



THE “BREAST” WAY TO FEED

YOUR GUIDE TO BREASTFEEDING

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DEFINITIONS

For each italicized word in the manual, a definition is provided for in this section.

ANKYLOGLOSSIA:

A condition where your baby has a shortened or tighter piece of tissue than normal that attaches their tongue to their mouth making it harder for your baby to suck or swallow.

ANTIBODIES:

These are blood proteins made in response to germs or other foreign substances that enter the body. Antibodies help the body to fight illnesses by attaching to germs and marking them for destruction.

AREOLAS:

The area around the nipple.

LACTATION CONSULTANT:

Lactation consultants are certified professionals with the highest level of knowledge and skill in breastfeeding support. They help mothers with a wide range of breastfeeding concerns.

LATCH

The correct feeding position from your baby's mouth to your breast.

MENINGITIS:

Meningitis is an inflammation of the meninges, the membranes that cover the brain and spinal cord. Most cases of meningitis are caused by bacteria or viruses.

SUDDEN INFANT DEATH SYNDROME (SIDS):

SIDS is the sudden and unexplained death of an infant who is younger than 1 year old. It often occurs without warning, usually in seemingly healthy babies. Most SIDS deaths are associated with sleep and infants who die of SIDS show no signs of suffering.

WHY IS BREASTFEEDING IMPORTANT?



Source: Office on Women's Health

Multiple health organizations — including the American Academy of Pediatrics (AAP), the American Medical Association (AMA), and the World Health Organization (WHO) — recommend breastfeeding as the best source of nutrition for babies.

MANUAL OVERVIEW

The purpose of this manual is to educate new mothers or mothers-to-be about the importance of breastfeeding their children. In this manual, you will find information, facts, and diagrams that will explain:

Remember, every woman's journey to motherhood is unique. Choosing whether to breastfeed or formula feed your baby is one of the biggest decisions you will make as a parent. Breastfeeding allows mothers to give their babies the best possible start in life.

BENEFITS FOR YOUR BABY

PROTECTION AGAINST INFECTION AND CHRONIC ILLNESSES

Breastfed babies have fewer infections and hospitalizations than formula-fed infants. During breastfeeding, mothers pass *antibodies* to their babies to strengthen their immune system.

A strong immune system will protect your baby from illnesses such as:

- Ear, nose, and throat infections
- Respiratory infections
- Allergies
- Asthma
- Type II Diabetes
- Childhood Obesity
- *Sudden Infant Death Syndrome (SIDS)*
- Diarrhea and vomiting

Note: Formula does not contain the antibodies found in natural breast milk. Therefore, formula cannot provide your baby the same protection against infections and chronic illnesses that breast milk does.

DIGESTION AND NUTRITION

Breastfed infants typically have fewer difficulties with digestion than do formula-fed infants. The components of breast milk--lactose, protein, and fat-- are easily digestible for infants. Breast milk also naturally contains many of the vitamins and minerals that a newborn needs.

FORMULA CAN'T MATCH THE COMPLEXITY OF BREAST MILK

Formula milk can't completely match breast milk's exact composition. Why? Milk is a living substance made by each mother for her individual infant which cannot be duplicated in a factory. Breast milk changes as the baby's needs change.

GROWTH AND DEVELOPMENT

The growth of breastfed infants differs from formula-fed infants because breastfed infants typically gain weight faster than formula-fed infants in the first few months of life. Then, their weight gain slows for the remainder of their childhood.

WHO recommends mothers exclusively breastfeed their child during the first six months to achieve optimal growth, development, and health.

BENEFITS FOR YOU



Source: Office on Women's Health

CONVENIENCE

Breast milk is always available whether you are home or not. You also won't have to worry about last-minute trips to buy formula. When women breastfeed, there's no need to wash bottles or warm up bottles in the middle of the night.

If you decide to pump your breast milk, then anyone can feed the baby at any time. However, bottles will need to be washed and properly stored.

Note: Unlike breastfeeding, formula feeding requires careful planning and organization to make sure you have what you need when you need it. With breastfeeding, breast milk is always available, unlimited, and served at the right temperature.

BREASTFEEDING IS FREE

Breast milk is absolutely free. Unless you're pumping breast milk and giving it to your baby, there's no need for bottles, nipples, and other supplies that can be costly. Since breastfed babies are less likely to be sick, they tend to make fewer trips to the doctor's office. Fewer trips to the doctor equals to less money spent on prescriptions and over-the-counter medicines.

BREASTFEEDING KEEPS YOU AND YOUR BABY CLOSE

Physical contact is important to newborns. It helps them feel more secure, warm, and comforted. Mothers also benefit from this closeness. The skin-to-skin contact boosts the mother's oxytocin levels. Oxytocin is a hormone that helps breastmilk flow and can calm the mother.



Source: Office on Women's Health

Formula expenses can quickly add up.

During an infant's first year of life, the cost of basic formula can equal to \$1,500.

BREASTFEEDING CAN BE GOOD FOR YOUR HEALTH

The ability to nourish a baby can help a new mother feel confident in her ability to care for her baby. Breastfeeding helps nursing mothers return to their pre-pregnancy shape quicker by burning calories and shrinking the uterus.

Research has shown that breastfeeding can lower the risk of illnesses such as:

- Breast cancer
- High blood pressure
- Type II diabetes
- Cardiovascular disease
- Ovarian cancer



Source: American Pregnancy Association

BREASTFEEDING MYTHS

This section will address the common myths and various stigmas around breastfeeding. It is a fact that breastfeeding is a healthy way to feed your baby. It is important to not let these myths persuade your decision to breastfeed.

BREASTFEEDING MAKES YOUR BREASTS SAG

Actually, your pregnancy stretches the ligaments of your breast tissue, whether you breastfeed or not. Age, genetics, and the number of pregnancies you've had also play a role.

YOU CAN'T BREASTFEED IF YOUR BREASTS ARE TOO SMALL

The size and shape of your breasts do not affect your ability to breastfeed and have nothing to do with how much milk you produce. Large *areolas* or flat nipples will also not affect the amount of milk you produce.

