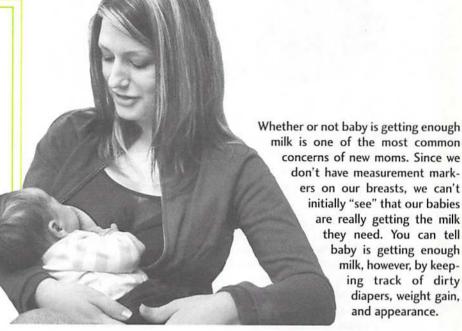


Is my breastfed baby

getting enough milk?



#### How often are you breastfeeding?

A baby needs to breastfeed frequently. Your milk is digested quickly and easily, sometimes in as little as 60 minutes, and small amounts are perfect for baby's tiny stomach. These frequent feedings also help to establish your milk supply. In simple terms, the more milk that is removed from your breasts, the more milk your body will produce. Frequent feedings are good for both of you!

- A newborn should feed at least eight to 12 times in a 24-hour period.
- Allow baby to determine the length of feedings: 10 to 20 minutes per breast or longer.
- Keep in mind that some babies "cluster nurse," which means they nurse very often for a few hours and then sleep for several hours. The number of feedings in a 24-hour period is more important than the spacing of feedings.
- A sleepy baby may need to be wakened every two to three hours to feed, particularly if he has jaundice. Talk with your health care provider if baby is lethargic and difficult to wake for feedings.

#### Weight Gain

Your baby may lose up to seven percent of his birth weight during the first three or four days. Once your milk "comes in," expect your baby to begin gaining weight. He should regain his birth weight by the time he is 10 to 14 days old.

age	weight gain (per week)
0-3 months	4-7 ounces (110-200 grams)
4-6 months	4-5 ounces (110-140 grams)
6-12 months	2-4 ounces (60-110 grams)

#### **Appearance**

You also know your baby is getting enough milk by noting the following:

- Baby's color is good.
- Baby's skin is firm.
- Baby is filling out and growing in length and head circumference.
- Baby is active and alert.

#### Diapers

Counting your baby's diapers can be a helpful indicator as to whether or not he is getting enough of your milk.

baby's age	mother's milk	wet diapers/24 hrs	dirty diapers/24 hrs
1-2 days	colostrum (provides immunities and helps with jaundice)	1-2	greenish-black tarry meconium
2-6 days	milk "comes in"; bluish color	5-6 wet disposable diapers (6-8 wet cloth diapers)	At least 3 greenish transitional stools
6+ days	milk supply adjusts to suit your baby's needs	Same as 2-6 days	At least 3-5 very loose stools; bright yellow color that are about 2.5 cm
6 weeks	milk supply established	Same as 2-6 days	Some babies switch to less frequent but large bowel movements



#### Let baby lead!

Watch your baby for signs of hunger, not the clock. Follow baby's feeding cues and do not try to schedule feedings or limit feedings. Early hunger cues include:

- Baby opening his mouth and moving his head side to side (known as the rooting reflex).
- Baby making sucking motions with his mouth.
- Baby begins to chew or suck on his hands or fingers.

Don't wait for your baby to cry to let you know he is hungry.

Crying is a very late hunger cue.

#### Increasing Your Milk Supply

Mothers throughout the ages have been able to produce plenty of milk for their babies. In certain situations because of a health problem or other complication, a mother may have a reason to be concerned and may need to carefully monitor her baby's weight gain in order to be sure he is getting enough milk. If baby is not gaining well or he is losing weight after the first few days, contact baby's health care provider. Slow weight gain may indicate a serious health problem. If you're concerned about your milk supply, get help. Being in touch with a La Leche League Leader can often provide the information, support, and encouragement that mothers need to be reassured that they are providing plenty of milk for their babies. Steps that will help your baby get as much of your milk as possible include:

Nurse often for as long as your baby will nurse. The more milk that is removed from the breast, the more milk the breast will make to replace it. Frequent breastfeeding helps to establish a plentiful milk supply. A sleepy baby may need to be awakened and encouraged to nurse more frequently. A baby who nurses for excessively long periods may not be nursing efficiently. If you're experiencing this, have a breastfeeding session observed by an experienced LLL Leader or lactation professional.

Offer both breasts at each feeding. This will ensure that your baby gets all the milk available and that both breasts are stimulated frequently. Allow your baby to indicate he is finished on the first breast, then offer the other breast.

Check baby's positioning and latch. Breastfeeding should not hurt. Hold baby close with his whole body facing you so he does not have to turn his head. When he opens his mouth wide, his head should be slightly tilted back with his nose at the level of your nipple. As he approaches the breast with his head slightly tilted back, this will bring him to the breast chin first. This will help you better aim his lower jaw so that he covers more of your breast with his lower jaw than with his upper mouth. As you bring baby onto the breast, aim your nipple toward the roof of his mouth. If you feel comfortable and baby is nursing actively, the latch is good.

