealth's Breastfeeding Helpline (513 862 7867 option 3)

- Monday–Friday, 8:30 a.m.–4:30 p.m.
- Saturday, 8 a.m.–12 noon

### 2) Outpatient appointments

A lactation consultant can offer you an in-depth assessment to help you overcome breastfeeding problems and reach breastfeeding goals:

- Assess baby's oral structures, state of alertness, and carry out a general assessment
- Assess mother's breasts and milk production
- Weigh your baby pre- and post-feeding to measure breastfeeding effectiveness
- Identify mother and baby-related feeding problems
- Develop an individualized plan for home which may include:
  - Techniques for assisting breastfeeding effectiveness
  - Strategies for building and maintaining mother's milk production
  - Recommendations for appropriate method of supplementation
  - Referral to appropriate health care providers for additional treatment when necessary
- Outpatient appointments can be scheduled by calling the Helpline (513 862 7867 option 3)

### 3) Monthly breastfeeding support group meetings

### 4) Retail sale of Medela breast pump parts, accessories and breastfeeding pillows





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## I. Breastfeeding Basics

Place baby skin-to-skin as early as possible after birth. Babies are usually alert the first two hours after birth. This is the best time to breastfeed. You may guide baby to breast while skin-to-skin. After the first two hours, your baby could be sleepy for the next 10 to 12 hours, so it is important to try breastfeeding soon after birth.

### Positioning You and Your Baby

The football and cross cradle positions work particularly well in the early newborn period. With your baby in those positions, you will be able to guide baby's head to your breast as well as support your breast. This is important in the early days since babies usually need extra support to latch on and breastfeed. They may not need as much extra support as they grow and become stronger. Other breastfeeding positions include cradle, sidelying, and laid back. These positions take a bit more practice. (For more information on positioning, go to [www.TriHealth.com](http://www.TriHealth.com) for the *Breastfeeding Resource Guide* online).

#### General Suggestions for Positioning Baby at Your Breast

- Sit with your back supported on a couch or chair with 1 to 2 pillows placed lengthwise behind you. If in bed, you may need more pillows.
- Support your baby with pillows to raise him to breast level.
- Baby should be in straight line from ear, shoulder and hip, with his entire body facing you.
- Separate baby's arms on either side of your breasts.

#### Breastfeeding Pillows Can Help with Positioning

There are many breastfeeding pillows that might be helpful with supporting your baby throughout the feeding to keep him close to your breast. You may need to use additional couch or bed pillows to raise baby to your breast level.

#### Football Position

- Place 2 to 3 pillows alongside your body on the side you will be feeding baby.
- Place baby on pillows on his side with his head and entire body turned toward you.
- Draw baby close into your body.
- Support baby's neck and shoulders with the hand that is on the same side as the baby.
- Support your breast with the opposite hand and hold it like a sandwich.



#### Cross Cradle Position

- Place 1 to 2 pillows on your lap. (You may also want pillows to support your arms.)
- Place baby on his side on the pillows with his head and entire body turned toward you.
- Draw baby close into your body.
- Support baby's neck and shoulders with the hand that is opposite the breast being used.
- Support your breast with the hand on the same side as the breast being used.
- Hold your breast like a sandwich.

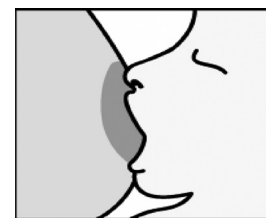
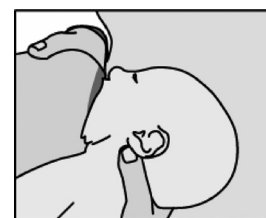
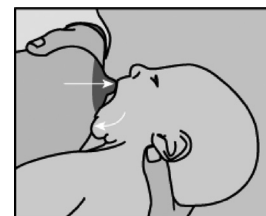


### Baby Latches Onto Your Breast

Once you and your baby are in position to breastfeed, baby is ready to latch onto your breast.

#### Guidelines for Assisting Baby With Latching Onto Your Breast

- Slightly tilt baby's head back with your hand that is supporting his head.
- Baby's chin should be up against your breast.
- Place your nipple just above baby's upper lip.
- As baby opens his mouth widely, guide him quickly up and over the nipple with the hand supporting his head. (You may need to use your thumb to compress more breast and nipple into his mouth during this motion).
- Baby's lower lip and jaw should draw in more areola and breast tissue than the upper lip.
- You will see baby's chin and cheeks up against your breast. His nose will just touch your breast and he can breathe out the sides of his nose (you won't see his lips).



#### How Baby Latches On

When baby feels the skin of your breast against his face and your nipple above his upper lip, his rooting reflex is stimulated. He opens his mouth widely and his tongue grasps your nipple and some of the *areola* (dark area surrounding nipple). He draws them back deeply into his mouth—all the way back to where his hard and soft



palates meet. It is important for baby to latch onto your areola in order to effectively remove milk from the milk ducts during breastfeeding. Baby cannot easily remove milk from your breast when he is shallowly on your nipple. For this reason, it is best to detach baby and try again for a deeper latch. It may take baby a few days to learn how to open widely and latch on, but with practice you both will become skilled.

### Comfortable Latch for Mom

Breastfeeding should not hurt. You should not feel biting or pinching. It should feel like a slight pulling or tugging sensation. When the baby finishes breastfeeding, the nipple should be rounded, not flattened. If you see dimpling of baby's cheeks or hear clicking sounds, then this may be signs of shallow latch. Detach your baby and try again to get a deeper latch. If soreness or damage occurs, talk with your nurse or a Lactation Consultant for assistance.

## Beginning to Breastfeed in the First Few Days

### Your Baby's Feedings in First 24 Hours

Attempt to breastfeed your baby at least 6 times in the first 24 hours. Look for signs that baby is ready to breastfeed. It is helpful to look for these feeding cues and not wait until baby cries. Crying is a late sign of hunger and baby will need to be calmed down in order to eat.

#### *Watch for these feeding cues:*

- Moving arms and legs
- Eyes fluttering
- Sticking out tongue
- Sucking movements
- Rooting
- Putting hands to mouth
- Crying—a late sign of hunger

### Waking Baby to Breastfeed

Some babies can be very sleepy and need to be awakened to breastfeed. Here are some ways to gently wake baby to prepare him to breastfeed.

#### *Suggestions for waking baby to feed:*

- Remove clothing and blankets except for diaper
- Gently rock baby back and forth, like doing sit-ups (bent at hips, not at waist)
- Gently roll baby side to side (your hands and your arms support baby's head and body)
- Stroking upward on baby's back or sides of ribs

- Gentle bicycling motions with arms and legs
- Change diaper before and/or between breasts
- **Babies should NOT be shaken to waken them**

### Is Baby Getting Enough to Eat in the First Few Days?

In the first few days of breastfeeding, your body will produce the early milk called *colostrum*. Colostrum can be thick and yellow or it can be clear. It contains proteins, calcium, vitamins, and minerals as well as antibodies to fight germs. Colostrum comes out in small amounts, but it is super-concentrated with nutrients. This allows your baby to practice breastfeeding in order to learn how to coordinate sucking, swallowing, and breathing with small volumes. Your baby doesn't require a lot to eat in the first few days as his stomach is small and will increase in size each day. On Day 1 of life, your baby's tummy is the size of a shooter marble. By Day 3, his tummy is the size of a ping pong ball, and by Day 10, it is the size of a large egg.

A healthy, full-term newborn should not need any extra supplement to your breast milk. If your baby is not breastfeeding at all on Day 1 of life, you should begin pumping by 12 hours to stimulate your milk production. Baby should produce at least 1 urine and 1 stool during the first 24 hours of life.

### Your Baby's Feedings in the Second 24 Hours

In the second 24 hours of life, it is important for your baby to breastfeed at least 8 times (count from baby's birth hour). Baby will be producing at least 2 urines and 2 stools during the second 24 hours. Look for signs of effective, nutritive feedings.

