CRIB TO BIB

PREFACE

Dr. Miner W. Seymour wrote the first edition of Crib to Bib in the 1940's. Since that time there have been many cultural, scientific and medical changes in our world. In 1940 the only readily available immunizations were tetanus, smallpox, and diphtheria. Antibiotics were not clinically available. Women were just beginning to enter the work place in large numbers.

Today we have vaccines to prevent most of the common serious childhood diseases. A few diseases, such as smallpox, were entirely eliminated by worldwide immunization. (Unfortunately, today smallpox is again a threat because of bioterrorism). In the first edition, parents were advised to avoid crowds in the late summer in an attempt to prevent polio, a dreaded killer and crippler of both children and adults. Measles and mumps were an inevitable part of childhood The devastating birth defects resulting from rubella were not yet understood in 1940, much less were they preventable. Polio essentially has been eliminated today by use of polio vaccine. The incidence of meningitis caused by Hemophilus type B has been reduced by 90% because of the Hib immunizations. Pneumococcal meningitis is also becoming a disease of the past because of the Pneumococcal vaccine. Fortunately today's vaccines are even safer and more pure than those manufactured only a few years ago. Thus even though we give many more immunizations, the number of actual antigens your child receives have dramatically decreased.

Unfortunately, many children still experience these diseases because they don't receive their immunizations at the proper times. At each immunization visit you will be given printed materials reviewing the risks and benefits of each vaccine. If you have questions or concerns please ask.

Today we are more concerned about the prevention of disease and the preservation of a safe environment for our children. We recognize that the social, educational and environmental issues facing the family are just as important as the traditional concerns about infectious disease control. For example, the section on fever has been entirely rewritten to eliminate the risk of mercury toxicity from traditional thermometers. Two generations ago, when this book was first written, few mothers breast-fed and most infant formula was prepared at home. Interestingly, in the 1940's, as it is today, the trend was toward the late introduction of solid foods. The early introduction of solids peaked in the 1960's and early 1970's.

Much of the factual information in *Crib to Bib* has changed with the times, but the original intent of this manual has not changed over the last sixty years. This new *Crib to Bib* was revised to meet the needs of the contemporary child and his or her family. Helping you to raise your children to their healthy and fullest potential remains our primary goal in writing this manual.

For clarity and ease of reading we will refer to your baby with the pronoun he in one chapter or section and she in the next.

Introduction

Crib to Bib is written not only to help you understand your child, but it is also your guide to our office, its policies, and practices. We formed Associated Pediatrics to provide the highest quality of care for your child. The more you learn about normal child development, the easier it will be to understand your child and to work with him/her. Likewise the more you know about us, the easier it will be to schedule appointments, conferences, consultations and to have your questions answered in a timely fashion.

Call In: Questions and Appointments

When questions arise, please call us at the office. Don't wait several days. By that time the problem may be magnified out of proportion to its original significance. It is best to call during regular office hours when our staff can pull your child's chart. If you need to schedule a routine well baby/child checkup, a school check, or a sports physical, our call center representatives will give you an appointment that is convenient for you and your child's schedule. Please call well ahead for these periodic checkups. If your child has an illness that needs to be seen within the day, our triage staff will give you the next available time in our schedule (for example an earache or a visit that the doctor on call instructed you to schedule). It helps us adjust our staffing needs if you call about illness visits before 10:00 AM. Our call center representatives may schedule illness appointments but they are not permitted to give any medical advice.

When you call with a question about your child, a nurse will ask about the nature of the problem. Often she can solve minor problems over the phone; therefore, always have a pencil and paper handy for instructions. In case a prescription is needed also jot down the number of your local pharmacy. If the problem is more complex, she will arrange a time for one of us to see your child. We do not prescribe antibiotics over the phone.

If you feel you have an urgent question or an emergency, please let our triage staff know so that it will be handled promptly. If you need to talk over a problem with a physician, please inform one of our nurses. She can help us to schedule a mutually convenient phone or conference time. Physicians generally return routine phone calls after patient care hours.

All our patients are seen by appointment only. If you have not already scheduled the first visit for your baby, call well ahead of time to get an exact appointment time. When calling, please identify yourself, your child, his usual physician, and your office of record. If you are unable to keep your check up, please cancel at least 24 hours before your appointment so your time will be available for someone else. There is a charge for missed check up appointments.