YOU CAN'T BREASTFEED IF YOUR BREASTS ARE TOO LARGE OR IF YOU ARE PLUS SIZE

Women of all sizes can successfully breastfeed. If you have large breasts, it may take some extra patience or some assistance from a *lactation consultant*. Plus-size women are more likely to have C-sections, which means your milk might come in a few days later. Depending on the size of your breasts, you may need a little more practice to find a hold that works for you and your baby. But with the right help and support, you can do it!



Source: Office on Women's Health

YOU WON'T BE ABLE TO PRODUCE ENOUGH MILK

Moms almost always make enough milk to feed their babies. A newborn's stomach is only the size of a hazelnut. If you eat healthy, drink water, and nurse often, your milk supply should be plentiful.

BREASTFEEDING IS PAINFUL

Breastfeeding is not supposed to be a painful experience. In fact, pain is usually a sign that something is wrong. Although a baby's latch can be strong, it's not actually biting (not even when the baby is forming teeth). As with any new skill, it takes to adjust and adapt.

BREASTFEEDING WILL SPOIL YOUR CHILD

After spending nine months growing inside you, it's completely natural for your baby to be attached to you. Despite what you've heard, newborns don't need to learn to fend for themselves at such a young age. In reality, breastfeeding provides a unique bond with your child that can last a lifetime.

RESEARCH SHOWS THAT BREASTFED CHILDREN GROW UP TO BE CONFIDENT AND SELF-SUFFICIENT WHEN PARENTS MEET THEIR NEEDS.



Source: Centers for Disease Control and Prevention

PREPARING TO BREASTFEED

Planning ahead, having self-confidence in your ability to breastfeed, and prenatal care can greatly improve your breastfeeding success. Attending breastfeeding class or support group, or by talking to other experienced mothers, can teach you different breastfeeding holds, address any of your concerns, and give you advice. Other people you need to discuss your breastfeeding plans with include your partner and other family members so support you, help you with household duties, take care of you when you are fatigued, watch other children you may have, and help nurture your baby. They may also be able to help you prepare for breastfeeding after delivery by getting such items as nursing bras, covers, and pillows.

Talk to your doctor about:

- Your desire to breastfeed
- Delivery center staff and facilities for breastfeeding (Baby-Friendly Hospitals and Birth Centers are optimal)
- Finding a lactation consultant to help with any potential breastfeeding problems
- Health conditions, such as breast surgery or injury, depression, and medications or supplements

STARTING TO BREASTFEED

It is best to start breastfeeding within the first hour of giving birth because the baby's sucking instinct is strongest at this time, and some of the most important times to breastfeed are during the first week after birth. Nurses can help you with latching on and different breastfeeding holds. Plan on nursing every one to three hours; this helps prevent breast engorgement and other feeding problems, as well as provides ample nourishment for your baby.

At the beginning of each feeding session, make sure you and your baby are both calm and relaxed. Sit up with pillows supporting you on each side. Elevate your feet, such as on a footstool or on a stack of pillows in the bed. Change your baby's diaper if needed.

For the first few days, you will need to nurse every one to three hours. Healthy babies feed as they need, so they determine how long and how frequently you need to nurse them; on average, each feeding period takes about 15 to 20 minutes. They may empty one or both breasts. You will know when they are done when they stop sucking and swallowing; you may then release them from your breast. **See Figure 1 for what to expect while nursing.**

FIGURE 1: WHAT TO EXPECT DURING THE FIRST SIX WEEKS OF NURSING

Time	Milk	Baby	You (Mom)
Birth	Your body makes colostrum (a rich, thick, yellowish milk) in small amounts. It gives your baby early protection against diseases.	Your baby will probably be awake in the first hour after birth. This is a good time to breastfeed your baby.	You will be tired and excited.
First 12 to 24 hours	Your baby will drink about 1 teaspoon of colostrum at each feeding. You may not see the colostrum, but it has what your baby needs and in the right amount.	It is normal for the baby to sleep heavily. Labor and delivery are hard work! Some babies like to nuzzle and may be too sleepy to latch at first. Feedings may be short and disorganized. Take advantage of your baby's strong instinct to suck and feed upon waking every couple of hours.	You will be tired. Be sure to rest.
Next 3 to 5 days	Your mature (white) milk takes the place of colostrum. It is normal for mature milk to have a yellow or golden tint at first.	Your baby will feed a lot, at least 8 to 12 times or more in 24 hours. Very young breastfed babies do not eat on a schedule. It is okay if your baby eats every 2 to 3 hours for several hours, then sleeps for 3 to 4 hours. Feedings may take about 15 to 20 minutes on each breast. The baby's sucking rhythm will be slow and long. The baby might make gulping sounds.	Your breasts may feel full and leak. (You can use disposable or cloth pads in your bra to help with leaking.)
First 4 to 6 weeks	White breastmilk continues.	Your baby will now likely be better at breastfeeding and have a larger stomach to hold more milk. Feedings may take less time and may be farther apart.	Your body gets used to breastfeeding. Your breasts may become softer and the leaking may slow down.

Source: Office on Women's Health

HUNGER SIGNS

- Becoming more alert or restless
- Putting their hands to their mouth
- Making sucking movements
- Looking for your breasts

Note: Late hunger signs may include crying, which usually disrupts the calm and relaxed atmosphere necessary for latching on and nursing. Keeping your baby close to you (such as by wearing a baby carrier like a soft wrap) can help keep them calm and relaxed and prevent crying.

CESAREAN DELIVERY

Having surgery have make you feel more fatigued and uncomfortable. You may also be on more medication after surgery. However, you can still breastfeed your baby, but it may be more difficult for these reasons. You should still try to breastfeed your baby every one to three hours, but you may need extra help from others and use certain breastfeeding holds.

HOW LONG TO BREASTFEED

For the first six months after delivery, you should give your baby only breast milk (also known as exclusive breastfeeding), as recommended by the American Academy of Pediatrics. After six months, you can give them other sources of food, but should continue breastfeeding at least until your baby's first birthday. You may choose when to wean your baby, or you can let your baby naturally wean themselves off your breast milk.

