

Let-down Reflex: Too slow?

By Kelly Bonyata, BS, IBCLC

- [Is my let-down functioning properly?](#)
- [Possible causes of slow let-down](#)
- [Let-down as a conditioned reflex](#)
- [Let-down cues that have proven helpful](#)
- [Additional Information \(links\)](#)
- [Relaxation and Visualization Exercises \(links\)](#)

Is my let-down functioning properly?

It is *normal* for let-down not to feel as strong as your baby gets older. Some mothers never feel let-down, and some stop feeling the let-down sensation as time goes by. This does not necessarily indicate that let-down is not taking place.

Reliable signs of a healthy, functioning let-down include:

- In the first week or so, mother may notice uterine cramping during letdown.
- Baby changes his sucking pattern from short and choppy (like a pacifier suck) at the beginning of the feeding to more long, drawing, and rhythmic a minute or so into the feeding.
- Mother may have a feeling of calm, relaxation, sleepiness or drowsiness.
- Mother may have a strong sensation of thirst while breastfeeding.
- Baby is swallowing more often. A swallow sounds like a small puff of air coming out the baby's nose and you can usually see the muscle moving in front of the baby's ear, giving the baby the appearance of his earlobes subtly wiggling.

Occasionally, mothers will also experience [other symptoms during let-down](#), including itching, nausea, headaches, or negative emotions.

Possible causes of slow let-down

It's quite normal for a mother to have a harder time letting down when pumping than when nursing. The milk may be there, but you may have a hard time letting down and "releasing" the milk. Some mothers also have a let-down which is not functioning properly when baby is nursing.

Many things can be the cause of a slow or inhibited let-down: anxiety, pain, embarrassment, stress, cold, excessive [caffeine](#) use, [smoking](#), use of [alcohol](#), or the use of some [medications](#). Mothers who have had [breast surgery](#) may have nerve damage that can interfere with let-down. In extreme situations of stress or crisis, the release of extra adrenaline in the mother's system (the "fight or flight" response) can reduce or block the hormones which affect let-down.

Sometimes a cycle is created, where baby fusses and pulls off because the let-down is slow, which makes mom tense up, which makes the let-down even slower, etc. You can use relaxation techniques and let-down cues to break this cycle.

Let-down as a conditioned reflex

Let-down is partially a *conditioned reflex*, or one acquired as a result of repeated “training.” The pioneer of research into what he called conditioned reflexes was the Russian neurophysiologist Ivan Pavlov.

A typical experiment of Pavlov’s was as follows: On numerous occasions a bell is rung just before a dog is fed. The dog salivates as usual on receiving its food. Then the bell is rung without any food being presented. The dog salivates in response to the bell ringing.

Let’s put this in terms of nursing. Use a “let-down cue” just before you nurse (for example, deep breathing or drinking a cup of tea). Your milk then lets down in response to baby nursing. Once you have established a conditioned reflex, you will begin to let-down in response to the let-down cue, without baby needing to nurse (or nurse as long).

In Pavlov’s terms:

- the food (nursing) is an *unconditioned stimulus*
- the salivation (let-down) in response to the food (nursing) is an *unconditioned reflex*
- the sound of the bell (let-down cue) is the *conditioned stimulus*
- the salivation (let-down) to the stimulus of the bell (let-down cue) alone is the *conditioned reflex*.

Pavlov also found that:

- It is much easier to form a conditioned reflex if the unconditioned stimulus follows the conditioned one (i.e. the food follows the bell)
- It is easier to form a conditioned reflex if the conditioned stimulus (bell) occurs *very close in time* to the unconditioned stimulus (food)
- The intensity of the stimuli is important – a dog salivates more if trained on larger pieces of food; and it also salivates more in response to a louder bell

Transferring this to nursing and let-down, we can surmise that:

- Your let-down cue should be used directly *before* and just as you begin nursing.

- Intensity makes a difference: Using a couple of different nursing cues at the beginning of nursing (for example, sitting down, getting a drink of water, and doing some deep breathing) should work better than just sitting down to nurse.

While you're having problems with let-down, it may be helpful to try to nurse in as close to the same setting and same circumstances every time, or have at least one thing that you do that's the same every time you nurse (deep breathing, visualization, the same drink in the same cup, etc.). If you begin routinely using a few of these let-down cues, your let-down should kick right back in.

Let-down cues that have proven helpful

Use **all** of your senses to facilitate let-down. Concentrate on the sight, sound, smell and feel of your baby. Have a certain beverage that you drink (the sense of taste) at the beginning of every nursing session, have a certain song that you listen to, etc.

Directly before nursing:

- Take a warm shower or bath prior to nursing.
- If you are in any pain, consider taking some Advil or Tylenol about 30 minutes before you expect to nurse. Pain can cause stress and inhibit let-down.
- Choose a calm, less distracting setting for nursing.
- Turn on some music that you enjoy.
- Undress baby to his diaper and yourself from the waist up to increase skin-to-skin contact.
- Get something to drink, like a glass of water or a cup of tea.
- Sit in a comfortable chair with arm support and good back support or better, nurse while lying down.
- Get in a warm bath with baby and nurse there.
- Before putting baby to breast, massage your breasts and do some nipple rolls and gentle tugging. Moist heat on the breasts should be helpful, too. See "Assisting the Milk Ejection Reflex" in this information on the [Marmet technique of manual expression](#).
- [Reverse pressure softening](#) helps let-down for some moms.

