



Caring for your Newborn

Eastern Carolina Pediatric Associates

<http://easterncarolinapeds.com>

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Caring for your Baby

New Parents and Baby

Your baby is unique. As parents, the people most closely involved, you will come to know your baby best. Trust yourself. Most new parents are unsure of their parenting skills. These worries will soon disappear with experience. You will see that you can provide the proper nutrition and the love, warmth, and attention your baby needs. My staff and I are here to answer your questions and address your concerns as you build your confidence.

All babies sneeze, yawn, burp, have hiccups, pass gas, cough, cry, and get fussy. These are normal behaviors. Sneezing is the only way that babies can clear their nose of lint, dust, and mucus. Hiccups are common little muscle spasms, but not painful. Crying is a baby's way of saying, "I'm tired," "I'm wet," "I want to be held," "I'm too hot," "I'm hungry." Gradually, you will learn what your baby means when she cries.

Because a baby's resistance is not very good in the first few months of life, It is a good idea to make every effort to minimize exposure to germs. This can be best done by not exposing your baby to anyone you know who has a contagious disease (including a cold or flu virus), restricting visitors to a select group of special family and friends, and asking that everyone who is going to touch the baby first wash his hands thoroughly with soap and water or an alcohol-based handwashing solution. Other friends and relatives can visit you and the baby later.



Regular Visits to Our Office

There is a recommended schedule of "well baby" visits to which you should bring your baby. These visits will give me a chance to check on your baby's growth and development, to talk with you about the care of your baby, and to offer guidance as your baby grows. Immunizations against a wide variety of important childhood illnesses are generally given at these well-baby visits. During these visits, my staff and I will also discuss with you my recommendations for handling many common childhood illnesses and problems.

When you need to call our office about an illness your child may have, please prepare for the call by doing the following:

- Write down what seems to be wrong.
- Take a temperature reading.
- Have the names and amounts of any medicines you are giving your baby.
- Have a pencil and paper in hand to note my instructions.
- Have a pharmacy phone number available in case a prescription will be needed.

Please call during office hours when you need advice about non-urgent problems. My professional staff or I will be happy to give you guidance and answer your questions. Keep paper and pencil near your phone to write down any instructions we may give. If an emergency occurs, call me immediately or call 911 or go to the emergency room for what appears to be a very serious problem. When I am out of town or otherwise unavailable, I will arrange for another doctor to be available for you.

Your Developing Baby

From the moment your baby enters this world, she is learning. She has come from a dark, tiny space to the bright open spaces of our world. Your baby is being bombarded with stimulation and may be unpredictable during the first few weeks of life.

- Your baby's head may seem large compared to the rest of her body. Her head may have a bump or two, or be misshapen from labor or from the help she received during birth.
- Your baby's eyes may be bloodshot and eyelids swollen. Her eyes may appear to cross in the first weeks.
- Your baby's skin may be dry and flaky, particularly in the first few weeks of life. Mild skin rashes in newborns are common.
- Your baby's breast tissue may be swollen due to maternal hormones that remain in her body. This is also true for baby boys.

Normal Physical Development

Your baby's head needs to be supported at all times. She may lift her head briefly, but a baby's neck muscles are not yet strong enough to support the head. Your baby will startle easily and often. She will respond warmly to comfort and negatively to pain. Her hands may be fisted or slightly opened. When a rattle is placed in her hand, she will most likely drop it quickly.

Your baby's eyesight is not fully developed at birth. Your baby may stare at objects, but will not yet reach for them. She sees objects best when they are within 8 to 15 inches of her face. Eye-to-eye contact may be brief at first, but it will increase during the early weeks after birth. In the first few weeks you will likely notice that your baby can focus on your face or an object; later she will be able to follow an object slowly from side to side. In the first few weeks of life, babies prefer looking at simple black-and-white shapes. They are drawn to the contrast between light and dark. A simple bull's-eye or diagonally striped pattern in black and white seems interesting to her. Newborns look at the outer edges of patterns, while several months later, babies will tend to look at the inside of a design. You may notice your baby especially likes looking at faces. Later, she will be attracted to colorful and shiny objects.



Although your baby's hearing is well developed, she will not look for the source of sound for many months. She may not like loud voices or loud music. When startled by a noise, your baby may stiffen her body and legs. She may thrust her arms outward and then pull them back close to her chest. Crying often accompanies these movements. Babies seem to like sounds that change, such as a voice or music. Soft music – sung or from a musical toy – may please babies. Talk to your baby often. When parents talk to their young baby, sometimes the baby “keeps time” with her arm and hand motions. Babies can tell the difference between sounds. They seem to react more to normal, rhythmic speech than to nonsense vowel sounds. This may be the beginning of language for them. Hearing people talk is very important for a baby's development.

Your baby has many automatic reactions or reflexes. A major reflex of your newborn is the one that helps him open his mouth and find the nipple for feeding. This is called the rooting reflex. Before breastfeeding, a mother can touch her baby's lips with her nipple so that he will open his mouth to nurse. The same occurs with the bottle-fed baby. When the nipple touches his lips, he will open his mouth and be ready to accept the nipple to suck. There are some other reflexes you may see in your newborn. He can pull back if he is pricked and can sneeze to clear out his nose. He can yawn to increase the air in his lungs. He can turn his head to one side if his breathing is blocked.

Care of the Navel and Circumcision

The umbilical cord remnant usually falls off within a few weeks. To keep the area clean, swab the umbilical cord (navel) each time you change your baby's diaper. Soak a cotton-tipped swab in rubbing alcohol and gently wipe the tip and base of the cord area. Your baby may squirm because the alcohol is cool, but you are not hurting him. It can take several weeks for the cord stump to fall off. Continue this care for a week after it does.