MATERNAL HEALTH- IMPACT OF MATERNAL HEALTH ON BREAST MILK

Pre-Pregnancy (Before Labor)

EFFECT OF BMI ON BREASTFEEDING

No matter your weight or BMI, all women have the ability to breastfeed. The only aspect about breastfeeding that differs with a mother's size is the time in which she breastfeeds. If you are a woman who is plus-sized, your chances of having a C-section birth are increased. C-section deliveries usually result in the delay of breast milk production by a couple of days after birth.

Proper exercise and fitness should be done before pregnancy in order to prevent risk such as these.

EFFECT OF STIS ON BREASTFEEDING

There are several diseases and treatment plans that inhibit a mother's ability to breastfeed once she has her child. Some of these infections and therapies include HIV/AIDS, antiretroviral therapy, tuberculosis, human T-cell lymphotropic virus type I or type II, chemotherapy agents, and radiation therapy.

Even if you are infected with one of these diseases and your child tests negative for the infection at birth, there is still the possibility of passing on the disease through your breast milk.

Some of the therapy treatments mentioned can interfere with the cellular division and replication of your baby.

NOTE: GET TESTED BEFORE YOU CHOOSE TO BREASTFEED.

During Labor

VAGINAL BIRTH VS. C-SECTION

When you deliver your baby, you can choose to either have a *vaginal birth* or a *C-Section*. The form of delivery that you choose does not affect the amount of milk you will be able to produce after you give birth. The only difference between delivery and breast milk is the time in which your breasts will begin to produce milk. In a vaginal birth, your breasts will be able to produce milk directly following delivery. In a C-Section birth, it may take a couple of days before your breasts will produce milk, but they will eventually express an equal amount of milk.

Post-Pregnancy (After Labor)

DIET

You do not have to go on a special diet while breastfeeding your child. In fact, it is okay to consume the same number of calories that you had consumed before you became pregnant. Some physicians suggest that a mother try to consume a holistically healthy diet in order to increase the overall well-being of themselves and their child. The food recommendations to sustain a healthy life have been published by the USDA and are suggestions for all individuals, not just pregnant mothers.

MALNUTRITION

Research has shown that the breast milk produced by a healthy mother in comparison to a malnourished mother is very similar. The amount of nutrients and calories a mother consumes does not inhibit her ability to produce milk, or the amount of milk she produces. If a woman is malnourished while breastfeeding, her body will make up for her lack of calories by extracting nutrients and fat stores that were previously laid down in the body.

VEGAN DIETS

If you are following a vegan diet or do not eat a lot of animal protein, then you may have a vitamin B12 deficiency. This can be dangerous for your child because if an infant does not consume enough B12, they could develop decreased appetite, muscle weakness, vomiting, slow motor development skills, become lethargic, or have blood problems. Talk to your doctor if you think that vitamin B12 supplements are right for you.

STAY HYDRATED

Although the amount of fluids you drink do not affect the amount of milk you will produce, increased intake of water will prevent you from becoming dehydrated while breastfeeding. Because your body is excreting another form of liquid when producing breast milk, it is recommended that you drink an extra glass of water or other fluid each time you breastfeed or pump milk.

It is suggested that a breastfeeding mother should decrease the amount of drinks containing high sugar or fruit content, in order to not exceed the amount of sugar given to the baby.

POSSIBLE TOXICANTS

CAFFEINE

Coffee should be consumed at a maximum of one to two cups per day. Caffeine does not have a substantial effect on babies, but too much can cause a child to be more energetic than normal and impact their ability to sleep.

TOBACCO

If you are someone who smokes, it is best for the health of you and your baby to quit smoking. If you are unable to quit smoking, it is recommended that you still breastfeed your child because breast milk can protect the infant from other severe health issues.

ALCOHOL

You should avoid drinking alcohol while breastfeeding. If you do choose to drink a little bit, you should not breastfeed or pump milk for at least two hours after consuming alcohol.

DRUGS

No illicit drugs should be used when breastfeeding your infant. These toxicants can get into your breast milk and seriously harm the baby. Examples of illicit drugs include cocaine, marijuana, heroine, and PCP.

MEDICINE

You should consult your doctor before taking any prescription and over-the-counter drugs, vitamins, dietary supplements, or herbal supplements while breastfeeding. Many medicines are acceptable to take while breastfeeding because only a small dose of the drug will make its way into the breast milk, but there are certain medicines that will harm your baby even in small amounts.

INFANT HEALTH – IMPACT OF BREAST MILK ON THE INFANT

In relation the newborn, breastfeeding results in increased positive short-term and long-term health improvements for the child. Research has shown that babies who are breastfed have drastic reduction in the following health issues:

EAR, NOSE, THROAT

Infants who have been breastfed for at least 4 months have a reduced risk of going to the hospital with health issues having to do with infections of the ears, nose, or throat. Some of these lower respiratory infections include pneumonia, *otitis media (OM)*, serious colds, ear infections, and throat infections.

ALLERGIES

Breastfeeding can also serve as a protective ingredient in decreasing a child's predisposition to certain allergic reactions. A decrease in the following allergy complications can occur: asthma, eczema, dermatitis, and *celiac disease*.

OBESITY

Children who have been breastfed also experience lower rates of obesity and usually have a *BMI* that is lower than the average *BMI* of children who are not breastfed. Preventing obesity in an infant can be crucial for their health and can decrease the number of chronic diseases the child may face in the future, such as *diabetes*.

