



# A Guide to Breastfeeding

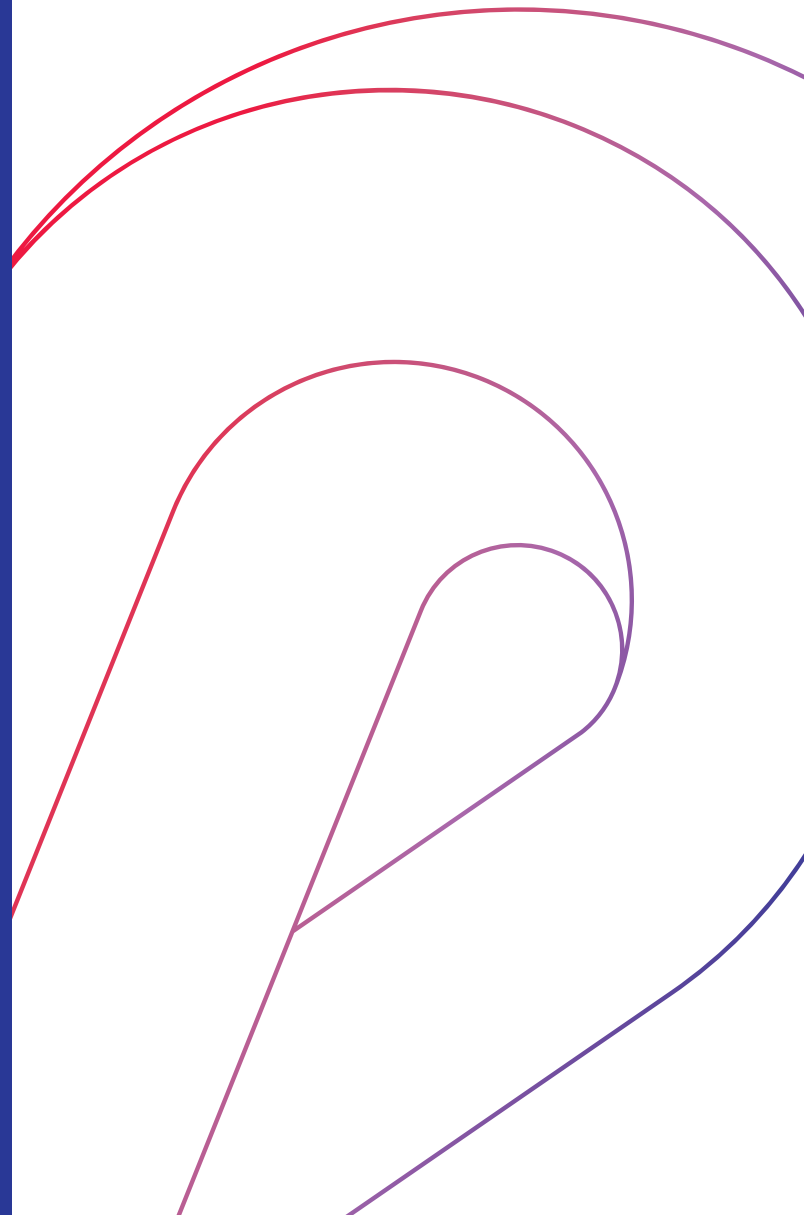
Living and learning together

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Be sure to check out the videos on your **Be Ready** card for tips and tricks on breastfeeding and for caring for your baby and yourself — before and after your baby comes.





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## The goals of this guide

The goals of this Guide to Breastfeeding are to teach you what breastfeeding is all about and to answer common questions about getting started and overcoming some of the challenges of breastfeeding. You should feel confident about your decision to breastfeed and comfortable in learning what works best for you and your baby.

**Note:** Be careful with breastfeeding information you find on the Internet. Not all websites are reliable. If you have questions about information from a website, ask your healthcare provider.

Intermountain Health understands and recognizes that not all people who have been pregnant or given birth identify as being a “woman.” This educational document uses the terms “woman or women” instead of “people” or “persons” as an intentional device to highlight the vulnerability of those who society typically identifies as being female. The use of “woman or women” is not intended to exclude or silence those who do not identify as female. We acknowledge all pregnant people require education during and after birth and include all parent populations when we talk about mothers.



# Overview

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The American Academy of Pediatrics recommends:

- Exclusive breastfeeding for the first 6 months. Mother's milk is the only food your baby needs at this time.
- Continued breastfeeding for the first 2 years of your baby's life (even after other healthy foods are introduced).
- After the first year, continued breastfeeding for as long as the mother and baby wish.

## The benefits

Breastfeeding has many benefits for both you and your baby.

### For the baby:

- Mother's milk contains antibodies, which are substances that help your baby resist disease. In fact, breastfed babies have fewer ear infections, lung infections, and respiratory illnesses than formula-fed babies.
- Mother's milk provides your baby with the best nutritional balance and rarely causes allergies. Breast milk is also easier to digest, and your baby is less likely to vomit or have diarrhea.
- Mother's milk is free and convenient. It doesn't need to be prepared and is always in supply. It's even good for the environment since there are no bottles, cans, or boxes to throw away!
- Studies have shown that breastfeeding is linked to improved intelligence and retinal (eye) development, especially in preterm infants.
- Studies have shown that breastfeeding may lower the risk of allergies, Sudden Infant Death Syndrome (SIDS), diabetes, and other medical conditions.

### For the mother:

- Breastfeeding reduces the risk of ovarian cancer.
- Breastfeeding reduces the risk of breast cancer in premenopausal women.
- Breastfeeding builds bone strength to protect against bone fractures in older age.
- Breastfeeding helps the uterus return to its pre-pregnancy size more quickly.
- Breastfeeding burns calories and helps you get back to your pre-pregnancy weight more quickly.

## The challenges

Whether you know you want to breastfeed or are just beginning to think about it, you're sure to have many questions. You might be concerned about how to fit breastfeeding into your busy life, whether your family and friends will support your decision, or if you'll be physically able to do it.

It's true that breastfeeding doesn't necessarily come easily for everyone. It takes practice and patience to find a method and pattern that works best for you and your baby. Having the support of family and friends is helpful when you are breastfeeding. It also helps to know you are giving your baby the best possible start in life.

### When to call your healthcare provider:

- **ON the 1st day of life**, your baby doesn't have at least 1 wet diaper and 1 messy diaper in a 24-hour period
- **ON the 2nd day of life**, fewer than 2 wet diapers and 2 messy diapers in a 24-hour period
- **ON the 3rd day of life**, fewer than 3 wet diapers and 3 messy diapers in a 24-hour period
- **ON the 4th day of life**, your breastfed baby has fewer than 4 wet diapers and fewer than 4 mustard-yellow stools ("poops") in a 24-hour period
- **AFTER the 4th day of life**: your breastfed baby has fewer than 6 wet diapers and fewer than 4 mustard-yellow stools ("poops") in a 24-hour period
- **IN the first 2 months**: no messy diapers at all in a 24-hour period
- **Sudden changes in bowel movements** combined with irritability, poor eating, or other concerns
- **Diarrhea**, or stool that's watery, green, foul-smelling, or contains mucus or blood
- **Signs of discomfort with urination** or failure to urinate within 24 hours of a circumcision
- **Jaundice** (a yellow appearance) that does not go away, or spreads to cover more of her body
- **Poor eating** (for example, refusal to eat at all, or consistently sleeping 5 to 6 hours between feedings)
- **Thrush** — white or grayish-white, slightly raised patches that look like milk curds on the tongue, throat, inside of the cheeks or lips
- **Any overall change in activity or temperament**

Also, if you don't think your milk has come in by the morning of the 5th day (there is no change in how your breasts feel), call your healthcare provider, your baby's healthcare provider, or a lactation consultant. Refer to page 42 for more information.