Call me if you notice redness of the skin around the cord or a strong odor or pus-like discharge from the cord itself. Except for the diaper area, which you will clean at each diaper change, your baby does not get very dirty. Until the umbilical stump has fallen off, only a sponge bath is recommended.

If your son was circumcised, clean the area with a cotton ball and warm water at each diaper change. Apply petroleum jelly or the antibiotic ointment I have recommended with each diaper change to prevent the surface of the penis from sticking to the diaper. If the Plastibell® method was used, the ring should fall off by the eighth day. Call me if it does not. Whatever method, call me if there is swelling, bleeding, or an unusual discharge or odor.

If your son was not circumcised, the penis can be gently cleaned daily. You should not pull back the foreskin to clean under it.

Jaundice

Jaundice is a common and usually harmless condition in newborn infants. The word jaundice comes from a French word meaning "yellow." It describes the yellowish appearance of the whites of the eyes and skin of many newborn babies. The most common kind of jaundice is called physiologic jaundice. It usually appears on the second or third day of life in healthy babies born after a full-term pregnancy. It often disappears within a week without treatment. It may occur in both breastfed and formula-fed babies.

In most babies, jaundice occurs because the liver is not yet fully mature and able to rid the body of bilirubin, the breakdown product of old red blood cells that causes the yellow coloring. In rare cases, jaundice can become severe. This is called pathologic jaundice. Please call me if you think that

your baby has jaundice that is more than you had expected. Feeding babies often helps them to maintain a good state of hydration and stimulates bowel movements, which helps the body get rid of the bilirubin. Extra water will not help and is discouraged for newborns.

If you notice a yellowing of your baby's eyes and skin, be sure to check with my office. But remember, jaundice in newborn babies is common, usually normal, and only a temporary condition.

Crying

A crying baby is a great concern for parents, other children, family members, and friends. Everyone wants to "do something" to stop the crying. It's easy to forget that crying is one of the few ways a baby has to communicate. She may cry if she is cold or hot; tired or bored; hungry; wet or uncomfortable; overexcited or in pain or distress. The reasons for ongoing crying are not always known. Babies tend to cry less overall if their cries are answered quickly. Give your baby attention and don't worry about spoiling her. Check to see if she is wet, cold, hot, or hungry. To calm your baby, you can try the following:

- Check to see if she is wet or dirty and change the diaper if necessary.
- Consider whether she may be hungry and try feeding if you think this may be the problem.
- Try burping her. A gas bubble in the stomach may be causing discomfort.
- Consider whether she may be hot or cold and adjust clothing accordingly.
- Make sure no strings or threads have worked themselves around a finger or toe.
- Try holding your baby, making face to face contact, and talk or sing to her.
- Some babies who are overtired and over stimulated will sleep better if swaddled – wrapped snugly in a blanket.

Don't assume that crying always means it is time for a feeding. Look at the "big picture." Is she comfortable? Is your baby too hot or too cold? Is the diaper wet or soiled? Would your baby like to try another position? Is there loud music or loud voices that upset her? Are there too many smells, sounds, or sights at the same time? Be especially alert to unusual cries, like piercing or shrieking sounds or persistent crying that is not typical of your baby's crying patterns. In these instances, you should call our office.

If you're feeling impatient, try leaving your baby with someone you trust while you get away, even for just a short while. Whatever you do, **NEVER** shake your baby, no matter how frustrated or angry you feel. Shaking a baby can cause very serious injuries.

Many babies have a "fussy time" at the same time each day. Late afternoon and evening hours are common. This pattern of afternoon or evening fussiness often starts at around three weeks of age and eases by three months of age. You may need to try a variety of calming techniques. Keep in mind that what may be successful this evening may not work tomorrow evening.



Your Baby's Safety

The kinds of injuries a baby may experience change with age, so you need to consider and adjust your safety efforts continuously. No one can protect a baby from all hazards; but there is a lot you can do, starting the day your baby comes home from the hospital.

Car Safety

Always use a government-approved, rear-facing car safety seat in the back seat of your car. In an accident, a baby held in a passenger's arms can strike parts of the inside of the car or be thrown from it. Make sure that there is **NO** air bag protecting the seat where your baby is placed. Ask me for information to help you buy, rent, or borrow an approved car safety seat.

Be sure your dashboard and back seat shelf are free of all objects that could fly off if you hit the brakes suddenly. Never leave your baby alone in a vehicle. Keep the vehicle at a comfortable temperature and well ventilated. On hot days, check the car seat surface before placing your baby in the seat. Cover a leather or plastic seat with a towel to avoid burning the baby. On cold days, bring an extra blanket to cover your baby.

Crib, Bassinet, Carriage, Playpen, and Changing Table

The crib for your baby must have slats or bars no more than 2-3/8 inches apart, no unsafe design features, and a snug-fitting mattress. To avoid blocking your baby's breathing, do not have pillows, large and fluffy toys, blankets, or loose plastic sheeting in the crib, bassinet, carriage or playpen. Cover the mattress with a waterproof cover, quilted pad, and well-fitting, soft baby sheet. Healthy infants should be placed on their back when put to sleep. Always be with your baby while he is on a flat surface above the floor unprotected by side rails, to avoid injury from falls. Keep one hand on your baby while he is on a changing table.