OBESITY

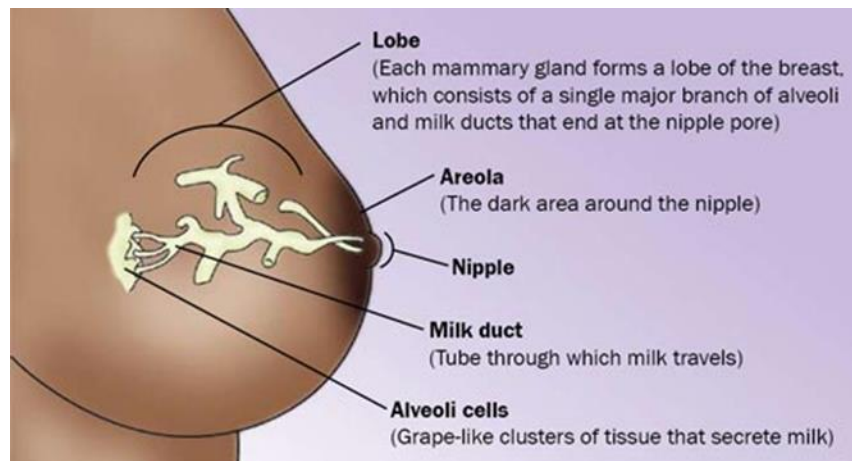
Breastfeeding can also decrease the risks of *neurodevelopmental issues* for a child, and is associated with higher *IQ* scores and brain activity.

FIGURE 2: INFANT HEALTH ISSUES

Health Issue	Definitions
Neurodevelopmental disorders	Impairments of the growth and development of the brain or central nervous system.
Otitis Media (OM)	An infection of the middle ear (near the eardrum) that can result in pain due to inflammation or fluid build up.
Necrotizing enterocolitis (NEC)	An intestinal disease that occurs when injured or inflamed tissue in the small or large intestine develops a hole in the organ. Is most commonly found among babies born prematurely.
Gastrointestinal tract infections	Viral, bacterial, or parasitic infections that affect the stomach and/or small intestines. Can result in diarrhea, vomiting, constipation, or abdominal pain.
Inflammatory bowel disease (IBD)	A chronic disease that causes inflammation of all parts of the digestive tract. This can lead to severe digestive pain and complications.
Celiac disease	A gluten-sensitive disease that causes the body to have an immune reaction to the consumption of gluten (any products containing wheat, barley, or rye).
Obesity	A disorder that is distinguished by an excessive amount of body fat, and can lead to a variety of alternative cardiovascular complications.
Diabetes	A group of diseases that affect your body's ability to produce or use insulin in reaction to the presence of blood sugar.
Allergies	Occur when your body reacts negatively to foreign substances that do not usually have an affect on the average person.
Childhood leukemia and lymphoma	1) A form of cancer that impacts the blood and bone marrow of a child. 2) A form of cancer that impacts the system of the body focused on fighting disease.
Infant Mortality	The death of an infant.

MAKING BREAST MILK

During and/or after pregnancy, your breasts tend to enlarge and become more tender because the alveoli are preparing for breastfeeding. See the following image for anatomy of the breast.



Source: Office on Women's Health

Hormones are released when your baby suckles; this triggers the alveoli to produce milk and the let-down reflex, which helps move milk through the milk ducts. The let-down reflex may also be triggered when you hear, see, or think of your baby, which can cause you milk to gush when you first begin each nursing session. If this happens, you can hand-express some milk before your baby latches on. Stress, anxiety, pain, smoking, caffeine, alcohol, certain medications, and nerve damage may inhibit the let-down reflex.

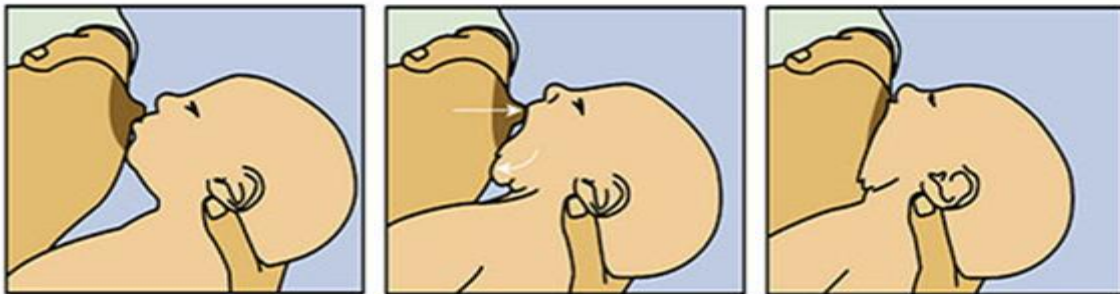
Since milk production is triggered by your baby's suckling, nursing frequently and until each breast is empty helps maintain a steady milk supply. Breast massage/compression and pumping after feedings can help you fully empty your breasts. You can also pump in between feedings to allow for greater milk production.

NOTE: A COMMON MISCONCEPTION IS THAT BREAST SIZE AFFECTS THE AMOUNT OF MILK YOU CAN PRODUCE; HOWEVER, THIS IS NOT TRUE. THE MOST IMPORTANT FACTOR IS HOW FREQUENTLY YOU EMPTY YOUR BREASTS, EITHER BY BREASTFEEDING OR BY PUMPING.

LATCHING ON

Latching on may be challenging at first and takes practice. Your baby should latch on to the areola; if they latch only on the nipple, it can cause sore nipples and decreased milk production. It is important for you and your baby to be calm and relaxed. **See Figure 3 for latching on.**

FIGURE 3: LATCHING ON



Source: Office on Women's Health

HOW TO GET YOUR BABY TO LATCH ON:

1. Begin by holding your baby to your chest so they are facing you. Their ears, shoulders, and hips should be aligned.
2. You may let your baby naturally find their way to nurse; avoid forcing them to latch on. If they are hungry, they will be restless and try to make eye contact with you; if they are not hungry, they will remain laying against your chest.
3. Support your baby's weight and head.
4. Your baby will lift their chin to your breast, creating pressure, then open their mouth over the nipple, allowing them to get a good latch over the areola (not just the nipple).
5. Your baby will breathe through their nose.

IF YOUR BABY HAS PROBLEMS LATCHING ON:

If your baby has difficulty latching by themselves, you can encourage them to open their mouth wider by tickling their lips with your nipple or help them aim their mouth towards the lower part of the nipple so they are able to latch more fully. You may need to guide them to your nipple, which you can do by bringing their lower lip to touch your nipple then pulling them in once they open their mouth wider. For the first few weeks, avoid giving them pacifiers or using bottles of breast milk because this can cause nipple confusion, which can make latching more difficult. If your baby still has trouble latching on, contact a lactation consultant.