During nursing:

- Deep breathe or use other *relaxation techniques* at the beginning of a feeding, like the techniques that are taught for childbirth
- Singing or humming can also speed let-down.
- Use *visualization*. Take several deep breaths and close your eyes as you begin. Try to visualize and "feel" what the let-down response feels like for you (if you normally feel anything). Some women imagine their milk flowing or use images of waterfalls. Some women concentrate on looking at baby's soft little hand moving at mom's breast, with fingers curled under. Some women use visualizations such

as being on the beach or any other relaxing place. Use all five senses; imagine the sights, smells such as the salt air, sensations such as the feel of the sand under you or the warmth of the sun on your skin, imagine tastes and what you might hear too. An excellent book on visualization techniques is [Mind Over Labor](#) by Carl Jones.

- The opposite can also be helpful: watch TV, talk on the phone, read a book, etc. – whatever will relax you and get your mind off it.
- Place a heating pad on your shoulders and back. Get someone else to massage your back and shoulders before and while you nurse.
- Switch nurse: move baby back and forth frequently between breasts until let-down occurs
- Continue to massage and use [breast compression](#) as you nurse.

Additional suggestions if you're pumping while separated from baby:

- Look at a picture of your baby (nursing, if possible).
- Try listening to a tape recording of your baby fussing before nursing and/or feeding sounds. Use a portable tape player with headphones if needed. Or just visualize what he sounds like when he's ready to nurse.
- Put a sleeper or t-shirt or blanket that baby has worn in a ziplock bag. Open it up when ready to pump – smell and touch it.
- [One study](#) has shown that the moms of hospitalized babies who listened to guided relaxation or soothing music while pumping had an increased pumping output. When mom listened to a recording that included both music and guided relaxation while pumping, in addition to looking at photos of her baby, pumping output was increased even more. In this study, the interventions led to moms producing 2-3 times their normal pumping output. Milk fat content also increased for these moms in the early days of the study. (Reference: Keith DR, Weaver BS, Vogel RL. [The effect of music-based listening interventions on the volume, fat content, and caloric content of breast milk-produced by mothers of premature and critically ill infants](#). Adv Neonatal Care. 2012 Apr;12(2):112-9.)

Additional Information

- [Marmet technique of manual expression](#) by Chele Marmet. Scroll down to "Assisting the Milk Ejection Reflex"
- Fennel is sometimes used to help elicit let-down
- A homeopathic remedy called Rescue Remedy has also been used to help elicit let-down

Relaxation and Visualization Exercises

- [Relaxation Techniques](#) for pumping, by Diane O'Brien Juve, from the Working Cow website
- [Elicitation of the Relaxation Response](#) from the Mind Body Medical Institute

- [Progressive muscular relaxation script](#) from the Centre for Clinical Interventions (Australia)
- [Relaxation and desensitization scripts](#) by David Ross, College of Lake County

Increasing Low Milk Supply

By Kelly Bonyata, BS, IBCLC

Is your milk supply really low?

First of all, is your milk supply really low? Often, mothers [think that their milk supply is low](#) when it really isn't. If your baby is [gaining weight well](#) on breastmilk alone, then you do **not** have a problem with milk supply.

*It's important to note that the feel of the breast, the behavior of your baby, the frequency of nursing, the sensation of let-down, or the amount you pump are **not valid ways to determine if you have enough milk for your baby.***

What if you're not quite sure about baby's current weight gain (perhaps baby hasn't had a weight check lately)? If baby is having an [adequate number of wet and dirty diapers](#) then the following things do **NOT** mean that you have a low milk supply:

Your baby [nurses frequently](#). Breastmilk is digested quickly (usually in 1.5-2 hours), so breastfed babies need to eat more often than formula-fed babies. Many babies have a strong need to suck. Also, babies often need continuous contact with mom in order to feel secure. All these things are normal, and you cannot spoil your baby by meeting these needs.

- Your baby suddenly increases the frequency and/or length of nursings. This is often a [growth spurt](#). The baby nurses more (this usually lasts a few days to a week), which increases your milk supply. Don't offer baby supplements when this happens: supplementing will inform your body that the baby doesn't need the extra milk, and your supply will drop.
- Your baby [nurses more often and is fussy in the evening](#).
- Your baby doesn't nurse as long as she did previously. As babies get older and better at nursing, they become more efficient at extracting milk.
- Your baby is [fussy](#). Many babies have a [fussy time of day](#) – often in the evening. Some babies are fussy much of the time. This can have many reasons, and sometimes the fussiness goes away before you find the reason.
- Your baby guzzles down a bottle of formula or expressed milk after nursing. Many babies will willingly take a bottle even after they have a full feeding at the breast. Read more here from board-certified lactation consultant Kathy Kuhn about [why baby may do this and how this can affect milk supply](#). Of course, if you regularly supplement baby after nursing, your milk supply will drop (see below).