Call In: Prescription Refills:

Many of our patients have prescriptions that must be refilled multiple times between office visits. For routine refills call (614) 882-9460 and leave a detailed message on our prescription line. Please include your name, your child's name, the name of the medication(s), the quantity and strength, and the name and number of your pharmacy. In case there are questions, leave a phone number. We will review your child's chart and call-in his medications within 24 hours. Utilizing this line will save lots of time and help us decrease telephone wait times.

Office Hours:

Our office is open from 8:00 A.M. to 4:30 P.M. Monday through Friday except for holidays. We also are open 8:00 A.M. to 11:30 A.M. Saturday morning. We have extended hours from 5:00 P.M. to 7:00 P.M. Monday, Tuesday, Wednesday, and Thursday evenings. These hours are for late day illness and health maintenance visits for the children of parents who work during the day. There is an extra charge for extended and after hour appointments.

After Hours Phone Calls:

Our office is open for phone calls from 7:45 A.M. to 4:30 P.M. Monday through Friday. We also are open 8:00 A.M. to 11:00 A.M. Saturday morning for illness calls. We believe that these times will provide you with ample time to call for all routine matters and most illnesses.

When the office is closed, one of us is on call for emergencies. We request that you limit after-hours telephone calls to those of an urgent nature. Please call if you have a severely sick child. However, if a problem has continued for several days without increasing severity, it probably can wait until morning call hours. We do see sick children on Sundays and holidays. If your child requires an evaluation on a Sunday or holiday, please call our answering service before 9:00 A.M.

After office hours, the office telephones are answered by a medical answering service. They will tell you who is on call and where we can be reached. Often we are on hospital rounds or away from the phone for other reasons. If we have not returned your call within one hour, or if your child has an emergency, please inform the answering service so that they can page us. If your child is in acute distress call 911. We strive always to be available for your child's emergencies but we cherish time with our own families.

The Beginning

The birth of your new baby is an exciting event! After delivery, most parents feel the need for time to recover their equilibrium, time to think, talk and rest. But birth has resulted in a new life, and with it the need to care for the baby. There isn't any time for a recovery period. There is no more time to think about being a parent. You are one! You will experience much joy and disappointment; fulfillment and frustration with your new baby. A baby's first cry is truly music to your ears. The

same sound at 2:00 A.M. is often less appealing. Your baby will challenge, excite, and often exasperate you. Yet, when everything is taken as a whole, we are sure you will agree that the rewards of parenting far outweigh the frustrations and anxieties.

Everyone will have advice for you on how to raise your baby. Grandmother will tell you how to "bring up" baby. Grandfather will volunteer information from the "good old days." Friends will tell you about the newest way to treat colic. More than three hundred authors recently have published books with advice on infant feeding, discipline, education and play.

Listen politely to all the advice and read what you wish. Remember, you are the parents, and you must decide the best way to raise your special and unique baby. Our job as pediatricians is to help you find the easiest and most practical ways to guide your child. If you have questions . . . ask!

Babies grow up in spite of grandparents, in-laws, friends and yes, even pediatricians. You will often have doubts, some important and some trivial. If you use common sense, ninety-nine percent of the time you will be right.

General Information on Newborn

The term "newborn" refers to the first month of life. A newborn is a magical, wondrous person who will have an incredible impact on everyone. He will be easier to understand if we review a few of the physical characteristics of your new baby.

GENERAL APPEARANCE: Physically, his high forehead, wide set eyes and pug nose give little hint of his eventual facial characteristics. A baby's short arms and legs are flexed against his rather large tummy and narrow chest. Usually he keeps his hands tightly closed. Because of the position of his chest and ribs, a baby moves his abdomen as he breathes. Frequently after a feeding, his tummy will visibly bulge. In many babies, you can feel a small firm button like structure at the midline where the ribs join. This bump, called the *xiphoid process,* is the tip of the normal breastbone.

HEAD: The head of a new baby is often lopsided or elongated. This phenomenon, called *molding*, may occasionally be associated with a large soft discolored bruise called a *caput*. This will disappear in a few days. However, the presence of a bruise will predispose your baby to a higher risk of jaundice. Molding may take a few days to several months to resolve. For safety reasons all babies need to rest and sleep on their backs. Molding will improve faster if we encourage some tummy playtime each day.

EYES: Puffy eyes are common in newborns. If the puffiness persists longer than four or five days, or if a yellow discharge collects in the corners of the eyes, your baby may have an infection or obstruction of the tear ducts. Please call the office so we may decide if he needs treatment.