SIGNS OF A GOOD LATCH

- Your baby's mouth covers the entirety of the areola, not just the nipple, so you cannot see the areola. Their chin should touch your breast.
- Your baby's lips are turned outward so you can still see them. They should look like fish lips.
- You may not see their tongue because it should be cupped under your breast.
- Your baby's sucking motion moves through the jaw, not the cheeks or any other part of their face.
- You can hear your baby swallowing, even if it is quiet.
- Your baby's ears, shoulders, and hips are aligned against your chest so they do not have to turn their head.
- Your baby's ears wiggle slightly.
- Breastfeeding does not cause pain and does not pinch.
- Your baby's sucking motion will cause rhythmic tugs on your breast.
- When beginning, your nipples may be tender, but not cracked or bleeding.

BREASTFEEDING HOLDS

There are four main breastfeeding holds: **cradle hold**, **cross-cradle hold**, **football hold**, and the **side-lying position**.

CRADLE (TUMMY-TO-TUMMY) HOLD

This is the easiest, most common hold. Begin by sitting straight up in a chair or on the edge of the bed, cradling your baby in your arm so your stomachs both touch and their ears, shoulders, and hips are aligned. Hold your baby so their mouth is close to your breast, which you should support by holding most of your fingers under and away from the areola and your thumb above the areola. You should use the arm on the same side as the breast you are using to hold your baby. Your baby will then latch, or you can help them latch if needed. **See Figure 4.**

FIGURE 4: CRADLE HOLD



Source: Office on Women's Health

CROSS-CRADLE (TRANSITIONAL) HOLD:

This is often used by mothers of premature babies or those with weak sucking reflexes. In this position, the baby's head is more supported, which may help them maintain a stronger latch. This hold is similar to the Cradle Hold, but in this hold, you need to cradle your baby with your arm so your hand is resting underneath and supporting their head. You should use the arm opposite from the breast you are using to hold your baby. **See Figure 5.**

FIGURE 5: CROSS-CRADLE HOLD



Source: Office on Women's Health

CLUTCH (FOOTBALL) HOLD:

This is popular for mothers who have had a Cesarean delivery, have large breasts, have flat or inverted nipples, have a powerful let-down reflex, prefer to hold their babies in an upright position while nursing, have a small or premature baby, need to have a better view of their baby latching on, need to ensure their baby stays on the areola instead of the nipple, have a fussy or restless baby, or have a sleepy baby. While supporting your baby's head with your hand, place their legs and body under your arm, imitating a football hold. Place your fingers from your other hand underneath your breast and hold your baby close to your breast so they can latch on. Their legs should be underneath your arm and their hips flexed. **See Figure 6.**

FIGURE 6: CLUTCH HOLD



Source: Office on Women's Health

SIDE-LYING POSITION:

This is useful for mothers who had a Cesarean delivery or need to lay flat. Begin by laying on your side with your baby facing your chest. Use pillows to support your top leg. Lift your breast upwards with your fingers so your baby can latch. **See Figure 7.**

FIGURE 7: SIDE-LYING POSITION



Source: Office on Women's Health

IS MY BABY IS GETTING ENOUGH MILK?

The number of wet diapers your baby produces and how much weight your baby gains (it should double within the first few months) both indicate whether they are getting enough milk or not. **See Figure 8** for the average number of wet diapers and bowel movements during the first week after birth. Their urine should be clear or pale yellow (not deep yellow or orange) and they pass enough bowel movements. If your baby is full, they will be satisfied and content, and will have short periods of sleep and alertness. Your breasts may also feel softer after nursing.

FIGURE 8: AVERAGE NUMBER OF WET DIAPERS AND BOWEL MOVEMENTS DURING THE FIRST WEEK AFTER

Baby's age	Number of wet diapers	Number of bowel movements	Texture and color of bowel movements
Day 1 (first 24 hours after birth)	1-2	The first bowel movement usually occurs within 8 hours after birth	Thick, tarry, and black
Day 2	2	3	Thick, tarry, and black
Day 3	5-6 disposable, 6-8 cloth	3	Looser and greenish to yellow (color may vary)
Day 4	6	3	Soft, watery, and yellow
Day 5	6	3	Loose, seedy, and yellow
Day 6	6	3	Loose, seedy, and yellow
Day 7	6	3	Larger amounts of loose, seedy, and yellow

Source: Office on Women's Health

YOUR BABY'S WEIGHT

Another way to tell if your baby is consistently getting enough breastmilk is by their weight. Your baby may lose a little bit of weight right after birth, but for the first three months they should steadily gain about two-thirds to one ounce of weight each day. Your doctor will help you keep track of their weight right after birth, three to five days after birth, and two to three weeks after birth. Each day, for the first one to six months, your baby will consume between 19 and 30 ounces of breastmilk if breastfed exclusively. Their stomach will grow from being able to hold about one to two teaspoons at the time of birth to being able to hold about two ounces around the first ten days.

Nighttime Tips:

At night, you should have your baby sleep in your bedroom so you can more easily breastfeed. This can also reduce their risk for sudden infant death syndrome (SIDS) because you will be able to monitor them more easily and frequently.

TAKING YOUR BABY OFF YOUR BREAST

When your baby is done breastfeeding, you will need to take them off your breast. Use your pinky finger to break the suction (which can be very strong) created between your baby's mouth and your nipple. Once you do this, you can then take your baby off your breast. If you do not break the suction first, you may experience sore nipples.

BURPING YOUR BABY

You should burp your baby when they empty each breast and at the end of each breastfeeding session, as well as during the feeding if they were crying before you started. It may take a few tries to get your baby to burp, as they may not burp immediately after the feeding; however, if you try burping them for five minutes with no success, they may not need burping and you can resume feeding or end the nursing session.

You can try different positions for burping. One way is to hold them upright, with their stomach touching your shoulder. You can also try holding them face-down on your lap. You may also sit up, lean over, and support your baby under their arm. After finding a suitable

position for you and your baby, you should apply some pressure on their stomach and try to burp them.