### Signs of Effective Breastfeedings

- You will observe a long and drawing jaw drop with each suck and a deeper jaw drop with each swallow
- You can usually hear a swallow, which sounds like a soft "k"
- You may see a pulsing motion at baby's temple as he sucks in rhythmical bursts
- Length of breastfeeding sessions are typically 10 to 30 minutes on a breast. Offer both of your breasts at a feeding, but some babies may only feed on one breast per session.
- You may experience uterine cramping during the first few days while breastfeeding. When a baby is effectively breastfeeding, the hormone *oxytocin* sends a signal from your brain which causes your uterus to contract for return to pre-pregnancy size.
- You may feel thirsty while breastfeeding. Keep water close by.
- Your baby is meeting his daily goals for number of breastfeedings, urines, and stools.

## “Let-Down” of Milk

When your baby is effectively breastfeeding, a hormone called oxytocin signals the milk-producing cells in your breast to quickly send the milk down through the milk ducts to your nipple. This is called a “let-down.” The let-down usually occurs within the first few minutes after baby latches on and begins sucking. This fast flow of milk lasts for a minute or less, but keep breastfeeding because your baby continues to get milk. You may not feel the let-down until your milk begins to “come in” after Day 3. Some mothers feel a tingling or pins and needles sensation when they are experiencing a let-down. Other mothers don’t feel it but see their baby start to swallow rapidly while the let-down is occurring and then go into a slower sucking and swallowing pattern as they continue to breastfeed. Other signs of let-down are thirstiness, sleepiness, and warmth. You may feel cramping in your uterus during the first week of breastfeeding from oxytocin release to return your uterus to its pre-pregnancy size. Mothers may have 2 or 3 let-downs during a breastfeeding session, but may only notice the first, more forceful let-down.

## Cluster Feedings

Your baby may begin cluster feeding on Day 2 or 3 of life. Cluster feeding is when your baby cues to breastfeed every 1 to 1-1/2 hours for several feedings. This typically occurs at night. Cluster feeding is your baby’s way of stimulating your milk production to increase in order to meet his growing needs. As long as your baby is eating effectively and producing the expected number of urines and stools for his day of life, your breast milk should meet his needs.

## Prolactin—An Important Milk-Making Hormone

Breasts come in all shapes and sizes, and whether large or small, most breasts can make enough milk for one or more babies. Your breasts contain many milk-producing cells that began developing during your pregnancy. The hormone *prolactin* is released into the milk-producing cells each time your baby breastfeeds. This hormone signals your breasts to make more milk. The more frequently and effectively your baby breastfeeds, the more often prolactin signals your breasts to make milk. In this way, your milk production continues to build to meet your baby’s growing needs. If baby is not removing your breast milk frequently or effectively around the clock, you may not make enough milk to fully feed your baby. If your baby is not breastfeeding well (see *Care Plan for Breastfeeding Your Healthy, Full-Term Newborn* on Page 6), you may need to use a high-quality breast pump to establish and maintain your milk production. Call the TriHealth Breastfeeding Care Center to speak with a lactation consultant if you have breastfeeding concerns (513 862 7867 option 3).

## On Days 3–5, Mother’s Milk Typically Increases in Volume

By Days 3–5 after baby’s birth, you will begin producing a greater volume of milk that is thinner and whitish in color. This is often called your milk “coming in.” Your milk production will continue to increase by frequent and effective breastfeeding (or pumping). You will hear baby swallowing more frequently and swallows will be louder. Baby will show signs of effectively feeding.

As the feeding progresses, you will notice a change in baby’s sucking and swallowing pattern. He makes smaller sucking movements with the front of his mouth. You won’t see his jaw dropping as deeply. There will be fewer or no swallows. He is no longer transferring milk. At this point, you can “break the suction” and take baby off your breast. Slide your finger between his gums and remove your nipple from his mouth. Offer the second breast.

Babies are feeding 8 to 12 times in 24 hours, starting on Day 3 through the next few months. On Day 3 of life, baby should be producing 3 urines and 3 stools. On Day 4 of life, baby should be producing 4 urines and 4 stools. Beginning on Day 5 of life, baby should be producing 6 to 8+ urines and 4 to 6+ stools. This output continues for the next month.

## Milk “Coming In,” Engorgement, and Sore Nipples

It is normal for your breasts to feel fuller, heavier, warmer, and tender when your milk is “coming in.” Your breasts become engorged with milk and other fluids that are used to make the milk. This normal fullness usually goes away when your baby is breastfeeding often and well (at least 8 to 12 times in 24 hours). Some women develop hard, swollen, painful breasts when the milk first comes in. The nipple and areola may become hard and flat, making it difficult for baby to latch on deeply to remove enough milk. Your nipples may become sore from baby latching on to the nipple alone. To soothe sore nipples, express your breast milk onto the nipple after each feeding or pumping and then apply purified lanolin for moist wound healing.

If you are feeling discomfort and your baby is having difficulty breastfeeding, call the TriHealth Breastfeeding Care Center (513 862 7867 option 3).

## Color of Baby’s Stools

The first 3 days of life, your baby’s stools are dark meconium. By Day 4 of life, as your baby breastfeeds effectively and frequently, he should have passed the meconium and be having 4 stools that are yellowish and seedy.

## Your Milk Is “In” by Day of Life 14

By the end of the second week of baby’s life, your milk production should be fully “in.” Your milk production also grows to meet his nutritional needs. When baby has been breastfeeding frequently and effectively, his tummy is growing daily. It may be more difficult to increase the amount of milk you are making if breastfeedings (or pumping sessions) were infrequent and if the milk was not effectively removed from your breasts. This signals the milk-producing cells in your breasts to decrease milk production. If you have concerns about your milk production, call the TriHealth Breastfeeding Care Center (513 862 7867 option 3).

## Techniques for Calming Baby

- Place your baby skin-to-skin on your chest or your partner’s chest
- Stroke baby’s back downward with firm touch

## A Breastfeeding Team

Breastfeeding is a learned skill for you and your baby. It takes about two weeks for both of you to learn how to be an effective breastfeeding team. If either of you is having difficulty, don’t hesitate to seek breastfeeding help.

## Partners Are an Important Part of the Breastfeeding Team

Partners can help in many ways. Here are some examples of ways that partners can support you and your baby.

- Bringing baby to you to breastfeed
- Helping you comfortably position baby for breastfeeding
- Providing extra hands when baby is latching on
- Using stimulation techniques to help baby stay awake during breastfeeding
- Changing baby’s diapers
- Record breastfeeding sessions, urines, and stools on chart
- Bringing you food and something to drink while you breastfeed
- Watching baby while you rest
- Bathing baby

## Support of Family and Friends

Family and friends can support you and your baby by offering you encouragement, helping with household tasks, bringing prepared meals, caring for your older children, and running errands. Ask for help if you need it, especially in the early days when you and your baby are learning to breastfeed.

## Care Plan for Breastfeeding Your Healthy, Full-Term Newborn

### Care Plan Goals

- Establish effective breastfeeding
- Enable parents to identify effective breastfeeding behaviors
- Establish and maintain your milk production through breastfeeding

### Suggestions for Breastfeeding Your Newborn

- Watch for baby’s feeding cues. Offer your breast when you see cues
- Position yourself and baby for feeding
- As baby opens his mouth widely, help him latch onto your breast
- You should feel a tugging sensation; if painful, try latching again
- You and your partner may need to stimulate baby to stay awake and feed during the first week

### Signs That Breastfeeding Is Going Well During the First Week of Life

- Baby is breastfeeding 8 to 12+ times in 24 hours (beginning Day 2 of life)
- Breastfeeding sessions are lasting 10 to 30 minutes per breast
- Baby is sucking and swallowing with his jaw dropping and you hear swallowing
- Breastfeeding is comfortable for you (no nipple or breast pain)
- By Day 4 of life, your baby’s stool should be yellow in color and he should have at least 4 stools and 6 wet diapers in 24 hours
- Baby appears to be satisfied after breastfeeding
- Baby has not lost more than 10% of his birth weight
- Baby should be gaining between 2/3 to 1 oz. per day when your milk comes in

### What To Expect During the First Month of Life

By the end of the first week of life, your baby will be breastfeeding 8 to 12 times in 24 hours. This will continue for several months. His daily goals for urine output will be 6 to 8+ wet diapers and 4 to 6+ stools in 24 hours. This will continue for the first 6 weeks. After 6 weeks, baby may decrease the number of stools to 1 to 2 large stools each day. Feedings will continue to last 10 to 30 minutes on each breast for the first month until baby becomes more efficient and effective at breastfeeding. The time will decrease around one month.

