



Newborn Instruction Booklet

**1321 Oberlin Road
Raleigh, N.C. 27608**

**Phone: 919-828-4747
Fax: 919-828-6765**

www.oberlinroadpediatrics.com

Office Hours

Monday-Friday:

Regular office hours: 7 am - 5 pm

Walk-in clinic: 7 am - 8:30 am

Urgent Care sick visits by appointment only: 5 pm - 7 pm

Phone lines to our receptionists are open 8 am - 5 pm

Saturday-Sunday:

Urgent Care sick visits by appointment only: 9 am - 1 pm

There are no walk-in appointments on weekends

Phone lines to our receptionists are open 9 am - 12:30 pm (Saturday only)

Call nurse starting at 8 am to schedule urgent same day appointments

Oberlin Road Pediatrics

1321 Oberlin Road
Raleigh, North Carolina 27608

Phone: 919-828-4747
Fax 919-828-6765

TABLE OF CONTENTS

Introduction _____	1
Office Visits _____	2
Telephone Calls _____	3
Signs of Illness _____	4
Temperatures _____	5
Infant Care and Characteristics _____	5
Friends and Relatives _____	6
Infant Nutrition _____	6
Burping _____	7
Breast Feeding _____	7-8
Bottle Feeding _____	8
Vitamins and Minerals _____	9
Solid Foods _____	9
Bathing _____	10
• Scalp _____	10
• Eyes _____	10
• Nose and Ears _____	10
• Face _____	10
• Body _____	10
Diaper Area _____	10
Navel Care _____	11
Bowel Movements (Stooling) _____	11
Circumcision _____	11
Jaundice _____	12
Clothing _____	12
Sleeping _____	13
Guidelines for Parents on Characteristics of Newborn Babies _____	14-17
Behavior – (Some things newborn babies commonly do) _____	18

Index

Introduction

Congratulations on the birth of your new baby! Parenthood can be one of the truly joyous and satisfying experiences of life and we consider it a privilege to share in the care and marvel with you at the growth and development of your child. As you care for your child, you will learn to recognize those traits and characteristics that make him or her an individual. Don't judge the infant or child by a fixed set of standards or by other children, and remember to let the child know that you love him or her immensely. In baby care, loving and common sense are the magic ingredients. Even with good food and health care, a baby won't thrive without love.

Your baby is now resting comfortably and warm in his or her bassinet and has had a thorough physical. The baby will be examined daily while in the hospital and, unless the physician tells you otherwise, is a normal, healthy newborn.

Please read and follow these instructions for your child and do not solely depend on your friends and relatives for advice. We will be happy to give you guidance and answer your questions while you are in the hospital, and later by phone and during your visits to our office. Relax, have confidence in yourself, and enjoy your child.

We sincerely hope this booklet will be a big help to you in the management of your child but encourage you to make use of many other printed sources of information. We particularly recommend books available by the American Academy of Pediatrics such as Caring for Your Baby and Young Child, Birth to Age 5. Other helpful books include: Healthy Sleep Habits, Happy Child; Happiest Baby on the Block; and Baby 411. A great website sponsored by the American Academy of Pediatrics that provides a tremendous amount of useful information for children of all ages is "healthychildren.org." Most of the contents of this booklet pertain to the care of your infant, but many points will still be useful and relevant to the care of your older child and for your interactions with our office and staff.

Office Visits

You should make your baby's first weight-check appointment at our office before you leave the hospital by calling our office at 919-828-4747. This usually should be scheduled one to two days after discharge (your physician in the hospital will help you decide).

After the first visit, regularly scheduled appointments will be made beginning two weeks to one month after birth. Appointments will then be at two, four, six, nine, twelve, fifteen, eighteen and twenty-four months, then yearly thereafter. We see children up to 22 years of age.

During these well child care visits, we will want to discuss your child's growth, nutrition, development, and the many interesting things you can expect your child to do. Immunizations are a very important part of these, and you can find this schedule on our website along with links to the CDC's Vaccine Information Sheets. Vaccine information is provided to parents at the time the immunization is given. The immunization schedule is approved by the Advisory Council on Immunization Practices, the American Academy of Pediatrics, the American Academy of Family Practice, and the American College of Obstetricians and Gynecologists. We require all patients in our practice to be immunized according to North Carolina state law, and strongly discourage alternative vaccine schedules. The physician can answer any additional questions parents may have with vaccines.