Burns

A baby's delicate skin burns easily. When you take the baby outside, shade him from the hot rays of the sun. Set your water heater no higher than 120°F (48.8°C). Always test the temperature of your baby's bath water to be sure it's not too hot. Smoking cigarettes while feeding or playing with your baby is harmful to his lungs. It is also dangerous because hot ashes could fall on your baby. Also, don't hold the baby while cooking or drinking hot liquids. Hot food could splatter on the baby, he could touch hot pans or their contents, or hot liquids could spill on your baby.

Supervision

As your baby grows, keep small objects such as buttons, pins, and toys with small parts out of the baby's reach so he cannot pick them up and swallow them. If you offer a pacifier, use only a commercially made one that meets safety standards and doesn't have a long cord that could wrap around his neck and cause choking.

Never leave your baby alone with a person you don't know. Never let any stranger take your baby from you, no matter what the excuse. Don't leave your baby alone with a pet, no matter how "friendly" the pet has been. Don't leave your baby alone with any young child.



Your Baby's Comfort

Room Temperature

Try to keep an even, comfortable temperature in your baby's room. Windows may be opened in warm weather. Newborn babies don't tolerate exposure to very warm or cold temperatures and drafty environments.

Clothing

A baby does not require any more layers of clothing than an adult. Dress your baby according to the temperature of his environment. Some babies are sensitive to a particular fabric or laundry detergent. Consider that as a possible explanation for skin rashes.

Outdoors

You can take your baby outside whenever the weather is pleasant. Remember that a newborn baby's skin is particularly sensitive to sunburn and so direct and prolonged sun exposure should be avoided. Make sure that your baby is dressed for whatever weather conditions you will be in. And remember that newborns have limited immunity from infectious diseases, so contact with ill people should be avoided.

Bathing Your Baby

Daily bathing of newborns may dry their skin and is unnecessary. Newborn babies don't get very dirty, except for the diaper area, which you can clean at each diaper change. Until the umbilical cord stump has fallen off, only a sponge bath is needed. After that, two or three baths a week are plenty.

It's a good idea to have a regular time for bathing your baby. The room should be warm, with no drafts. Keep bathing supplies together to save steps. You can bathe your baby in a small tub containing comfortably warm water no more than 3 inches deep. Check the temperature of the water with your elbow before placing your baby in it. NEVER turn your back for even an instant while your baby is in the tub.

Wash the baby's face with plain, warm water and a soft cloth. Do not use soap. To clean around the eyes, use cotton dipped in cool water. Wipe from the bridge of the nose

toward the ears. Do not try to clean the inside of either the nose or ears, but clean outer areas with a moist washcloth or cotton ball.

Wash your baby's head with a mild shampoo. Work from front to back, to keep suds out of his eyes. Clean carefully over the soft spots. I should be notified if there is greasy scaling (cradle cap).

Use a mild soap and warm water to wash the baby's body. Be sure to wash in the folds of skin. Rinse well. Pat him dry. Powders and lotions are not necessary for routine skin care. Powders, in particular, should be avoided as babies have been injured by accidentally inhaling baby powder.

Trim your baby's fingernails carefully with a nail clipper. This may be necessary several times a week.

Diapers

Wet diapers and frequent feedings are signs that your baby is getting enough to drink. Sometimes it is difficult to determine if a diaper is wet. A tissue liner inside the diaper can help show wetness. It is common, during the first 4 to 5 days after birth, to find a pink-colored stain in your baby's wet diapers. This results from normal crystals in the urine and is not a problem.



Preventing Diaper Rash

Change your baby's diaper frequently. Let her bottom air-dry as long as possible at each diaper change. You may use a zinc oxide cream or petroleum jelly to protect the skin. Do not use powder.

Changing Your Son's Diaper

If your son is circumcised, gently rinse the area at each diaper change. It is important to keep the area as clean as possible. The gauze wrap on the penis will usually fall off within 24 hours following circumcision. Until the circumcision is healed, I recommend applying petroleum jelly or an antibiotic ointment to prevent the penis from sticking to the diaper.

Changing Your Daughter's Diaper

Using a wet cloth, wipe from front to back. Gently clean between all creases of skin. A little blood-tinged mucus from her vagina is normal at first. If this condition continues, becomes more frequent or heavier, call me.

Bowel Movements

Bowel movements of newborn babies vary considerably in size, color, consistency, and frequency. A baby may have several bowel movements daily, or none for a few days. Frequent bowel movements in a breastfed newborn are a good indication that he is getting enough breast milk.

Stools may be yellow, brown, or green – firm, loose, or pasty. Your baby's first stools are black-green, tarry, and sticky. They are called meconium. By day 2 or 3, the stool will probably become brown to green and seedy. A breastfed baby's stools are generally yellow, loose, and seedy once past the meconium stage. The stools of a bottle-fed baby may be yellow, green, or brown and may be loose to well-formed.

Change your baby's diaper as soon as possible after each bowel movement or wetting. Clean the diaper area and wipe it gently with a cotton washcloth or a non-sensitizing diaper wipe.

General Feeding Information

At Feeding Time

Feeding is one of your baby's (and your) most pleasant experiences. At feeding time, your baby receives nourishment and a feeling of security from your loving care. The food helps your baby grow healthy and strong. Loving care helps your baby develop a sense of security and stability.

Both you and your baby should be comfortable at feeding time. Choose a position that will help you relax as you feed your baby. Be sure she is warm and dry.

A Schedule With Flexibility

A feeding schedule should be flexible, allowing your baby to eat when she becomes hungry. Very young babies usually need to be fed every 2 to 3 hours, but older babies may wait for 4 or 5 hours between feedings. Although crying is the only way a young baby can complain of hunger, crying may mean other things as well. If your baby cries within 2 hours after a feeding, check for other causes such as an uncomfortable position or wet diaper before feeding her again.