## Breastfeeding Concerns/Reasons To Call Lactation Consultant

Contact your baby's doctor or your doctor, as well as TriHealth Breastfeeding Care Center (513 862 7867 option 3) with any of the following concerns:

- Baby is not breastfeeding 8 to 12+ times in 24 hours
- Baby is not breastfeeding more than 10 minutes per session
- Baby is breastfeeding more than 60 minutes per session and acting hungry afterwards
- Baby is not having 6 to 8+ urines and/or 4 to 6+ stools in 24 hours after Day 5 of life
- Baby is having difficulty latching on and/or breastfeeding
- You have sore and/or damaged nipples or breasts due to any reason
- Baby needs to be given a supplemental bottle or syringe of breast milk or formula
- Baby is not back to birth weight by 2 weeks of age
- Baby is not gaining weight well or is losing weight
- Baby is fussy, gassy, pulling off or refusing the breast
- You are experiencing milk production problems (high or low)



## II. Managing Breastfeeding Problems: Care Plans

### When a Breastfeeding Baby Is Supplemented

If your baby is not breastfeeding well for some reason, it is important that he still eats. It may be medically necessary for your baby to be given a supplement of your expressed breast milk or infant formula. Do not be discouraged if this happens; a lactation consultant will discuss ways to supplement that are less likely to interfere with breastfeeding. (This may be with a syringe, bottle, or cup). With help and persistence, your baby's ability to breastfeed will improve.

It is important to begin pumping when your baby is given a supplement. If your baby isn't breastfeeding effectively, you will need to continue removing milk from your breasts frequently and effectively with a breast pump. This will help you to establish and maintain your milk production so that you can breastfeed when your baby is able. Plan to rent a hospital-grade breast pump if baby is not breastfeeding well. Most mothers find that they get more milk in less time when they use a rented hospital-grade breast pump.

#### *Reasons for Supplementing Full-Term Baby or Late Preterm Baby (34–37 weeks gestational age)*

- Baby is not breastfeeding effectively at least 8 times in 24 hours
- Baby is sleepy
- Baby is unable to latch on and breastfeed
- You are using a nipple shield to help your baby latch on and breastfeed
- Baby is not having adequate urines and stools (Not meeting daily goals)
- Baby has low blood sugar
- Baby has significant jaundice
- Baby has weight loss of 10% or greater

### Supplementing Care Plans

You and your baby may be placed on one of the following care plans which involve breastfeeding, offering a supplement, and pumping. Follow the care plan that is given for your baby's situation. If you have any questions while your baby is in the hospital, speak with your nurse or lactation consultant. If you have questions after your baby is discharged from the hospital, speak with your baby's doctor and call the TriHealth Breastfeeding Care Center (513 862 7867 option 3).

### Care Plan for the Full-Term Baby Who Is Not Breastfeeding Well or Supplemented for Medical Reasons

#### Care Plan Goals

- Support and encourage baby to breastfeed.
- Offer baby supplemental feedings in order to keep him well-nourished while learning to breastfeed or until no longer medically necessary.
- Establish and maintain your milk production so that you can transition baby to breastfeeding.

It is important to wake your baby to feed every 3 hours around the clock. Babies need to eat a minimum of 8 times in 24 hours in order to gain weight.

#### Every 3 hours:

##### *Step 1 Attempt Breastfeeding*

- Follow the *Waking Baby to Breastfeed Techniques*.
- Attempt breastfeeding for 10 to 15 minutes total. Allow your baby to continue breastfeeding longer if effectively feeding.

##### *Step 2 Offer Supplement*

- If baby does not breastfeed effectively at least 10 to 15 minutes, offer supplement of 1/2–1 oz. (15–30 ml) expressed breast milk or formula or according to doctor's order\*
- If baby continues to need a supplement, increase the amount supplemented each day
- Follow the *Care Plan for Supplementing the Breastfed Baby with a Bottle*.

##### *Step 3 Express Your Milk with a Breast Pump*

- Express your breast milk with a hospital-grade breast pump to better stimulate your milk production (you can rent a hospital-grade pump from the hospital or another medical supply company)
- Follow the *Care Plan for Establishing Milk Production with a Hospital-Grade Electric Breast Pump* and *Guidelines for Storage of Breast Milk for a Healthy Full-Term Newborn*.

\*Note: If you have a partner, family member or friend helping you, they can supplement your baby while you pump. If not, offer the supplement then pump afterwards. The amount supplemented to baby will need to increase by small amounts each day. Check with baby's health care provider for amounts to be offered to your baby.

## Signs That Baby Is Ready To Transition to Exclusive Breastfeeding

- Wakes on his own to breastfeed at least 8 to 12 times in 24 hours
- Latches deeply onto your breast without discomfort or pain
- Breastfeeding sessions are lasting 10 to 30 minutes per breast
- Baby is sucking and swallowing with his jaw dropping and you hear swallows
- Breastfeeding is comfortable for you (no nipple or breast pain)
- Wets at least 6 diapers and passes at least 4 stools in 24 hours by 6 days old

## Transition to Exclusive Breastfeeding

Talk with your baby's health care provider regarding how long to continue this supplementing care plan and the amount of supplement to be given to your baby.

## Breastfeeding the Late Preterm Baby

Babies born between 34–37 6/7 weeks of gestation are late preterm infants. If your baby is late preterm, he may be sleepy and not wake on his own for feedings. He will need to learn how to coordinate sucking, swallowing and breathing in order to feed. He may become over-stimulated by loud talking or lights. Late preterm babies have many of the same behaviors as a preterm baby until they reach 38 weeks. In order for a late preterm baby to feed optimally, we use special developmental techniques that are appropriate for his gestational age. We plan baby's care based on his gestational age. The lactation consultant will be able to show you some developmental techniques to support you and your baby when feeding.

## Care Plan for Breastfeeding Your Late Preterm Baby (Born at 34–37 6/7 Weeks Gestation)

### Care Plan Goals

- Support baby while he is learning to breastfeed
- Offer baby supplemental feedings in order to keep him well-nourished while maturing and learning to breastfeed
- Establish and maintain your milk production so that you can transition baby to breastfeeding when ready

It is important to wake your baby to feed every 3 hours around the clock. Babies need to eat a minimum of 8 times in 24 hours in order to gain weight.

## Every 3 hours:

### Step 1 Attempt Breastfeeding

- Follow the *Waking Baby to Breastfeed Techniques*
- You may need to swaddle baby to support him for more effective breastfeeding (keep his hands free)
- Attempt to get baby to latch on for 5 to 10 minutes. If baby is able to latch on and begins breastfeeding, allow him to continue longer if effectively feeding (See *Signs of Effective Breastfeedings*)

### Step 2 Offer Supplement

- If baby does not breastfeed effectively for at least 15 minutes, offer supplement of 1/2–1 oz. (15–30 ml) expressed breast milk or formula or according to doctor's order\*
- If baby continues to need a supplement, increase the amount supplemented by small increments of 7–10 mL each day
- Follow the *Care Plan for Supplementing the Breastfed Baby with a Bottle*
- Finish breastfeeding and bottle feeding session within 30 minutes to prevent weight loss

### Step 3 Express Your Milk with a Breast Pump

- Express your breast milk with a hospital-grade breast pump to better stimulate your milk production (you can rent a hospital-grade pump from a medical supply company)
- Follow the *Care Plan for Establishing Milk Production with a Hospital-Grade Breast Pump*

\* Note: If you have a partner, family member or friend helping you, they can supplement your baby while you pump. If not, offer the supplement, then pump afterwards. Check with baby's health care provider about how long to continue supplementing your baby.