- Your breasts don't leak milk, or only leak a little, or stop leaking. Leaking has nothing to do with your milk supply. It often stops after your milk supply has adjusted to your baby's needs.
- Your breasts [suddenly seem softer](#). Again, this normally happens after your milk supply has adjusted to your baby's needs.
- You never feel a [let-down](#) sensation, or it doesn't seem as strong as before. Some women never feel a let-down. This has nothing to do with milk supply.
- You get very little or no milk when you pump. The amount of milk that you can pump is not an accurate measure of your milk supply. A baby with a healthy suck milks your breast much more efficiently than any pump. Also, pumping is an acquired skill (different than nursing), and can be very dependent on the [type of pump](#). Some women who have abundant milk supplies are unable to get any milk when they pump. In addition, it is very common and normal for [pumping output to decrease over time](#).

See also [Is my baby getting enough milk?](#)

Who to contact if you suspect low milk supply

If you're concerned about your milk supply, it will be very helpful to get in touch with [a trained breastfeeding counselor or a board certified lactation consultant](#). If your baby is not gaining weight or is losing weight, you need to keep in close contact with her doctor, since it's possible that a medical condition can cause this. Supplementing may be medically necessary for babies who are losing weight until your milk supply increases. If supplementing is medically necessary, the best thing to supplement your baby with is your own pumped milk.

Potential causes of low milk supply

These things can cause or contribute to a low milk supply:

- [Supplementing](#). Nursing is a supply & demand process. Milk is produced as your baby nurses, and the amount that she nurses lets your body know how much milk is required. Every bottle (of formula, juice or water) that your baby gets means that your body gets the signal to produce that much less milk.
- [Bottle preference](#). A bottle requires a different type of sucking than nursing, and it is easier for your baby to extract milk from a bottle. As a result, giving a bottle can either cause your baby to have problems sucking properly at the breast, or can result in baby preferring the constant faster flow of the bottle.
- [Pacifiers](#). Pacifiers can affect baby's latch. They can also significantly reduce the amount of time your baby spends at the breast, which may cause your milk supply to drop.
- [Nipple shields](#) can be a useful tool in some cases, but they can also reduce the stimulation to your nipple or interfere with milk transfer, which can interfere with the supply-demand cycle.

- [Scheduled feedings](#) interfere with the supply & demand cycle of milk production and can lead to a reduced supply, sometimes several months later rather than immediately. Nurse your baby whenever she is hungry.
- [Sleepy baby](#). For the first few weeks, some babies are very sleepy and only ask to nurse infrequently and for short periods. Until baby wakes up and begins to breastfeed well, nurse baby at least every two hours during the day and at least every 4 hours at night to establish your milk supply.
- Cutting short the length of nursings. [Stopping a feeding before your baby ends the feeding herself](#) can interfere with the supply-demand cycle. Also, your milk [increases in fat content](#) later into a feeding, which helps baby gain weight and last longer between feedings.
- Offering only one breast per feeding. This is fine if your milk supply is well-established and your baby is gaining weight well. If you're trying to increase your milk supply, let baby finish the first side, then offer the second side.
- Health or anatomical problems with baby (including, [jaundice](#), [tongue-tie](#), etc.) can prevent baby from removing milk adequately from the breast, thus decreasing milk supply.
- Mom's health (uncontrolled anemia or [hypothyroidism](#), retained placenta, postpartum hemorrhage...), previous [breast surgery/injury](#), hormonal problems (e.g. [PCOS](#)), [anatomical problems](#), medications she is taking ([hormonal birth control](#), [sudafed](#)...), or [smoking](#) also have the potential to affect milk supply.

Increasing your milk supply

Milk production is a demand & supply process. If you need to increase milk supply, it's important to understand [how milk is made](#) – understanding this will help you to do the right things to increase production.

To speed milk production and increase overall milk supply, the key is to remove *more* milk from the breast and to do this frequently, so that less milk accumulates in the breast between feedings.

OK, now on to things that can help increase your milk supply:

- Make sure that baby is nursing efficiently. This is the “remove more milk” part of increasing milk production. If milk is not effectively removed from the breast, then mom's milk supply decreases. If positioning and latch are “off” then baby is probably not transferring milk efficiently. A sleepy baby, use of nipple shields or various health or anatomical problems in baby can also interfere with baby's ability to transfer milk. For a baby who is not nursing efficiently, trying to adequately empty milk from the breast is like trying to empty a swimming pool through a drinking straw – it can take forever. Inefficient milk transfer can lead to baby not getting enough milk or needing to nurse almost constantly to get enough milk. If baby is not transferring milk well, then it is important for mom to express milk after

and/or between nursings to maintain milk supply while the breastfeeding problems are being addressed.