Burping Your Baby

Try to burp your baby during and after breastfeeding or bottle-feeding. It's also a good idea to try burping your baby halfway through a feeding. Burping helps remove swallowed air. To burp, hold the baby in an upright position so that her head is directly above her stomach. Sometimes a baby will not be able to burp, so don't try to force one. Don't be alarmed if your baby spits up a few drops of her feeding when being burped.

Feeding Your Baby Other Foods

According to the American Academy of Pediatrics, there is no need to begin feeding a baby solid foods or liquids other than breast milk or formula before 4 to 6 months of age. When that time is near, I will discuss with you the addition of new foods. Generally one new food is begun every several days. Water supplementation is unnecessary for both formula-fed and breastfed infants. Fruit juices should not be introduced before 6 months of age and should be limited to 4-6 oz per day. Cow's milk should not be given before one year of age. Don't give your baby honey before 2nd birthday. Certain bacteria that are sometimes found in honey may cause a serious disease called infant botulism in your baby. Older children don't get this disease, so feeding them honey is not dangerous.

Vitamin Supplements

The need to supplement an infant's diet with vitamins or fluoride is individualized, based on what diet your infant is being fed and where you live. Breastfed babies will likely need a vitamin D supplement, beginning in the first few days of life. I will discuss this with you at your first visit and, if indicated, prescribe accordingly.

Breastfeeding

Feeding Your Baby

Breastfeeding is the optimal way to feed your baby. Just as a mother is capable of nourishing her baby for months in the womb, she is also capable of completely nourishing her baby at the breast. Breast milk is the ideal food for your baby.

Your breast milk is suited to your baby. It is always available at the right temperature, doesn't need any mixing or equipment, and costs very little. By choosing to breastfeed, you are helping protect your baby from common early childhood illnesses such as colds, ear infections, and diarrhea, especially during the early weeks and months of her life.

The ideal goal is to breastfeed for at least the first year, but your baby will benefit from whatever amount of breast milk she receives.

Keep in mind that you should breastfeed without introducing a bottle or pacifier for at least 3 to 4 weeks to assure that breastfeeding is well established. I recommend that you continue to breastfeed your baby for as long as you can. If possible, continue to feed your baby your breast milk until her first birthday.

Techniques for the Breastfeeding Mother

The way your baby "latches on," or attaches to your breast, is one of the most important things to master for successful breastfeeding. Making sure your baby correctly latches on will help prevent or minimize sore nipples. Gently lift and support your breast, with your fingers below the breast and your thumb above, well away from the areola (the dark area around your nipple). Gently stroke your baby's bottom lip with your nipple in a downward motion several times. Pause to see if he will open his mouth. Repeat this until your baby opens his mouth very wide. Then quickly pull him onto your breast so that his nose, cheeks, and chin are all touching the breast. Most of your areola should be in the baby's mouth. If your nipples become sore as the feeding continues, remove your baby from your breast, after breaking the suction, and try reattaching him. You should call my staff or me if you develop sore nipples.



When you breastfeed in the sitting position, hold your baby on his side facing your breast, with the baby's lower arm tucked around your waist. Your baby's face, tummy, and knees should be facing you, in a snug tummy-to-tummy position. If his nose is blocked, pull his bottom upward and closer to you so his head will move back slightly.

Alternate the breast offered first at each feeding. Babies should be offered both breasts at each feeding. When your baby loses interest in the first breast, stop and burp him. Then offer the second breast for as long as you both want. Generally, most newborns should feed for at least 10 minutes and they should be able to complete a feeding in about 60 minutes or less. To change breasts, put your finger into the corner of the baby's mouth between the gums, and he will open his mouth, releasing the suction. Let your breast completely air-dry after nursing.

Check the information on the next page for signs that your baby is getting enough breast milk. Please call my office if you are concerned that your baby is not feeding well, or if you are feeling overwhelmed, anxious or just unsure about the breastfeeding process. Getting help early will often prevent problems from developing.

If you need to be separated from your baby at feeding time, once breastfeeding is well established, you can leave behind a

bottle of milk that you express from your breasts. You can express breast milk by hand, or by using a breast pump (see information later in this section). If one is needed, my staff can refer you to a lactation consultant for assistance in selecting and renting or purchasing a breast pump.

Signs Your Baby Is Getting Enough Breast Milk

A healthy, full-term newborn who is breastfeeding well at least eight times a day should need no feedings other than mother's milk. Your baby is most likely getting enough milk if:

- Your milk "comes in" (increases in amount) – making your breasts feel firm and full – between the second and fourth days of breastfeeding.
- Your breasts feel full before a feeding and softer afterward.
- Your baby has no difficulty latching on.
- She is breastfeeding every two to three hours – at least eight times in a 24-hour period.
- She usually breastfeeds for 10 minutes or more and no longer than 60 minutes at each feeding. Let your baby, and not the clock, determine how long a feeding lasts.
- She gives you signs that she is ready to be fed. She may lick and smack with her lips and tongue, clench her fists and put her hand to her mouth, or flex her arms and legs.
- You can hear a rhythm of suck/pause/suck during feedings.
- Your baby usually breastfeeds at both breasts.
- She appears satisfied and no longer hungry after feedings.
- She has at least one wet diaper the first day of life and three on days 2 and 3. Look for more wet diapers on days 4 and 5. Your baby should wet at least six diapers every day after about 6 days of life with a clear, colorless urine.
- Your baby is passing yellow, seedy runny stools, starting on day 3 or 4. If she is not passing any stools, or is still passing meconium (thick and black or dark green stools), contact our office.