Try breast compression to keep your baby interested in breastfeeding. Squeeze the breast firmly with your thumb on one side and fingers on the other to increase milk flow. Keep squeezing until baby is no longer actively sucking; then release. Rotate fingers around the breast and squeeze again. Then switch to the other breast, using both breasts twice at each feeding. Squeeze

firmly but be careful not to cause injury to your breast tissue.

Feed your baby only your milk. If your baby has been receiving formula supplements, do not cut these out abruptly. As you improve your breastfeeding techniques with the help of a lactation professional, and as your milk supply increases, you will be able to gradually reduce the amount of supplement. Monitor baby's weight gain and stay in touch with your baby's health care provider during this transition.

All your baby's sucking should be at the breast. If some supplement is necessary, it can be given by spoon, cup, or with a nursing supplementer. Be aware that a pacifier can create more problems than it solves. If you decide to give your baby a pacifier, wait until he is nursing effectively and gaining well.

Use skin-to-skin contact. It may encourage your baby to nurse more often. Skin-to-skin means that baby will be nestled upright between your breasts, clad in only his diaper directly against your skin. Your warmth, smell, and heartbeat will also soothe baby, which in turn aids in his development.

Try to relax. Paying attention to your need for rest, relaxation, and proper diet will help your milk supply and improve your general sense of well-being.

Talk to your health care provider about medicinal herbs or prescription medications to increase your milk supply.

A La Leche League Leader can provide resources with information about herbs and medication.

La Leche League Leaders are accredited volunteers who are available to help with breastfeeding questions in person, over the phone, or online. Locate an LLL Leader near you at www.llli.org.

#### False Alarms

Some mothers think their babies are not getting enough milk when they are actually getting plenty of milk. Some "false alarms" that worry mothers include:

Your breasts feel different. If your breasts suddenly feel softer or your breasts no longer leak between feedings, it does not mean you are producing less milk; it simply means that your supply has adjusted to your baby's needs.

Baby seems fussy. Many babies have a fussy time every day that is not related to hunger. Some babies need lots of stimulation and activity; others need soothing. You will learn how to respond to your baby as you find the ways that comfort him. If your fussy baby settles down when you offer him the breast, go ahead and breastfeed. But don't take this as a sign that he is not getting enough to eat.

Baby suddenly wants to feed more often, or seems hungry again soon after being fed. Babies often go through "growth spurts" when they are two to three weeks old and again at six weeks and at three months. At these times, breastfeed as often as possible as your supply catches up with baby's demand.

Baby decreases his nursing time, perhaps down to five minutes or so at each breast. As babies get older, they become very efficient at taking the milk so this is a positive sign that breastfeeding is going well, not something to worry about.



## Vitamin D, Your Baby, and You

It is a known fact that human milk is the superior infant food. Human milk is the most complete nutritionally, immunologically, and is the only food designed specifically for your baby. Given that it is expected to be "perfect," you may be confused about why your baby's doctor is encouraging you to give your breastfed baby vitamin D supplements.

In 2008, the American Academy of Pediatrics (AAP) amended its recommendation regarding vitamin D supplementation of infants and children. The current recommendation reads: "A supplement of 400 IU/day of vitamin D should begin within the first few days of life and continue throughout childhood. Any breastfeeding infant, regardless of whether he or she is being supplemented with formula, should be supplemented with 400 IU of vitamin D." (Pediatrics 2008; 122(5):1142-52)



#### Why is vitamin D important?

Vitamin D is a key nutrient in the maintenance of bone health in children and adults. Because vitamin D is essential for promoting calcium absorption in the body, vitamin D deficiency is marked by such conditions as rickets (in children), osteomalacia (in adults), and can lead to osteoporosis if left unchecked long-term. While researchers are still working to prove a cause-and-effect relationship between low levels of vitamin D and other health issues, anecdotal and epidemiological (tracking the occurrence of a disease or condition in a population over time) correlations have been found between vitamin D insufficiency/deficiency and the following:

- Cancers; specifically of the colon, breast, and prostate
- Hypertension (due to calcium's role in the regulation of blood pressure)
- Diabetes (both type I and type II): insulin resistance/pre-diabetes may also be related to vitamin D insufficiency
- Multiple sclerosis, rheumatoid arthritis, and other autoimmune conditions

#### I spend a lot of time outside. Surely I'm not deficient in vitamin D.

There are a few factors that have an impact on the vitamin D content of a mother's milk. Most significantly, the vitamin D status of the mother during pregnancy and lactation impacts the vitamin D status of the baby at birth, as well as mother's ability to transfer vitamin D via her milk. In 2003, data released by the Thrasher Research Fund/US National Institutes of Health reported that 81% of women of childbearing age have insufficient levels of vitamin D. While there is still some uncertainty about the optimal level of vitamin D for adults, there is recent agreement among the medical community that vitamin D insufficiency is represented by a blood level of less than 32 ng/mL. Those with blood levels below 20 ng/mL are considered deficient in vitamin D. How has vitamin D insufficiency reached epidemic proportions?