- Nurse frequently, and for as long as your baby is actively nursing. Remember – you want to remove *more* milk from the breasts and do this frequently. If baby is having weight gain problems, aim to nurse at least every 1.5-2 hours during the day and at least every 3 hours at night.
- Take a *nursing vacation*. Take baby to bed with you for 2-3 days, and do nothing but nurse (frequently!) and rest (well, you can eat too!).
- Offer both sides at each feeding. Let baby finish the first side, then offer the second side.
- Switch nurse. Switch sides 3 or more times during each feeding, every time that baby falls asleep, switches to “comfort” sucking, or loses interest. Use each side at least twice per feeding. Use [breast compression](#) to keep baby feeding longer. For good instructions on how to do this, see Dr. Jack Newman’s [Protocol to manage breastmilk intake](#). This can be particularly helpful for sleepy or distractible babies.
- Avoid pacifiers and bottles when possible. All of baby’s sucking needs should be met at the breast (see above). If a temporary supplement is medically required, it can be given with a nursing supplementer or by spoon, cup or dropper (see [Alternative Feeding Methods](#)).
- Give baby only breastmilk. Avoid all solids, water, and formula if baby is younger than six months, and consider decreasing solids if baby is older. If you are using more than a few ounces of formula per day, [wean from the supplements gradually](#) to “challenge” your breasts to produce more milk.
- Take care of mom. Rest. Sleep when baby sleeps. Relax. Drink [liquids to thirst](#) (don’t force liquids – drinking extra water does *not* increase supply), and eat a [reasonably well-balanced diet](#).
- Consider pumping. Adding pumping sessions after or between nursing sessions can be very helpful – pumping is very important when baby is not nursing efficiently or frequently enough, and can speed things up in all situations. *Your aim in pumping is to remove more milk from the breasts and/or to increase frequency of breast emptying.* When pumping to increase milk supply, to ensure that the pump removes an optimum amount of milk from the breast, keep pumping for 2-5 minutes *after* the last drops of milk. However, adding even a short pumping session (increasing frequency but perhaps not removing milk thoroughly) is helpful.
- Consider a galactagogue. A substance (herb, prescription medication, etc.) that increases milk supply is called a galactagogue. See [What is a galactagogue? Do I need one?](#) for more information.

Additional information



- [How does milk production work?](#)
- [My breasts feel empty! Has my milk supply decreased?](#)
- [How might I increase baby's weight gain?](#)
- [Protocol to Manage Breastmilk Intake](#) by Jack Newman, MD
- [Weaning from formula supplements](#)
- [Prescription drugs used for increasing milk supply](#)

@ other websites

- [How can I increase my milk supply?](#) by Becky Flora, IBCLC
- [Hidden Hindrances to a Healthy Milk Supply](#) by Becky Flora, IBCLC
- [Increasing Your Milk Supply](#) by Anne Smith, IBCLC
- [The First Six Weeks: Milk Supply](#) by Paula Yount

How might I increase baby's weight gain?

By Kelly Bonyata, BS, IBCLC

- [Some causes for low weight gain in breastfed babies](#)
- [What can I do to increase my baby's gain weight?](#)
- [Additional information](#)

Some causes for low weight gain in breastfed babies

It is recommended that you work with your pediatrician and a [board certified lactation consultant](#) if your baby is having weight gain problems.

First, it's important to determine if baby is having a genuine problem with weight gain. Take a look at [Normal Growth of Breastfed Babies](#) for more on this subject.

Following is a quick sketch of some things to look into when baby is not gaining well. This is by no means complete.

- Poor breastfeeding management is the most common cause of low weight gain –.is baby taking in enough calories?

- Is baby having enough wet and dirty diapers? This is an indicator of how much milk baby is taking in.
- What is baby's nursing pattern? Is baby nursing frequently enough? Some things on baby's side that might interfere with nursing frequency include [jaundice](#), [sleepy newborn](#), [distraction](#) and [pacifier](#) use.
- Is mom [letting baby determine](#) when to switch sides, or is she switching after a set time?
- Is baby [latching](#) well and transferring milk adequately?
- Is mom's [milk supply](#) adequate? (Remember that [pumping output](#) is *not* a useful indicator of milk supply.)
- It is *not* necessary to pump and bottle feed or to give formula to determine whether baby is getting enough calories. There is a specialized scale (often available for rent from your lactation consultant or hospital) that can be used for pre- and post-feed weights to determine whether baby is taking in enough milk. There is a special procedure that is used for getting these weights – make sure the person doing the weighing is familiar with it.
- See [Is baby getting enough milk?](#) for more information.
- Evaluate baby for medical problems that might interfere with weight gain.
- Babies who are sick (with even a minor illness) often slow weight gain or even lose weight.
- A few common things that can affect weight gain are [ear infection](#), [thrush](#), [reflux](#), [anemia](#), [allergies](#), [tongue-tie](#), and urinary tract infections.

What can I do to increase my baby's weight gain?

There are several simple things that have been proven to help with weight gain:

- Stop or decrease [solid foods](#), particularly if baby is younger than 6 months. Most solids foods have [fewer calories and nutrients than breastmilk](#), plus they tend to replace (rather than add to) the higher-calorie, more nutritious breastmilk.
- [Sleep close to your baby](#) (this increases prolactin and frequency of nursing).
- Learn [baby massage](#) — this has been proven to improve digestion and weight gain.