BREAST PUMPING

WHY SHOULD I USE A BREAST PUMP?

- Your baby is premature or too sick to nurse at the breast
- Your baby has trouble latching on, especially if caused by irregular nipple shape. Pumping briefly before nursing can help shape the nipples so your baby has an easier time latching on.
- You have to go back to work, school, or other responsibilities that require you to be away from your baby.
- Your baby does not have to drink less-nutritious formula while you are away if you have breastmilk stored to give them in a bottle.
- Helps you maintain good, steady milk production by increasing the times you empty your breasts.
- You are hospitalized or must take medications and cannot breastfeed, but still need to empty your breasts.
- Helps relieve breast fullness, which can make it more difficult for your baby to latch on.
- Helps relieve breast engorgement if pumping modestly; too much pumping can cause more pain.

CHOOSING THE RIGHT PUMP FOR YOU

There are two main types of breast pumps: **electric (automatic)** or **manual**

Electric Pumps: They are usually faster and easier to use, though some women find it strange at first to use such as machine or may prefer to pump manually. However, with routine practice, using an electric pump becomes more comfortable and less time-consuming, which is helpful for mothers who need to go back to work, school, or other responsibilities that require them to be away from their baby.

Manual Pumps: They are often used for occasional pumping, for mothers who do not need a lot of milk from each pumping session, or for alleviating engorged breasts and plugged milk ducts. It may also be helpful to use manually-pumped milk to rub over sore or cracked nipples after feedings. Compared to an electric pump, manual pumps often take more time and practice.

FLANGE FIT

A key part of a breast pump is the flanges (phalanges). They create an air seal around your breast while pumping, so it is important that they fit properly, which is determined by the width of the opening of the flange. Pay attention to your nipple while pumping to check if the flange fits properly. If it is a good fit, there will be space around the nipple in the flange tunnel, which will allow for it to move around, and the areola will largely remain out of the flange tunnel. Your nipple will rub up against the flange tunnel if the fit is too small. If the fit is too large, the areola will be drawn into the flange tunnel and may rub up against the sides. You may need to adjust your flange fit, as it can change over time, so it is important to periodically check the fit

HOW TO START BREAST PUMPING

If your baby is unable to breastfeed right after delivery, for reasons such as prematurity or illness, it is important to starting pumping as soon as possible, preferably within the first six hours. If not, you may a few weeks after establishing good breastfeeding practices.

1. Before you begin pumping, read the instructions for your pump.
2. Make sure the pump is fully assembled and equipped with batteries if needed if it is electric.

3. After thoroughly washing your hands, sit in a quiet, comfortable, and relaxing place.
4. You should bring a drink and snack.
5. If you are pumping both breasts simultaneously, which saves times and can further increase your milk production, you may want to use a hands-free bra. You can buy a hands-free pumping bra, cut holes in a sports bra to accommodate the flanges, or attach elastic to the clasp of a regular nursing bra to allow for stretch. You can also hold the flanges with your arms.
6. For hands-on pumping, you will need to hold your hands around the flanges. After each pumping session, it is important to clean the used parts of the machine.

If you begin breast pumping immediately after delivery, it is best to start within the first six hours. You should pump about eight to ten times a day, including at least once each night, to begin. To keep up the best milk production, pump at least once every five hours.

You will increase milk production for the first two weeks until you are making 25 to 35 ounces (750-1050 mL) of breastmilk per day. Increase the time spent pumping to 20 to 30 minutes, but continue to pump eight to ten times a day until you reach the 25 to 35 ounces per day target amount. After that, you can reduce your pumpings to five to seven times a day. You can also decrease the time spent pumping back down to 10 to 15 minutes. You may not need to pump during the night unless breast fullness is a problem; you may be able to manage pumping before and after bed instead.

INCREASING YOUR MILK PRODUCTION

Pumping more frequently and for longer periods of time can help increase milk production. Proper flange fit can also ensure you are pumping the most milk during each pumping session, which helps you increase or maintain steady milk production. Massaging your breasts and hand-expressing milk are other ways to increase production.

USING AN ELECTRIC (AUTOMATIC) PUMP:

After placing the properly-fitting flanges over your nipple, turn the machine on. Start with the lowest level of suction and work your way upwards as needed. You will feel a tug when you first begin pumping. The machine will suction the milk from the breast and store it in a container attached to the pump. To empty both breasts it usually takes about 15 minutes.

USING A MANUAL PUMP:

After placing the properly-fitting flanges over your nipple, either squeeze or use a plunging mechanism, depending on the type of pump, to extract the milk. To empty both breasts it usually takes about 45 minutes.

STORING YOUR BREASTMILK:

Always use clean glass or BPA-free plastic containers with leak-proof lids. Breast milk freezer bags are another option, but do not use thin disposable bottle liners or sandwich bags because they are more likely to break. Many pumping machines also come with storage containers.

Using a label or a non-toxic marker, label each container with the date and time. You may need to include your baby's name if you are taking the milk to a facility that cares for other babies and toddlers.

It is a good idea to store milk in individual portion amounts so for each feeding you can take out a single container and have the amount you need. Generally, for each feeding, it is recommended to store two to three ounces (60-90 mL) for babies one to two weeks old and three to five ounces (90-150 mL) for babies one to six months old. **See Figure 9** for average feeding amounts.

FIGURE 9: AVERAGE FEEDING AMOUNTS

Baby's Age	Average Intake Per Feeding	Average Intake Per 24 Hours
First week (after Day 4)	1-2 oz. (30-60 mL)	10-20 oz. (300-600 mL)
1 to 3 weeks	2-3 oz. (60-90 mL)	15-25 oz. (450-750 mL)
1-6 months	3-5 oz. (90-150 mL)	25-35 oz. (750-1050 mL)

Source: Ameda

Always use stored milk with the oldest date first. If there is any milk left in the bottle after a feeding, some professionals advise throwing out the milk. However, some say it may be refrigerated and used within 4 hours.

HOW LONG DO I STORE BREAST MILK?