## Transitioning Baby to Exclusive Breastfeeding

As your baby matures and becomes more skilled at breastfeeding, he will be able to stay awake and feed long enough to obtain a full feeding. When this happens, he will no longer need a supplemental bottle afterwards. He may start spitting up or refusing to take the supplement after breastfeeding. It is important to stay in touch with your baby's doctor to make sure that your baby is gaining weight weekly when supplements are discontinued. It is also important to stay in touch with lactation consultants who are experienced with late preterm babies (TriHealth Breastfeeding Care Center 513 862 7867 option 3).

### Signs That Baby Is Ready To Transition to Exclusive Breastfeeding

- Wakes on his own to breastfeed at least 8 to 12 times in 24 hours
- Latches deeply onto your breast without discomfort or pain
- Breastfeeding sessions are lasting 10 to 30 minutes per breast
- Baby is sucking and swallowing with his jaw dropping and you hear swallows
- Breastfeeding is comfortable for you (no nipple or breast pain)
- Wets at least 6 diapers and passes at least 4 stools in 24 hours by 6 days old

### Care Plan for Establishing Milk Production with a Hospital-Grade Electric Breast Pump

If your baby is preterm, ill, or sleepy and not yet able to breastfeed well, a rented hospital-grade breast pump is strongly suggested. Only these pumps were made for round-the-clock use to establish and maintain a mother's milk production. Studies have shown that the milk-making hormone prolactin is higher when using a rented hospital-grade pump. It is very important before your milk "comes in" to stimulate this hormone in order for your body to produce enough milk for your baby. Initially you may only obtain a few drops of colostrum each time you pump. When you continue pumping regularly, your milk volume will increase. Effective milk removal is very important for you to build good milk production. It is strongly recommended to continue to use the hospital-grade pump for maintaining good production until baby is able to breastfeed well.

#### Care Plan Goals

- Stimulate your milk to "come in" and maintain good milk production to meet your baby's needs
- Pumping feels physically comfortable for you

#### Preparing to Pump

- Wash your hands thoroughly with soap and water.
- Put your breast pump collection kit together and attach it to the breast pump
- Massage your breasts from your rib cage to the areola and nipple area
- Center the flanges (breast shields) over your nipples to pump both breasts at the same time

### Pumping Your Breasts

- Turn on the pump
- Increase suction level to your highest comfortable level. (Higher suction does not mean you will obtain a higher volume of milk and can cause soreness).

#### How Often To Pump

- Pump at least 8 to 10 times in 24 hours. We recommend pumping every 3 hours.
- You may sleep for up to 4 hours at night but pump more frequently during the day to meet the minimum of 8 sessions per day.
- Keep a pumping log to help you keep track of how many times you are pumping.

#### How Long To Pump

*Days 0–3 (before your milk "comes in" and begins to flow)*

- Pump for 15 minutes.
- Use the highest level of suction pressure that feels comfortable. It should not be painful.
- You may get a few drops of colostrum but less than an ounce from each breast.

Regular, frequent pumping is important in the first week, even if you are obtaining small amounts of milk.

*Days 3–5 and Beyond (once your milk has "come in" and flows easily)*

- Pump for at least 15 minutes. Watch for your milk to stop dripping and pump 2 minutes beyond this point. If milk is still dripping at 30 minutes, you can stop. (Total time will be 15 to 30 minutes)
- Use the highest level of suction pressure that feels comfortable. It should not be painful.
- You may get more than an ounce from each breast.

Your milk production will continue to build up through Day 14 and beyond when you are pumping at least 8 times in 24 hours.

\*For mothers of preterm babies, talk with your lactation consultant in NICU/SCN for more information about your milk production goals.



## Pumping Tips

- You may feel a gentle pull and tug when pumping but you should not feel pain. Many pumps have different size flanges (breast shields) and you may need to be fitted with the right size flange so you are comfortable. The right fit helps you to get the most milk out.
- If the suction pressure is too high, it can cause pain and damage to your nipples. Turn the knob to the highest level that is comfortable.
- You will make more milk if you have a regular pumping schedule. If your pumping schedule is not working for you and you need some helpful ideas, call the TriHealth Breastfeeding Care Center at 513 862 7867 option 3.

## Cleaning Your Breast Pump Kit

After each use, wash your pump kit pieces that contact milk: flanges, clear connectors, yellow mounts with white membranes, and bottles (tubing and yellow caps on Symphony pump do not need to be washed).

- Wash with hot, soapy water
- Rinse with hot water
- Shake out excess water and lay pieces on clean towel to dry
- Dry the pieces with a clean paper towel if they are still wet when it's time to pump again

You can also wash your kit on the top rack of a dishwasher.

To sanitize pump kit pieces that contact milk, place them in a 4- to 5-quart saucepan and fill with cold water. Cover pan and boil 20 minutes. Drain off water and place on towel to dry.

## Troubleshooting Pump Problems

If you are not able to get suction pressure while pumping or the suction pressure is weak, make sure that:

- The flange (breast shield) is forming a complete seal around your breast
- The yellow caps on top of the Symphony pump are pushed on tightly and close top of pump
- The white membrane is pushed securely into the yellow valve inside the collection bottle
- Your pump kit pieces are completely dry before you begin pumping
- Check to make sure all pieces to your pump kit are connected securely together

Prevent milk from backing up into tubing by emptying the collection bottles before they become overly full.

If the pump kit tubing gets water inside or if you see condensation in the tubing after pumping, detach the bottles and allow the pump to run for 15 to 20 minutes until they are dry.

Note: If these suggestions do not improve the problem, exchange your rental breast pump for a different one at the supplier. If you have a personal pump, call the manufacturer.

## Care Plan for Expressing Your Milk by Hand

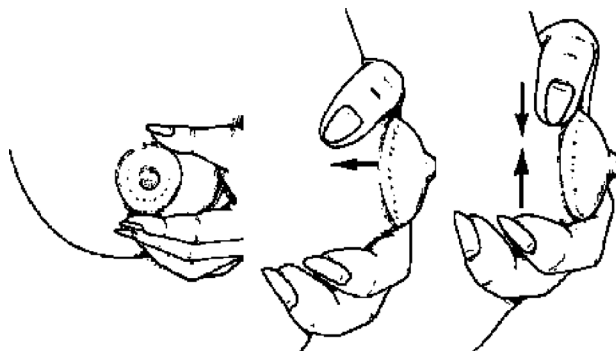
Hand expression is a useful skill to learn. Expressing a drop of milk onto your nipple beforehand may help baby to latch onto your breast. There are different techniques for hand expression, including the one pictured (below). Other illustrations or photos of techniques may be found via the links in the *Resources* section at the end of this booklet.

### Care Plan Goal

- Provide baby with colostrum or breast milk

### Technique for Hand Expressing Your Milk:

- Wash and dry your hands
- Hold a collection bottle or spoon under your nipple to collect your milk
- Grasp your breast slightly beyond the outer edge of your areola (the dark area around your nipple)
- Place your thumb and index finger on opposite sides of your nipple
- Press your index finger, middle finger, and thumb back toward your chest wall, keeping them in the same place on your breast. (Do not slide or spread them.) For large breasts, lift them first then push straight into your chest wall.
- Roll your thumb and fingers forward toward your nipple, changing finger pressure from the middle to index finger at the same time.
- Repeat rhythmically several times
- Rotate your index finger and thumb to another area of your breast and repeat



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## Guidelines for Storage of Breast Milk for a Healthy Full-Term Newborn

These guidelines were developed for storing expressed breast milk for feeding a full-term, healthy baby. For babies who are preterm or ill and hospitalized in the neonatal intensive care unit or special care nursery, there are different milk storage guidelines that will be provided to you.

Expressed breast milk contains many disease-fighting properties that protect your baby from bacteria and viruses. It is still important to wash your hands before expressing your milk as well as handling the stored milk to feed your baby.