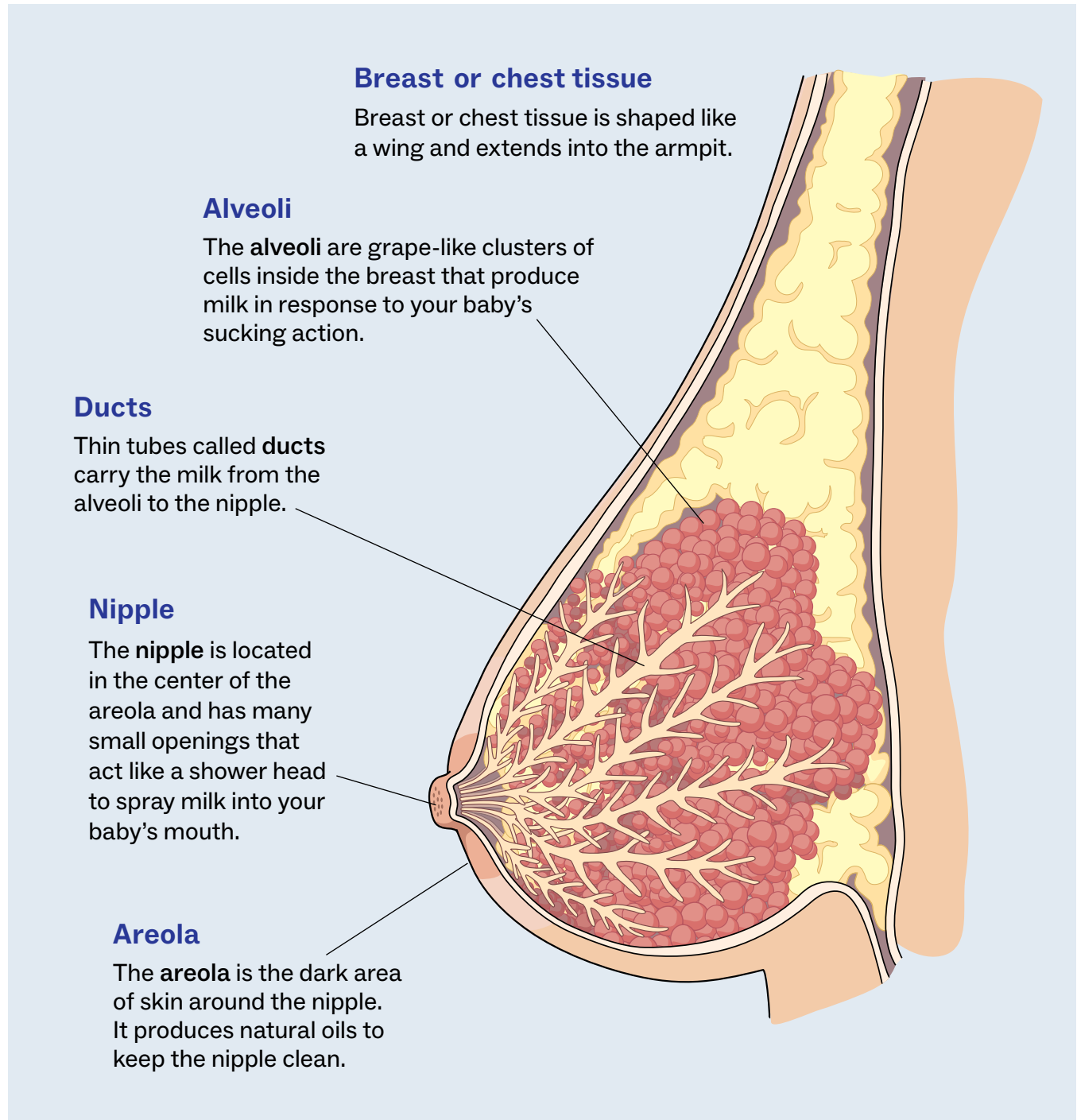


Lactation is the word that describes the process of your body making breastmilk. If you have trouble with breastfeeding, can't seem to keep up your milk supply, or your baby shows signs of not getting enough milk, you may be referred to a lactation consultant.

A lactation consultant is a healthcare provider who has advanced training and certification in breastfeeding.

# Anatomy of the Breast

Your body is an amazing structure and your breasts perform an important part of reproduction. During pregnancy, your body makes all of the nutrients your baby needs to grow and thrive in your womb. After your baby's birth, your breasts naturally begin to provide milk, making as much as is needed to feed your baby as they grow outside your body. The picture below shows how it works.



# Milk Production and Delivery

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## Preparing to make milk

Early in your pregnancy, your breasts may become fuller and more tender as the milk-making glands develop. As your breasts enlarge and blood flow increases, small stretch marks may appear and the veins in your breasts may be more visible. Your nipples may also become more sensitive to touch.

## Producing and delivering milk

Once your baby is born, your body knows it is no longer pregnant and your breasts begin to make milk. The more you breastfeed or pump, the more milk your body makes. Each time you breastfeed or pump, your body releases the milk. The release of milk is called **letdown**.

The first few times you breastfeed, letdown may take a few minutes. It will eventually happen more quickly, usually within a few seconds. Sometimes, milk may start dripping from the other breast, and you may feel strong cramping in your uterus. These are normal signs. Mothers feel letdown in different ways, and some don't feel anything at all.

## Colostrum

Your body makes different types of milk to meet your baby's needs. Colostrum is the white, clear, or yellowish "first milk" that may leak from your breasts late in pregnancy. It is your baby's first food. It contains the nutrients and antibodies (disease-fighting substances similar to medicine) your body has built up over time to help protect your baby.

During the first few days after delivery, your breasts produce colostrum. Over the next 2 weeks, your breasts will gradually begin to produce more mature mother's milk. See the next page for a description of the different stages of lactation.



### Begin with skin-to-skin (Kangaroo Care)

Human touch warms your baby better than blankets or an incubator. Snuggling skin-to-skin feels great to a baby — and it's nice for mom and dad too. It relaxes your baby and helps you bond.

Continue with skin-to-skin care beyond the first few days. It is especially good for breastfeeding sessions. For example, it helps:

- Your baby wake up and get ready to breastfeed.
- You recognize your baby's feeding cues. These are signs that show your baby is hungry.
- With letdown (the release of milk from your breasts).

## The milk you make: What to expect

### Day 1

Your body makes colostrum for your baby. This “first milk” is made in small amounts, which is just right for your new baby.

It’s best to breastfeed within the first hour of birth. After that, breastfeed at least 6 to 8 times in the first 24 hours.

Your baby may want to cluster feed, which is when they want to nurse every hour for a few hours in a row.

### Day 2

Your milk may start to change color and become less thick.

Sometime during this day or perhaps the next day, your baby may become very restless, especially at night. This is normal newborn behavior. Many moms doubt their ability to make milk, when really babies just need to be nursed and snuggled more as they adjust to the world. Your breast is the best comfort you can offer!

### Day 3

Your milk will continue to change in color, becoming light yellow or even white or bluish white. Volumes will start to increase.

Your breasts may become very full, heavy, and hot. This is common shortly after birth, and if managed appropriately it most likely will not progress to further problems (see page 25).

Your baby may continue to feed sporadically, every 1 ½ to 2 hours, or continue to cluster feed. This is normal newborn behavior.

As you nurse, you may feel tingling or fullness in your breasts, warmth in your upper body, or sleepiness. Whatever you feel, try to relax and enjoy your baby each time you nurse. Your baby can sense if you’re upset, stressed, or in pain, and these feelings can slow the milk ejection reflex (let-down).

### Days 4 through 7

Your milk may continue to change in color, becoming more white or bluish white and thin. This is watery “mature milk” is called “foremilk,” As your baby continues to drink, the milk gradually changes to creamy hindmilk, which gives your baby additional healthy fats. It’s important for your baby to get both foremilk and hindmilk at each feeding. Not getting enough of one or the other could cause your baby to have extra gas or to have medical problems.

Mature milk has everything your growing baby needs for the next year or so. If your milk is not in by day 5, talk to a lactation consultant and your baby’s healthcare provider. Work with them to make sure your baby is getting enough to eat.



# Getting Started

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This section describes options for positioning your baby and getting a proper latch-on.

## When your baby is ready to eat

When your baby wants to eat, they will give you cues to show you how hungry they are. See images of baby feeding cues or signs on the next page. It is best to feed your baby when they are showing the early feeding cues rather than trying to follow a set schedule. If it has been 3 hours and your baby has not eaten, you should try to wake your baby and offer the breast. If your baby does not wake up after 10 minutes, do skin-to-skin and try again in an hour.

When your baby starts to get hungry, they may move around a little, open their mouth, and turn their head as if rooting for the breast. If they are very hungry, they may put their hand in their mouth, stretch, and move a lot. Babies who are not fed when they show hunger will become agitated or upset and cry hard. If your baby is upset, you should calm them down before breastfeeding. Cuddle your baby to your chest, and talk to them. Skin-to-skin cuddling may help calm them down enough so they can be fed.

## Positioning yourself and your baby

Every mother and her baby have different needs, so you'll want to find positions and holds that are comfortable for both of you. You may find that placing a rolled towel or washcloth beneath your breast provides support for you and helps your baby latch on better. Experiment a bit, and use what works best for you. As your baby grows, you may find your preference changes.

The most supportive positions for a newborn are the cross-cradle hold and the football hold. It is recommended to use those for the first few weeks. The cradle hold and side-lying hold usually work best when your baby has learned to breastfeed well.

Learn about the different kinds of positioning and ways to hold your baby on pages 11 to 13.



### Breastfeeding in public

It's your choice if you want to breastfeed when other people are around. But you might want to know that many states have laws that confirm a woman's right to breastfeed in public, even if there is some exposure of the breast. Breastfeeding is healthy, natural, common — and an easy way to feed your baby on the go.

# Baby feeding cues (signs)

## Early cues – “I’m hungry”



Stirring



Mouth opening



Turning head  
Seeking/rooting

## Mid cues – “I’m really hungry”



Stretching



Increasing  
physical movement



Hand to mouth

## Late cues – “Calm me, then feed me”



Crying



Agitated body  
movements



Colour turning red

## Time to calm crying baby

- Cuddling
- Skin-to-skin on chest
- Talking
- Stroking



For more information refer to the Queensland Health booklet *Child Health Information: Your guide to the first twelve months*  
Visit the Queensland Health breastfeeding website: <http://www.health.qld.gov.au/breastfeeding/>



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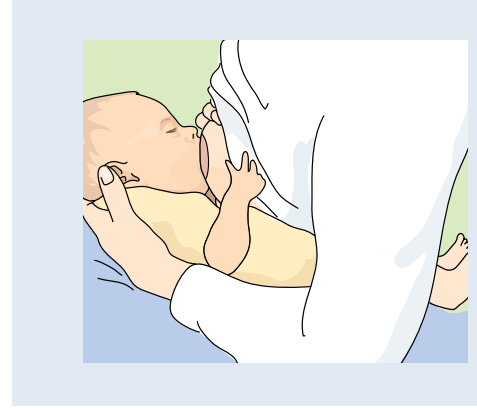


## Positioning yourself and your baby (continued)

### Football hold

Many women find the football hold helpful because it can help babies latch on well. This position is good for large-breasted women. It can help protect a C-section incision, provide you with a free hand, or allow you to breastfeed two babies at once.

Begin by placing pillows at your back and side to support your body as you hold your baby. Hold your baby in your arm and lay your arm on the pillow at your side. Support your baby's neck and head with your hand, and support their back with your forearm. Tuck your baby's legs between your arm and body, as if carrying a football. If your baby is troubled by gas, adjust this hold so your baby sits slightly upright, leaving less room for air in their tummy.



### Cross-cradle hold

The cross-cradle hold often works well for babies who are having trouble latching on or who are very small.