How long you store breast milk depends on where you store it. Room-temperature breastmilk is good for six to eight hours and should be given to your baby first. You can keep fresh breastmilk in a cooler with ice packs for 24 hours if kept at 59° Fahrenheit. Refrigerate your breastmilk if using within eight days; otherwise, freeze it. Always put the milk in the coldest part of the refrigerator or freezer, not in the door because it is not as cold. It is best to use fresh breast milk as soon as possible because it loses begins to lose nutrients the longer it is stored. **See Figure 10** for storage time for breastmilk.

FIGURE 10: STORAGE TIME FOR BREASTMILK

Storage Time for Human Milk*	Deep Freeze (0 °F) (-18 °C)	Refrigerator Freezer (variable 0 °F) (variable -18 °C)	Refrigerator (39 °F) (4 °C)	Room Temperature (66 °F–72 °F) (19 °C–22 °C)	
				(73 °F–79 °F) (23 °C–26 °C)	
Freshly Pumped	12 Months	3–4 Months	8 Days	6–10 Hours	4 Hours
Thawed in Refrigerator, After Being Frozen	Do Not Refreeze	Do Not Refreeze	24 Hours	4 Hours	4 Hours

^{1,2} *Storage times may vary for preterm or sick babies.

Source: Ameda

REFRIGERATING VS. FREEZING BREAST MILK:

Fresh milk is always optimal because freezing milk destroys some of the antibodies found in breastmilk. It is best to immediately refrigerate fresh milk, but it can be held at room temperature between six to eight hours. After refrigerated, the milk is good for five days. When refrigerating milk, place the container in the back of one of the main shelves of the refrigerator. Refrigerated breastmilk usually separates into two layers, the fat separating from the watery part and floating on top. To combine the two layers, you should swirl (not shake) the milk in the container to combine the two layers. Stored milk may also have a slight hue, commonly bluish, to it; this is normal, and may be due to medications or diet.

However, if you need to freeze the breast milk, allow for expansion by only filling the container about three-quarters of the way full. When frozen at 5° Fahrenheit, milk will stay good for two weeks. At 0° Fahrenheit, it can be kept for three to six months, and at -4° F it can be kept for six to 12 months. It is best to use milk within three to six months for optimal quality.

THAWING AND USING BREASTMILK:

Thaw frozen milk in the refrigerator overnight before using and should be used within 24 hours. Once thawed, it can be kept at room temperature for one hour.

Warm up the milk by placing the storage container in a cup of warm (not hot or boiling) water, but never in the microwave because it can cause the milk to heat unevenly and create hot spots, which can burn your baby's mouth, and kill important nutrients in the breastmilk. It is important to make sure the milk is not too hot before giving it to your baby. After a few months, the baby may drink chilled milk, but may prefer warm milk. Either is okay to give to your baby.

Thawed milk may have a soapy odor if it is high in lipase (a fat-digesting enzyme). Even though it is safe for the baby to drink, they may refuse to take it. Scalding the milk (heating it on the stove until bubbles form around the edges, then cooling) before freezing it deactivates the enzyme, which will prevent the soapy odor from forming.

PREVENT OVERFEEDING:

Be careful that your baby does not overfeed. Sometimes, babies will drink more milk from the bottle than they need because milk tends to flow more consistently from a bottle than from the breast. You can use a bottle with a slow-flow nipple to slow down the steady flow of milk, which will help prevent overfeeding.

HOW DO I WEAN MY BABY FROM THE PUMP?

It is best to wean your baby from the pump gradually. Every two to three days, decrease your pumpings by one until you are pumping no longer. You can also try decreasing the amount you pump during each session by one ounce every two to three days while keeping the number of pumpings the same.

PROBLEMS WHILE BREASTFEEDING

SORE NIPPLES

Having the correct feeding position from your baby's mouth to your breast called a *latch*, can help decrease sore nipples. To readjust your babies latch on your breast, place a clean finger in the corner of your baby's mouth. This will force the baby to readjust their suction and position on your breast. This technique also works for if your baby decides to bite you.

5 Key Steps

Check your baby's position while you breastfeed. If possible try to have your baby stay on one breast for an entire feeding session.

- 1. Avoid giving your baby formula or cereal to supplement your breast milk especially in the first six months.*
- 2. If you feel the need to supplement your breasts use a spoon or dropper full of breast milk instead of a bottle.*
- 3. If your baby loses interest in your breast milk you will begin to decrease in milk supply.*
- 4. Check with your doctor if you have any concerns and are not producing enough milk.*

LOW MILK SUPPLY

To make sure your baby is getting enough to eat monitor your baby's weight and growth. Your baby is getting enough to eat when his or her urine is clear or yellow and has regular bowel movements. Your baby should also alternate between sleeping and waking cycles if they are getting enough to eat. Your babies should be happy after a feeding in your breasts should feel softer. According to the Office of Women's Health babies gain 2/3 to 1 ounce of weight each day from birth to three months.

EXCESS MILK PRODUCTION

If you are producing too much try breast-feeding only on one side for each feeding. If your other breast feels too full hand express some of the milk out to relieve pressure. You can also use a cool washcloth to reduce swelling. Also make sure to feed your baby when he or she is hungry to avoid aggressive behavior such as biting or heavy sucking. Also make sure to burp your baby after a feeding to avoid gas from building up in their tummy.

STRONG MILK EJECTION

If you are experiencing overly strong milk ejection hold your nipple between the first and middle fingers over the side of your hand and lightly squeeze your milk ducts to reduce the force of ejection. If your baby chokes or sputters while you do this unlatch your baby and let the excess milk spray onto a towel or cloth. Also try different breast-feeding positions to reduce the amount of gravity you're placing on your breasts.