We as a population have heeded the warnings of the medical community and limited our unprotected exposure to the sun. The use of sunscreen, while important in the protection against skin cancer, blocks the rays of the sun that are necessary for our bodies to convert sunlight into vitamin D through the skin.







Additionally, many of us live north of the 35th parallel, where, for most months of the year, the sun's rays are not strong enough to assist our bodies in making enough vitamin D. This is the case even with prolonged, unprotected sun exposure. Those living where clouds often cover the sky or in cities with poor, polluted air quality also will be deprived of optimum sun exposure for the manufacture of vitamin D.

People with darker skin colors will be more likely to have low levels of vitamin D. This is due to the increased pigment in their skin which requires nearly four times the length of sun exposure in order to manufacture vitamin D.

Our bodies are designed to make very large amounts of vitamin D through exposure to the sun (10,000-20,000 IU in 24 hours, after 15-20 minutes of summer-sun exposure in a bathing suit/45-60 minutes of exposure for those with darker skin tones). However, in adults and children, the desire to avoid overexposure and sunburn has eclipsed our ability to absorb adequate amounts of sunlight to keep our vitamin D status at a normal level.

#### I eat a healthy diet and take vitamins. My vitamin D status is probably fine.

Until very recently, it was unknown that low vitamin D levels in the body could be related to conditions other than overt bone problems. such as rickets in children and osteomalacia in adults. Consequently, vitamin D insufficiency and deficiency goes unnoticed and underdiagnosed. It was also commonly believed that adverse effects could result from too much vitamin D. Current adult Recommended Daily Intakes (RDI) for vitamin D in most of the world are still quite low, and are now believed by many researchers to be inadequate for achieving or sustaining normal vitamin D levels. Most multivitamins only contain 200-400 IU of vitamin D. While this amount does not appear to be sufficient for adults, 400 IU/day is sufficient for babies, beginning in the first few days of life, as recommended by the American Academy of Pediatrics.







There are few dietary sources of vitamin D, but they are not significant enough to provide the amount of vitamin D that most adults really need. These dietary sources include:

- · cod liver oil
- · fish, such as mackerel, tuna, and salmon
- egg yolk
- · beef liver
- · fortified dairy products

Recent research emphasizes the need for more than the currently recommended intake of 600 IU/day of vitamin D for adults.

#### Should I supplement my breastfed baby with vitamin D?

Your baby's doctor probably recommends that you supplement your baby with 400 IU /day of vitamin D, as per the AAP 2008 recommendation. The recommendation is based on the following well-established facts:

- · Vitamin D deficiency can occur very early in life, particularly because many pregnant women have deficient blood levels of vitamin D.
- Vitamin D levels (measured by a blood test for 25-OH-D) of unsupplemented breastfed infants are often below 20 ng/mL, particularly in the winter and latitudes farther from the equator, probably as a result of maternal deficiency.
- Adequate sunlight exposure for sufficient manufacture of vitamin D in an infant is difficult to assess and often not achieved.
- · Optimal vitamin D levels in breastfed infants can be maintained with supplementation of 400 IU/day of vitamin D.

Most commonly, multivitamins are prescribed for infants. If you choose to supplement your baby and are uncomfortable with supplementation of vitamins other than D (since your milk alone provides optimal amounts of those other nutrients), ask your doctor to recommend a vitamin D-only preparation for your baby. They are available but may be more expensive than the multivitamin. Additionally, doctors may be more comfortable prescribing multivitamin preparations because those have been available for many years, while the vitamin D-only preparation is relatively new.

Even though it is likely, given the above factors, that your baby needs vitamin D supplements, you may opt to have your baby's vitamin D level assessed with a blood test measuring 25-hydroxy vitamin D (25-OH-D). Your baby's doctor can help you determine whether vitamin D supplements are, indeed, warranted.

#### Should I take vitamin D supplements?

Unless your blood level of 25-OH-D is greater than 60 ng/mL, your milk does not provide enough vitamin D for your baby. Even with large supplemental doses (5000+ IU/day), your vitamin D status may not reach the level required to assure your milk is transferring enough of this nutrient to your baby. Research shows that mothers require a high dose (6400 IU/day) of vitamin D in order for their milk to transfer the recommended 400 IU/day to their babies. While the currently recommended safe upper limit for vitamin D intake is 4000 IU/day, it is very important to check with your doctor and have your own vitamin D status assessed by a blood test before you begin supplementing at levels higher than the current RDI of 600 IU/ day. Debates continue over what an optimal level of vitamin D is for an adult, and recent research has indicated that pregnant and lactating women might need more vitamin D than adults who are not bearing children.