Telephone Calls

We want you to know you will always have someone available to answer your questions concerning the health of your child (despite how trivial the questions may seem to you). The following suggestions will make these services and our communications more efficient:

1. Call 919-828-4747 during the office hours of 8:00 AM – 5:00 PM Monday through Friday for general questions and appointments (the phones can be extremely busy before 10:00 am). It is much easier for us to manage a problem when we are in the office and have your child's chart easily accessible. Please call at night only if your concern is urgent and cannot wait until the next day. At this time, we do not charge for after-hours phone calls.
2. Make the call yourself if possible. If your child is in daycare or with a sitter, it is often helpful for the parent to observe the child prior to calling our office.
3. Identify yourself and give your child's full name and date of birth and a number where you can easily be reached. Briefly describe the conditions you are concerned about in specific terms and be sure to state if the child was recently seen for the same condition. Please speak slowly and clearly.
4. Don't hold a crying baby while trying to talk. It makes conversation difficult and it will be impossible for you to write down instructions.
5. Have a pencil and paper handy when you call. Do not rely on remembering instructions, especially when you may be upset or tired.
6. Please be brief when discussing your concern as other parents are also trying to call for appointments and advice. You may be transferred to the phone nurse and asked to leave a voicemail. The phone nurse will call you back as soon as possible to answer questions and schedule an appointment if needed. Urgent concerns will be transferred directly to our phone nurse.
7. Call us, if at all possible, before rushing to the emergency room so the necessary arrangements can be made. When the office is closed, we contract with an after-hours answering service staffed by nurses who will answer calls made to our main number, 919-828-4747, and help address your questions. Please inform the service if your call is an emergency. There is always a physician from our practice on-call during evenings, weekends, and holidays. In the event you do need to take your child to the emergency room, we direct people to the **WakeMed Children's Emergency Department at 3000 New Bern Ave, Raleigh**. The main number for WakeMed is 919-350-3000.
8. If your child may have an infection that is particularly contagious such as chicken pox, strep throat, influenza or gastroenteritis (stomach flu), please tell the nurse at the time of your call.
9. Don't apologize for calling. We are here to help you!

Signs of Illness

If you are unsure about what to do with a sick child, the best advice is to call our office. If your child is under two months, please call our office without hesitation. Possible indications of illness include:

1. Jaundice (yellow color) extending below the face or involving the eyes
2. Poor appetite (in a newborn).
3. Fever above 104 degrees (or 100.4 measured rectally in a newborn up to two months old). We recommend rectal temperatures until your child is six months of age and your nurse can instruct you in taking a temperature in this manner (see the following section on “Temperatures”).
4. Vomiting (not just spitting up) or refusal of food several times in a row.
5. Excessive crying that cannot be consoled. Remember that four or five hours of crying throughout the day is typical for newborns through age two months.
6. Listlessness or weakness.
7. Watery bowel movements especially with mucous, blood or a particularly foul odor. This is usually not as urgent in the older child. It is important to remember that newborns, particularly those who are breastfed, will normally have loose, yellow, seedy stools.
8. Any unusual rash. Baby’s skin is very sensitive and there may be faint, splotchy, red marks on the child’s body that are not a concern. However, if the rash doesn’t blanch (turn white) when pressure is applied, that could be a sign of serious illness.
9. Rapid or difficult breathing especially if accompanied by wheezing, nostril flaring, or pulling of the chest wall or abdominal muscles.
10. Drooling excessively or inability to swallow.
11. Seizure activity with or without fever.
12. Severe fall or injury with loss of consciousness.
13. Cuts that require stitches (most can be seen within twelve hours if bleeding is controlled).
14. Cough lasting more than ten days.
15. Congestion lasting more than ten days – or congestion that seems to make feeding difficult in the infant.
16. Suspected ear infection (wait until morning if symptoms discovered at night).
17. Inability to walk after your child has begun walking.

Temperatures

Fever (defined as a rectal temperature of 100.4 F or 38.0 C or higher) can be a frightening occurrence for the parents that are probably doing everything they can to keep the baby healthy. Eventually, most babies will get sick, and one way of determining the degree of illness is by taking the temperature. If your baby is sick, check the temperature several times each day and write this down. If the young infant up to two months old has any fever at all, please notify our office without delay. Beyond this period, fevers are more frequent and may or may not be associated with serious illness.

Thermometers are easiest to read if they are digital. Be sure you have a rectal thermometer to use during the baby's first six months of life. Wash the thermometer with warm soapy water or rubbing alcohol. Place a small amount of Vaseline on the tip and place about one inch into your baby's rectum while lying on his or her tummy or back. The thermometer will beep when it is finished taking the reading.

Axillary (under the arm) temperatures may be used after the first six months of life, but oral temperatures should not be taken until your child is four or five years of age.

Infant Care and Characteristics

An excellent review of newborn characteristics by Barton Schmitt is included at the end of this booklet. It is important to realize the dynamic nature of these and other characteristics and traits in your baby. The most important aspects of newborn care are reviewed below.