GROWTH: The average baby weighs about seven and one-half pounds. He will gain about two pounds a month for the next three months. By six months, his weight gain will slow to only one pound per month. A baby's head circumference,

about fourteen inches, represents almost two-thirds of his average height of twenty-one inches. His chest circumference will be an inch smaller than his head.

PULSE AND RESPIRATION: The newborn's heart beats around one hundred-twenty times per minute. They will breathe about twenty times a minute, but it is common for them to occasionally sigh and then take several compensatory rapid breaths.

EATING AND SLEEPING: Your baby will want to nurse for ten to thirty minutes every two to four hours. Most babies will sleep fourteen to eighteen hours each day. Add to this about ninety minutes of crying per day, and on the average, a newborn is alert and quiet only about thirty minutes out of every four hours.

VERNIX: At birth, his skin is covered with a yellow greasy substance, the *vernix caseosa.* This vernix serves to protect your baby while in the uterus. It also serves as a lubricant during his journey out the birth canal.

SKIN: Newborns commonly have a variety of spots on their skin. *Milia* are the tiny white bumps usually seen on the nose. They will fade spontaneously in a few weeks. Bluish black areas usually on the back or the buttocks, called *mongolian spots,* are seen in eighty percent of babies of darker skinned parents. They usually disappear by school age. "Salmon patches" are light red areas most frequently seen on the back of the neck (*stork bites*) or above the eye (*angel kiss*). Although a few may persist, they usually fade away during early childhood. Small red raised bumps called *strawberry birthmarks* appear shortly after birth. They gradually enlarge and then slowly become a gray color and eventually disappear.

The delicate skin of a baby is susceptible to many different rashes. Excluding diaper rash, the most common newborn rash is *toxic erythema.* It appears as dozens of tiny raised red spots most prevalent on the face and trunk. These will fade in one or two weeks. Many babies develop *infantile acne* from exposure to high levels of their mother's hormones. This pimple like rash is most often found on the face. It will resolve without treatment during the first few months. *Pustular melanosis* are a series of small blisters that quickly dry and peel away, leaving small dark spots like freckles. These will fade in a few weeks.

Skin color at birth varies depending on racial background. Most newborns are slightly pink and remain so for several days. Their skin will flush when crying. Since most babies' peripheral circulation is not well developed, it is not uncommon for their feet and hands to appear slightly bluish.

JAUNDICE: Most babies develop a peachy yellow tint to their skin called *jaundice*. This condition is caused by the normal breakdown of red blood cells in the bloodstream. Jaundice is common during the third to fifth days of life. Occasionally the jaundice level will become elevated and the baby may feed poorly and become lethargic. Another name for jaundice level is *bilirubin*. Since the peak time for jaundice will occur after your baby is home, you should call our office and report excessive yellow, peachy skin. It is easiest to see the jaundice if you blanch, by

applying gentle pressure with your index finger, an area of skin over the nose or chest. Quickly remove your finger and watch the color of the skin as it refills. It is important to make the observations in the same room, preferably in natural light, at approximately the same time each day.

Since excessive jaundice has been associated with brain damage, we do tests if the jaundice seems excessive or persists. If it should become extremely elevated, we arrange for special treatments to lower the bilirubin level to a safe range.

UMBILICAL CORD: A baby’s umbilical cord begins to dry and get a bit leathery almost immediately after it is cut and clamped. How fast it falls off is not dependent on its length. Your baby should not have a tub bath until the cord has dropped off and the umbilical site is dry. The initial care of your baby’s cord will vary depending on where she is delivered. However after she is home, treating the umbilical cord with a Q-tip dipped in alcohol will help avoid infection and speed its removal. It is not unusual for the umbilical cord site to ooze a small amount of blood as the cord starts to fall off. If the area around the cord seems red and tender, drains pus, or develops an odor, please call our office. A slight bulge, slightly above or in the center of the umbilicus, called an *umbilical hernia* often appears in the first month. It will usually disappear in two or three years. Belly button bands and silver dollars do not speed the disappearance of an umbilical hernia.

GENITALIA: The genitalia of a newborn (the penis and scrotum of a boy and the clitoris and labia of a girl) will often appear swollen at birth. The external labia of your little girl should be gently cleansed with warm water. It is not uncommon for many newborn girls to have a slight bloody vaginal discharge in the first to third week of life.