It is important to note that a mother's milk is not replete with vitamin D because she. herself, does not have enough in her body. Supplementing the baby takes care of his needs, but does not address the deficiency in the mother, which may lead to long-term. chronic compromises in her health. Researchers are still determining what "optimal" levels of 25-OH-D should be, but the following can serve as a guideline for total 25-OH-D:

• < 20 ng/mL Vitamin D deficiency

 20-31 ng/mL Vitamin D insufficiency

• 32 ng/mL Sufficient vitamin D levels

#### Reference:

Wagner, C.L., Taylor, S.N., and Hollis, B.W. New Insights Into Vitamin D During pregnancy, Lactation, & Early Infancy. Amarillo, TX: Hale Publishing, 2010.



## Safe Sleep for Breastfeeding Babies

Sleeping with our babies is an instinct as old as motherhood itself. Yet today, some authorities say it's risky. What are the facts?

#### Sudden Infant Death Syndrome

(SIDS, Crib Death, or Cot Death) is the unexpected and unexplainable death of a baby. The highest risk is during the first six months. The greatest SIDS risk factors are smoking during your pregnancy and placing your baby face-down for sleep.¹ Formula-fed children have double the risk of SIDS.² Parents

who smoke and share a bed with their infant also increase the risk, regardless of where or when the parent smokes. One in five SIDS deaths occurs in daycare.<sup>3</sup>

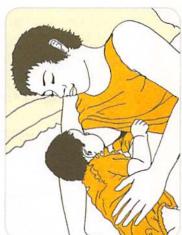
#### Suffocation

isn't SIDS. It almost always involves either prone (face-down) sleeping or a baby becoming wedged, for instance in a couch<sup>4</sup> or recliner. Sharing sleep with an adult who smokes or is impaired by drugs or alcohol is risky. Using pillows, props, or soft bedding to "help the baby sleep" increases risks. 5 When a breastfeeding mother sleeps in bed with her baby, she tends to curve her body around her baby in a "cuddle curl" that keeps the infant at breast level and keeps her from rolling onto him.<sup>6</sup> (And of course he would

wriggle and yell if she did!) Her sleep cycles tend to synchronize with his, often increasing sleep time and lowering stress for both. Unfortunately, some mothers, mistakenly believing their bed is a SIDS risk, move to a couch or recliner with the baby – a much greater risk than the bed they left.<sup>7</sup>

#### "Cuddle Curl"

"All bedsharing," "all babies," and "all bed partners" are not the same, just as "all drivers" are not the same. Anything that interferes with breastfeeding puts a baby at higher risk.\* There is no known increased risk when a sober, non-smoking, breastfeeding mother sleeps with her baby on a safe surface.



#### Here's what our babies have always "expected" at night:

#### During sleep, babies "expect"...

ATTENTIVE, SOBER ADULTS. Even in your sleep, you normally know where your baby is just as you know where your bed edge is. Alcohol and certain medications alter awareness during sleep and increase the risk of suffocation.<sup>9</sup>

CLEAN AIR. A smoking parent greatly increases the risk of SIDS. (Smoking during pregnancy increases risk even more.)  $^{10}$ 

BACK- SLEEPING. Stomach-sleeping on a flat, horizontal surface increases the risk of suffocation and SIDS<sup>11</sup> unless the surface is a parent's chest.

A GAP-FREE SURFACE and reasonable airspace, to avoid suffocation risk.12

BREASTFEEDING. Bottle-feeding behaviors increase suffocation risk.<sup>13</sup> Breastfeeding to sleep is normal and healthy.

HUMAN MILK. Formula-fed babies are more than twice as likely to die of SIDS. Suffocation and other risks rise with formula-feeding as well.<sup>14</sup>

FREEDOM OF MOVEMENT. A swaddled baby can't protect his airway, change his position, reach his mother, suck on his hands, or regulate his temperature, sleep state, or appetite normally. Swaddling increases the risk of both SIDS and suffocation. 15, 16

#### What you can do

Be aware of your and your partner's condition. A baby should never sleep with young children or anyone who is compromised.

If you or your partner smokes at all, bed-share only for feedings. Otherwise, keep your baby in a separate space within arm's reach.

This takes care of itself. Breastfeeding babies who sleep with their mothers don't roll onto their stomachs.

Eliminate gaps — between bed and wall and between bed and rail — that could trap your baby's face. Avoid mattresses and couches that roll your baby tightly against you, or any surface too soft for your baby to lift his head from if he's face-down. No pillows or props for the baby. Light blankets will "tent" over you both, leaving plenty of air for your baby. Putting the mattress on the floor eliminates many risks.

The breastfed baby heads toward your breast and stays out of trouble. Bottle-fed babies don't orient this way, and their mothers aren't as sensitive to their own sleep position. If your baby isn't at least partly breastfed, it's safer for him to sleep separately, always within arm's reach.

If you don't breastfeed, have your baby sleep face-up within arm's reach on a separate surface. For help with breastfeeding, call La Leche League. There are often surprisingly simple solutions to what may feel like big problems.

Don't swaddle your baby.



#### Here's what our babies have always "expected" at night:

#### During sleep, babies "expect"...

#### What you can do

AN ADULT WITHIN REACH. When they're alone, babies' temperature and breathing are less stable, and they have less practice in rousing – important practice! They also have more periods of apnea (no breathing) – all risk factors for SIDS.<sup>17</sup>

Keep your baby within his arm's reach, not yours. Breathing on your baby is actually good for him.