### Milk Storage Guidelines for Healthy Full-Term Infants

Room temperature 72–79° F (22–26° C)	4 hours
Room temperature 66–72° F (19–22° C)	6–10 hours
Cooler bag with 3 or more frozen ice packs 59° F (15° C)	24 hours
Refrigerator at 32–39° F (0–4° C)	5–8 days
Self-contained, separate door of two-door refrigerator/freezer 39° F or colder	3–4 months
Deep Freezer 0° F (–18° C)	6–12 months

## Care Plan for Breastfeeding Your Baby with a Nipple Shield

A nipple shield may be recommended by your lactation consultant or nurse if you are having breastfeeding difficulties. If using the nipple shield after discharge, it is important to stay in contact with a lactation consultant to make sure your baby is feeding effectively (TriHealth Breastfeeding Care Center 513 862 7867 option 3).

### Care Plan Goals

- Help baby latch on and breastfeed effectively
- Make breastfeeding more comfortable for mother

### A Nipple Shield May Be Helpful When:

- Baby is premature
- Baby has trouble latching or maintaining latch
- Mother's nipples are flat or inverted
- Mother has nipple pain and/or damage

### Suggestions for Applying a Nipple Shield

- Your lactation consultant or nurse will help you choose which size nipple shield is best for you and your baby
- Stretch the nipple shield until it's almost inside out and center it over your nipple; this will pull your nipple fully into the shield and stimulate your baby to suck
- Smooth out the nipple shield over your areola

## Breastfeeding With Nipple Shield

- Support your breast and hold the edges of the nipple shield if necessary
- Baby should latch deeply onto the nipple shield, taking in some of your areola, not just your nipple (may need to sandwich your breast to help him get deeper latch)
- Baby should be actively sucking and swallowing for 10 to 30 minutes (see *Signs of Effective Breastfeedings*)
- Observe for colostrum/milk in tip of nipple shield after baby detaches from your breast
- The nurse or lactation consultant may talk with you about the need to supplement and pump after breastfeeding when using a nipple shield (see *Care Plan for Baby Who Is Not Breastfeeding Effectively*)

If you are following a supplementing care plan, make certain that your baby is breastfeeding effectively and gaining weight before you stop. Talk with your baby's doctor and a lactation consultant.

For suggestions for weaning from the nipple shield, go to [www.TriHealth.com Breastfeeding Resources](http://www.TriHealth.com/BreastfeedingResources). If you have specific questions, call the TriHealth Breastfeeding Care Center (513 862 7867 option 3)

## Care Plan for Supplementing the Breastfed Baby with a Bottle

When babies are not breastfeeding well, they may need to be fed a supplement of expressed breast milk or formula. It is important to remember that if a supplement is needed, whether it is expressed breast milk or formula, you need to begin pumping. Bottle feeding is a method that may be recommended to help your baby learn how to coordinate sucking, swallowing, and breathing while feeding. Breastfeeding can be reinforced with an appropriate bottle and nipple as well as the following techniques.

### Care Plan Goals

- Encourage safe feeding by properly positioning baby and choosing appropriate bottle
- Reinforce breastfeeding by encouraging baby to latch onto bottle nipple as if at breast
- Maintain mother's milk production by pumping with a hospital-grade rental breast pump

## Choosing a Bottle and Nipple

- Use a slow-flow nipple so your baby can manage the flow of milk
- Baby should be able to take 10 ml in 10 minutes. This allows baby to control the flow from the bottle better and is more compatible with breastfeeding.
- If the flow is too slow and it takes your baby too long to finish the bottle, talk with your nurse or lactation consultant. You may need to use a regular or different flow nipple until baby is more efficient.

## Positioning Baby for Bottle Feeding

- Hold your baby in a seated to position with his hips bent
- Support your baby's head, neck, and upper back with your arm along his back and your hand at the base of his head. Pressure from the palm of your hand will keep baby in an upright position.

## How To Bottle-Feed Baby

- Gently touch the tip of the bottle nipple above your baby's upper lip just as you would with your nipple when attempting to latch him onto your breast.
- Wait for baby to open widely then bring baby to bottle nipple, so that latching onto the bottle nipple is like latching onto your breast. Baby's mouth should take in most of the bottle nipple.
- Bottle should be level, allowing for the nipple to be half-full so baby can manage the flow of milk better. Do not tilt the base of the bottle up since this creates a faster flow. (Bottle base may need to be tilted up more toward the end of the feeding to keep milk in the nipple).
- If you see signs that baby cannot tolerate the flow, such as choking or coughing, help him by dropping the base of the bottle down with the nipple still in his mouth. This will stop the flow.
- Let baby pause during feeding as needed. This is a new skill for baby and pauses are normal. Pausing helps him to regulate sucking, swallowing, and breathing.
- Give baby chin and jaw support if after pausing, he does not start to suck again.

Note: If baby is losing milk from his mouth, gagging, choking, coughing, or biting the nipple, this may mean that the flow of the bottle nipple is too fast. He might feed more efficiently and safely with a different one. Ask your nurse or lactation consultant for suggestions.

## Care Plan for Breast Engorgement

Between Days 3 and 5, breast milk begins to increase as your milk "comes in." It is normal for your breasts to feel fuller, heavier and tender. Your breasts become engorged with milk and with other fluids that are used to make the milk. This normal fullness usually goes away when a baby is breastfeeding or if you are pumping often and well.

Some women develop hard, swollen, painful breasts when the milk first "comes in." The nipple and areola may become hard and flat, making it difficult for baby to latch on deeply to remove enough milk. Mother's nipples become sore from baby latching on to the nipple alone.

### Care Plan Goals

- Remove milk from your breasts
- Decrease breast swelling

### Suggestions for Relieving Engorgement

- Breastfeed or pump breasts every 2 to 2-1/2 hours during the day and 3 hours at night
- Decrease swelling in your breasts by applying cold packs 20 minutes before breastfeeding or pumping (See more info on cold pack at the end of this care plan)
- DO NOT USE HEAT when there is swelling. It can make it worse.
- Massage your breasts while breastfeeding or pumping by stroking toward your baby's mouth or the pump flange
- Ask your doctor about using a non-steroidal, anti-inflammatory medication, such as ibuprofen, to reduce inflammation
- Wear a supportive, well-fitting bra but avoid a tight bra or clothing that may put pressure on milk-making breast tissue
- Drink plenty of fluids. Avoid high-sodium (salt) foods and liquids that may increase swelling

### Helping Baby Latch on When You Are Engorged

Sometimes a mother's nipples and areolas become too full for baby to latch on. If your baby is unable to latch on for a feeding due to engorgement, you can pump 1 to 2 minutes to assist baby, then call the TriHealth Breastfeeding Care Center (513 862 7867 option 3).

### Relieving Uncomfortable Fullness After Breastfeeding

When your breasts are still uncomfortably full after breastfeeding, you can express some milk for relief. It's important to express just enough to be comfortable. Do not overdo the pumping since it may encourage overproduction. You may only need to do this temporarily since the engorgement should decrease over time.



### Suggestions for Making and Using Cold Packs

Cold packs are used to relieve breast swelling so your milk will flow more easily. They are also used for your comfort. You may only need to use them for 1 to 2 days as needed. To make cold packs:

- Place small ice cubes in a ziplock bag. (You can also use frozen peas or corn)
- Put ziplock bags inside a pillow case
- Wrap the cold packs around your breasts
- Alternate cold packs by placing them on your breasts for 20 minutes, take them off 20 minutes, put back on 20 minutes, take off 20 minutes, etc.
- Use cold packs between feeding or pumping sessions as you need them

If you are using frozen peas or corn, they can be put back in the freezer to refreeze and use later on your breasts. Do not eat the peas or corn after they have been thawed and refrozen.

Note: You may need to follow this care plan for 24 to 48 hours until engorgement is gone. Call the TriHealth Breastfeeding Care Center (513 862 7867 option 3) if engorgement is not relieved by these suggestions. If your symptoms worsen, call your doctor.

### Care Plan for Plugged Milk Ducts and Mastitis

Mastitis is an inflammation in your breast. There are two kinds of mastitis: inflammatory and infectious. Inflammatory mastitis can lead to infectious mastitis—which is also called a breast infection—if not treated early. It is very important to remove milk from your breasts frequently and effectively in order to prevent and relieve mastitis. If you stop pumping, your infection may get worse and the mastitis may lead to a breast abscess.