- Carry baby throughout the day in a [baby carrier](#); get as much skin to skin contact as you can. Both of these things have been shown to improve weight gain.
- Nurse often – at least every 2 hours during the day and at least once at night. Frequent nursing increases baby’s milk intake.
- Make sure you’re allowing your baby to *completely finish one side* before you offer the other by waiting upon her cues that she is finished; i.e. pulling off herself and looking satisfied, going to sleep, changing from an active suck/swallow to more of a pacifier suck, etc. Always OFFER the second side, but don’t worry if she doesn’t seem to need it. It’s much more important that she be allowed to completely finish one side than that she nurse both sides. By doing so she will be assured of reaching enough of the richer, more caloric [hindmilk](#) that helps her to go longer between feedings.
- Use [breast massage and breast compression](#) during breastfeeding. If you’re pumping, use [hands on pumping techniques](#).
- Pump or hand express for a couple of minutes before nursing. This will remove some of the foremilk so that your baby receives more of the richer, higher calorie hindmilk.
- If [supplements](#) are medically indicated, breastmilk is preferred over formula as a supplement (exceptions to this are rare), and the average [fat/calorie content of mom’s milk is higher than that of formula](#). Mom can pump for 5-10 minutes *afternursing* (don’t interrupt or shorten the nursing session to do this), and offer this higher-fat hindmilk to baby as needed. This is also an option for moms who normally offer expressed milk when they are separated from baby.

See also [What affects the amount of fat or calories in mom’s milk?](#)

Additional information @

- [What affects the amount of fat or calories in mom’s milk?](#)
- [Got Milk? Milk Supply Issues](#)
- [Calorie and fat content of various milks](#)
- [Calorie and fat content of common baby & toddler foods](#)

Breast compression

- [Breast Compression](#) by Jack Newman, MD, FRCPC
- Stutte PC, et al. The effects of breast massage on volume and fat content of human milk. *Genesis* 1988; 10:22-25.
- Bowles BC, et al. New benefits from an old technique: alternate massage in breastfeeding. *Genesis* 1987/1988; 9: 5-9,17.
- Iffrig MC. Nursing care and success in breast feeding. *Nurs Clin North Am.* 1968 Jun;3(2):345-54.

More

- [Protocol to manage breastmilk intake](#) by Jack Newman, MD, FRCPC
- [Slow Weight Gain Following Early Good Weight Gain](#) by Jack Newman, MD, FRCPC
- [PDF Weight gain](#) from Children's Hospitals and Clinics Minneapolis and St. Paul, MN. Some children who are eating solids and have trouble eating enough to gain weight may need extra calories. Here are some easy ways to add calories to foods.

Exclusive Pumping

(aka: everything you wanted to know about exclusive pumping but didn't know who to ask!)

Reprinted from Mother-2-Mother.com (2000-2006), with permission from the author, Paula Y.

- [How Often & When?](#)
- [How Long to Pump?](#)
- [How Much Milk Per Bottle?](#)
- [How to Bottle-feed the Breastfed Baby](#)
- [Increasing Supply](#)
- [Pumping Tricks: More Tips for Eping Moms by Eping Moms](#)
- [Special Thanks](#)

A note about exclusive pumping:

There are occasions that arise which may prevent a mom from being able to nurse her baby. A mother who has a baby who cannot or will not latch, for whatever reason, may assume there is no choice but for her to use infant formula. There is another option however, and one that doesn't seem to get the support or acknowledgment it deserves – exclusively pumping, also known as “**EPing**”.

In most cases, a mother who has made the decision to exclusively pump has not done so “lightly”. She is aware of the irreplaceable benefits of her milk, and she wants her baby to have the best, so the most logical conclusion for her is to pump and provide her milk to baby by bottle.

Sadly, many (including health care providers) will tell mom that this is crazy idea, and “it’ll never work”; “you’ll run out of milk”; or will say “you simply will not be able to keep up”. Without the support and information she needs, a mom may simply give up.

Those who don't give up often are faced with other issues to overcome. They often feel like they are in a class by themselves, excluded from the usual groups of moms who typically form into “support groups” either for breastfeeding mothers, or for formula feeding mothers.

They may feel they must explain “why” they are “bottle feeding” breastmilk – even to their health care providers who often ask.. “breast or bottle” assuming “bottle” is formula.

While everyone does agree that there are irreplaceable benefits to nursing baby directly from breast, everyone also must agree that breastmilk *itself* is irreplaceable. When faced with providing breastmilk, or not, then whenever possible it should be breastmilk regardless of the method of delivery.

There is no room or need for guilt here – the mother who has done all she can to bf “normally” isn't a failure – she is just doing the best she can in the situation she is in. Mothers who choose to exclusively pump are very dedicated mothers – determined to do the best they can for their precious babies, and they deserve respect and support.

Here are some tips and information regarding exclusive pumping:

All About Exclusive Pumping and Tips for EPing Moms by EPing Moms: The Best... Expressed!

(italicized info shared by Shanna)

HOW OFTEN TO PUMP & WHEN?:

First and foremost – one should have a good quality, double electric pump. Some mothers rent them, others buy pumps such as the Hygeia EnJoye. The quality of the pump can make all the difference in the world!

A normal newborn baby nurses on average 8 to 12 times in a 24 hour period. Most experts suggest it is best if mom can come close to matching what the normal nursing baby would do at the breast, and recommend she pump about every two hours, not going longer than three hours between sessions. Understanding [how milk production works](#) can help moms in their efforts to establish good milk supply. The more frequently the breasts are emptied, the more milk mother should have. Therefore, if she were to pump at least every 3 hours, for about 20 minutes, she should establish and maintain a good milk supply. In the first couple of weeks, she may also want to pump at least twice at night, but not all mothers do this.