You may feel that your newborn looks a bit odd during the first several days of life. The head may appear "lop-sided" due to molding that occurs during the birthing process (this usually resolves within two days). You may note an excessive amount of mucous in the nose and throat. This can be cleared with a bulb syringe and your nurse can help you feel more comfortable with this process. You also may notice one or more of the common newborn rashes or birthmarks, but the nurse or your physician will point these out to put you at ease.

Studies have shown that it is virtually impossible to "spoil" a baby during the first several months of life, so go ahead and take advantage of the opportunity to rock and play and enjoy your new little one. Crying may be a response to hunger or a dirty diaper, but it also may be only a request to be held and comforted. Normal babies may spend as many as four to five hours of the day crying for one reason or another and you will soon learn to differentiate your baby's cries. They also will sleep anywhere from twelve to twenty-one hours of each day.

Friends and Relatives

The newborn is best kept to himself or herself as much as possible and should not be taken into crowded shopping areas. We know that people are interested in your baby and will want to hold him or her, but you may not know who has a cold, sore throat or dirty hands. Please encourage people to wash their hands thoroughly before handling your baby. It is reasonable to take the baby out for brief trips after about four weeks of age, but try to avoid peak shopping hours. Childcare centers, crowded church services, and shopping malls should be avoided until eight weeks of age. These guidelines are devised to avoid exposure to common viruses that lead to fever requiring lab tests and possible hospitalization during the first two months of life.

Infant Nutrition

Feeding is one of the baby's first pleasant experiences. The baby's first love for its parent arises primarily from the feeding situation and helps the all important "bonding" between parent and child. The proper feeding helps the baby grow healthy and strong.

The cornerstone of infant nutrition during the first year is milk. There are two excellent methods of supplying the basic nutritional requirements. They are breast feeding and bottle feeding of breast milk or formula. If you want to breast feed, we strongly recommend it and will work with you or direct you to appropriate resources when needed. We have several breast feeding counselors at our office and work closely with lactation specialists at WakeMed and Rex Hospital. In addition, we have a list of lactation consultants who are excellent resources for information, pump rentals, and support and are available for home visits as well. We will be more than happy to direct you to lactation consultants with whom we have built a relationship.

We recommend a relaxed and casual approach to feeding – not necessarily on a precise schedule. While the baby is in the hospital, the nursery lights are on all the time and, of course, there are always people there to take care of your needs. During the first week at home, only during the day, it is a good idea to awaken the baby and feed rather than letting him or her sleep longer than 3 hours at a stretch – chances are that they won't. After the first week, if there still seems to be some confusion to your baby's day/night schedule, more regular feedings or a change in the baby's bath time may prove to be useful. In general:

1. During the first month - the breast-fed baby will feed every two to three hours on average while the bottle-fed baby may feed every three to four hours taking two to four ounces by the end of the month.
2. During the second through third months – breast feeding occurs every three to four hours while bottle feeding occurs approximately every four hours with infants taking up to six ounces in general. Many, but not all, infants are sleeping 8-10 hours by three months of age.
3. During the fourth month – breast- and bottle-fed infants feed every four to five hours or so and generally sleep at least eight hours through the night. Most infants are getting at least 32 ounces of milk each day (and they generally will not require more through the first year).

Burping

Babies swallow a variable amount of air while feeding (and more during fretful spells). Holding bottles at an angle (or using angled bottles) may decrease the amount of air that a bottle-fed baby will swallow. Give the baby a chance to burp during the feeding (between breasts for example). Hold him or her upright on your shoulder and pat or rub the baby gently. Most babies will spit up in varying amounts (“wet burps”). Generally, these are more of a mess than anything serious, unless they are consistently spitting up entire feedings. Let us know if spitting up seems to be a problem or the spitting up is causing prolonged periods of respiratory distress or pain.

Breast Feeding

In our experience, mothers who want to breast feed and who have been thoroughly counseled on what to expect during the initial adjustment period have ultimately found nursing to be a uniquely enjoyable and satisfying experience which they treasure. Breast feeding mothers should continue taking their prenatal vitamins and get plenty of fluids to meet their own metabolic demands.

Initially, your baby will be getting colostrum, a yellowish fluid that is rich in antibodies which protect your baby from a variety of illnesses (most notably ear infections and stomach viruses). You will begin making milk two to four days after delivery. It is not unusual for newborns to lose a little weight during the first few days (up to seven percent of the birth weight is common). They quickly regain this once your milk has come in – averaging four to seven ounces of weight gain per week for the first several months.

If your baby loses 7 % or more of its birth weight, supplementing the baby bottles of pumped breast milk or formula is recommended to avoid dehydration, jaundice, and the possible need for subsequent hospitalization.