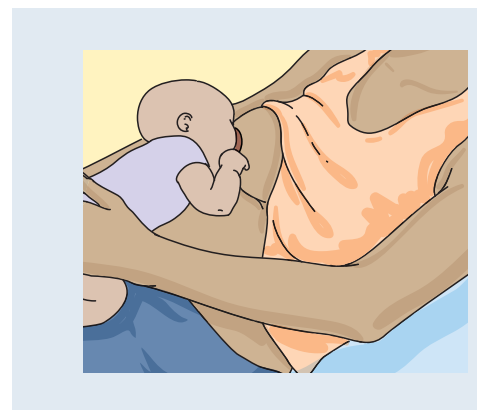
For this hold, position yourself comfortably with pillows behind you so that you don't have to bend over your baby. Support your baby with your arm and place your arm on a pillow or cushion in a horizontal or semi-upright position. Hold your baby using the arm opposite from the breast you'll begin feeding from. Support your baby's neck and head with this hand as your baby's body extends along the length of your forearm. Use the hand on the side of the breast you are feeding from to support your breast. Position the baby's nose at the level of your nipple, with their body resting on their side, facing you. When looking down, you should not see any space between you and your baby. Their ear, shoulder, and hip should be in a straight line.



### Laid-back position

A laid-back position — in which your head, neck, and shoulders are supported, and your baby is resting on your body — is an option you can use when you begin breastfeeding your new baby. It's comfortable for both mom and baby and seems to help newborns take in the breast deeply.

You can use this position in bed or on a couch or soft chair. Just arrange your bottom so that you can lean back into the pillows or cushions, far enough that your baby can rest completely on your body. (If you've had a C-section, have the baby lie across your body in a way that protects the incision — try different angles.) In this laid-back position, you don't need to lift your baby up with your arms. Your baby's weight is completely supported by your body, so you and your baby can relax and enjoy.



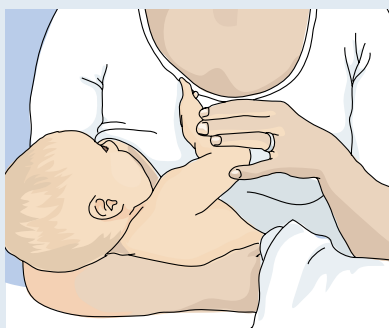
## Side-lying

For breastfeeding in bed or keeping an active baby away from a C-section incision, the side-lying hold is a good choice.

Stretch out on your side with your baby facing you, tummy to tummy. Use pillows to provide yourself and your baby with back support. If you want to switch breasts, gather your baby close to your chest, then roll onto your back and across to the other side.

## Cradle hold

The cradle hold usually works best when your baby has learned to breastfeed well. For this hold, sit upright, making sure you have good back support. Select a chair with armrests or use pillows to help raise your baby to breast height. Keep your knees even with your hips by putting a stool or pillows under your feet. Now, cradle your baby at your breast with your baby's tummy facing yours. When looking down, there should not be any space between you and your baby. Your baby's ear, shoulder, and hip should be in a straight line.



Let your baby nurse well and empty one breast before changing to the other side.

Most babies will let go of the breast when they are finished on that side. If you need to remove your baby from your breast to switch them to the other side, gently put your finger into a corner of their mouth to break the suction.

## Offering your breast and helping your baby latch on

**Begin by supporting your breast with your hand.** Put your thumb on top and your fingers below the breast, cupping your breast with your hand in a “C” or “U” shape. Make sure that the fingers on the underside of your breast aren’t touching the areola (the darker skin around your nipple).

**Next, position your baby’s body** by bringing them in close to your side. Their tummy should be facing you and their ear, shoulder, and hip should line up.

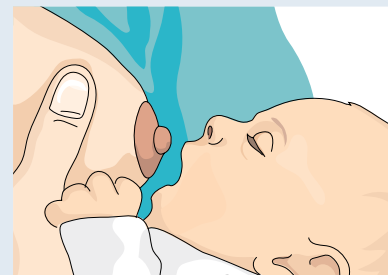
**Position your baby’s head** so that their nose is in line with your nipple. Encourage your baby to open their mouth wide by tickling their upper lip with your nipple.

**When your baby’s mouth is wide open, bring them toward your breast, making sure that:**

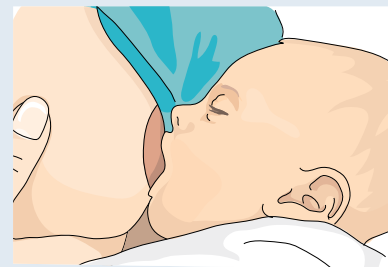
- **Your nipple is pointing toward the roof of your baby’s mouth.**
- **Your baby’s upper lip is aiming for the nipple.** Their bottom lip should be aimed as far away from the base of the nipple as possible.
- **When your baby connects with your breast, their chin touches first.** Support their neck and shoulder with your open hand. (Do NOT push their face into your breast.)

With this **asymmetrical (off-center) latch**, your areola will show above your baby’s top lip, and your baby’s tongue will draw in more of the breast tissue below. Your baby’s chin and lower lip will be close against your breast, and their head will be slightly tilted back. Don’t use your finger to create an air pocket under your baby’s nose. If it seems like your baby can’t breathe easily at your breast, pull their shoulder closer to you and let their forehead fall slightly away from your breast.

When your baby first nurses, you’ll feel a tugging sensation. Listen for the sound of your baby swallowing. A clicking sound (the baby’s tongue against the roof of their mouth) may mean that your baby isn’t latched on well. Other signs of a poor latch-on are nipple pain or pinching. If you think the latch-on isn’t right, slip your finger into the side of your baby’s mouth to break the suction, and then reposition and try again. It may take several tries to get the latch-on correct.



Position your baby so that their nose is in line with your nipple. Tickle their upper lip with your nipple to encourage them to open wide.



When your baby’s mouth is open wide, bring them to your breast with their upper lip aiming for the nipple and their bottom lip aimed as far away from the base of the nipple as possible. With this latch, your areola will show above your baby’s top lip.

### Call your healthcare Provider or lactation consultant if:

Your baby continues to have trouble latching on after you try the suggestions in this booklet.

# The First Feedings



## Look, listen, and feel for signs that the feeding is going well

- **LOOK** to see that your baby is swallowing. (Their whole jaw is moving rhythmically.)
- **LISTEN** for swallowing sounds, especially after your milk comes in and your baby is getting more volume. The sounds may include a little “aah” as your baby breathes between several swallows. (But clicking, slurping, or smacking sounds may indicate a poor latch.)
- **FEEL** for a tugging sensation — but not pain.

Think of your first breastfeeding as a special “hello” between you and your new baby.

The sooner you get acquainted, the better. Babies are very alert after they are born and are usually hungry too! Your baby’s first feeding can be within the first 30 minutes to 2 hours after delivery. If possible, right after delivery, your baby should be placed on your chest or belly, skin to skin, and remain there until they have successfully breastfed.

You and your baby are different people with different personalities. The two of you may need a week or a couple of weeks before breastfeeding feels natural. Breastfeeding is a skill that you and your baby will learn together. How often and how long you breastfeed will change as your needs and the needs of your baby change.

Some mothers and babies are unable to breastfeed right away. If this is the case for you, your healthcare providers can help you to begin pumping. This will help build and maintain your milk supply. These early feedings and pumpings are necessary to establish your supply. Although your first few breastfeeding sessions may feel awkward, these early feedings encourage milk production and give your baby a healthy start in life. Don’t be shy about asking for help.

Don’t worry if it seems like your baby is only getting a very small amount of milk during these first feedings. In the first 3 or 4 days, your baby will only need and receive 1 to 2 teaspoons of colostrum at each feeding. This small amount is enough to nourish your baby. Also, don’t worry if your baby seems hungry again soon after a feeding. It’s normal for newborns to feed frequently and for some of these feedings to be close together. This is called “cluster feeding.” Cluster feeding often occurs at a specific time of the day or night, usually during a fussy time that is 4 to 5 hours long. This is normal and typically happens at night during the first few days.

Refer to page 8 for a summary of what to expect during the first few days of breastfeeding.

## The first few days

By day 3 or day 4, your milk supply will increase. Your breasts should feel full before feedings and softer afterward. Mother's milk is easy to digest, so at first your baby may want to eat at least every 2 to 3 hours. Breastfed babies should eat 8 to 12 times or more in a 24-hour period during these early days. Offer the breast frequently, and allow your baby to feed for as long as they want to.

If your baby doesn't wake up on their own after 3 hours, wake them for a feeding. If they fall asleep within the first few minutes of breastfeeding, remove them from the breast and try to wake them so they can nurse for a longer time. To wake your baby for a feeding, try unwrapping them, holding them skin-to-skin, firmly rubbing their back, changing their diaper, or uncovering their hands.

To help maintain your milk supply, offer your baby both breasts at each feeding. However, always allow your baby to finish one breast before you offer the second. Not all babies will take both breasts at each feeding, so switch the side you start on.

Watch your baby for active feeding — this means the whole mouth and jaw are moving in a rhythmic fashion. Try to breastfeed on the first breast long enough to supply hindmilk (released after about 5 to 10 minutes of nursing). Your baby is probably full when the rhythm of their suck is no longer active. At this time, you may want to burp your baby, and then offer the second breast. Let your baby continue nursing as long as they want — usually 10 to 20 minutes per breast. You should hear swallowing throughout the feeding.



### Tips for increasing your milk supply

If you are concerned that your baby is not getting enough milk, try the following suggestions for 3 days:

- Breastfeed as often as your baby will take the breast (at least every 2 hours during the day).
- Do not go longer than a 5-hour stretch at night without breastfeeding.
- Pump both breasts after breastfeeding for added stimulation.
- Avoid using a pacifier. Let your baby suckle at your breast instead. This will help increase the amount of milk your body makes.
- Be sure your baby is positioned correctly at your breast.
- Eat at least 3 well-balanced meals and one nutritious snack each day. Do not try to lose weight if you are trying to boost your milk supply.
- If you feel thirsty, drink more water, milk, or juice.
- Make sure you get plenty of rest and reduce stress.