If you don't share a bed, be sure to keep your baby in proximity (within arm's reach) during sleep such as in a bassinet, crib, or "sidecar" (which attaches to the bed), for at least the first 6 months.

A COMFORTABLE TEMPERATURE; overheating increases the risk of SIDS.18

Dress your baby the way you dress yourself. No extra covering or swaddling

FREE ACCESS TO SUCKLING AT BREAST. There's no evidence that a sleeptime pacifier helps protect a bedsharing, breastfed baby. 19-21

Learn to breastfeed lying down during the day. Then, at night, you'll already know how.



#### What do mothers expect at night? And how can they get it?

UNBROKEN SLEEP

Babies usually double their weight by six months and triple it by a year; no wonder they breastfeed at night! Of all mothers, those who bedshare and breastfeed exclusively tend to get the most sleep.<sup>22,23</sup> Expect your baby to feed at night, so you won't resent it.

If your baby doesn't stay in your bed full-time, put him on a thin blanket or pad next to you, and move baby and blanket/pad to the other surface, to keep him settled during the switch.



A COMFORTABLE POSITION

Practice during the day. Leaning back with your baby facing your chest is not a risk. Because breastfeeding hormones make you relaxed and drowsy, breastfeed where your baby will be safe if your arms relax. Lying on your side? Remember that babies tend to skootch up; you may need to slide her down for easy latching. To breastfeed from the top breast, use the bottom breast first so you can roll onto it somewhat.

A DRY BED

A large towel or absorbent pad can protect sheets from both mother and baby leaks. Or use a waterproof mattress pad. Leaking usually subsides after the early weeks.

EASY DIAPER CHANGES

Keep diapers and wipes at bedside. Once she stops pooping at night, she can probably use the same diaper all night.

**ENOUGH ROOM** 

Many families play musical beds at night. The parent without the baby can sleep anywhere, leaving mother and baby in their familiar, safe place.



A LITTLE TIME WITHOUT

Babies need lots of touch. In the beginning, life will be simpler if you don't try to get away from the baby. And letting her sleep alone "until she wakes up the first time" can mean that she sleeps too deeply to rouse – not good for either of you and a risk for SIDS. As she develops, you'll find patterns that work for you and your family.

#### For references cited in this handout, Illi.org/safesleeptearoff

For more information see *The Womanly Art of Breastfeeding*, 8th edition, 2010, chapter 12 OR Academy of Breastfeeding Medicine Protocol, Committee. ABM clinical protocol #6: guideline on co-sleeping and breastfeeding, Revision, March 2008. *Breastfeed Med*, 3(1), 38-43.



## What is Reflux?

## Breastfeeding your baby with gastroesophageal reflux.

Gastroesophageal reflux is the medical term for milk and stomach acid backwashing out of the stomach into the throat. Reflux is also called wet burps or spitting-up.

The valve between the stomach and the esophagus is only supposed to open when your baby swallows or burps. Reflux happens when the valve doesn't close tightly or opens for no reason.

English (Stomach + Esophagus + Backwash) = Latin (Gastroesophageal Reflux)

## Any baby on this spectrum can benefit from the ideas in this publication.

- Most babies have occasional episodes of reflux every day. This is perfectly normal and doesn't usually cause any problems for the baby.
- Some babies spit up large amounts after every meal. You and your doctor will want to watch your baby carefully for signs of trouble.
- 3. Some babies experience problems when the stomach acid burns the delicate lining of the throat or airway or the baby can't gain enough weight. This is called Reflux Disease.

#### Reflux Symptoms

If your baby experiences any of these problems, please discuss them with your doctor so you can work together and prevent them from becoming serious.

- Spitting up large quantities very frequently or hours after eating
- Vomiting (more forceful than spitting-up and usually emptying the stomach)
- Painful crying after wet burps or spitting-up
- Crying, fussing or arching the neck and back during feeding
- Baby seems reluctant to nurse or pulls away from the breast
- Unusual eating patterns, constant feeding or feeding only when sleepy
- · Noisy breathing or congestion
- Breath-holding spells, skipping several breaths
- Frequent gagging, coughing, choking or sneezing
- Poor weight gain, falling to a lower weight percentile
- Frequent throat infections, red throat, colds, ear congestion or infections
- Any serious respiratory problems such as bronchitis, pneumonia,
- Breath that smells sour/acidic
- Frequent hiccupping and burping
- Waking suddenly with painful crying, unusually poor sleeping habits

When a baby has acid backwashing from the stomach into the esophagus, this can cause throat pain. The pain can range from minor to severe. It may last for a few minutes or all day.



## When a baby has throat pain, it can affect nursing.

 She may have poor weight gain until the pain is gone.