In an uncircumcised boy the foreskin generally adheres to the penis. It should not be forcibly retracted. With careful cleaning and gentle pressure the foreskin will naturally retract. After a boy is out of diapers, you will need to teach him how to retract the foreskin and cleanse the end of his penis.

If your son is circumcised, we will initially cover the head of the circumcised penis with Vaseline gauze. After the gauze comes off, continue to apply Vaseline to circumcised area until the penis is heals. It is important to keep the healing penis as clean as possible.

It is common for the tip of the penis to look red and have small areas of yellow secretions. This irritation is a normal part of healing. If the redness lasts more than a week, if it becomes swollen, or if crusted yellow sores appear, there may be an infection. This does not happen very often; however if you suspect an infection, call the office.

A small piece of the foreskin often remains after the circumcision heals. We will retract this skin when his penis is completely healed. In the older infant this skin should be gently pulled back each time he is bathed. During his bath, the groove around the head of the penis should also be gently cleaned.

URINATION: Most babies begin to urinate within the first few hours of life. They will then urinate from five to fifteen times per day. Failure to urinate for twelve hours

may signal a serious problem. Urination should never be painful. In a healthy infant, the urine is light to dark yellow. Bloody urine is never normal. If your child has decreased, painful or blood-tinged urine, you should call the office for instructions. Often you will find a pinkish stain in the diaper. This is caused by urate crystals in the urine and requires no treatment.

STOOLS: A baby's first stool, called the *meconium stool*, will be sticky and greenish black. Within three days, they should change to greenish brown *transitional stools*. By the end of the week your baby should be having normal milk stools. Their color and frequency will vary, depending on whether you are breast or bottle-feeding.

Infant Behavior

A new baby's needs are few, simple, and repetitive. They need food, warmth, and tactile stimulation. An infant can sense rough and inappropriate handling. They depend on touch suited to their personality and temperament. It is normal for a baby to startle with sudden changes in motion or noise. Do not mistake this normal reflex behavior for nervousness.

All babies sneeze, yawn, cough, belch, burp, cry and spit up. Most have a fussy period, usually late in the afternoon or evening. This generally does not mean colic.

In the past thirty years, we have learned that a newborn's sensory powers are impressive. At birth, a baby can feel changes in temperature. By three days of age, he prefers sweet over bitter tastes. He is barely a week old when he can distinguish the smell of his mother and her milk. Contrary to earlier information, it is now known that a baby can see. Even in the first weeks of life, they can distinguish the nipple from the surrounding skin or bottle. Newborn's can also discern people from objects. Soon they can identify their mother from other people. Babies are born with the ability to hear and they seem to prefer certain sounds to others. They also can distinguish volume. Soft sounds may produce a fleeting smile, while loud noises often cause them to flinch. Researchers have found that most babies respond most readily to moderately high-pitched sounds. This may explain a baby's initial preference for mother's voice over the father's.

Even before birth, infants have different activity levels. Some lie quietly in the womb, while others kick and squirm so much that their mother has little time for rest. After birth, some babies feed easily, gently fall asleep, and awaken with a smile. Others feed vigorously, resist sleep and awaken with loud and seemingly insatiable crying. Much of the challenge of caring for new babies occurs because you have no standard by which to judge their behavior, appearance and temperament. Since you don't know their reaction to a particular stimulus, it is very difficult to know which behaviors are not normal. Often we can help you to more readily identify your baby's temperament and normal activity level.

Problems of Early Discharge

The first days of a baby's life represent a time of major transition from intrauterine life to life out of the womb. She must make major changes in just a few hours. She

will learn to swallow and digest her food. The pathway of blood through her heart and lungs will undergo major rerouting to allow her to gather oxygen from the air and to send it to all parts of her body. Suddenly, a baby depends on her own bowels and kidneys to ensure the removal of waste materials. Her liver must learn a variety of new methods of processing and breaking down toxins and redistributing essential nutrients.

Delivery itself is as difficult on the baby as it is on her mother. To the baby, it represents a battle of four to twenty-four hours in which her head must mold and squeeze through the birth canal full of germs and bacteria she has never known.

Each of these new adaptations proves too difficult for some babies without special help. As pediatricians, we use these first few days in the hospital to determine which babies might need extra help. This is done partly from our examinations of the baby and partly by laboratory tests. Much of the information comes from the day and night observations of nurses skilled in the care of new babies.