## When the pace picks up: Growth spurts

When your baby is in an active growing stage, expect more frequent feedings. Your body will naturally meet the extra demand for milk, so you won't need formula to fill in the extra feedings. In fact, if you give your baby formula at this time, your breasts will not get the message to increase milk production.

Luckily, growth spurts last only for a day or two, and the number of feedings soon returns to normal. Your baby's first growth spurt may come at 2 or 3 weeks of age. You may notice additional growth spurts as your baby nears 6 weeks, 3 months, and 6 months of age.

## About vitamin D

Healthcare providers recommend that all breastfed infants receive a daily supplement of vitamin D, which should begin soon after birth. Talk to your doctor about vitamin D for you and your baby.

## Pacifiers

### You should know:

- The use of pacifiers has been linked to earlier weaning (stopping breastfeeding) and a higher risk of breastfeeding problems.
- Pacifiers can make an infant's muscles weaker and can change how an infant sucks.
- If you choose to use a pacifier, wait to give one to your baby until 3 to 4 weeks of age when breastfeeding is usually well-established.
- Pacifier use may decrease the risk of SIDS. The American Academy of Pediatrics recommends introducing a pacifier at 1 month of age to reduce this risk.

### Follow these pacifier guidelines:

- Use a pacifier after a feeding, not in place of a feeding. Do not use a pacifier to space feedings or if your baby is still wanting to eat.
- Do not use a pacifier within 30 to 60 minutes of when you are planning to feed your baby again.
- Do not tie a pacifier around an infant's neck. Your baby could strangle.
- Check the pacifier before each use. Keep it clean. If it becomes torn, cracked, sticky, enlarged, or shows other signs of wear, replace it immediately.
- Use only store-bought pacifiers.
- Do not give your baby a pacifier during a growth spurt or when your baby is happy or bored.





# Is Your Baby Getting Enough Milk?

When you're breastfeeding, you can't directly see how much milk your baby is taking in. An easy first way to gauge your baby's milk "input" is to check their "output" — wet and dirty diapers. As time goes on, you and your baby's doctor can use weight gain to gauge whether your baby is getting enough nutrition.

## Early on

- On the 3rd day of life, your baby should have at least 3 bowel movements in a 24-hour period. Your baby's first few bowel movements will look dark and sticky, but will gradually become greenish-yellow.
- On the 4th day of life, your baby should have at least 4 mustard-yellow bowel movements and at least 4 wet diapers in a 24-hour period.

## Babies younger than 2 months

A baby younger than 2 months will usually:

- Breastfeed 8 to 12 times each day.
- Actively suck and swallow for about 10 to 20 minutes at every feeding. Note: It's important to make sure your baby gets hindmilk. Let them nurse as long as they want on the first breast before you switch them to the second. Remember, some babies are satisfied after nursing on one breast and may not suck very long on the second breast. Just switch the side you start on next time.
- Have 6 or more wet diapers and 4 or more dirty diapers each day.
- Seem full and satisfied after eating.
- Gain at least 4 to 7 ounces per week.



## Babies older than 2 months

A baby older than 2 months will usually:

- Breastfeed 7 or more times per day.
- Be more efficient at emptying the breast, so feeding time is shorter.
- Have 6 or more wet diapers each day. They may continue to have several messy diapers each day or may go several days without one.
- Seem full and satisfied after feeding.

## Keeping your baby's teeth, gums, and mouth healthy

Your baby's oral health has a significant impact on their overall health.

"Baby teeth" don't last a lifetime, but they're important because they help your child speak clearly and chew naturally. The 20 baby teeth that will fall out between ages 6 and 12 form a pathway that permanent teeth can follow when it's time for them to "come in."

You can help your baby get a healthy start to their oral health by preventing cavities. Like everyone, you and your family have bacteria in your mouths that can be passed to your baby through kissing, sharing spoons, and licking pacifiers. Cavities can form on your baby's teeth when harmful bacteria feed on sugar in your baby's mouth and, as a result, make acid. This acid can dissolve your baby's teeth. Cavities can begin forming when your baby's first teeth start to appear at 4 to 6 months.



To prevent cavities on your baby's new teeth:

- **Make sure that you and your family members have good dental health.** Visit the dentist on a regular basis for check-ups and treatment of cavities. Your untreated tooth decay increases the amount of harmful bacteria in your mouth that can be passed on to your baby.
- **Limit the amount of sugar-containing drinks you give your baby, especially at night.** After breastfeeding (breast milk has sugar), use a wet washcloth to gently wipe your baby's gums and any teeth they have. This will help remove bacteria and sugar from their mouth.
- **Once your baby gets that first tooth, continue to use a wet washcloth on their gums.** You should also begin to brush your baby's teeth twice a day with a small, soft-bristled toothbrush. Use a rice-sized amount of fluoridated toothpaste with each brushing.
- **Visit a pediatric dentist when your baby is no older than 1 year old** to establish a "dental home" for your baby and get them started on a lifetime of good oral health.

# Nutrition and General Health

## Eating a balanced diet

What you eat and drink is very important when you're breastfeeding, especially during the first 2 to 3 weeks when your milk supply is becoming established. Don't diet during this critical time. Follow an eating plan that includes a generous intake (1,800 to 2,200 calories each day) of nutrients from all food groups.

- **Eat plenty of fruits and vegetables.** Dark green, orange, and yellow vegetables are especially healthy choices.
- **Make most of the grains you eat whole grains.** Examples include whole-wheat bread, brown rice, and oatmeal. These have lots of healthy fiber and nutrients.
- **Choose heart-healthy proteins.** Examples include beans, eggs, low-fat cheese, nut butters, skinless poultry, and lean red meats. Fish is another good protein source, but limit your intake of mercury (common in many sea fish) by eating no more than 12 ounces a week of the following fish: halibut, sea bass, swordfish, mackerel, grouper, red snapper, and orange roughy.
- **Select low-fat dairy products.** Go for non-fat or low-fat milk, yogurt, and cheese. If breastfeeding, you need at least 4 servings of dairy each day. Dairy products provide calcium which is important for breastfeeding
- **Choose unsaturated fats and oils** — and stay away from trans fats. Read food labels to see what's inside.
- **Limit salt and sweets.** Most Americans get far too much sodium (salt) in their diet and eat too many sweets. Keep salty and sweet snacks to a minimum — save your appetite for foods that are packed with the nutrients you need.

Once your milk supply is established, gradual weight loss should not interfere with breastfeeding. However, keep in mind that diets of less than 1,800 calories a day are often low in vitamins, minerals, and iron and often lead to fatigue and low milk supply. Diets with fewer than 1,500 calories a day — or those that severely limit carbohydrates or fats — are also not recommended at any time while you're breastfeeding.

What about foods to avoid? Contrary to popular belief, there are no “forbidden foods” for breastfeeding women. Unless you have a food allergy in the family, you should be able to eat everything in moderation — including spicy foods, nuts, dairy, broccoli, and chocolate. Your baby's occasional fussiness is probably not related to your diet. If you're concerned, you can try eliminating a food for a time to see if things improve, or you can talk with your baby's healthcare provider.



## Fluids

You should be drinking plenty of fluids. Try to drink at least 8 cups every day. However, forcing fluids beyond your thirst will not increase your milk supply.



## Vegetarian and vegan diets

It is okay to follow a vegetarian diet while breastfeeding. Make sure you are getting enough calories, protein, iron, calcium, vitamin D, and zinc. It's also important to make sure that you are getting enough vitamin B12. This vitamin is only found in animal products. A vitamin B12 supplement is recommended for mothers on strict vegan diets who avoid eggs, milk products, and meat products.

## Vitamins, dietary supplements, herbs, and medicines

### Vitamins

Doctors recommend that all women of childbearing age take a vitamin with at least 400 micrograms (mcg) of folic acid every day:

- Before they're pregnant
- During their pregnancy
- After a baby is born
- Always — if they have any chance of getting pregnant, on purpose or accidentally

Folic acid is important to help prevent certain birth defects. And it's good for you too. If you have any chance of becoming pregnant, take folic acid daily. If you took prenatal vitamins or iron during your pregnancy, keep taking them for the first few months of breastfeeding. But be aware that vitamins don't take the place of nutritious foods, and they can be dangerous in large amounts. Always take the amount recommended by your healthcare provider.

### Dietary supplements and herbs

Before you use any herb, dietary supplement, or medication—either prescription or over-the-counter—ask the advice of your healthcare provider, pharmacist, lactation consultant, or dietitian. Some substances and essential oils are not recommended during breastfeeding and can be dangerous. You can also get information from the MotherToBaby Utah helpline (Pregnancy Risk Line) at 1-800-822-BABY (2229) or [mothertobaby.utah.gov](https://mothertobaby.utah.gov).

## Medicines

Prescription pain medicines should be used with caution while breastfeeding. If you have incision pain, you may have been prescribed an opioid pain reliever such as Lortab (acetaminophen + hydrocodone). Small infants (less than 6 weeks old or less than 5 pounds) are especially sensitive to opioids in breast milk and could have trouble breathing or become too sleepy to eat. Ibuprofen (Advil, Motrin, others) and acetaminophen (Tylenol, others) may be taken for pain management. Follow your healthcare provider's dosage instructions exactly. If your pain is not better and you decide to take a prescribed opioid, take the opioid right before you nurse your baby. This will help the milk have the lowest level of opioid possible. (It takes 1 to 2 hours after taking the medication before it reaches the highest level in your body.)

Remember that opioids are prescribed for incision pain and are NOT intended for pain from engorgement, damaged nipples, or constipation. If your incision pain or cramps suddenly get worse, call your healthcare provider. Remind your healthcare provider that you're breastfeeding. Finally, never share prescription medicines.