You may expect your baby to nurse eight to twelve times a day for at least 20-30 minutes. This frequency will probably decrease to eight feedings a day after the first two weeks. Whether the baby is getting enough to eat is often a concern of new parents during the first several weeks. If your baby seems satisfied after feeds and is having six or more wet diapers a day, then these are reassuring signs that your baby is receiving adequate milk from you. Generally, a breast-fed baby does not need supplemental formula, but we may instruct you otherwise if we are concerned the baby is not gaining weight adequately or isn't voiding and/or stooling frequently enough. As soon as the infant is proving that he is gaining weight adequately, we encourage moms to nurse exclusively for the first few weeks of the baby's life to give the baby practice at breastfeeding and promote bonding. This time will also help mom's body to adjust to the demands of nursing. Around three to four weeks of age, it is helpful to introduce a bottle with pumped milk or formula a few times a week to give the baby an opportunity to learn how to take a bottle. This is especially helpful for mom's who are returning to work or for parents who want to have the option to bottle feed while they are out in public with the baby.

All babies (breast- and bottle-fed) go through growth spurts periodically through the first year of life. The first one occurs between two to three weeks of age and during this time your body may take one or two days to adjust to the demands of your baby (often wanting to feed approximately every two hours). Other growth spurts occur at approximately six weeks, three months, and six months of age.

If you experience difficulty with latching, pain with or without engorgement, or have other questions regarding breast feeding, please call our office for help. Our physicians and nurses can address many problems, but we are happy to arrange other intervention if it will make you more comfortable.

Some women choose to pump their breasts and give breast milk from a bottle. We will be happy to discuss this more with you if these are your plans.

Bottle Feeding

Some families prefer to use formula to feed their baby. We recommend using one of the prepared infant formulas with iron. Most of the prepared formulas come in three forms.

1. Powdered formula is mixed like instant coffee. One unpacked scoop of powder is added to two ounces of room temperature water. If you have city water (which is chemically treated and tested regularly), you may use the water straight from the tap. If you choose to use bottled water, we suggest the use of “nursery water” which contains fluoride, as this will help your baby develop strong teeth. If you have a well, you should boil it for five minutes prior to use. However, if you get your well water tested through your county health department and there is no evidence of contamination, you can safely use your well water without boiling.
2. Ready-to-use formula comes in 2 ounce bottles, as well as 8 and 32 ounce bottles. This type is very convenient for traveling. Do not add water to this type of formula.
3. Concentrated formula is prepared by adding equal quantities of water and concentrated formula.

A convenient way to use the concentrated formula is to open one can daily (after shaking well and washing the top of the can with hot soapy water), filling each of six clean bottles with two ounces of concentrated liquid and after capping them, placing them in the refrigerator. When the baby is ready for a bottle, run two ounces of warm tap water into one of the six bottles.

Prepared formula should always be refrigerated (it will keep for approximately three days). Do not re-refrigerate a previously used bottle or use a bottle that has been out for more than one hour. Formula may be fed at room temperature or can be warmed in a pan full of hot water. Shaking a few drops onto your wrist is the best way to determine if the milk is too hot. Do not heat bottles in a microwave as microwaves can heat unevenly, causing the formula to burn your baby. Sterilizing bottles is not necessary if you have city water. Handwashing with hot soapy water and thoroughly drying the bottles and nipples or cleaning through a full dishwasher cycle is all that is required.

Vitamins and Minerals

Breast milk and infant formula contain most of the nutrition your infant will need for the first several months of life. Vitamin D (400 International units/day) will be recommended for the breast-fed child starting at two weeks and continuing through 4 months of age and is also recommended for infants who are formula fed but consume less than 32 ounces of formula per day. Vitamin D can be purchased over the counter from the grocery store, pharmacy or online.

At four months of age, the breast fed baby needs to switch from the Vitamin D drops to a multivitamin with iron that is continued through 12 months of age. The vitamins with iron can be stopped at one year of age when the baby transitions to whole milk. Iron can sometimes cause a baby's stools to turn black and may make them harder. Black stools from iron are nothing to worry about. If the baby has hard, log-like or pellet-like stools, you may give him ½ ounce of juice (apple, pear, or prune) mixed with ½ ounce of water one to two times per day with a goal of 2-3 soft stools per day that have a peanut butter consistency.

Fluoride supplements are recommended at six months of age for those families with well water or those who buy bottled water without fluoride to prepare formula. An option for these families is to buy bottled nursery water which contains fluoride from the store. Filters at the sink and in water pitchers do not remove fluoride from tap water. You may have your water tested for fluoride levels by taking a sample to your local health department. There is typically a nominal charge to have this testing performed.

The dental and pediatric societies promote starting fluoride supplements in children who don't have fluoride in their water supply at six months of age. When you bring us the results of the water testing from the health department, we can determine if your child would benefit from a prescription for fluoride.