Expressing and Storing Your Breast Milk

Your situation will likely dictate which method of expression you use. For example, if you need to be away from your baby for full-time work or school, or if your baby is premature or sick and unable to breastfeed, it is recommended that you rent an electric breast pump. Select one with a double pumping kit so you can pump both breasts at once and cut the time in half that you will need for expressing milk. If you need to be separated from your baby only occasionally, a hand pump or hand expression may suit your needs.

Expressing Your Milk by Hand

Wash your hands thoroughly with soap and water. Place one hand at the edge of the areola of one breast, with your thumb above and your fingers below the areola and the nipple in the center. Your fingers and thumb should not move on the skin, as this leads to pinching of the nipple. Pull back toward your chest, press your thumb and fingers together to squeeze the breast, and then roll them forward toward your nipple. Hold your thumb and fingers in this squeezing position as long as milk is coming out. Then let go. Do the same thing again. Continue to use this "milking" action in a rhythm. Move your hand around the areola to reach all parts of each breast. Alternate between breasts, continuing until enough milk has been expressed. Remember, hand expression is like any other manual skill: It takes practice before you become good at it.



Using a Breast Pump

Several different types of breast pumps are available:

- **Hospital grade electric pumps** produce the closest imitation of both the pressure and rhythm of a baby's sucking action. They are the most appropriate choice when breastfeeding is going to be delayed for a considerable time (as with a premature baby) and the most convenient if you will be away from your baby for long periods on a regular basis (as when returning to work or school).
- **A double pump set-up** permits pumping both breasts at once. The advantages are that it takes half the time to pump and can increase the level of prolactin, the hormone that tells your body to make milk. With a double pump, it usually takes 10 to 15 minutes to express your milk. If you do one side at a time, it will take 10 to 15 minutes per side. These pumps are expensive to purchase, but they are available for rent on a weekly, monthly, or longer basis. They usually can be rented from hospitals or medical supply companies. Check with our office for information on how you can obtain these pumps.
- **Small hand-held battery or electric pumps** are used to collect milk from one side at a time. They vary in type and quality, from good to ineffective. Before purchasing one, talk to someone who has used a hand-held pump successfully or ask a certified lactation consultant or our office for advice on which type to choose. This kind of pump is probably most appropriate for a limited amount of pumping, as when you collect for an occasional separation from your baby. With practice, expressing your milk should take no longer than about 30 minutes. Follow the manufacturer's instructions for using and cleaning the pump.

Resolving Challenges When Expressing Your Milk

If you have difficulty expressing your milk, don't panic. This does not necessarily mean your milk supply is low. Some of the following tips may help you:

- Relax. For about 5 minutes before beginning to express, sit or lie in a comfortable, quiet place and close your eyes. Take several slow, deep breaths for the first few minutes. When you feel yourself relaxing, picture in your mind either your baby breastfeeding well at your breast or your milk flowing freely from your breasts as you express.

- Get into a "pumping routine" by always pumping in the same location(s), and keep a picture of your baby, or one of her toys or blankets to look at while you pump.
- Try putting warm compresses on your breasts for a few minutes before expressing.
- Massaging, stroking, and gently shaking your breasts can help your milk let down before and between episodes of expressing.

Storing and Handling Your Breast Milk

The following are the basic procedures for storing and handling your milk.

- Wash your hands before touching your breasts, any of the breast-pump parts, or your expressed milk.
- Transfer your expressed milk into a clean glass or rigid plastic, food-safe container or heavy-duty breast milk bag for storage.
- Label the container with the date and time the milk is collected so you can be sure to use the oldest milk first. You may also want to mark the amount of milk you collect.
- Freshly expressed milk contains antibacterial factors that enable it to be kept at room temperature for up to 4 hours. But to be on the safe side, place your milk in a cooler or refrigerator as soon as possible.
- If you intend to store your breast milk for longer periods of time, freezing your breast milk is preferred. Freeze your milk within 24 hours after it has been expressed. Refrigerated breast milk should be used within 24 hours if possible.
- Freeze your milk in small (2- to 4-fluid-ounce) portions so that they will thaw fairly quickly.
- Wash all the pump parts that come into contact with your breast milk in hot, soapy water after each use; rinse well in hot water. Follow the manufacturer's suggestions about putting pump parts in the dishwasher. Milk storage containers should be washed in the same manner if they are to be reused.

GUIDELINES FOR STORING BREAST MILK FOR HEALTHY, FULL-TERM INFANTS*

	IN REFRIGERATOR	IN FREEZER
FRESHLY EXPRESSED BREAST MILK	• Use within 24 hours if possible • Discard after 72 hours	• Up to 1 month in freezer compartment of refrigerator • 3-6 months in deep freezer (0°F or less); store in the back of the freezer. Label and use oldest first. Best if used within 3 months.
PREVIOUSLY FROZEN BREAST MILK	• 24 hours	• DO NOT REFREEZE

GUIDELINES FOR THAWING FROZEN BREASTMILK

DO	DO NOT
• Thaw container of frozen breast milk gradually, in the refrigerator, under increasingly warm running water, or in a bowl of warm water. • After the thawing is complete, gently swirl the container to mix the milk before feeding it to the baby, because the milk can separate while standing.	• Defrost breast milk by using boiling or very hot water. • Defrost breast milk in a microwave oven. Uneven heating may cause "hot spots" that could burn your baby. Also, microwaving may alter proteins and destroy some protective components of the milk.