### Taking medicine safely

It is possible you will need to take medicines while you are breastfeeding. Many medicines are safe for you and your baby, when taken in the proper doses. However, there are some that are not recommended. Always check with your healthcare provider before taking any medicine. Also, be aware that birth control pills and pseudoephedrine may reduce milk supply.

Some common medicines that are safe for nursing mothers are:

- Over-the-counter pain killers such as acetaminophen (Tylenol) and ibuprofen (Motrin, Advil)
- Many antibiotics

For up-to-date information about medicine safety while breastfeeding, call the Mother to Baby helpline at 1-800-822-BABY (2229).



## Illness

In most cases, it's fine to keep breastfeeding when you are ill. In fact, continuing to breastfeed during most common illnesses will help protect your baby. You pass on valuable infection fighters called **antibodies** through your milk. Illnesses in which you need to stop breastfeeding are rare and tend to be more serious (like HIV infection).



## Caffeine

Mother's milk is only slightly affected by caffeine. Just keep your intake moderate. Avoid drinking more than 2 to 3 cups a day of coffee, tea, or soda that has caffeine. More than that could make your baby fussy and unable to sleep.

## Other substances

### Alcohol

You should limit alcohol to an occasional single drink. Alcohol passes to your baby when you breastfeed. A newborn's liver doesn't work efficiently and will have a hard time cleaning the alcohol from their system. Alcohol can also cause your body to make less milk. If you become uncomfortable because your breasts are full — and it's been less than 2 hours since you've had an alcoholic drink — pump your milk, and be sure to throw it out. Pumping won't clear the alcohol from your system any faster. It still takes about 2 hours.

### Smoking and nicotine

Smoking is bad for you and for your baby. It affects your breast milk, can reduce your milk supply, and may mean that your baby gets sick more often. If you smoke, stop as soon as possible. Talk to your doctor, or visit online **Freedom from Smoking** ([freedomfromsmoking.org](http://freedomfromsmoking.org)) or **Quit for Life** ([quitnow.net](http://quitnow.net)), or **Way to Quit** ([waytoquit.org](http://waytoquit.org)).

If you can't quit or are in the process of quitting, it's still best to breastfeed. The benefits of breastfeeding are greater than the risks from your smoking. Just make sure you do these things:

- Don't let anyone smoke in the house or around your baby.
- Cut down your smoking as much as you can.
- Breastfeed before you smoke, not right afterward.
- When you smoke, cover up with a jacket and pull your hair back.
- Before you breastfeed, take off the shirt or jacket you wore while smoking.

## Cannabis and other street drugs

Mothers who breastfeed their babies should not use cannabis in any form, according to the American Academy of Pediatrics. Cannabis is just another name for marijuana. Marijuana (cannabis) products to avoid include smokable weed or vapes, as well as edibles, oils, and powders.

Tetrahydrocannabinol, or THC, is the active ingredient in marijuana. It is stored in body fat and is passed into breast milk at concentrated levels— 6 to 8 times higher than the levels found in the mother’s blood plasma. THC may negatively affect your baby’s brain development.

You should not breastfeed if you use any amount of street drugs. These drugs pass into your breast milk. Even a small amount that feels mild to you can make your baby very ill. Pumping and dumping your expressed breast milk after marijuana use is not recommended because marijuana can stay in your body for a long time. It is unhealthy for both you and your baby to breathe marijuana smoke.

**Do not let anyone smoke marijuana around your baby as it increases the risk of SIDS.**



### Use of Street Drugs

Care of your baby can be compromised following use of street drugs. Talk to your healthcare provider to make a care plan for feeding your baby if you use street drugs.





If you find that you are more physically active or are losing weight too quickly to maintain an adequate milk supply, increase the number of servings of foods from each food group.

## Exercise

Exercising has many health benefits and is recommended during breastfeeding. If you were exercising during pregnancy, it's safe to continue your exercise routine. Just **make sure that you are consuming enough fluids and calories to maintain your milk supply and prevent fatigue.** If you're just beginning an exercise program, check in with your healthcare provider and get their OK. Then follow these safe exercise habits:

- Start slowly and build up gradually.
- Exercise at least 3 days a week.
- Warm up before you exercise.

You can breastfeed right after you exercise — there is no need to wait.





# Problem Solving

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For the most part, your breasts will take care of themselves. Just rinse them with warm water every day and let them air-dry. Avoid soaps and perfumed cleansers as they can crack your nipples. The best way to prevent problems with your breasts is to stick to regular feedings that keep your milk flowing.

## Sore, tender nipples

If your nipples are sore, your baby may not be latching on correctly. When feeding, your baby should grasp onto the areola with a wide-open mouth. You should feel a tug on your nipple but no pinching or pain.

If breastfeeding hurts, try these suggestions:

- **Try different nursing positions.** Switching positions may help decrease nipple soreness. See pages 11 and 12 for ideas.
- **Break the suction when you finish feeding.** Gently put your finger into the corner of your baby's mouth when you want to remove your baby from your breast.
- **Don't allow your baby to chew on your nipple.** Also, don't allow your baby to sleep holding your nipple in their mouth.
- **Use mother's milk and nipple cream to soothe and heal sore nipples.** After feeding, express a drop or two of milk and rub it gently onto the nipple. While the nipple is still moist, apply nipple cream that is approved for breastfeeding use. This will encourage moist wound healing of your sore nipples.
- **For cracked, scabbed, or bleeding nipples,** contact a lactation consultant to help evaluate the latch and the reason for the problem.
- **If your breasts are very full,** express some milk before breastfeeding. This will soften the breast so that the baby can latch on more easily.
- **Keep your nipples clean and dry.** Use warm water only, and do not use soap on your nipples.

## Flat or inverted nipples

Some women have flat or inverted nipples. Most babies can breastfeed on this kind of nipple without problems because when babies are latched on correctly, they suck on the breast, not the nipple. If needed, try these tips:

- Roll your nipple between your fingers.
- Avoid giving your baby bottles or pacifiers.
- Use a breast pump at the start of a feeding to help draw your nipple out.

Breastfeeding should not be painful. There may be some tenderness for 1 to 2 days, but if nursing hurts, ask your healthcare provider or lactation consultant for help.

### Call your healthcare provider or lactation consultant if you:

- Have pain while breastfeeding that lasts for more than 2 days or becomes worse
- Experience a sudden increase in nipple soreness (with or without a rash) that continues after the end of a breastfeeding session
- Develop cracks or blisters or see blood on your nipples
- Have difficulty getting your baby to latch on

Do not use a nipple shield over your nipple unless advised to do so by a lactation consultant. If advised to use one, continue to follow up with your lactation consultant.



### Call your healthcare provider if you notice any of the following:

- You don't feel better after 24 hours of following treatment recommendations.
- Flu-like symptoms (chills, body aches, fatigue, or headache)
- Fever of 100.4°F (38.0°C) or higher
- Extremely painful nipples
- Cracks, blisters, or blood on your nipples
- Throbbing pain in one breast, or a part of your breast becomes red and extremely painful to the touch

### Think R. I. C. E.

- R** Rest or Reassure
- I** Ice or Cold packs
- C** Compression using gentle sweeping motions
- E** Elevate the breast or lie down on your back

## Postpartum engorgement

Postpartum engorgement is when both breasts become swollen (engorged) and tender. It happens most often about 3 to 5 days after giving birth (postpartum) — or later, if you had a C-section — but can happen at any time you are producing milk. The increase in milk can cause swelling in the tissue around the milk ducts. This narrowing used to be called “plugged ducts,” but we now know that the ducts are not actually plugged. Postpartum engorgement is usually treated the same as mastitis [mass-TIE-tiss].

## What is mastitis?

Mastitis is now called **mastitis spectrum**. Your provider may also call it **ductal narrowing** or **inflammatory mastitis**. It is called a “spectrum” because it has many symptoms and is not always an infection. It usually starts as postpartum engorgement (inflammation) in the breast tissue on one side of the chest. While common shortly after giving birth, it can happen at any time. The extra swelling puts pressure on the ducts, reducing flow.

## What are the symptoms of mastitis?

Symptoms of mastitis spectrum may include flu-like symptoms, such as chills, body aches, fatigue, headache, a fever of 100.4°F or 38° C or higher, and throbbing pain in one breast. In addition, an area of your breast may be red and painful to the touch, or the skin may look tight and shiny. Many symptoms will go away with early and appropriate care. This inflammation is only swelling, not an infection.

## How is mastitis treated?

It's important to remember that inflammation is only swelling, not an infection. With proper care, inflammatory mastitis does not need to become an infection that requires antibiotics. Also remember that breast tissue is full of glands and normally lumpy. Breasts are shaped like a wing — the roundness on your chest comes to a point at your armpit.

It is normal to sweat and have hot flashes that feel like a fever. Most symptoms will go away with early and appropriate care. Follow the treatment suggestions listed on the next page.