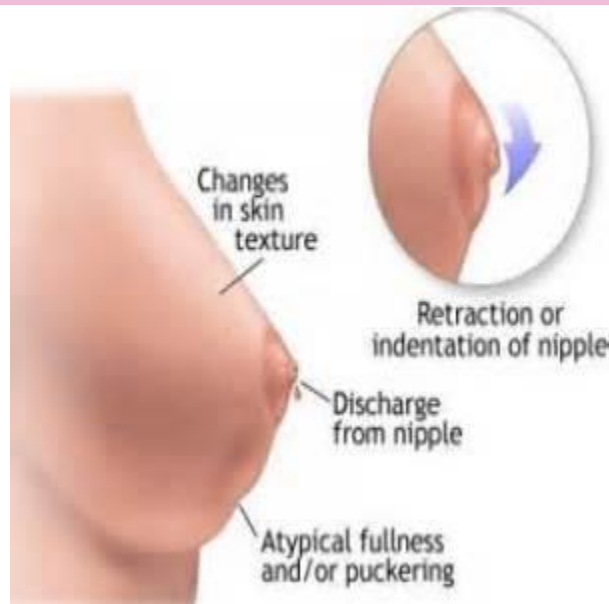
ENGORGEMENT

Engorgement is the result of milk build up in your ducts. This will usually happen on days 3 to 5 after giving birth although it can still happen at any point in time though. Engorgement can lead to other problems such as swelling, tenderness, redness, the flattening of nipples, and even fever. To avoid engorgement breast-feed often after birth and work with a lactation consultant. Avoid pacifiers and bottles until your baby is 3 to 4 weeks old. You also can hand express or pump a little milk to soften the breast before you feed your baby. Also try massaging your breast. When he returned to work be sure to pump milk on the same schedule as you fed your baby at home. Don't let more than four hours pass before you pump again to avoid engorgement.

PLUGGED DUCTS

This is a common issue and often feels like you have a sore lump in your breast. A plugged duct happens when a milk duct doesn't drain properly. In order to get rid of your plugged duct feed on the affected breast up to two hours. Be sure to aim the baby's chin at the plug as this focuses the baby's mouth and suck on the clogged ducts. Be sure to get extra sleep and relax with your feet elevated. A plugged duct is often a sign that you are trying to work or do too much. If you keep experiencing plugged ducts receive help from a lactation consultant.

BREAST INFECTION



Source: Medication at Home, 2015

Try tips for having a clogged ducts and then contact your doctor if you are not better after 24 hours or if you have a fever or worsening symptoms. Seek your doctor's help immediately if both of your breasts look affected by the infection, if puss or blood is coming out in your breast milk, if you have red streaks near the affected area of your breast, or if your symptoms came on suddenly.

FUNGAL BREAST INFECTION

Be sure to change disposable nursing pads often and wash any towels or cloth that come into contact with the yeast in very hot water above 122°F. Be sure to wear a clean bra daily, wash your hands often and wash your baby's hands often as well. Be sure to boil all pacifiers, bottle nipples, or toys the baby puts in his or her mouth daily place in a pot of boiling water and heat water to a rolling boil. After one week of treatment throw out all bottle nipples and pacifiers. Make sure other family members are free of thrush or other fungal infections as well. You can get a fungal infection from your baby's mouth if he or she has thrush or from the use of antibiotics or steroids during labor.

RIGHTS AS A BREASTFEEDING MOM

THE FEDERAL LAW

Under the Affordable Care Act you are ensured a place and time to express breast milk when you return to work if you are covered by the Fair Labor Standards Act. In short you are covered by the Fair Labor Standards Act if your employer is required to pay you over time when you work more than 40 hours a week and if you are engaged in interstate commerce somehow. Interstate commerce can mean you work in anything from retail, a restaurant, agriculture, a call center, or construction. Those not covered by this law include administrative and executive professionals as well as seasonal workers.

Note: To learn more about individual state laws visit:

<http://www.Illi.org/law/lawus.html> .

You can legally breastfeed in public in every state.

SPECIFIC DETAILS FOR WORK

The breaks your employer gives you are not required to be paid, but you are ensured this time to express breast milk in a private place other than a public bathroom. If you normally are paid for breaks you may be able to receive payment for a breast feeding break. Be sure to talk to your employer to make sure. Your employer is required to allow you to express breast milk until your child is one-year-old. You can store your milk in the community refrigerator or if you feel more comfortable, store your milk in a cooler with ice packs.

Once you have decided to breastfeed your baby be sure to let your supervisor, manager, or a human resource department employee know that you will need time to express breast milk upon returning to work.

SPECIFIC DETAILS AT HOME

Breast pumps and supplies are tax-deductible meaning you can write them off as a medical expense on your taxes.

Under the Affordable Care Act all new health insurance plans must provide breastfeeding equipment, support, and supplies without any *cost-sharing* – things such as co-pays and deductibles for the entire duration you decide to breast-feed.

One problem you may run into is the fact that although your health insurance must cover breastfeeding equipment and supplies (usually a breast pump and pads) your insurance may require you to actually purchase the breast pump instead of renting one.

Also covered under all new health insurance plans is a *lactation consultant* to help you as long as you decide to breastfeed without cost-sharing. A lactation consultant is someone who is specially trained to help women breastfeed. One issue you may have though, is that your health insurance may limit you to a certain list of lactation consultants meaning you may not get to choose the exact consultant you want.

If you have a health insurance plan that existed before the Affordable Care Act was implemented, you may not have health insurance covered access to a lactation consultant or breastfeeding supplies. If your plan was grandfathered in to the Affordable Care Act you will not have health insurance covered access to a lactation consultant or breast-feeding supplies unless your health insurance plan already provided these things. If you had your health insurance plan prior to the Affordable Care Act and it was not grandfathered in, you will receive health insurance coverage for a lactation consultant and breast-feeding supplies and equipment.

Can my health insurance place limits on the amount of equipment I use or number of lactation consultant appointments?

Your health insurance can place some limits, but they can't give you a time limit for buying your breast pump or say they will not allow breast pump use after one year.

STIGMA

While breastfeeding your child it is important to have a strong support group or support network. Although breastfeeding is recommended by the American Academy of Pediatrics for the first six months of life without any other supplementation of foods, many people still believe that formula is better than breastmilk. Formula is advertised more often than breast-feeding in most cases which may lead to others questioning your choice to breast-feed. Do not allow other people's opinions to dissuade your choice to do what's best for you and your baby. If your doctor does not support your choice to breastfeed, try to find a more supportive healthcare professional. If this is not possible, seek help from friends in your community.

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