#### Symptoms of Inflammatory Mastitis—Plugged Duct

If you have a tender spot, redness, or a sore lump in your breast or nipple you may have a plugged duct. Milk backed up behind the plug causes the inflammation in your breast. It usually affects one breast. You may have a slight fever or none at all.

#### Symptoms of Infectious Mastitis—Breast Infection

If part of your breast or your entire breast becomes red and hard, you have a fever of 101 degrees or higher, and you feel flu-like and achy, you may have a breast infection. Breast infections may begin as a plugged duct, engorgement, or a cracked nipple. It can develop gradually or suddenly. Breast infections can affect one breast or both breasts.

### Care Plan Goals for Inflammatory Mastitis—Plugged Duct

- Decrease breast inflammation and eliminate plug
- Identify the cause of the mastitis
- Prevent mastitis from becoming breast infection or abscess

### Suggestions for Relieving Inflammatory Mastitis—Plugged Duct

- Breast feed or pump affected breast every 2 to 2-1/2 hours during the day and 3 hours at night until your symptoms subside
- Begin each breastfeeding session on the affected breast then switch to unaffected side
- Massage your breast while you breastfeed or pump, starting above affected area and stroking toward your nipple
- Use ice packs to relieve swelling and discomfort; rest as much as possible
- Drink plenty of fluids and eat healthy foods
- Do not wear a tight-fitting bra or clothing that presses against the breast tissue
- Ask your doctor about using non-steroidal, anti-inflammatory medications such as ibuprofen, to reduce inflammation and discomfort
- If you have any questions, call the TriHealth Breastfeeding Care Center (513 862 7867 option 3)

### Suggestions for Relieving Infectious Mastitis—Breast Infection

If you have been following the above steps for treating inflammatory mastitis and see no improvement or are feeling worse after 24 hours, you may have a breast infection.

#### Treat Symptoms of a Breast Infection Immediately

- Follow the *Suggestions for Relieving Inflammatory Mastitis* listed above
- Call your doctor right away
- Take the entire course of the antibiotic, if prescribed (typically 10 to 14 days)
- Use an effective breast pump to remove milk
- If you have any questions, call the TriHealth Breastfeeding Care Center (513 862 7867 option 3)

### III. Providing Breast Milk and Breastfeeding Your Premature or Sick Baby

Your breast milk has many important benefits for your baby, and even more so when your baby is born preterm or is ill. Research has shown that mother's breast milk is more than nutrition; it is like medicine that helps protect preterm and sick babies against infection and inflammation, and promotes growth. Your breast milk is easier for baby to digest and helps baby gain weight. Babies who receive their mother's breast milk have been found to have shorter hospital stays because of all the health and nutritional benefits. Even two weeks of mother's pumped milk can make a significant difference for a very premature baby. Whether your goal is to breastfeed or to provide milk while your baby is hospitalized, it's important to establish good milk production by pumping your breasts.

#### Importance of Starting To Express Your Breast Milk Early

Research has found that when babies are born early, the mother's body responds by producing breast milk with special disease-fighting and nutritional properties that are made just for the preterm baby. It is important to get started expressing your milk right away. The more frequently and effectively you pump, your milk production will continue to increase. If you are not removing your breast milk frequently or effectively around the clock, you may not make enough milk.

#### Begin Pumping in the Hospital

Research has shown that getting started pumping within 6 hours after baby's birth and pumping both breasts at the same time helps mothers to make more milk. Ask your nurse to help you get started. Your hospital room has an electric hospital-grade breast pump for you to use. Your nurse can give you a collection kit that attaches to the hospital-grade breast pump. This is your personal kit to take home with you when you leave the hospital. In the first few days after your baby is born (Days 0–3), you will express colostrum. Colostrum can be thick and yellow or it can be clear.

When you first pump your breasts right after birth, you may get a larger amount of colostrum. After that, colostrum may come out in small amounts until your milk volume begins increasing on Days 3–5. Colostrum is thick and sometimes it is difficult for the breast pump to remove it. Ask your nurse to show you how to hand express your milk before using the hospital-grade pump. Research has

shown that hand expression combined with pumping can make it easier to collect colostrum and mothers find that they make more milk. A video that shows how to hand express can be found at: <http://newborns.stanford.edu/Breastfeeding/MaxProduction.html>

#### Additional Suggestions for Pumping More Milk

- Massaging your breasts before and during pumping
- Placing your baby skin-to-skin (kangaroo care) before pumping
- Pumping at your baby's bedside with screens around you for privacy

#### How Often To Pump

Your goal is to pump 8 to 12 times in 24 hours, or every 2 to 3 hours. It is helpful to keep a log of your pumping sessions so you can see that your milk production is increasing in small amounts each day. Follow the *Care Plan for Establishing Milk Production with a Hospital-Grade Electric Breast Pump*.

#### Sanitizing Your Breast Pump Kit

It is important to sanitize your breast pump kit when your baby is in NICU/SCN. Once each day, wash your kit on the top rack of a dishwasher or boil it. To boil your kit:

- Place pump kit pieces that contact milk in a 4- to 5-quart saucepan
- Fill the pan with cold water to within one inch of rim
- Cover pan and boil for 20 minutes
- Remove from stove and drain off water
- Allow parts to cool and air dry on a towel

#### Guidelines for Establishing Your Milk Production by Day 14

Mothers who are expressing their milk for a premature or sick baby may be pumping for days or weeks. For a very preterm baby, a mother may be pumping for weeks before baby is able to breastfeed. It is important to work on building your milk production by pumping every 2 to 3 hours during the first two weeks after your baby is born to stimulate the milk-making hormone prolactin. Understanding what the ideal amount is will help you to know if you are making enough milk or if you will need to make changes to increase your production.

- **Ideal** Greater than 750 ml/d (25 oz.) per day
- **Borderline** 350–500 ml/d (11.6 to 16.6 oz.) per day
- **Low** Less than 350 ml/d (*milk production at risk*) (11.6 oz.) per day

You may be making more milk than your baby is eating in the early days, but your baby will eventually be taking more as he grows.

### Pumping Should Be Comfortable

Pumping should feel like a gentle pull and tug. If you experience pain while pumping, ask your nurse or lactation consultant for help. It is important that you have the pump turned to the highest level that is comfortable **without** causing pain. Turning up the suction pressure on the breast pump will not make your milk come in sooner. The breast shields, or flanges, should fit you comfortably. If that size is not comfortable, ask the nurse or lactation consultant to help you find a size that fits.

### What Type of Pump To Use at Home

There are two kinds of breast pumps—hospital-grade rental pumps and personal pumps.

### Renting a Hospital-Grade Breast Pump

A hospital-grade breast pump is made for a mother who is frequently pumping because her baby is premature or ill and not yet breastfeeding well. Research has shown that pumping both breasts with a hospital-grade breast pump can help a mother build and maintain her milk volume even when her baby is not breastfeeding.

### Benefits of Using a Hospital-Grade Pump:

- It has a motor that is stronger and lasts longer than a personal pump.
- It is made for pumping around-the-clock for days or weeks at a time.
- Most mothers get more milk in less time when using a hospital-grade pump.

A hospital-grade pump is a closed system, meaning that particles from the environment, such as bacteria or viruses, are less likely to enter the milk. This is important when a mother is providing milk for her hospitalized preterm or ill baby. Personal pumps are more open to contact with the environment. Hospital-grade breast pumps are very expensive medical equipment. They can be rented from medical equipment companies. Mothers who qualify may get a loaner hospital-grade pump from WIC.

### Personal Breast Pump

A personal pump is designed for a mother whose baby has been breastfeeding well and she has well-established milk production. Personal pumps are used while mother is away from her baby, whether she is at work or school or for other occasions, like appointments or shopping. They can be bought at a baby store or department store or may be provided by mother's insurance company. Even the best personal pumps were not designed to be used every 3 hours around the clock when mother is pumping for a preterm or ill baby. Their motors are not as strong so a mother may not express as much milk as her growing baby needs.