“It’s insanely hard in the beginning but you need to pump every 2 to 3 hours around the clock. Prolactin levels (the hormone that tells your body to make milk) are highest in the early morning hours so mom would want to make sure she is pumping then as well. This is like the 1am to 5am stretch of time. If mom can at least get one pump in during this time, it will really help.

The main concern is to get enough pumps in per day – a minimum of 7 pumps per day. I will say from experience that when I pushed myself to get in 8 pumps per day, my supply REALLY increased. Most of the time, I just couldn’t push myself and ended up with 7 times. And to create a little bit of sanity, it is the number of pumps per day that you get in and not necessarily the amount of time you wait in between pumps that counts. So, if I needed to run an errand or just wanted to get out of the house without dragging my pump along, I would pump every 2 hours in the morning and then have a window of about 4 or 5 hours in the afternoon to do everything and would then pump again every 2 hours in the evening to get my total of 7 pumps in for the day.

That being said, I did NOT get up to pump in the middle of the night if my baby wasn’t awake. I thought that was cruel and couldn’t do it! Ha! The sleep was more important to me (especially after the c-section). A lot of pumping is trial and error and this is why keeping info in a spreadsheet (or journal) is helpful. If you start sleeping through the

night or going longer stretches and see a huge decline in your volume, you can always set you alarm to add another pump back in. I never had to but this can vary from mom to mom. I did the early morning pump as long as I was up feeding the baby, but if she slept 5 hours through the night, so did I! ”

PUMPING – HOW LONG?

Most experts agree that whatever the reason for pumping, moms should pump for about 20 minutes. Most agree its best to pump at least 15 minutes, and to avoid going much longer than 20 minutes. Experts also encourage pumping about five minutes past when the milk stops flowing, often by doing so mom will elicit another letdown, and at the very least will maintain production as well as encouraging increase in supply if needed.

“The standard advice is to pump for 15-20 minutes. Even if you don’t have milk flowing that entire time, you need to pump that long to get enough nipple stimulation. Also pumping at least 5 minutes after your milk stops flowing will tell your body that you need more milk; thus increasing your supply. 15 minutes should absolutely be the minimum pumping time. I’ve talked to women who only pumped for 10 minutes and eventually started losing their supply. They had to work really hard to rebuild it.”

Pump Settings

“More is not better” when it comes to the suction settings on the breast pump. Most experienced moms do not set the pump speed on high, but rather keep it on lower setting for comfort.

“This one was a BIGGIE for me and I want to definitely pass this one on! There should be a suction setting on your pump and a speed dial. This is very important, the higher the suction does NOT mean the more milk you make. Your pump will probably have a suction setting of minimum, medium, and maximum. I had mine set on medium when I developed a blister. Once it healed, I turned it down to minimum and have never had another blister or pain again. I keep the speed at 3 but if you feel like too much areola is being sucked into the horn, then turning down the speed will remedy that. If you are in a lot of pain and turn down the settings, you might actually get more milk because you are more relaxed!”

HOW MUCH MILK PER BOTTLE?

Moms may find it surprising that the breastfed baby often takes less milk in the bottle than formula babies take in. This is because breastmilk is so well utilized by the baby’s body that less is needed. Since breastmilk is so easily and completely digested, the breastfed baby needs to eat more often, but they don’t need as much per bottle.

When a baby is nursed from the breast, research shows us that baby will vary their intake of milk from feeding to feeding, and the length of time at the breast doesn’t always correlate with the amount of milk taken from the breast. Overall, the average bf baby takes in between 19 and 30 oz (or 570 – 900 mL) per day (24 hrs), but the amount taken per bottle may vary somewhat from feeding to feeding, just as it does at the breast, depending on baby’s need at the time.

” According to the most current breastfeeding research, exclusively breastfed babies take in an average of 25 oz (750 mL) per day between the ages of 1 month and 6 months. This may vary a little from baby to baby, but the average range of milk intake is 19-30 oz per day (570-900 mL per day).

To estimate the average amount of milk baby will need at a feeding:

- Estimate the number of times that baby nurses per day (24 hours).
- Then divide 25 oz by the number of nursings.

This gives you a “ballpark” figure for the amount of expressed milk your exclusively breastfed baby will need at one feeding.

Example: If baby usually nurses around 8 times per day, you can guess that baby might need around 3 ounces per feeding every 3 hours when mom is away. ($25/8=3.1$).

NOTE: Current breastfeeding research does not indicate that breastmilk intake changes with baby’s age or weight between one and six months.”

You can find a quick and easy expressed breastmilk calculator [here](#).

HOW TO BOTTLEFEED

It is important to remember that it is very easy to overfeed a baby using bottles. This is because the way a baby drinks from a bottle is very different than how a baby would nurse from the breast. A baby cannot control the flow of milk from a bottle thus experts recommend using slow flow or “newborn” type nipples, to reduce the risk of overfeeding.