*Adapted from Meek JY (ed): *New Mother's Guide to Breastfeeding*. Elk Grove, Ill: American Academy of Pediatrics, 2002.



Supplementing

If you choose to supplement your breast milk with an infant formula, talk with my office staff or me first. Infant formulas provide a safe and nutritionally complete alternative to breast milk, but do not offer the same benefits as your breast milk. The American Academy of Pediatrics recommends an iron-fortified infant formula as the only acceptable alternative to breast milk for the first 12 months of life. Cow's milk and low-iron infant formulas should not be fed during a baby's first year. Even if you choose to use infant formula for some feedings, you can still continue to breastfeed. Many mothers find that a combination of breastfeeding and formula feeding works best for themselves and their baby.

If your situation requires that you be away from your baby at feeding time, on a regular basis, and you will be unable to express your milk while away, you may want to start the conversion to formula a few weeks ahead of time. This will allow your breasts to reduce the amount of milk that is made for less frequent breastfeeding and for your baby to adjust to the bottle of formula. For example, if you will be missing two breastfeedings every day, start to introduce bottle feedings about 2 weeks before being away. During the first week, give your baby one bottle feeding each day at the time you expect to be away. Express only enough milk from your breasts at this missed feeding to relieve any discomfort. The next week, give him two supplemental feedings each day. Again, express only enough milk for relief. The law of supply and demand is at work here: The need to express your milk when you are away will decrease over time.

Formula Feeding

Feeding Your Baby

Deciding how and what to feed your baby is a personal choice only you can make. Breast milk is the optimal feeding for a baby. For that reason, I recommend that you breastfeed, and for as long as possible during your baby's first year. In addition to supplying proper nutrition, breastfeeding helps protect your baby from disease.

If you have chosen not to breastfeed, if you need to supplement your breast milk, or if you stop breastfeeding before your baby is a year old, I will recommend an iron-fortified infant formula, like Similac® Advance®. The American Academy of Pediatrics recommends an iron-fortified formula as the only acceptable alternative to breast milk during the first year. Cow's milk and low-iron infant formulas should not be fed during a baby's first year. **Do not change formulas unless you talk to my office nurse or me first.**

Choosing the Right Infant Formula for Your Baby

Nutrition will never be more important for your baby than during the first year. Your baby will grow more and develop faster than during any other period in her life. You can be confident that infant formulas are both safe and nutritionally complete, and will provide your baby all the nutrition she needs for proper growth and development.

However, when it comes to choosing an infant formula, there is a difference. I recommend Similac® Infant Formulas. For most babies, Similac® Advance® Infant Formula with Iron is the right feeding because it is designed to be more like breast milk. In addition to having DHA, it is the only formula that has lutein,* an important nutrient babies can only get from breast milk or Similac.† It's especially helpful now, during this critical time of your baby's brain and eye development.

* Excluding inherent sources.

† Prior to the introduction of solid foods.

Your Baby's Delicate System

As a new mom, you may find it comforting to know that more than half of all babies spit up to some extent. Occasional spit-up is normal for both breastfed and formula-fed babies. Usually, the most sensible course is to continue feeding the same brand of formula, and not make changes that could further upset your baby's system.

It is important to remember that your newborn's digestive system needs time to fully develop. Most babies gain weight despite spitting up. A change in formula is just one more thing that can confuse the situation and is usually not necessary. Spitting up can happen when your baby burps, eats too much or swallows too much air. There's no reason to worry about these common causes for spitting up. It's not painful, and most babies don't even realize they've done it. If your baby is healthy and gaining weight, it's just part of the development process.

If you are concerned your baby may have more serious feeding issues, please call my office.

Tips for Preparing Formula

- Always follow the instructions on the label.
- Wash your hands and all supplies carefully before preparing formula.
- Always test the temperature of warmed formula before feeding by shaking a few drops on your wrist.
- Never use a microwave oven to warm formula – this can result in hot spots that can burn your baby.
- After one hour, throw out any formula left in the bottle after feeding.

Techniques for the Bottle-Feeding Family

When you feed your baby, she should be in a semi-upright position with her head higher than her body. Hold the bottle so the nipple is always filled with formula. This helps your baby receive formula instead of air. Air in the baby's stomach may give a false sense of being full and may cause discomfort.

Sucking is part of a baby's pleasure at feeding time. A baby may continue to suck on a nipple even when it has collapsed. Therefore, take the nipple out of your baby's mouth occasionally to make sure that it hasn't collapsed.

Never prop a bottle or leave your baby alone to drink. Remember your baby needs the security and pleasure of being held at feeding time. Face-to-face contact is very important for your baby. Sometimes, your baby will take every drop in the bottle, and sometimes not. Don't worry – this is normal. You can usually tell when your baby has had enough when he stops sucking, frequently turns away, or falls asleep. You should never force your baby to finish a bottle. Throw out any formula left in the bottle.

When your baby regularly finishes every drop at each feeding – and sometimes cries for more – it may be time to increase the amount of formula in the bottle at each feeding. Your baby will need larger amounts as he grows.

Choosing the Form That's Best

Different babies and their parents have different needs. That's why infant formulas come in three forms:

- Ready To Feed requires no measuring or mixing. It is convenient for everyday use and especially for your day-care or travel needs.
- Concentrated Liquid is easy to mix and convenient for preparing several bottles in advance.
- Powder is handy for making one feeding at a time and can be used for up to a month after opening.

Do not add water to Ready To Feed formula. You can mix Powder or Concentrated Liquid with sterilized water (water that has been brought to a rolling boil for one minute, then cooled to room temperature), with tap water from the cold-water faucet, or with bottled water. My staff or I will tell you which to use.