## Pattern #1 Babies with reflux who nurse for comfort:

- Many babies with reflux find that breastmilk is soothing on their sore throats. Breastmilk helps wash the acid back down into the stomach.
- She may nurse constantly all day and night.
- She may want to nurse after every wet burp or spit-up.
- She may gain a lot of weight until the pain is gone.

## Pattern #2 Babies with reflux who feel pain when they nurse:

- This baby will probably behave in ways that confuse her mother. When she is hungry her tummy wants food, but if her throat is sore from acid she might not want the milk to touch her throat. She is confused and is not sure whether to eat or not.
- She may fuss and act hungry but refuse to eat until she is starving.
- She may eat very fast, but stop after only a few minutes.
- . She may become afraid of eating.
- She may eat better when she is sleepy because she feels less pain.

## Tips that minimize reflux episodes:

- Use breastfeeding positions that don't put pressure on the baby's stomach. When her tummy is being squeezed, the milk comes back up more easily.
- Use breastfeeding positions that keep your baby's head higher than her stomach. She may also prefer to keep her right ear up. This keeps the top of the stomach higher than the milk in her stomach.
- If your baby chokes during the letdown, try positions that let her face your body, not the ceiling. These positions allow her to release the breast and let some milk dribble out of her mouth when the flow is too fast. You can also try taking her off for a few seconds and pressing your breast with your palm to slow the milk flow a bit.
- Encourage your baby to nurse frequently and take small amounts at a time. Overfilling her stomach makes the milk come back up easier.
- Nursing at one breast per feeding can help your baby avoid overfilling her stomach. It also helps her get a balance of foremilk from the front of the breast and hindmilk from deeper in the breast. Both are important



to good nutrition. If she nurses frequently and takes small amounts, you can try switching breasts every few hours

- Make sure that your baby is latched onto your breast properly so that she doesn't swallow air. When air comes up, it can bring up milk.
- Good burping is very important to minimizing reflux. You may find that you need to burp her before, during and after nursing. You need to get the air up right after meals—before the stomach mixes acid into the milk.
- Your baby should never be exposed to second-hand smoke. Smoke greatly increases reflux.
- Loosen your baby's diaper and try not to put pressure on her tummy after meals.
- Keep your baby upright after meals—30 minutes for breastmilk and longer for other foods.
- Don't jiggle or bounce your baby after meals.
- Your baby may sleep better at night when the head of her bed is elevated.

## Tips that minimize the pain:

- Some babies feel less pain when they are entertained. She may eat better in public or when you sing and talk to her.
- Some babies feel less pain when they are sleepy and eat better when they are half-awake. Tell your doctor if your baby seems to be in so much pain that she won't eat if she is fully awake.
- Your baby may need to be held and comforted nearly 24 hours per day. There are many tricks that you can learn from other moms. Slings, front packs and cosleeper beds can be helpful.

### Can mom's diet affect reflux?

You may find your baby has more reflux on certain days. You may suspect this happens after you eat certain foods. Some babies do have reflux because of food sensitivities or allergies.

A few mothers find that eliminating foods can help their baby. But many mothers never find a specific food that makes a big difference. Elimination diets can be frustrating and confusing because it can take days for an offending food to be eliminated from breastmilk and a several more days till your baby feels better. Elimination diets require a lot of planning and patience.

#### Easy ingredients to avoid:

- Caffeine—even the small amounts in "decaf" coffee
- Alcohol—even in cold medicine
- Tobacco and nicotine
- · Tomatoes in all forms
- Oranges, lemons, limes, grapefruit, strawberries, kiwi and other acidic (sour) fruits
- Broccoli, cabbage, cauliflower, peppers, onions, garlic, cucumber skins, beans and other veggies that tend to make people burp or have gas.
- Peppermint and spearmint.
   Wintergreen may be OK.
- Chocolate. White chocolate may be OK.
- Peppers and hot spices.
   Herbs may be OK.
- Fish
- Shellfish
- Nuts

These ingredients are harder to avoid and often hidden in common foods—even medicines and vitamins. If you decide to eliminate these foods, please work with a doctor or nutritionist to be sure you are getting a balanced diet.

- Milk
- Wheat
- Soy
- Corn

#### Medication

If the doctor prescribes medicine, use it properly. Some medicines for reflux work best when taken at a specific time of day or on an empty stomach. Measure it carefully and store it properly. Don't stop the medicine until the doctor says that your baby no longer needs it. It can take two weeks for the medicine to start working and several months for her throat to heal completely. If the first medicine doesn't work for your baby, ask for a different brand. It can take several tries to find the medicine that works best for your baby. The dose may need to be adjusted every time your baby gains 1–2 lbs/0.5–1 Kg.

#### Coping

If your baby has pain due to reflux, she may need all of your attention 24 hours a day. It may be difficult or impossible for you to do chores or work until your baby's pain is under control. It can help to talk to other mothers of high-need babies or babies with reflux. They know what you are experiencing and can offer support and practical tips. You will probably need help from your family, friends and neighbors. Make sure they understand your baby is in pain and needs special care. Be sure to get enough sleep, fluids, nutritious food and "down time" so that you can continue to make milk for your baby.