Solid Foods

You may hear a variety of recommendations from your relatives and friends regarding the need for cereals, fruits, and vegetables. From a strictly nutritional point of view, your baby will not require solid foods until five or six months of age. Most babies are not developmentally ready to eat solids because they cannot sit up or eat from a spoon until this time. We generally recommend waiting to start solids until at least four months of age, but this may vary from one infant to another. Proper instructions and more useful material will be provided to you at the 4 or 6 month visit by your pediatrician.

There is ongoing research to determine the best way to provide your baby with optimal nutrition. As guidelines change, your doctor will help you decide how to introduce solid foods to your infant. Grains, such as rice cereal or oatmeal, should be introduced to your baby sometime between 4 and 7 months of age to prevent development of wheat intolerance. A benefit of infant cereal is that it contains iron which can help decrease the likelihood of iron deficiency anemia. Some parents may prefer to start their babies on vegetables and then move on to fruits. Once you do start solids, it is important to allow your baby to try that new food for 3-7 days in a row before introducing any additional foods. This will allow you to determine more easily if your child has an allergic reaction, like lip/tongue swelling, hives, trouble breathing, throwing up and/or diarrhea.

Bathing

It is good to have a fairly regular time for bathing your baby, but he or she does not need baths more than two to three times each week. The room should be warm and free from drafts. Keep bathing supplies together to make this more of an enjoyable and safe experience. Sponge baths are recommended until the cord comes off (see below) because it is important to keep this area dry. After this time, you may use a kitchen sink or bathinette.

1. **Scalp:** Use any mild baby shampoo and pour only two or three drops in your hand and apply in a circular massaging manner to the scalp 2–3x per week. Don't be afraid of the soft spot. A very soft toothbrush may also be used and washing the scalp daily may help if cradle cap is developing. Continue rinsing and wringing out your bath cloth to remove the shampoo with “picking” motions. Fluff the hair dry with a towel.
2. **Eyes:** Wipe from the nasal corner out with a warm, moistened cotton ball. You may note excessive secretions or crusting during the first several days.
3. **Nose and ears:** Cleanse only the outer areas and never use Q-tips around the ears which may merely pack wax out of sight and deep into the ear canals. It is okay and actually advisable to let some water get in the ear canals with baths to help keep them clean.
4. **Face:** Use only water or a cleaning agent such as Cetaphil, Johnson and Johnson Head-to-Toe, or Dove (unscented).
5. **Body:** Use unscented Dove, Neutrogena, Cetaphil, or other mild non-perfumed, hypoallergenic soaps sparingly and be sure to wash in the creases and rinse well.

Eucerin or Lubriderm lotion or a similar unscented, hypoallergenic moisturizer can be used to moisturize your baby after bathing. It is important to note that babies will normally have dry skin for the first two weeks while adjusting to their new environment.

Diaper Area

The diaper area should be cleaned with a water-moistened cloth or hypoallergenic, fragrance-free commercial wipes with each diaper change. Girls should always be cleaned from front to back. Wet or dirty diapers should be changed as soon as possible to avoid irritation to the baby's bottom.

When a diaper rash is apparent, a barrier cream containing zinc oxide such as Desitin, Balmex or Triple Paste may be used after cleansing the baby's diaper area. Be diligent in keeping your baby clean. Powders are generally not recommended as the particulate matter can be breathed in by the baby and cause irritation to the lungs. Leaving the baby's bottom exposed to air during naps may be helpful in resolution of a diaper rash. If rashes persist beyond three or four days or appear to be worsening, please contact us for additional help.

Navel Care

The cord usually comes off in about 2 to 4 weeks after birth. When the cord comes off, there may be a few drops of blood, but this is typically of no concern. We will want to be informed if the area of skin at the base of the cord appears tender, swollen, increasingly red, or if any pus is noted. You may clean the base of the stump with rubbing alcohol if you note a little bit of crusting, but this is not necessary.

Bowel Movements (Stooling)

The number of bowel movements in infants varies greatly. Breast-fed infants may have a stool with every feed or go a few days between bowel movements. Some bottle-fed infants may have only one large stool every two or three days. After the sticky, tar-like meconium has passed a few days after birth, your baby's stools typically will have a mustard yellow and seedy appearance (they may occasionally be green) and are loose. By one month of age, many babies (both breast- and bottle-fed) may have only three stools each week and the color will typically darken with time. It is normal for a baby to grunt or strain to some degree while passing a bowel movement and does not indicate constipation as long as the baby passes soft stools. This pattern of straining tends to improve by 2-3 months of age.

Circumcision

Whether or not you circumcise your son is chiefly a personal decision. Uncircumcised boys require minimal care to the penis area (cleaning the tip with warm soapy water). The foreskin should not be retracted as there are adhesions that attach the foreskin to the head of the penis. Forcefully retracting the foreskin is painful and can cause complications. Once your son is older, the foreskin will begin to retract. At that time, the foreskin should be retracted only to wash during bathing. The ability to retract the foreskin can start to occur as early as 4 to 5 years of age, but it may not be fully retractable until he reaches around 12 years of age.