Choosing the Right Nipple

There is no "correct" nipple shape; however, different babies are likely to have a definite preference for one shape over another. Try different ones until you find the nipple your baby likes.

Another thing to consider when choosing a nipple is the size of the hole. The hole should be large enough so your baby doesn't have to work too hard to get the milk out, but not so big that the milk flows too fast causing your baby to gulp or choke. Repeated use may distort nipple size. Make sure you examine the bottle nipples frequently and discard at the first sign of wear.

Cleaning Bottles

After feeding time, scrub bottles, nipples, caps and rings with a bottlebrush in soap and hot water. Or, put them in the top rack or basket of a dishwasher. Squeeze water through the nipple hole during washing and rinsing, to keep it from clogging. Rinse everything well in hot water. Test nipples regularly to be sure the holes are the right size and there are no signs of wear.

Changing Formulas

Continue feeding the formula I have recommended until at least the baby's first birthday. If you have reason to believe that your baby's chosen formula is causing any problems, please discuss that concern with me. Please be sure to check with my office nurse or me before making any feeding changes.

Your Sleeping Baby

When putting your baby to bed, the American Academy of Pediatrics recommends that healthy infants sleep on their backs to reduce the risk of SIDS (sudden infant death syndrome). SIDS is a term used to describe the unexpected death of babies in their sleep for no known reason.

Six Steps to Reduce the Risk of SIDS

- 1** Put your baby on his back to sleep in an appropriate, safe infant crib with a firm mattress.
- 2** Do not put your baby to sleep in a bed shared with any other person (including yourself), on a couch, sofa, waterbed or any soft mattress.
- 3** Do not let him sleep on soft things like cushions, pillows, blankets, sheepskins, or foam pads. Keep your baby's crib free of extra fluffy blankets and stuffed animals.
- 4** Smoking during pregnancy has been associated with a higher risk of SIDS. Do not smoke near your baby. Do not let others smoke near your baby.
- 5** Do not let your baby get too hot. Dress him in as much or as little as you would wear. Do not wrap your baby in lots of blankets or clothes. If your baby is sweating, has damp hair, or is developing a heat rash, he may be too hot.
- 6** If possible, breastfeed your baby. Breastfeeding has been shown to be healthier for your baby and may reduce the risk of SIDS.

Newborns do not have the same sleep patterns as adults. Regular sleep patterns develop as your baby gets older. Newborns usually sleep 16-18 hours a day. They sleep 2-3 hours, wake up, eat, and go to sleep again. They often seem to have no real pattern and no regard for whether it's day or night. At about 6 weeks old, their sleep and wake pattern begins to become established. By 16 weeks, many will have settled into a regular schedule.

Choking and CPR

We recommend you take an infant-child CPR course so that you can receive proper training to handle these potentially life-threatening problems.

Constipation

Constipation in infants less than one year of age can be a source of concern for parents. Sometimes your baby is not really constipated, but must be given time to set his own schedule for having a bowel movement. Remember that some grunting and straining is normal. Generally, an infant's stool is soft and easily passed. Irregular bowel movements do not necessarily mean a baby is constipated. If your baby is having large and very hard bowel movements or seems to struggle painfully when having them, please discuss this with me.

Treatment for Constipation

- If your baby is old enough to eat strained foods, you may give him fruits and vegetables.
- If your baby is not eating jarred baby food yet, we may recommend fruit juices (prune, pear, cherry or apple). If his stools become too loose, just give him less juice.
- If your baby is eating rice cereal, it may help to switch to oatmeal or barley cereal. Rice cereal can cause constipation.
- Do not give your baby enemas, laxatives, or suppositories unless I direct you to do so.

Diarrhea

One of the most common illnesses among infants and young children is diarrhea. The most common cause of diarrhea in infants is an intestinal virus. It may be accompanied by fever and/or vomiting. A child may have several large watery stools or more frequent (more than 5 or 6 in 24 hours) loose stools. Usually, diarrhea lasts only a few days and can be managed at home. My staff or I will discuss with you the routine management of diarrhea.

During diarrhea, babies lose fluid and important minerals from their bodies. Excessive fluid loss caused by diarrhea can lead quickly to a serious condition called dehydration, especially if the baby is also vomiting. Dehydration may become severe enough to require a baby to be hospitalized to have fluid replaced.

It is important that extra fluids be given to replace the fluids being lost during bouts of diarrhea, and to replace the nutrients (electrolytes) also lost in these stools. Discuss with me the need to keep on hand an oral electrolyte maintenance solution and instructions for its use. An oral electrolyte solution is the best way to replace the fluids and minerals your child is losing.

You may have heard that sports drinks, fruit juices, weak tea, and soft drinks containing sugar are good to give your baby during diarrhea. However, these liquids are not best for your baby. They do not have enough sodium and the proper balance of electrolytes to replace what is lost during diarrhea. Most of these fluids also contain too much sugar. Too much sugar can draw water into the intestine and away from the rest of the body and make diarrhea worse. The best fluid to give your baby is an electrolyte maintenance solution.

Know the signs of diarrhea—more frequent, watery stools, often with a change in color and odor. Follow my instructions for dealing with the diarrhea. Be sure to call me if your baby has persistent vomiting or you note any of the following signs of dehydration:

- Less frequent urination (fewer wet diapers)
- Dry mouth
- Few tears
- Overly sleepy or overly fussy
- Sunken eyes

Fever

Newborn: Fever in a newborn baby is a concern to us. If your baby is 2 months or younger, and has a rectal temperature above 100.5 degrees Fahrenheit, call us immediately.