## Treatment for mastitis (continued)

- **Continue to latch your baby every 2 to 3 hours.** Try to decrease stress, increase rest times, and eat healthy food.
- **Hand express or pump as needed, but don't overdo it.** Only pump as much as your baby will eat. There is no need to pump after each feeding to empty the breasts. This can worsen the inflammation and swelling.
- **Wear a bra that fits well and supports your breasts.** If it has an underwire, the wire should not put pressure on the glandular tissue. Good support also prevents back and neck pain.
- **Avoid saline soaks, castor oil, electric toothbrushes, or other commercial devices.** These may cause tissue damage and more swelling. Delicate handling is the best treatment.
- Unless your baby is in the NICU, use **minimal sterilization of pump parts and household items like infant toys.** Pump kit parts and infant toys should be cleaned appropriately with dish soap and water. Sterilizing too often can disrupt your balance of good bacteria.
- **Avoid overcleaning your nipples.** Overcleaning may cause nipple damage and pain. This is not an infection and does not spread to your baby.
- **Avoid heat compresses.** This includes hot pads, warm/wet washcloths, hot showers, etc. It creates more swelling and pain.
- **Avoid deep tissue massage.** Gentle compressions while using a breast pump provides an effect similar to hand expression and is safe as long as it's gentle. This is called "hands on pumping." When doing hands on pumping, massage forward from the armpit towards the nipple. When doing lymphatic drainage, sweep back from the nipple toward the armpit. (See how to do lymphatic drainage on page 28.)
- **Use over-the-counter medication** to help reduce swelling and provide pain relief. These include ibuprofen (Advil, Motrin, others) or acetaminophen (Tylenol, others). You may also use soy or sunflower lecithin to decrease the "stickiness" of the fats in your breast milk. Be sure to ask your doctor how much you should take.
- **Treat milk blebs gently.** A bleb is inflammation of the milk duct at the nipple. It may look like a pimple. Do not pick at it. This causes nipple trauma or damage. Try soy or sunflower lecithin. This can help reduce the "stickiness" of the fats in your milk.
- **Treat hyperlactation (oversupply of milk).** Work with a lactation consultant to slowly and safely decrease your milk supply. An oversupply of milk is more likely to cause mastitis symptoms.
- **Use therapeutic ultrasound (TUS)** to help reduce inflammation and swelling. This is done by a doctor or technician and can be done daily. Ask your doctor if this is an option for you.
- **Try a steroid cream (such as 0.1% triamcinolone) on your nipple.** This nipple treatment is better than using a prescription nipple ointment (such as Newman's nipple ointment). The steroid cream is safe to use when breastfeeding and can be wiped off with a tissue or towel before feeding your baby. Do not use steroid cream or prescribed nipple ointment for more than 1 week at a time. Ask your doctor how much you should be using.
- **Consider taking probiotics.** Probiotics help restore the healthy balance of bacteria in the milk ducts. This is especially important if you are taking an antibiotic. Choose a probiotic that includes *L. fermentum* or *L. salivarius*.
- **Watch for mood changes.** If you have a history of anxiety and depression, you may have higher rates of mastitis symptoms. Talk with your healthcare provider to get the help you need.

Drinking less water will not reduce engorgement.

## Lymphatic drainage

Lymphatic drainage can help reduce swelling by moving the extra fluid to the lymph nodes in your armpit (see illustrations below). It can be done once every hour or more frequently as needed.

- 1 Elevate the breast** by lifting it up or lying down on your back. Put one hand below the breast. Use the other hand to massage and do gentle sweeping.
- 2 Use soft, circular motions** — 10 small circles just under the collar bone and 10 small circles in the armpit.
- 3 Use a gentle and light touch** — massage from the nipple toward the collar bone and to the armpit. (Gentle pressure is the same as petting a dog or cat.) Lifting the skin allows the extra fluid to drain.



## What is bacterial mastitis?

Bacterial mastitis is an infection that usually happens in specific area of the breast and only in one breast. It may spread throughout the affected breast. In some cases, the breast or chest tissue around the areola becomes so swollen that no milk can flow. If this is the case, latch your baby on the unaffected side. Be sure to check to see if they are getting enough milk.

Treat the affected breast with cold packs and do lymphatic drainage for one or more feeds, or until the milk flows again. If you cannot see milk coming out for more than 8 hours, then contact a lactation consultant or your healthcare provider. When the affected side is less swollen and milk is coming out, then you can resume feeding normally on that side.

**Only take antibiotics if you have a confirmed bacterial infection.** Call your healthcare provider if you have a fever of 101° F (38.3°C) or higher, a racing heartbeat, or worsening symptoms over 24 hours that do not respond to the above recommendations.

Remember: Mastitis is an infection in the surrounding tissue, not an infection of the milk. It is safe to continue to give your milk to your baby.

## Yeast Infections

Sometimes a yeast infection can develop on the mother's breast or in the baby's mouth. Some yeast infections are noticeable only in the mother, and some are noticeable only in the baby. However, since the breastfeeding mother and the baby can re-infect each other, both mother and baby need medicine.

### Symptoms

**In your baby:** A yeast infection in a baby's mouth is called **thrush**. Thrush may appear as white or grayish-white, slightly raised patches that look like milk curds on the tongue, throat, inside the cheeks, or on the lips. These patches cling and will not wipe or rinse off easily. If they are wiped off, they leave the underlying tissue raw and possibly make it bleed.

**In you:** Yeast infections can cause your nipples to crack, itch, or burn. Nipples can become shiny, red, swollen, and painful. Some mothers also develop breast pain.

Part of the treatment for thrush is washing your baby's toys often in hot, soapy water.



Thrush (yeast infection) in a baby's mouth may appear as white patches that look like milk curds on the tongue, throat and lips, or inside the cheeks.



A yeast infection in your baby can also appear as a persistent diaper rash that may have red spots along the edges.

## Yeast Infections (continued)

### Yeast infection treatments for your baby

#### To treat thrush in your baby's mouth:

- Your doctor will prescribe a liquid medicine called Nystatin. Follow the package directions to gently rub the medicine on your baby's tongue, cheeks, and gums. This is usually done after a feeding, 4 times a day for 2 weeks.
- If you are using a breast pump, pacifier, or bottle nipple, boil it for 20 minutes, run it through a dishwasher, or use a micro-steam sanitizer each day. Be aware that boiling may wear down bottle nipples and pacifiers, so you may have to use new ones after about a week of boiling.
- Wash your baby's toys often in hot, soapy water to prevent your baby from becoming re-infected.

#### To treat a yeast diaper rash:

Your doctor will prescribe an ointment that you will apply to the diaper area at least 4 times a day for 2 weeks. You should also try not to use diaper wipes from stores. Instead, use clear water and non-scented tissues or washcloths, and pat dry. Soaking the diaper area in warm water for 5 to 10 minutes, 4 times a day, and then letting your baby's bottom air-dry, can also be soothing for your baby.

### Yeast infection treatments for you

Rinse your nipples with warm, clear water after breastfeeding. A mixture of water and vinegar may be even more effective than plain water. (Mix 1 tablespoon of vinegar in 1 cup of water.) Pat your nipple dry with a soft towel when you're done. Do not rub your milk onto your nipples. Yeast can grow in dark, moist places and when it is in contact with the natural sugars in breast milk.

- Apply a thin layer of antifungal cream to your nipples and areolas after each feeding for 14 days, or follow your doctor's instructions. The cream usually absorbs into the skin between feedings. However, if you notice any extra cream, remove it with a wet cotton ball before breastfeeding.
- Change your breast pads or bra whenever they become wet with milk. Use cotton bras and breast pads (without waterproof linings) because they allow air to reach the nipples.
- Wash your bras, pajamas, sheets, towels, and washcloths in hot water daily.
- Wash your hands after you use the bathroom or change your baby's diaper.
- If you're expressing your milk, you can still feed freshly expressed milk to your baby. However, because of the risk of reinfection, it may not be wise to freeze the milk for later use.
- You may continue breastfeeding during the treatment for a yeast infection.



### Call your doctor if you:

- Think you or your baby may have a yeast infection.
- Have a yeast infection that does not go away with the treatments discussed here. (Your healthcare provider may prescribe a stronger medicine to be taken in pill form).

## Breastfeeding and birth control

Breastfeeding is NOT a guarantee against pregnancy. You need to use birth control as soon as you are ready to have sex again after your baby's birth.

Consult with your doctor or health care provider to help you choose a birth control method that will work best for you throughout the time in which you are breastfeeding.

**NOTE:** You should not use time-release hormones (such as birth control shots or patches) until your milk supply is well-established. This usually takes 3 to 4 weeks. Also, some time-released hormones may lead to decreased milk supply. See *Caring for Yourself After the Birth of a Baby* for a summary of birth control options.



# Pumping and Storing Your Milk

You can transfer milk from your breasts into a bottle by hand expressing or pumping. (Pumping involves expressing milk with a breast pump. Common types of breast pumps include manual or hand-operated, battery-powered, and electric.)

Hand expressing or pumping your milk can give your partner and others a chance to feed your baby. It can also free you up and make activities outside the home possible, such as returning to work or school. If you're not able to pump, you can use formula during work or other activities, and breastfeed while you're at home.

## Hand expressing

Hand expression can help your milk come in faster and — in combination with pumping — help your body make more breast milk later on. Hand expression is also easy and free. You can do it without any special equipment. Your first tries at hand expression may not produce much milk, but you'll get better at it with practice.

### How to hand express

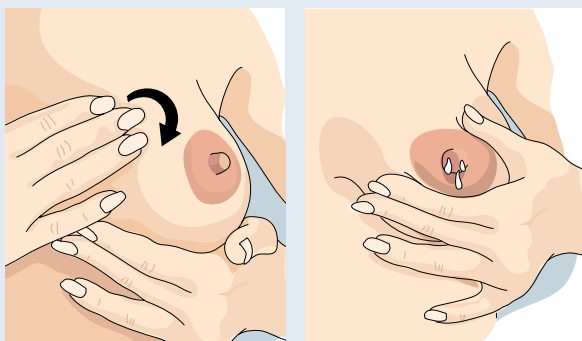
**1 Wash your hands and your collection cup thoroughly.**

**2 Stimulate milk flow. Try the following:**

- Apply a warm, moist towel to the breasts for 1 to 3 minutes. (A warm shower will also work.) Do not use heat if you are engorged.
- Gently massage your breast using small, circular motions. Move your fingers around the breast, working from your chest down toward your nipple.
- Gently massage for at least 2 minutes, then repeat on your other breast.
- Relax and think of your baby.

**3 Collect your milk by doing the following:**

- Place your finger and thumb about 1 to 1 ½ inches behind the base of the nipple.
- Gently lift, then press the breast back toward your chest.
- Compress your fingers and thumb together. Relax and let go. (Do not squeeze or pull on the nipple. It should not be painful.)
- Repeat the press-compress-relax motion several times before switching to the other breast.
- As you alternate sides, and the milk begins to flow, collect it in a tube, spoon, or cup so that it can be easily fed to your baby.
- Continue working around your breast to reach all of the milk sacs.