The circumcised penis will have an angry, bright red appearance for the first week or so. Vaseline or Vaseline gauze should be kept around the tip of the penis until it is well-healed to prevent the head of the penis from sticking to the diaper. After the circumcision has completely healed, the skin on the shaft of the penis should be gently retracted at bathtime or diaper changes to prevent adhesions from forming. The tip of the penis will have a bluish-purple appearance which is normal.

Jaundice

Jaundice (a yellow coloring to the skin and eyes) is a natural phenomenon that occurs during the first week of life. The yellow color typically peaks at about three to seven days of life. In more extreme cases, your child may require that additional fluids in the form of formula from a bottle be given or your child may need phototherapy until the jaundice clears. This is one reason that we want your baby to be seen in our office the day after discharge from the hospital so we can monitor the development of jaundice closely. Phototherapy involves special lights that emit ultraviolet light that sometimes can be set up in your home by home health agencies but may require admission to the hospital. The yellow color usually begins at the face and descends down the body as bilirubin (the yellow pigment in the blood) levels rise. For mild cases, holding your baby for twenty to thirty minutes by a sunny window each day and frequent feedings may be all that is required. If the yellow color appears early (before 24 hours of life), or if it seems to be involving the baby's tummy, arms or legs, or if you have any other concern about his or her color, we want to hear from you.

Clothing

Newborns are monitored closely while in the hospital to assure they are properly adjusting to the new environment. Common sense should prevail in dressing your baby after leaving the hospital. You will not have to alter an otherwise comfortable temperature in your home, but be sure that the bassinet or crib is free from unusual drafts. A good rule of thumb is that young babies may require one additional layer of clothing (a t-shirt for example) than the rest of the family but should be bundled with hats and extra blankets when out in the cold for brief periods of time. The sleeping environment should be on the cooler side as overheating can possibly lead to sudden infant death syndrome (SIDS).

Sleeping

For the first month of life, most babies will sleep anywhere from twelve to 21 hours out of the day. Unfortunately, they usually do not sleep more than four to five hours at any one time. Your baby's mattress should be firm and flat with no pillow or extra blankets in the crib. Put your baby to bed on his or her back. The following measures may help in teaching your new baby the difference between day and night.

1. Place the baby in bed while still drowsy but not completely asleep. It may be easier to rock him to sleep, but by letting him fall to sleep independently at the beginning of the night, he may learn early on how to comfort himself when briefly awakened during one of several natural sleep cycles.
2. Don't let your baby sleep all day. They will get enough sleep through any given day and it is best to wake them for feeding during the day while letting them determine when the night time feedings occur.
3. Make night feeds brief and boring. Feed your baby in a dark room without a lot of rocking or talking.
4. Plan on eliminating the middle of the night feed by four months of age. They will certainly make up for this in the morning and you will have more energy and enthusiasm to enjoy them. Most babies will be taking three naps each day by four or five months of age, and if not prolonged, these naps should not interfere with their night sleep. Most babies go to two naps around six months of age. Many babies will give up the morning nap by fifteen to eighteen months of age, but children may require and enjoy an afternoon nap until two to six years of age.
5. Sleep begets sleep. Intentionally stimulating a baby to keep him awake will actually produce an overtired, fussy, poor sleeper. Putting your baby to bed at the first signs of sleepiness (drowsy, less active, less vocal, weaker or slower suck, more quiet or calm, eyes less focused, droopy eyelids, and yawning) can help him get longer, better sleep. Parental recognition of these signs is very important with helping setting up healthy sleep strategies. Once the baby shows signs of being overtired (fussy, rubbing at eyes, crankiness), it is much more difficult to get the baby to initiate sleep or sleep for longer stretches.

Guidelines for parents on Characteristics of Newborn Babies

By Barton D. Schmitt, MD

APPEARANCE

Even after your pediatrician assures you that your new baby is normal, you may find that he looks a bit odd. He does not have the perfect body you have seen in baby books. Be patient. Most newborns look slightly peculiar to their parents. Fortunately the peculiarities are temporary. Your baby will begin to look "normal" by 1 to 2 weeks of age. The list that follows describes some common physical characteristics of newborn babies. Most are temporary; a few are congenital defects that are harmless but permanent. Call our office if you have any questions about your baby's appearance that this list does not address.

Fontanel: This "soft spot" is found in the top front part of the skull. It is diamond shaped and covered by a thick, fibrous layer of tissue. It usually pulsates with each beat of the heart. It is safe to touch this area. The purpose of the fontanel is to allow rapid growth of the brain. It normally closes over with bone when your baby is between 9 and 18 months of age.