### Milk Storage and Transportation to the NICU/SCN

The lactation consultant or your baby's nurse will give you special labels with your baby's name printed on them to be used on the milk storage bottles. It is important to follow this procedure for storing and labeling your breast milk when your baby is in the NICU/SCN so that your milk stays clean and to reduce the spread of germs. As soon as your pumping session is finished, pour your milk from your collection bottles into bottles provided by the NICU/SCN.

- Write the time and date of your pumping session on the labels provided by NICU/SCN.
- Attach the label to the bottle(s). (You can get more labels by asking for them at the front desk of the NICU or SCN.)
- If you are still in the hospital, give your pumped milk to your baby's nurse or ask a relative or friend to take the bottles to the NICU/SCN to be refrigerated. It is best to get freshly pumped milk into the refrigerator within an hour.
- At home, store your fresh breast milk in the refrigerator immediately after you finish pumping. If it will be used to feed your baby within 48 hours, keep it in the refrigerator. If it will not be used within 48 hours, place it in the freezer. Place bottles in the back of refrigerator or freezer where they will stay cold—not in the door.

### Milk Storage Guidelines for Preterm and Sick Infants in NICU/SCN

Refrigerator	48 hours
Self-contained, separate door of two-door refrigerator/freezer	3–4 months
Deep Freezer 0° F	6–12 months

- When you come to the NICU/SCN, bring your breast milk in a small, insulated cooler. Use a cold pack to keep the milk cold.
- Talk with your baby's nurse to find out how much milk to bring to the NICU/SCN for your baby.

### Storage and Labeling Milk for Babies Under 32 Weeks Gestation

Very low birthweight babies have a higher risk of infection. Infections that are not life-threatening to full-term babies or adults can be for small preterm babies. If your baby is under 32 weeks at birth, your breast milk will be placed in a hospital-grade freezer. Research has shown that freezing mother's milk for 24 hours has been proven to kill certain viruses. The NICU/SCN staff can provide you with pink stickers so they can make sure that your breast milk will be frozen.



In addition to the NICU/SCN white label that has your baby's name on it with the time and date that you pumped, you will also use the special pink stickers. Place the pink sticker on the bottle lid but do not write on it. When you bring the milk into the NICU, that date and time will be written on the pink sticker.

### Special Program: The Gift of Donor Milk

Your baby may be ready to begin feeding before you have enough breast milk. The NICU at Good Samaritan Hospital has a Donor Milk Program for preterm babies who weigh less than 1,500 grams at birth. Donor milk is only used until your milk comes in. Research has shown that premature babies have fewer infections when they receive their mother's milk or donor breast milk. Feeding infant formula to a low birthweight baby is a risk our doctors would rather not take if possible.

Many women who donate their milk have had a preterm baby and want to share the gift of breast milk. They are not paid for their milk and are screened to make sure that their milk is safe for your baby. The milk from many screened donors is combined and heat-treated for safety. Donor milk is not given to a baby unless a doctor, nurse, or lactation consultant has discussed the program with baby's parents and obtained written consent.

### Important Things To Do Before You Are Discharged from the Hospital

- Check with your insurance company to see if they provide coverage for a hospital-grade breast pump rental or a personal pump. Be sure to let them know that your baby is premature or sick.
- Make arrangements to get your pump before leaving the hospital by calling 513 862 7867.
- It is important to **take your breast pump collection kit with you!** (Don't forget the caps and tubing)
- Get bottles and labels for milk storage from the NICU or SCN.

### Where To Pump at the Hospital

The SCN and NICU have hospital-grade pumps for you to use when you visit your baby. In the NICU, you can pump in the breast-pumping rooms or at your baby's bedside. At SCN, you can pump at your baby's bedside. Be sure to bring your pump kit (including the tubing and membrane caps) with you to use at the hospital.

### Breast Engorgement

Between Days 3–5, breast milk begins to increase as your milk "comes in." It is normal for your breasts to feel fuller, heavier and tender. Your breasts become engorged with milk and with other fluids that are used to make the milk.

This normal fullness usually goes away when a baby is breastfeeding or if you are pumping often and well. Some women develop hard, swollen, painful breasts when the milk first "comes in." This is called engorgement. See the *Care Plan for Breast Engorgement* for more information about treating this problem.

### Plugged Ducts and Mastitis

Mastitis is an inflammation in your breast. It is very important to remove milk from your breasts frequently and effectively by pumping in order to prevent and relieve mastitis. If you stop pumping, your infection may get worse and the mastitis may lead to a breast abscess. Let your baby's nurse and lactation consultant know right away. Follow the *Care Plan for Plugged Milk Ducts and Mastitis*. If you have a fever, call your midwife or obstetrician.

Note: Premature babies' immune systems are not as strong as full-term babies. Premature babies can get an infection more easily. Because of this, your pumped breast milk should be discarded from the time your fever begins until you have been on antibiotics for 48 hours. This will help keep your baby from getting an infection. After you have been on the antibiotic for 48 hours, we will begin feeding your baby your breast milk once again.

### Breastfeeding Your Premature or Ill Baby

The road to breastfeeding for a premature baby is different than for a full-term baby. Full-term babies may take several days to learn how to breastfeed. A premature baby will take longer for several reasons. A premature baby is not meant to be awake for feedings every 2 to 3 hours like a full-term baby. He may not yet have the ability to coordinate sucking, swallowing, and breathing. A premature baby may not have fully developed the ability to make the necessary suction to get enough milk from the breast. Ability to stay awake for full feedings, ability to suck, swallow, and breath, and ability to get enough milk from the breast will develop in time.

Right now, your goal is to establish and maintain milk production by pumping. The next goal is to begin the progression to breastfeeding.

### Steps to Breastfeeding

There are several steps that will help your baby learn how to breastfeed. They include:

- Kangaroo Care
- Nuzzling
- Breastfeeding

## Kangaroo Care (Skin-to-Skin)

Kangaroo Care is when you hold baby on your chest, skin-to-skin. Research has shown that when mothers are skin-to-skin with their preterm babies, babies have more stable breathing, heart rate and temperature. Research has also shown that moms who are skin-to-skin with baby on a regular basis can increase milk volume by 50%! Another important benefit is that you are being exposed to the same environment as your baby. Your body will begin producing immunities and will pass those immunities to your baby through your breast milk. Talk with your baby's nurse about kangaroo care. She can help you position your baby skin-to-skin. Dads can do kangaroo care too!

## Nuzzling

Nuzzling is the next step toward breastfeeding. Baby can be at your breast with no pressure to eat. Before nuzzling, pump your breasts. Nuzzling on an empty breast is similar to your baby taking a pacifier. Baby can practice latching onto your breast without having to coordinate sucking, swallowing and breathing (these are developmental skills your baby will learn as he grows). You will learn to place your baby in a breastfeeding position. Your baby may lie quietly at your breast or may latch on and suck a few times. Your nurse may gavage-feed your baby at your breast so that he can learn to associate being at the breast with having a full tummy. Talk with your baby's nurse and lactation consultant about nuzzling your baby. Moms can nuzzle with their babies once per day.

## Breastfeeding

As your baby's feeding skills develop and he is able to stay alert for longer periods, he will be able to breastfeed more effectively. He will learn to coordinate sucking, swallowing and breathing when your milk is flowing. Talk with the lactation consultant and your baby's nurse about your baby's readiness for breastfeeding. Many babies are able to manage mom's flow of milk more easily when breastfeeding as compared to bottle feeding.

## Preparing Your Baby for Nuzzling or Breastfeeding

Turn down the lights and try to keep the area quiet and calm. Swaddle baby with a blanket from the waist down with hands free. Babies feed better when they are flexed. Bend baby's hips and knees, keeping them together and arms brought together in the middle. Move your baby from the bed to your chair slowly.

## Reading Your Baby's Cues

Babies communicate using cues. It is important for you to learn how to read your premature baby's cues.