Older Infants: Fever in infants older than two months of age is commonly associated with infectious illnesses and can be treated with acetaminophen or ibuprofen. If your baby's fever is very high or associated with unusual sleepiness or irritability, please call me.

Spitting Up

Spitting up is when some of the baby's stomach contents spill out of her mouth. This usually involves only small amounts of liquid—although it often seems like a lot. Spitting up generally occurs shortly after feedings, beginning in the first few weeks of life. More than half of all babies spit up to some extent after they have been fed. Occasional spit-up is normal for both breastfed and formula-fed babies.

In many cases, spit-up is thought to be due to an immature muscle at the base of the esophagus, the tube connecting the throat and stomach, which allows the stomach contents to back up into the mouth. This is often referred to as "GE reflux" (gastroesophageal reflux) and goes away as the baby matures. Though spit-up may be messy, it's usually not a cause for concern. Most babies gain weight well despite "spit-up." If an infant is frequently in distress, is not gaining weight as he should or has other symptoms, we may need to do some further evaluation.

Spit-up happens. If your baby spits up occasionally, here are several things you can do to help keep meals down:

- Avoid feeding your baby when he is lying down and keep him upright for about 30 minutes after a feeding—in a front carrier, a back carrier, or in your arms.
- Avoid placing him in an infant seat, which can increase pressure on the abdomen.

- Avoid vigorous play and jostling after feeding your baby. Excess activity can aggravate an already delicate system.

Control the amounts you are feeding. If your baby gets an overly full stomach, it is more likely to overflow. Give more frequent, smaller meals to see if that helps.

Burp your baby often and control the amount of air and liquid he takes in. Check the nipple-hole size. If the hole is too small (which may increase the gulping of air) or too large (and the formula flows too fast), your baby may spit up more.

Try to feed your baby before she is overly hungry. Gulping formula too fast may lead to spit-up problems.

Vomiting

Vomiting occurs when the stomach contents are ejected through the mouth with force. It usually is a cause of great distress for baby and family. When vomiting occurs, it usually involves more than just a few mouthfuls. Call my office right away if you notice any of the following:

- Frequent, repeated vomiting
- Crying (with legs pulled up) that cannot be soothed
- Fever
- Blood in vomit
- Green vomit
- Can't keep fluids down
- Repeatedly refuses feedings
- Any signs of dehydration

Immunizations and Tests

Your baby will require certain immunizations for protection against childhood diseases. If your child has had a reaction to a previous immunization, please let me know.

Immunizations

The following immunizations are recommended for all children. During routine office visits, I will tell you at what age each immunization should be given.

- Hepatitis B
- Rotavirus
- DTaP (Diphtheria, Tetanus, Pertussis [Whooping Cough])
- H influenzae type b (Hib)
- Pneumococcal Conjugate (PCV7)
- Inactivated Polio Virus (IPV)
- Influenza
- MMR (Measles, Mumps, Rubella [German Measles])
- Varicella (Chicken Pox)
- Hepatitis A*
- Meningococcal (MPSV4)

* Recommended only for children and adolescents in selected states, regions, and/or those with certain risk factors.

If the following reactions occur with an immunization given in my office, contact me immediately: baby's temperature higher than 102°F (38.8°C), uncontrollable screaming, excessive sleepiness, limpness, paleness, or a convulsion.

Tests

Certain tests are a part of routine well-child care. These screenings may include tests for the following:

Anemia	Kidney Problems
Tuberculosis	Lead Poisoning
High Cholesterol Levels (depending on family history)	Vision Problems
Blood Pressure	Hearing Problems

Records

Spaces are provided in the back of this booklet for my staff or me to fill in, date, and sign when an immunization is given or a test is performed. If a state health department form is used instead to record this information, keep the record in this booklet for your own information.

Newborn Screening

All newborn babies are required by law to be tested, or screened, for certain rare inherited diseases. These diseases, if untreated, can seriously interfere with a baby's development. For screening, a few drops of blood are usually taken from the baby's heel. Although all babies are screened in the hospital, sometimes babies have to be screened again after they have gone home. In certain situations, the screening may not detect the disorder the first time. I will tell you if your baby needs to be screened a second time for these rare but serious diseases.

Notes

This image shows a single page of white paper with horizontal blue or grey ruling lines. The lines are evenly spaced and run across the width of the page, typical of notebook paper. There is no handwriting or other markings on the page.

Notes

This image shows a single sheet of white paper with horizontal blue or grey ruling lines. The lines are evenly spaced and run across the width of the page. There are approximately 20 lines visible. The paper appears to be a standard notebook page or a sheet of stationery. There is no handwriting or other markings on the page.

Immunization and test records

Vaccine	Vaccine Type	Date	Reaction (if any)	Doctor
Hepatitis B				
Rotavirus				
Diphtheria Tetanus Pertussis (DTaP)				
H <i>influenzae</i> type b (Hib)				
Pneumococcal Conjugate (PCV7)				
Inactivated Polio (IPV)				
Influenza				
Measles, Mumps Rubella (MMR)				
Varicella (chickenpox)				
Hepatitis A*				
Meningococcal (MPSV4)				
Other				

* Recommended only for children and adolescents in selected states, regions, and/or those with certain risk factors.

Test	Date	Result	Test	Date	Result
Tuberculin			Urinalysis		
			Lead Screening		
Hemoglobin or Hematocrit			Cholesterol		
			Vision		
Blood Pressure			Hearing		
Newborn Screen 1st			Other		
2nd					