You can also try hand expressing from one breast while feeding your infant from the other. Your baby's suckling will stimulate your milk flow and make it even easier to hand express.



## Pumping in the hospital to protect your milk supply

There are many reasons why women may need to start pumping while they are still in the hospital. Whether or not it's important for you to pump at this stage is based on your individual circumstances. If you will be pumping, plan to start as soon as possible, within 3 or 4 hours after delivery.

You may need to start pumping in the hospital:

- If your baby is born preterm (born before 37 weeks). Pump after feedings regardless of how well your baby is latching since babies born early have a softer suck than full-term babies.
- If your baby is in the NICU (newborn intensive care unit). Pump every 2 to 3 hours with a 5-hour gap at night for a total of 8 pumps in 24 hours.
- If you have more than one baby (such as twins). Pump after feedings.
- If you have a history of low milk supply, polycystic ovary syndrome (PCOS), or infertility. Pump after feedings.
- If your baby is not latching well in the first few days. If not latching well on day 1, hand-express colostrum after feedings. If not latching well by day 2, start pumping after feedings.
- If you are using a nipple shield. Hand express after feedings on day 1. Start pumping after feedings on day 2.
- If your baby is only breastfeeding well on one side. Pump the breast that your baby is struggling with after feedings.
- If you are supplementing your baby's feedings with pasteurized human milk or formula. Pump after feedings.
- If you have had breast surgery, talk with your healthcare provider or lactation consultant about pumping.

**Keep in mind:** Nurses and lactation consultants at the hospital can teach and help you to start pumping and check to make sure you have the right size of flange (the part of the breast pump kit that fits over your nipple and forms a seal). Flange sizes may change over the course of pumping.



### Target 24 - hour Milk Volumes for Pumping

	Day 7	Day 14
<b>Single baby</b>	<b>16 ounces</b> (500 mL)	<b>24 to 32 ounces</b> (700 - 950 ml)
<b>Twins</b>	<b>20 ounces</b> (600 mL)	<b>36 ounces</b> (1100 mL)

## Choosing a pump

Breast pumps range from simple hand pumps to deluxe double electric pumps. They can be bought or rented. Check with your insurance provider — many insurance policies will help pay for pump rental or purchase. The type of pump you choose depends on the quality you want and how often you will be pumping. If you will be away from your baby often, it's wise to choose a high-quality pump. This will help you keep a good milk supply.

You may have received a list of pump suppliers from the hospital where you delivered. You can also look for breast pump suppliers by searching for your region and “breastfeeding” or “breast pumps” online. You may want to talk about which pumps may work best for you with a lactation consultant.

### Did you know?

It's cheaper to rent or buy a quality pump than to buy formula.



### Hand pumps

With a hand pump, your muscles supply the power. Hand pumps are small and inexpensive, but they take longer to use than other pump styles such as electric pumps. These pumps can work well to draw out inverted nipples or to relieve mild engorgement. A hand pump may be all you need if you are only away from your baby once in a while or for a few hours at a time.

### Hands-free pumps

These are hands-free devices that are best for occasional use. They are easily portable and moms find them convenient to use. They are not as effective as larger pumps. Some have lower suction and strength. They don't empty the breast as well, which can affect milk supply. These would be a good option for convenient and discrete pumping. They should not be the main pump if pumping exclusively.

### Personal, daily-use electric pumps

These are the most efficient of the personal pumps. Although not designed to help establish a woman's milk supply, daily-use breast pumps are good for moms who pump several times a day. Personal electric breast pumps offer portable convenience for discreet pumping anywhere and can effectively pump both breasts at the same time. (These pumps should not be shared, loaned, or used secondhand. They are meant for a single user.)

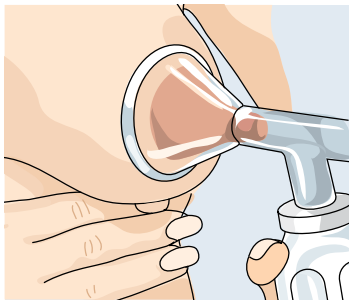
### Hospital-grade pumps

With technology that closely mimics the natural sucking motion of an infant, hospital-grade pumps are excellent for establishing and maintaining a woman's milk supply. They can efficiently empty both breasts at the same time, are easy to use, and are comfortable. They are more expensive to buy, but they can be rented. This is the best kind of pump to use if you work full-time, are separated from your baby because of illness, are trying to increase your milk supply, or need to relieve severe engorgement.

## Pumping to return to work

Plan to begin pumping your milk for at least 2 to 3 weeks before returning to work or school. It's important to pump your breast milk as often as you would be nursing (at least every 3 to 4 hours).

Try to mimic your baby's feeding pattern and express both breasts at each session. You should replace each feeding session that you will miss with a pumping session or your milk supply could decrease. If you are trying to store extra milk before returning to work, pump any time you feel you have extra milk. One of the easiest times to pump is whenever the baby only nurses on one side—you can then pump the other side. Some mothers even pump while their babies nurse.



The plastic funnels that go directly against your breasts are called flanges. Flanges come in several sizes. Ask a lactation consultant to check the fit of the flanges to your breasts. A good fit means more efficient and comfortable pumping.

## Pumping at work

No matter where you work or what type of job you have, you should be able to pump your milk while you're at work. It just takes a bit of planning and preparation. Here are a few tips:

- Prepare with your employer. Before you go back to work, tell your employer that you're breastfeeding, and that when you're at work, you'll need to pump throughout the day. Ask where you can pump (it should be clean and private) and where you can store the milk. Discuss how you can fit pumping into your workday. Make sure they know the facts: Studies show that breastfeeding mothers miss less work than other new moms! If your supervisor can't meet your needs, check with your Human Resources department.
- Start pumping before you go back to work—2 to 3 weeks before is good. This way, you can build up a supply of frozen mother's milk for the first few days. Also, make sure your baby gets some practice drinking expressed milk from a bottle.
- When you're at work, pump about every 3 to 4 hours. Try to mimic your baby's feeding pattern. If you don't pump often enough, you could have problems with leaking.
- If you have a double pump, pump both breasts at the same time. This will cut down on pumping time and make the most of your body's natural letdown reflex.
- Think of your baby! Thinking of your baby while you pump will help with letdown—and remind you of the gift you're giving your baby by continuing to breastfeed.

## What will happen when I'm apart from my baby?

When moms return to work, some babies go through a normal period of adjustment that may include a lack of appetite and an increase in fussiness. They will soon make the adjustment.

Breastfeed as soon as you get home from work and frequently when at home with your baby. This will help you maintain your milk supply.

Many mothers find that the stress of returning to work or school causes a temporary decrease in their milk supply. Preparing by building up a supply of frozen mother's milk will help you through this period.

## Instructions for pumping:

- Wash your hands before pumping.
- Pump until your flow of milk slows or stops—this takes about 10 to 20 minutes if you are using a double electric pump. You will need to pump longer if you are using a smaller pump or a hand pump.
- After each use, wash any piece of the pump kit that touches your breast or holds milk. Use hot, soapy water and follow the pump manufacturer's instructions.
- Rinse and air dry thoroughly.



Breast milk can be safely refrigerated for 5 days or frozen for a longer period of time.

## Storing mother's milk

You can store milk in glass or plastic bottles, resealable freezer bags, or plastic bags made especially for storing mother's milk. Disposable bottle liners may also be used, but be aware that freezer odors can seep into the milk, and water can evaporate out of the milk.

### More tips for storing your milk:

- **Store milk in 2- to 4-ounce containers.** Storing small amounts, especially in the early days, may mean you don't have to throw away milk when your baby doesn't drink much.
- **Leave some room at the top** when filling the container since milk expands when frozen.
- **Label all containers with the date the milk was expressed.** If your baby takes your milk in a hospital NICU, a day care, or some other place outside your home, also put your baby's name on the container. Be sure to check the label before preparing stored milk for your baby or bringing it home from the hospital.
- **The storage containers must have an airtight seal.** Use screw-on lids, not nipples, on the bottles.
- **Never add warm milk to cold or frozen milk.** If you need to combine milk to have enough for a feeding, cool the warm milk first.
- **Mother's milk stored in the fridge should be used within 5 days — don't freeze it after this time.**
- **If you don't plan to use milk within 2 days, freeze it.** Breast milk can still be frozen if it's been in the fridge for 2 days or less.
- **Chill your milk as soon as possible after it's expressed.**

### Tips for using stored mother's milk:

- **Always use the oldest milk first.**
- **Defrost or warm milk by placing the container of milk in a bowl of warm tap water.**
- **After removing milk from the freezer, place it in the refrigerator for about 12 hours to slowly defrost it.**
- **Never use a microwave or boiling water to warm milk.** A bottle warmer is OK to use, but be sure to follow the manufacturer's directions for safe use.
- **Gently swirl the milk to blend in the cream layer.**
- **If your baby does not finish a bottle of milk, throw the rest away immediately after feeding or within 1 hour of use. Do not reuse.**

## Guidelines for storing mother's milk for healthy newborns

Milk that is...	Time at room temp (66°F to 77°F)	Time in an insulated box/bag (using blue ice)	Time in refrigerator (32°F to 39°F)	Time in freezer (Not in the door)
Freshly pumped	Up to 6 hours	Up to 24 hours	Up to 5 days	Up to 6 months (up to 12 months if in deep freeze -4°F)
Thawed in refrigerator (but not warmed)	Up to 4 hours after milk is completely thawed	Up to 12 hours	Up to 24 hours	Do NOT re-freeze thawed milk

Guidelines recommended by the Human Milk Banking Association of North America, Fort Worth, Texas

These storage guidelines are for healthy newborns. If your baby is hospitalized, you'll receive special instructions on pumping and storing your milk. For example, milk for most preterm babies should only be stored for 48 hours in the fridge.