*These are some signs that your baby is ready to eat:*

- Stable heart rate and breathing
- Good oxygenation
- Pink skin color
- Mouthing, licking, rooting, sucking for your breast

*These are some signs that your baby is not ready to eat:*

- Change in heart rate or breathing
- Color—pale, dusky, blue, reddish and changeable
- Trouble calming down, irritable, cries
- Fussy, crying, getting sleepy
- Spreading out fingers, extending arm

Your baby's nurse and lactation consultant can help you learn to read these cues.

## Positioning Your Baby at the Breast

Positioning is a very important part of a successful breastfeeding experience. A premature baby's head is usually larger than his body. He may not have the strength to hold your breast in his mouth without your help. You can offer extra support for his head and your breast by using the cross-cradle and football positions so baby can latch on and feed more effectively. A breastfeeding pillow is also very helpful. There are breastfeeding pillows available for you to use in the NICU/SCN. Follow the suggestions for positioning your baby at the beginning of this booklet.

## Care Plan for Breastfeeding Your Preterm Baby

Begin by breastfeeding once per day. Plan on a time when your baby is most alert and willing to feed. Talk with your nurse so you both can decide on the best time. When your baby is ready to breastfeed twice per day, the nurse may suggest spacing out the breastfeeding sessions so they are not back-to-back. Your baby may be discharged from the hospital breastfeeding 1 to 2 times per day.

## Care Plan Goals

- Breastfeed baby when feeding skills have matured
- Keep baby well-nourished and growing by providing supplemental bottles as necessary
- Maintain your milk production by pumping until baby is effectively breastfeeding

## Breastfeeding Plan in NICU/SCN

### Step 1 Attempt Breastfeeding

- Attempt to get baby to latch on for 5 to 10 minutes. If baby is able to latch on and begins breastfeeding, allow him to continue 10 to 15 minutes if he is feeding (See *Signs of Effective Breastfeeding* below)
- If he is sleepy or not interested in latching on and breastfeeding, move to offering a supplemental bottle. Try breastfeeding at another feeding time
- You may need to swaddle baby to support him for more effective breastfeeding (keep his hands free)

### Step 2 Offer Supplement

- Your nurse will have bottles at your baby's bedside and will talk with you about how much supplement to offer
- Finish breastfeeding and bottle feeding session within 30 minutes to prevent weight loss

### Step 3 Express Your Milk with a Breast Pump

- Express your breast milk

## Signs of Effective Breastfeeding

As your baby approaches 40 weeks gestation and sometimes a few weeks after, look for these signs of effective breastfeeding:

- You will observe a long and drawing jaw drop with each suck and a deeper jaw drop with each swallow
- You can usually hear a swallow, which sounds like a soft "k"
- You may see a pulsing motion at baby's temple as he sucks in rhythmical bursts
- You do not have nipple pain
- Length of breastfeeding sessions are typically 10 to 30 minutes on a breast. Offer both of your breasts at a feeding, but some babies may only feed on one breast per session.
- Your baby is meeting his daily goals for number of breastfeedings, urines, and stools.

## Breastfeeding Your Preterm Baby with a Nipple Shield

Some premature babies have difficulty latching on and staying at the breast. They may also have trouble getting enough milk because their sucking skills are not yet strong enough. Research has shown that a nipple shield can help a preterm baby breastfeed. A nipple shield is a thin silicone nipple that fits over your nipple while breastfeeding. In time, your baby's mouth will develop and sucking skills will mature so he can breastfeed more effectively. The shield may be used for a few weeks or months until your baby is able to breastfeed effectively without it as his feeding skills mature.

## Breastfeeding Plan After Baby Has Gone Home

There are two very important things that you can do at home when working toward breastfeeding. First, it is important to put your baby to breast each day. Begin 1 to 2 times per day, and increase 1 feeding per week as your baby shows signs of staying awake and actively sucking and swallowing. Babies transition to breastfeeding better when they are familiar with feeding at mother's breast. Second, it is critical that you continue pumping to keep your milk production high. When mothers maintain their milk production, milk flows easily so baby is more willing to breastfeed.

## How Often To Breastfeed Baby at Home

When your baby is able to stay awake and actively breastfeed twice per day, you can add another breastfeeding session. After a week, if baby is doing well with breastfeeding 3 times per day, you can increase to 4 times a day. Increase breastfeeding sessions by adding 1 each week. As your baby matures and becomes more skilled at breastfeeding, he will be able to stay awake and feed long enough to obtain a full feeding. When this happens, he will no longer need a supplemental bottle afterwards. It is important to stay in touch with your baby's doctor to make sure that baby is gaining weight weekly when supplements are discontinued. It is also important to stay in touch with lactation consultants who are experienced with preterm babies.

## TriHealth Outpatient Breastfeeding Care Center

As your baby approaches 39–40 weeks gestation, we encourage you to contact our lactation consultants to help with transitioning your baby to breastfeeding. Our International Board-Certified Lactation Consultants have over 13 years of experience assisting mothers and preterm babies achieve their goal of breastfeeding. Call the TriHealth Breastfeeding Care Center (513 862 7867 option 3) to schedule an appointment for you and your baby.

## The TriHealth Breastfeeding Resource Guide

For additional information about breastfeeding, the complete TriHealth Breastfeeding Resource Guide is available online at [www.TriHealth.com](http://www.TriHealth.com) (see *Breastfeeding Resources*). If you have specific questions, call the TriHealth Breastfeeding Care Center to speak with a lactation consultant (513 862 7867 option 3).



## Resources

### Internet Breastfeeding Resources

TriHealth Breastfeeding Resources for a variety of research-based breastfeeding information:  
[www.TriHealth.com](http://www.TriHealth.com)

*Breastfeeding "How-to" Video Clips Ameda (latch):*  
<http://www.ameda.com/resources/video>

Biological Nurturing (positioning/latch):  
<http://www.biologicalnurturing.com/video/bn3clip.html#>

Jack Newman, MD (latch, other techniques):  
<http://www.drjacknewman.com/video-clips.asp>

Getting Started with Breastfeeding (menu includes general "how to" plus milk expression/breast pumping):  
<http://newborns.stanford.edu/Breastfeeding/>

General research-based information:  
<http://www.kellymom.com/>  
*How milk production works:*  
<http://www.kellymom.com/bf/supply/milkproduction.html>

### Maternal Medications

Breastfeeding Pharmacology (Thomas W. Hale, RPh, PhD):  
<http://www.infantrisk.org/category/breastfeeding>

LactMed (National Library of Medicine; search generic or trade name; correct spelling required):  
<http://toxnet.nlm.nih.gov/cgi-bin/sis/htmlgen?LACT>

### Pumping

*Maximizing Milk Production with Hands-on Pumping:*  
<http://newborns.stanford.edu/Breastfeeding/MaxProduction.html>

### Online Support Groups

La Leche League Mother-to-Mother Forums:  
<http://forums.llli.org/>

MOBI (Mothers Overcoming Breastfeeding Issues)  
Motherhood International:  
<http://www.mobimotherhood.org/MM/default.aspx>

MotheringDotCommunity Forums:  
<http://www.mothering.com/discussions>

*Online Breastfeeding Support Networks*  
AP Multiples (breastfeeding twins or more):  
<http://groups.yahoo.com/group/apmultiples/>

### Breastfeeding Support Groups

You are invited to meet with other breastfeeding mothers and learn more about breastfeeding your baby by attending monthly support groups held at Bethesda North and Good Samaritan Hospitals. All pregnant women and breastfeeding moms and babies are welcome to attend.



Breastfeeding USA Cincinnati Chapter offers monthly meetings at Good Samaritan Hospital.

For more information, visit their Web site at  
<http://www.breastfeedingusa.org>.

La Leche League of Northeast Cincinnati, Ohio, offers monthly meetings at Bethesda North Hospital. For more information, e-mail [LLCintiNE@gmail.com](mailto:LLCintiNE@gmail.com) or visit their Web site at <http://www.lllohio.org/groups/cincinnati>

*Note: Meeting times may vary around holidays. Check with support group counselor for meeting schedule.*













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