The breastmilk should never be warmed in the microwave, since doing so not only creates hot spots that cannot fully be distributed evenly even when the milk is mixed (the heat adheres to the fats which “glob” together, and can result in scalding of a baby’s mouth and throat), but it actually alters the composition of the breastmilk, damaging some of the nutrients. Shaking breastmilk is also not recommended (gently swirl to mix, instead).

Ideally [bottlefeeding the baby](#) should mimic how a mother breastfeeds her baby. The baby should be fed on cue, or demand, and not according to a rigid schedule. Breastmilk digests in about 90 minutes, so one would expect the feedings to be anywhere from 1.5 hrs to 3 hours apart. (younger babies often need to eat more frequently than older babies).

The bottle should be offered gently, in a non-stressful manner, with the baby drawing the nipple into the mouth. The type of bottle or nipple is not as important as the manner in which the bottle is offered. A typical nursing session lasts about 15 to 20 min, and care should be taken to allow baby to take his/her time to drink the bottle, not “rushing” through a feeding as quickly as possible. Changing position mid-way through a feeding is often recommended, as is holding baby in a more upright position. Propping a bottle is also not recommended.

INCREASING YOUR SUPPLY

There are wonderful tips on increasing milk supply below – those that work for nursing mothers also work for mothers who exclusively pump, the biggest “difference” is that nursing mothers are encouraged to put baby to breast often, and pumping mothers are encouraged to pump often. Probably **THE** most important thing to remember is to pump often and pump long enough to soften (or “empty”) the breast.

“Some little tips to help increase your supply if you really need it. It’s nice to have these on hand just in case:

First drink plenty of water. *I don’t drink a ton but I make sure to stay hydrated. Check your pee when you go (I know, sounds funny!). If it is light yellow to clear, you are plenty hydrated.*

Make sure you eat! *While you are pumping, you will keep the weight off, I promise! It can make you hungry as a horse and it does that for a reason. You need the extra calories because you are burning so much off! When I didn’t eat enough, I would get really light headed and feel like I was going to drop my baby...not good! Eventually, your hunger should taper off (mine has).*

Eat REAL oatmeal, not the instant. *You can eat the quick oats (the ones that cook in 1 minute) or the old fashioned oats (that cook in 5 minutes). You can also make cookies that have oatmeal in them and get oatmeal that way (I prefer this way! Ha!). The way they process the instant oatmeal, it doesn’t give you the same results. No one is sure how the oatmeal works but it does!*

Get some rest *(yeah, I know easier said than done!) If you are exhausted and have the opportunity to take a nap (even if it pushes your pump back) do it! You will actually get more milk that way! Even if you’re not sleeping, rest by sitting down a lot. Conserving energy is important.*

Don't stress too much. This all depends on how you personally handle stress. I tend to be a thinker, so I think things out a lot. It has to be some MAJOR stressful situation for it to hurt my supply.

Some suggest drinking dark beer, with or without alcohol. Some say it's the barley in it or something, that helps to increase supply. Plus some women just swear by the relaxation it gives them! You **can** have 1 or 2 beers without much crossing into your milk. (**Note:** Most breastfeeding experts do not routinely recommend using alcohol to boost milk supply. More on alcohol and breastfeeding [here](#).)

There is a tea called Mothers Milk Tea and it is supposed to increase your supply if you drink it.

There are herbs like Fenugreek and also prescription medications that will increase your supply if you really need it. I would use these as a last resort but they can be effective and are available!

Most importantly, **good pumping habits** will keep your supply up and increase it!"
PUMPING TRICKS & More Tips For EPing Moms by EPing Moms

(aka "Tricks of the Trade" shared by Shanna)

"Go hands free! This was the best trick I learned!! I went hands free and set my pump up by my computer and read my pumping board while I pump. It keeps me from looking down into my bottles wondering how much I'm getting, being bored out of my mind, and makes time FLY by! You can use an old nursing bra and just cut slits in the flap. Then you just slide the horns through. I did this for a while but I didn't want to wear the cut up bra all day long so that meant I had to literally change bras before each pump. At 7 times a day, that was a bit much!! So, I bought a pumping bra and LOVE it! It's the Easy Expressions bustier.

The best thing about this bustier is that it can be worn over any nursing bra. So, when it's time to pump, I put the flaps down on my nursing bra, wrap the bustier around, slide the horns through the holes, position them and zip it up. That's all!"

"The refrigerator trick. This is where you rinse your horns and/or collection bottles after each pumping session. You put them in a ziplock bag (or not, this is optional), and put them in the refrigerator. The idea is that since breast milk is good in the fridge for 5-8 days, any residue left on the horns won't matter. Then you can wash the horns/bottles once at night. I throw mine into the dishwasher (all except the white membranes) and it's easy, easy, easy!"

“Storage bags. Many of us started out using the Gerber Seal-N-Go bag but they get very pricey quickly. They are like \$5.50 for a box of 25 bags. After researching it online, I found many other women were using regular freezer bags for freezing the milk....MUCH cheaper! Everything I’ve read shows that they are safe to use. From what I have found, I only buy Glad and not Ziploc. Ziploc seems to have a much higher rate of leaks. I write the date and amount of ounces on the label with a sharpie and put the milk in and freeze flat. I then take several of them and put them into a gallon size freezer bag and write the dates that are enclosed on the gallon bag. This helps by double bagging and keeping them grouped. This way the corners on the bags won’t get poked and possibly cause the bag to leak. Also, whenever I want to get a bag, I can just dig through gallon size bags instead of tons of little bags floating around! : I usually put one or two days worth in a gallon bag.”