#### Non-nutritive sucking

Many babies with reflux find that sucking their thumb, a drained breast or a pacifier feels comforting. Having something in her mouth may also help your baby produce more saliva which soothes her throat. If your baby spits-up onto your breast, be sure to wipe the acid off right away. Be cautious of introducing pacifiers —they are shaped differently from a breast and encourage your baby to move her tongue and jaw a different way. When she returns to the breast, she may not remember how to suckle from it properly.

#### Breast is best

Continue breastfeeding as long as you can. In the past, mothers were told that formula is best for babies with reflux but research has shown that breastmilk is easier to digest for most babies. Many babies with reflux who are switched to formula don't tolerate the typical formulas

and end up drinking amino acid based formulas which are extremely expensive. Milk from bottles often flows faster so she may overfill her stomach when drinking from a bottle. It may take several weeks for you and your baby to develop a breastfeeding rhythm. Some days, your milk may be excessive and overfill her tummy. Other days, she may spit-up and want to feed again so often that your breasts have trouble making enough milk. Usually, this evens out with time. Some mothers learn how to pump and store extra milk on the days that they make too much. The pumped milk can be offered from a spoon or cup when your baby needs it.

#### Reflux Rollercoaster

Babies with reflux may have good weeks and bad weeks. Your baby's reflux may be worse when she is teething or has an illness such as a cold or ear infection. Some babies who take medicine may need a bit extra when the reflux flares up. Ask your doctor about adjusting the dose if you see this pattern. Reflux is often the worst at four to six months of age. As your baby's digestive system matures, the top of her stomach will stay shut better. Often babies improve at six months when they learn to sit upright and start eating solid foods. There is often more improvement at nine months when they learn to stand up. Reflux usually improves a lot when your baby starts to walk and is upright most of the day. Only a few babies continue to have problems with reflux after age two.

#### References:

La Leche League International The Womanly Art of Breastfeeding, 8th edition, 2010, pages 163, 383-84, 416-17 or The Ger Group, reflux.org





## Breastfeeding tips



#### Early Start

Put baby to the breast to nurse as soon as possible after birth.

#### How Often?

- Baby needs to nurse 10-12 times in 24 hours. The more you nurse the more milk you will have.
- Frequent breastfeeding stimulates milk production.

#### Colostrum

- Produced in first few days.
- M Small amounts, but concentrated. Perfect for a newborn's tiny stomach.
- Protects against infection.
- Clears meconium—helps reduce jaundice.
- Satisfies baby's thirst and hunger.

#### Engorgement

- Murse often!
- M Cold compresses or cabbage leaves between feedings to reduce swelling.
- Warm showers or compresses before feeding.
- Soften breasts by expressing some milk.
- Use gentle finger pressure around the base of the nipple to move some of the swelling slightly backward and upward into the breast.

#### Baby Needs Night Feedings

Easily digested human milk passes quickly

through the digestive system. This is why breastfed babies wake at night to eat.

#### Enough Milk?

After milk comes in:

- 5-6 wet disposable diapers in 24 hours.
- 3 2-5 bowel movements per day mean baby is getting enough milk.

#### Milk Too Weak?

Never! Milk changes throughout the feeding. Express one drop of milk before and after a feeding and see the difference. Foremilk is watery to satisfy thirst. Hindmilk is creamy to satisfy hunger.

#### Ensuring Adequate Milk Supply

- Finish the first breast first.
- Offer other breast if baby is still hungry.
- Use breast compressions to keep baby interested and awake during feedings.

#### Sore Nipples

Remember: Correct positioning and latchon are most important for preventing sore

- Break suction before taking baby off the breast.
- Offer the least sore breast first.
- Use only plain water for washing.

#### Helpful Hints

- La Leche League Leaders are accredited volunteers who are available to help in person, over the phone, and online. Locate an LLL Leader near you @ www.llli.org.
- Use ultra pure modified lanolin, like HPA® Lanolin, or hydrogel pads without cloth backing to speed healing.
- Check with an LLL Leader for help.

#### Blocked Duct

If milk becomes blocked a tender lump may appear in the breast.

- M Apply heat.
- Get plenty of rest.
- M Nurse frequently.
- Check positioning.

#### Growth Spurts

Baby may nurse more often at times to build milk supply. "Frequency days" often occur around 3 weeks of age.

#### Back to Work

- Find out about facilities at work for expressing and storing your milk.
- Best to wait until milk supply is well established.
- Pump or express milk at work.
- Take milk home for the next day's feedings.
- Frequent breastfeeding when at home.

#### Bottles

- Babies who are feeding well don't need bottles.
- If using a bottle while separated from baby, use a slow-flow nipple. Fast-flow nipples may confuse baby and cause him to reject feeding at the breast.