Molding of the head: Molding refers to the long, narrow, cone-shaped head that results from passage through a tight birth canal. This compression can temporarily hide the fontanel. The head returns to a normal shape in a few days.

Caput: This swelling on top of the head or throughout the scalp is caused by fluid that is squeezed into the scalp during birth. Caput is present at birth and clears in a few days.

Cephalohematoma: This is a lump on the head – usually confined to one side – that occurs when blood collects on the outer surface of the skull under the skin. It is caused by friction between the infant's skull and the mother's pelvic bones during birth. It first appears on the second day of life and may grow larger for up to five days. It doesn't disappear completely until the baby is 2 or 3 months of age.

Scalp hair: Most hair is dark at birth. This hair is often temporary and may begin to fall out by 1 month of age. Some babies lose it gradually while the permanent hair is coming in. Others lose it rapidly and temporarily become bald. The permanent hair generally appears by 6 months. It may be an entirely different color from the newborn hair.

Body hair (lanugo): Lanugo is the fine downy hair that is sometimes present on the back and shoulders of newborn babies. It is more common in premature infants. It rubs off with normal friction by 2 to 4 weeks of age.

Folded ears: The ears of newborns are commonly soft and floppy. Sometimes the edge of one is folded over. The ear will assume its normal shape as the cartilage becomes firmer over the first few weeks of life.

Ear pits: About 1% of normal children have a small pit or dimple in front of the ear below the temple. This minor congenital defect is not a problem unless it becomes infected.

Blocked tear duct: If your baby's eye waters continuously, he may have a blocked tear duct. This means that the channel that normally carries tears from the eyes to the nose is blocked. It is a common condition, and more than 90% of blocked tear ducts open up by the time the child is 12 months old. The physician can demonstrate use of warm compresses and gentle massage to the area between the inner aspect of each eye and the nose 3-4 times per day to help unblock the duct. Mothers can also put a few drops of breast milk in the eye to help open up the duct.

Swollen eyelids: Your baby's eyes may be puffy because of pressure on the face during delivery. This puffiness should clear up in about three days.

Hemorrhage of the eyes: Some babies have a flame-shaped hemorrhage on the white of the eye. It is caused by breaking of blood vessels on the surface of the eye during birth and is harmless and painless. The blood is reabsorbed in two to three weeks.

Eye color: The permanent color of the eyes – usually blue, green, gray, brown, or some variation of these colors – is often uncertain until your baby reaches 6 months of age. Children who will have dark eyes often change to the permanent eye color by 2 months of age. Children who will have light-colored eyes usually change by 5 to 6 months of age.

Flattened nose: The nose may be flattened or pushed to one side during birth. It will return to its normal shape by 1 week of age.

Nasal congestion: Babies often sound congested because of their small nasal passages. As long as they can nurse or take a bottle comfortably, they are ok. If they are having difficulty breathing through the congestion, you can put 2-3 drops of nasal saline in each nostril and suck out the mucus with a bulb syringe or "Nose Frida."

Sucking callus or blister: A sucking callus occurs in the center of the upper lip from constant friction at this point during bottle or breast feeding. It will disappear when your child begins cup feedings. If the baby sucks his thumb or wrist, a callus may develop there too.

Tongue-tie: The tongue in newborns normally has a short, tight band on the underside that connects it to the floor of the mouth. This band usually stretches with time, movement, and growth. Tongue-tie, or tight tongue, is a rare condition in which the band keeps the tip of the tongue from protruding beyond the teeth or gum line. Tongue-tie doesn't usually cause any symptoms or interferes with sucking or speech development. However, if the tongue-tie impedes with nursing, a simple procedure can be done in the office to release tight band.

Epithelial pearls: There may be little cysts containing clear fluid or shallow, white bumps along the gum line or on the roof of the mouth. They result from blockage of normal mucous glands. They disappear after one to two months.

Teeth: The presence of a tooth at birth is rare. About 10% are extra teeth without a root structure. The other 90% are prematurely erupted normal teeth. The distinction between the two can be made with an X-ray. Extra teeth must be removed by a dentist because they can fall out unexpectedly and cause choking. Normal teeth need to be removed only if they become loose because of the danger of choking, or if they cause sores on your baby's tongue.

Swollen Breast: Many babies, both male and female, develop swollen breasts during the first week of life. The swelling is caused by the passage of female hormones from the mother across the placenta during pregnancy. It generally persists for four to six months but may last longer in breast-fed male and female babies. Swelling may decrease in size in one breast a month or more before the other breast. Never squeeze the breast because this can cause infection or stimulate further growth. Be sure to call our office if a swollen breast develops signs of infection such as general redness, red streaks, or tenderness.

Female genitals: The labia minora may be quite swollen in newborn girls because of the passage of female hormones across the placenta. The swelling will go down in two to four weeks. There is a thick, white discharge that can be present between the labia. This is not a yeast infection and does not need to be cleaned off. It will resolve within a matter of days.