“Lube Up! It is perfectly safe to put the lansinoh on before pumping and still use the milk. Putting it on before and after pumping really helps to keep you from getting too sore. Purelan100 is also good (and cheaper). I’ve used this from the beginning. You can also rub Olive Oil on the horns and inside the nipple chamber to reduce friction. Olive Oil is antibacterial so it is helpful. This is also safe to use and pump milk with. I’ve done both of these and hadn’t had a problem. There are times when I seem to get sorer than other times with no real explanation. But, it then goes away as quickly as it came! Who knows!”

“Taking Care of Baby When Pumping. Once I went hands free and had to do those early morning feedings by myself, I would sit on the floor and prop my baby up in her boppy pillow on the floor. I would get hooked up to the pump and start it and pump while I fed her. About the time she was done eating, I was done pumping and I would put her back in bed and go to sleep myself. This will cut down on your time tremendously! It also helps to do this if your pumping time happens to correspond to your baby’s feeding time during the day. The bouncy seat is my best friend! I would put her in the bouncy seat and bounce it with my foot while surfing the net and pumping. It made time fly by and she was content. You may find other solutions if you have older children, or extra help.”

“Taking Care of Older Children, and Pumping. You may not need a lot of tricks for this one depending on the age of the child, or children. They will probably understand if you just explain that while you are pumping, they can’t get up and get things without help. Some tricks other moms had mentioned to keep their other child entertained and kind of reward them would be to go shopping and let your child pick out a special toy or video that she really wants. Then when ever it comes time for you to pump, she can play with it. But, she ONLY gets to play with it when you pump. This helps to make pumping time special for her as well and can help prevent any resentment she might begin to feel.”

“Warnings:

Excessive caffeine may cause problems (like keeping the baby wired!). I avoid caffeine completely (except chocolate) but even if you have 1 drink a day, it won't hurt. Just don't go over board. (More on caffeine [here](#).)

Medications that have Sudafed (pseudoephedrine HCl) in them can affect milk supply! Be careful!

Regular birth control pills will impact milk supply, and some women even have a problem with the mini pill. Breastfeeding (and yes that's what you are doing even if it's not from "the tap") is a good deterrent for ovulation but not 100% so be careful! However, you may find you get hot flashes and things like that. It is normal because your body is acting like it's going through menopause. This suppresses ovulation and allows you to make milk. I thought I was going crazy until I learned this! Ha! Sometimes if you get your period back while pumping, it can decrease your supply. This can be fixed by taking a calcium/magnesium supplement. (I don't have mine back yet and loving it!).

"WHEN DOES THIS GET EASIER?"

Around 3 months your supply will probably be established. This is when you can begin to drop the number of times per day that you pump and not see too much of a decrease in total output (this is again, where the spreadsheet comes in handy). That's why if you do the hard work in the beginning, I promise it will pay off when this time comes! If you don't keep up the number of pumps per day in the beginning, you may continue to have to pump a high number of times per day just to maintain a small supply. **Of course, this is all dependent on how each woman produces milk.** So, you may have such a great supply and so much frozen that you can drop pumps earlier. I began dropping pumps at 10 weeks and by 3 months I was down to 4 pumps per day! I lost a little with each drop but am currently at 50 ounces per day. There's no way my baby will ever eat that much so I see no reason to pump more. You will have to decide for yourself. Once you start dropping pumps, you will need to pump longer at each session (because you've gone longer in between pumps and need longer to empty your breasts). This is also dependent on the woman. I pump about 35-40 minutes per pump now on 4 times because I get another let down at about 36 minutes into it!"

"YOU CAN DO THIS!!!"

I firmly believe that pumping is 10% physical and 90% psychological. If you try to view this as positively as possible, I think you will have a better outcome. That's why going hands free and doing everything to minimize your stress about pumping is important.

A lot of people don't understand pumping. I still get stupid questions like, "Why don't you just nurse?" Well, DUH! She **won't** nurse! Ha! You should do whatever makes you

comfortable. Sometimes strangers ask me if I'm breastfeeding and if I don't feel like dealing with anything, I just say yes. I am after all! She's just getting it "to go" instead of from "the tap"! Ha!

Mostly though, I do all I can to educate. I know many women who didn't know this option was even possible and wished they had when breastfeeding didn't work out. Don't listen to doctors or nurses who tell you this isn't possible. There just isn't enough wide spread info out there and unfortunately most health care professionals give really bad advice (like only pump for 10 minutes). So, when they hear back from their patients on how they had supply problems or dried up, they just assume it's not possible to pump long term. On my online group, there are women who have been pumping for a year or longer! It is DEFINITELY possible!

Most importantly, if for any reason you just don't want to do it anymore, it is perfectly fine! Remember, a happy mommy = a happy baby. You have to do whatever is right for your entire family. Pumping is hard and can take its toll on you. There is no right or wrong when it comes to how you feed your baby! Remember that! We all have days when we want to wean. That's why support is SOOO important!"