#### Latching On

- M Sit back comfortably (don't lean over baby).
- Support your breast with one
- Place baby's head on your forearm. Pull baby's feet in close to your other side. Hold baby at level of breast.
- Baby's face and body are turned toward mother.
- Tickle baby's lips, and wait for him to open wide.



Bring baby to the breast with his head slightly tilted back. Baby's chin will press into the breast first. More of your breast will be covered with his lower jaw.



When baby is latched well, his chin should be pressed into the breast, and his nose slightly away from it.

ations by Paul Torgus



# **Your Milk Supply**

A baby's need for milk and his mother's ability to produce it in just the right quantity is one of nature's most perfect examples of *the law of supply and demand*. Understanding how the milk supply is established and regulated makes it easier to maintain an ample milk supply. Here are 10 tips to help you.

#### TIP 1: Nurse early and often.

This is the key to establishing a abundant milk supply and getting breastfeeding off to a good start. Mothers who nurse their babies within an half hour after birth and continue to nurse at frequent, unrestricted intervals are more likely to establish a good milk supply than mothers who nurse on a restricted feeding schedule.

### TIP 2: The more the baby nurses, the more milk there will be.

The breast produces milk almost continuously. Frequent nursing and effective suckling signal the mother's body to produce the amount of milk her baby needs. So the more often the baby nurses, the more milk the breast will make. This simple rule of supply and demand is the key to establishing and maintaining an abundant milk supply.

## TIP 3: Newborns usually nurse every one to two hours, or at least ten to 12 times in a 24 hour period.

This frequent nursing is nature's way of not only helping the mother provide a wonderful source of comfort and nutrition for her newborn, but also to help the mother's milk supply to become quickly established. Enjoy these special nursing sessions and bond with your baby.

#### TIP 4: Don't look at the clock, look at your baby.

Your baby needs to nurse long enough to get the hindmilk, the milk that comes toward the end of a feeding as it is creamy and high in calories. Encourage the baby, if willing, to nurse from both breasts at least 10 to 15 minutes on each side. It may take the milk two or three minutes to "let down," or start to flow, especially in the beginning. Babies who have had enough hindmilk usually have relaxed bodies and may fall asleep at the breast. If your baby suckled both breasts at the feeding, start the next feeding with the breast the baby nursed from last. (Often small infants, like late preterm infants, only take one breast at a feeding the first few days, and they do just fine if they are nursing frequently enough.)

#### TIP 5: Be sure your baby is suckling effectively.

Milk production depends on milk removal. Watch baby for signs of milk removal. Does your baby have a large mouthful of breast tissue? Can you see baby's tongue between your breast and their lower gum? Are baby's temples moving as baby swallows? Can you hear baby swallowing your milk? Do you feel like your breast has been drained after baby comes off the breast? These questions may be helpful in assessing weather your baby is removing milk from the breast. Sore or cracked nipples may be an indicator of improper latch or positioning at the breast.

## TIP 6: Breastfed babies feed more often than formula fed babies.

Keep in mind that since human milk is perfectly suited to your baby, it will be digested more rapidly and completely than non-breastmilk substitutes like cow's milk or soy-based formulas. Your breastfed baby will be ready to eat again sooner than his bottle-fed counterpart. Remember the law of supply and demand that is at work here—the more often the baby nurses, the more milk your body will produce for your baby.

## TIP 7: Count diapers to check if your baby is getting enough to eat.

Sometimes a mother finds herself thinking that her baby is nursing "all the time," and wonders if this means that she doesn't have enough milk to satisfy him. If he has six to eight wet cloth diapers (five to six disposables) and two to five bowel movements per day (beginning the third day after birth) and is not being given anything but your milk, you can be sure he is getting plenty of nourishment. An older baby may have bowel movements less frequently, but they should be plentiful.

#### TIP 8: You may need to wake your baby for feedings.

If you find that your baby regularly sleeps more than three hours between feedings, he may need to be awakened for feedings at least every two hours during the day until your milk supply is well established. If the baby begins to nurse less frequently, there will be a corresponding drop in milk production. If nursings continue to be spaced farther and farther apart or if the baby nurses less vigorously or for a shorter period of time at each feeding, the milk supply will diminish. The law of supply and demand also works in reverse: the less often the baby nurses, the less milk there will be.

#### TIP 9: Growth spurts cause babies to nurse more often.

Usually around 3 weeks, 6 weeks, 3 months and 6 months of age you may notice your baby nursing more often. Allowing your baby to nurse more often for two or three days around these times will increase your milk supply to meet his needs.

## TIP 10: Remember that newborns nurse for many reasons other than hunger.

Your baby may be nursing often because he likes the feeling of security from the close body contact that comes with nursing, because he needs to satisfy his suckling need, or because he finds the sound of your heartbeat and the gentleness of your touch a great source of comfort as he adjusts to his new world. If you have any further questions or concerns, be sure to contact your La Leche League Leader or other breastfeeding specialist.



\*\* Breastfed newborns should regain their birth weight by 10 days to two weeks of age. A baby who is not gaining well should be checked by a doctor.