Hymenal Tags: The hymen also may be swollen because of maternal hormones and may have smooth 1½ inch projections of pink tissue called tags. These tags are harmless. They occur in 10% of newborn girls and slowly shrink over two to four weeks.

Vaginal Discharge: A clear or white discharge may flow from the vagina during the latter part of the first week of life as maternal hormones in the baby's blood decline. Occasionally, the discharge will become pink or blood tinged (false menstruation). This normal discharge should not recur once it stops.

Male Genitals: The scrotum of newborn boys may be filled with clear fluid that has been squeezed into the scrotum during birth. This common, painless collection of fluid is called a hydrocele. A hydrocele may take six to 12 months to clear completely. It is harmless but should be checked during regular visits to the doctor. If the swelling changes size frequently, a hernia may also be present, and you should call our office during regular hours for an appointment. If the scrotum appears red and swollen and the baby is fussy, vomiting, and/or not feeding well, notify our office immediately.

Undescended Testicle: In about 4% of full term newborn boys, the testicle is not in the scrotum. Many of these testicles gradually descend into the normal position during the following months. In 1 year old boys, only 0.7% have testicles that remain undescended and need to be brought down surgically.

Tight foreskin: Most uncircumcised infant boys have a tight foreskin that doesn't allow you to see the head of the penis. This is normal and the foreskin should not be retracted. The foreskin separates from the head of the penis naturally by 5 to 10 years of age.

Erections: Erections occur commonly in newborn boys, as they do at all ages. They are usually triggered by a full bladder and demonstrate that the nerves to the penis are normal.

Feet turned up, in or out: Feet may be turned in any direction inside the cramped quarters of the womb. As long as your child's feet are flexible and can be moved easily to a normal position, they are normal. The direction of the feet will straighten between 6 and 12 months of age.

Long second toe: The second toe is longer than the great toe as a result of heredity in some ethnic groups, especially those who originated around the Mediterranean Sea.

Ingrown toenails: Many newborns have soft nails that bend and curve easily. The nails are not truly ingrown however because they don't curve into the flesh or cause irritation. The nails can be easily filed down with an emery board or can be carefully cut with a nail clipper. Do not attempt to bite off your child's fingernail with your teeth as you may cut his skin.

Tight hips: When we examine your child, we will spread the legs apart to make sure the hips are not too tight. Outward bending of the upper legs until the knees touch the surface the baby is lying on is called "90 degrees of spread" (less than 50% of normal newborn hips can be spread this far). As long as the upper legs can be bent outward to 60 degrees and both hips are equally flexible, he is fine. The most common cause of a tight hip is a dislocation.

Tibial torsion: The lower leg bones (tibia) normally curve outward in newborns because the baby was confined to a cross-legged position in the womb. If you stand your baby up, you will notice that the legs are bowed and the feet are pigeon-toed. Both of these curves are normal and will usually straighten out after your child has been walking for six to 12 months.

BEHAVIOR

Some things newborn babies commonly do concern parents, but they are not signs of illness. Most are harmless reflexes caused by an immature nervous system and disappear in two or three months. They include:

- Chin trembling
- Lower lip quivering
- Frequent yawning
- Hiccups
- Passing gas
- Noises caused by breathing or movement during sleep
- Sneezing
- Spitting up (small amounts) or belching
- Startle reflex – a brief stiffening of the body in responses to noise or movement (also called the Moro reflex or embrace reflex)
- Straining with bowel movements but producing soft stools
- Throat clearing or gurgling sounds caused by secretions in the throat. These are not a cause for concern unless your baby is having difficulty breathing.
- Irregular breathing - An irregular breathing pattern is not cause for concern as long as your baby is content, his breathing rate is less than 60 breaths per minute, the pauses between breaths last less than six seconds, and he doesn't turn blue. Occasionally, infants take rapid, progressively deeper breaths to completely expand the lungs.
- Trembling or jitteriness of arms and legs during crying. Jitters are common in young infants, and parents sometimes worry that their baby is having a convulsion. Convulsions are rare. During a convulsion, babies also make jerking movements, blink their eyes, suck rhythmically with their mouths, and don't cry. If your baby is trembling and not crying, give him something to suck on. If the trembling doesn't stop during sucking, call our office immediately because he may be having a convulsion.

Adapted from Schmitt BD: *Your Child's Health*, ed 2. New York, NY, Bantam Books, Inc., 1991
Dr Schmitt is Director of General Consultative Services, The Children's Hospital of Denver,
Professor of Pediatrics, The University of Colorado School of Medicine,
And Member of the Editorial Board of *Contemporary Pediatrics*.

This article was published in *Contemporary Pediatrics*, October 1993