### If your milk has high lipase levels

Lipase is an enzyme found in breast milk that benefits your baby in many ways, including breaking down fats in breast milk. Some mothers have too much lipase in their milk. This can make the fat in their milk break down more quickly, causing their stored breast milk to smell or taste soapy or sour. Many moms don't find out they have high lipase until they try to use their older, refrigerated or frozen breast milk and notice the smell or find that their baby won't drink it. While high-lipase breast milk is still safe for your baby, it's best to feed your baby freshly pumped breast milk.

Since lipase makes its impact on milk over time, you may want to taste or smell your milk every hour to determine when it begins to taste differently. This usually happens after 24 hours but can be sooner depending on your lipase levels. Scalding (heating your milk to a near boil) before it begins to smell or taste differently or before you freeze it will stop your milk from having lipase-related changes. However, if your pumped or thawed milk already has a different smell or taste from high lipase, scalding your milk will not be helpful. Talk with your lactation consultant for the best methods to scald your milk.

If you are not sure if you have high lipase levels in your milk, you can freeze your milk for several days and thaw it to see if it smells or tastes differently. This way you can prevent having a freezer full of milk that your baby refuses to drink.

If you have stored breast milk in your freezer that your baby is refusing, you can try using part freshly pumped milk with part of the frozen milk. If your baby still refuses the milk, you may be able to donate it to your local milk bank.



### Label the milk — check the label

- Write the date the milk was expressed so you'll know how long it has been stored when you're ready to use it.
- Write your baby's name on the label. If your baby takes milk in the hospital, at day care, or elsewhere outside your home, this can prevent mix-ups. You want to be sure your baby gets your milk.
- Check the label before preparing milk that has been stored for your baby, and check before taking home stored milk that has been at the hospital or day care.

## Introducing the bottle

If breastfeeding has been going well, you can introduce your baby to a bottle around 3 to 4 weeks of age. After breastfeeding is well established, most babies can switch back and forth from the breast to a bottle without problems. You may need to try different kinds of bottle nipples to find one that your baby likes. To help your baby take mother's milk (or formula) from a bottle, offer the bottle when the baby is neither too full nor too hungry.

Once your baby is taking a bottle, continue to offer it 2 to 3 times each week until you go back to work or school. Do not give a bottle more than once a day, and give only an ounce or so at a time. This will help avoid problems with your milk supply and keep your baby interested in nursing.



It may be best if someone other than the mother feeds your baby a bottle.



# About Weaning

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Weaning yourself and your baby from breastfeeding is a natural stage in your baby's development. Each mother must decide for herself when and how to begin weaning. It is a decision based on many factors, including your baby's needs, your needs, and your home and work situation. You should base your decision on these needs, not on the expectations of others. When you do decide to wean your baby, a gradual, planned weaning will be easiest for both of you. You may start by eliminating one feeding no more often than every 2 or 3 days. This allows your milk supply to decrease slowly, without fullness or discomfort. You might also decide to do partial weaning — for example, eliminating 1 or 2 feedings daily but continuing with the rest of the feedings you would normally do. This often works for moms returning to work who do not plan to pump. Keep in mind that after you stop nursing, it can take a month or two for your milk to go away completely.

Ask your care providers for more suggestions about weaning for your specific situation. It helps to be able to discuss your reasons for weaning and come up with a plan that is best for you and your baby.

# Breastfeeding Log

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Whether you are just getting started with breastfeeding or you want reassurance that your baby is getting enough milk, you may want to keep track of feeding times. There are many ways to keep track of feedings, including phone apps and written logs. The log on the following pages provides a place for you to record details such as how long and how often you are feeding your baby and how many wet or messy diapers your baby has. This information can help you and your healthcare providers figure out where adjustments can be made, if necessary. Feel free to make additional copies if you want to keep a log for a longer period of time.



## BREASTFEEDING LOG

Offer baby the breast every 2 to 3 hours. If your baby is uninterested, try again every hour until you have a successful feeding. Ask for help as you need it.

To know if your baby is getting enough milk, fill in the following log:

- 1 Circle each hour that your baby nurses.
- 2 Circle a “W” each time your baby has a wet diaper.
- 3 Circle an “S” each time your baby has a poopy diaper.

<b>DAY OF BIRTH (1ST 24 HOURS)</b>													date: _____
<b>Breast feedings</b> (about 6 to 8 times)	12 am	1	2	3	4	5	6	7	8	9	10	11	
	12 pm	1	2	3	4	5	6	7	8	9	10	11	
<b>Wet diaper</b> (at least 1)	W												
<b>Tarry soiled diaper</b> (minimum of 1)	S												

<b>DAY 2</b>													date: _____
<b>Breast feedings</b> (at least 8 times)	12 am	1	2	3	4	5	6	7	8	9	10	11	
	12 pm	1	2	3	4	5	6	7	8	9	10	11	
<b>Wet diaper</b> (at least 2)	W W												
<b>Tarry soiled diaper</b> (minimum of 2)	S S												

After Day 2, your baby should nurse 8 to 12 times for 10 to 20 minutes, every 24 hours. Your baby will start to cluster feed at night, which are small feedings back-to-back.

<b>DAY 3</b>													date: _____
<b>Breast feedings</b> (at least 8 to 12 times)	12 am	1	2	3	4	5	6	7	8	9	10	11	
	12 pm	1	2	3	4	5	6	7	8	9	10	11	
<b>Wet diaper</b> (at least 3)	W W W												
<b>Tarry soiled diaper</b> (minimum of 3)	S S S												



## BREASTFEEDING LOG

<b>DAY 4</b>	<b>date:</b> _____
<b>Breast feedings</b> (at least 8 to 12 times)	12 am 1 2 3 4 5 6 7 8 9 10 11
	12 pm 1 2 3 4 5 6 7 8 9 10 11
<b>Wet diaper</b> (at least 4)	W W W W
<b>Yellow soiled diaper</b> (minimum of 4)	S S S S

<b>DAY 5</b>	<b>date:</b> _____
<b>Breast feedings</b> (at least 8 to 12 times)	12 am 1 2 3 4 5 6 7 8 9 10 11
	12 pm 1 2 3 4 5 6 7 8 9 10 11
<b>Wet diaper</b> (at least 6)	W W W W W W
<b>Yellow soiled diaper</b> (minimum of 4)	S S S S

<b>DAY 6</b>	<b>date:</b> _____
<b>Breast feedings</b> (at least 8 to 12 times)	12 am 1 2 3 4 5 6 7 8 9 10 11
	12 pm 1 2 3 4 5 6 7 8 9 10 11
<b>Wet diaper</b> (at least 6)	W W W W W W
<b>Yellow soiled diaper</b> (minimum of 4)	S S S S

<b>DAY 7</b>	<b>date:</b> _____
<b>Breast feedings</b> (at least 8 to 12 times)	12 am 1 2 3 4 5 6 7 8 9 10 11
	12 pm 1 2 3 4 5 6 7 8 9 10 11
<b>Wet diaper</b> (at least 6)	W W W W W W
<b>Yellow soiled diaper</b> (minimum of 4)	S S S S

**It is OKAY for your baby to have more wet diapers or more soiled diapers. Call for an appointment with a lactation consultant if your baby has fewer than the number on this log.**

# When to Seek Medical Help

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## Call your baby's doctor

Pay attention to the number of wet and messy diapers your newborn makes. Too few may signal a problem. **Call your baby's doctor today if you notice any of the following:**

Baby's doctor:

name:

phone:

- **ON the 1st day of life**, your baby doesn't have at least 1 wet diaper and 1 messy diaper in a 24-hour period
- **ON the 2nd day of life**, fewer than 2 wet diapers and 2 messy diapers in a 24-hour period
- **ON the 3rd day of life**, fewer than 3 wet diapers and 3 messy diapers in a 24-hour period
- **ON the 4th day of life**, your **breastfed** baby has fewer than 4 wet diapers and fewer than 4 mustard-yellow stools ("poops") in a 24-hour period
- **AFTER the 4th day of life**: your **breastfed** baby has fewer than 6 wet diapers and fewer than 4 mustard-yellow stools ("poops") in a 24-hour period
- **IN the first 2 months: NO MESSY DIAPERS AT ALL IN A 24-HOUR PERIOD**
- **Sudden changes in bowel movements** combined with irritability, poor eating, or other concerns
- **Diarrhea**, or stool that's watery, green, foul-smelling, or contains mucus or blood
- **Signs of discomfort with urination** or failure to urinate within 24 hours of a circumcision
- **Jaundice** (a yellow appearance) that does not go away, or spreads to cover more of her body
- **Poor eating** (for example, refusal to eat at all, or consistently sleeping 5 to 6 hours between feedings)
- **Thrush** — white or grayish-white, slightly raised patches that look like milk curds on the tongue, throat, inside of the cheeks, or the lips
- **Any overall change in activity or temperament**

## Call your doctor

If your baby has trouble latching on or you have other problems with breastfeeding, talk to your doctor or lactation consultant. **Call your doctor if you notice any of the following:**

- **Your milk has not come in** by the morning of the 5th day (no change in your breasts)
- **You have extremely painful nipples** or cracks blisters or blood on your nipples
- **You have a sudden increase in nipple soreness** (with or without a rash) that continues after the end of a breastfeeding session
- **You have throbbing pain** in one breast, or a part of your breast becomes red and extremely painful to the touch
- **You have flu-like symptoms** (chills, body aches, fatigue, or headache)
- **You have a fever of 100.4°F (38.0°C) or greater**
- **You have a breast infection that doesn't get better** after 24 hours of being treated with antibiotics
- **You or your baby has a yeast infection, or your yeast infection doesn't go away** even after treatments described on pages 29 to 31.



To find this booklet and other patient education, go to:  
[intermountainhealth.org](https://intermountainhealth.org)



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