Until recently, mothers and their babies stayed together in the hospital for about three days. Such an arrangement allowed both of them to get to know each other under safe and comfortable conditions. We used this time to look for medical problems common to newborns. Today, most parents are directed by their insurance company to stay in the hospital for only two days.

If you and your baby leave the hospital early, we still will do our initial examination and make a judgment about your baby's total health. However, you must do much of the continuing care and observation at home.

Danger Signs in the First Week

Most babies are born healthy and remain so when taken home. However, a few will have difficulty in making the transition to life outside the womb. The failure to maintain usual body function represents a major threat to your baby; therefore call us if you notice any of the following:

1. Difficulty with feeding or lack of interest in feeding. It is not normal to be too tired to eat.
2. Excessive spitting and/or projectile vomiting are also serious concerns. We realize that it is initially very difficult to tell normal baby wet burps from problematic spitting.
3. Difficulty in breathing or an increase in the rate of breathing.
4. Change in stool or urine patterns, especially increased frequency of stools or decreased frequency of urination.
5. Change in the skin color, such as excessive jaundice or persistent blueness around the nose and lips.
6. Change in behavior such as an increase in irritability or an increase in lethargy (decreased activity).

With special vigilance, we are sure that you can identify any worrisome behavior in your infant. If you are unsure . . . call.

Laboratory Tests in the First Week

The PKU test is required by the State of Ohio to screen for phenylketonuria (PKU). Tests for hypothyroidism, galactosemia, and sickle cell disease, and a panel of tests for rare metabolic diseases also are done by the state. Undetected, these diseases may cause brain damage or death. Some of these tests are not valid if done before twenty-four hours of age. If your baby goes home from the hospital before twenty-four hours of age, please call the office to arrange for us to repeat these tests before two weeks of age. Results of PKU testing are usually available at baby's 1st. month check up.

APGAR Test

Your obstetrician does an APGAR test at one and five minutes of age. This score provides a simple and quick gauge of your baby's condition at birth. The baby is rated from zero to two on five parameters: heart rate, respiratory effort, muscle tone, color, and response to stimuli. Few babies attain the maximal score of ten at one minute. Most normal babies have a five-minute APGAR of eight to ten. A very low score, especially on the five-minute rating serves to warn us of high risk conditions to watch for in later infancy and childhood.

Caring for Baby at Home

Your baby's basic needs are for love, food and warmth. Ornate bassinets and designer sheets may look pretty, but for the first few months your baby will be much more interested in being warm and dry than fashionable. Ideally, your baby should have her own room. If she shares your room, soon both of you will become annoyed with the other's sleeping patterns. When a newborn shares a room with an older brother or sister, make sure the older sibling continues to have a part of the room to call his/her own. A baby will learn to sleep with ordinary household noises, so there is no need to keep things absolutely quiet.

A baby's room should be warm (68-74 degrees Fahrenheit) and bright. Make sure that room (walls, furniture, crib, etc.) are painted or stained with non-toxic lead-free paints or covered with non-toxic wallpaper. Try to keep the humidity in the moderate range. If you have forced air heat, a pan of water on the register will help. Often a cool mist room humidifier is necessary, especially in very cold weather. During the summer, air conditioning is ideal if your baby isn't in a direct cool draft.

Her room should be furnished with simple, easy to clean furniture. During the first few weeks, you may wish to have her sleep in a bassinet with firm sides protected by a quilted pad.

The crib should have slats no more than two and three-eights inches apart so that her head cannot become caught between them. The top rail should be at least twenty-six inches higher than the lowest level of the mattress support. If the crib has high corner posts, remove them. Your baby's clothing could become snagged on the post and choke her. The mattress should fit snugly so her head can't get stuck between the

mattress and the crib. Crib guards help ensure safety. They should go all around the crib and be secured to the crib sides with ties. The ties should never be longer than six inches in length to prevent accidental strangulation. Never use a pillow with a newborn. Soft, well fitting cotton sheets help prevent facial rashes.

Babies rapidly outgrow their clothing. Generally it is better to buy the three to six month sizes instead of the newborn sizes. Her clothing should be simple, soft and easy to clean. Today's market place supplies many styles of infant clothing that meet these criteria.

For everyday use, knitted cotton nightgowns are practical and easy to care for. The mitten ends can be opened or closed, depending on your baby's tendency to scratch. Long gowns make it difficult to kick off the blankets, while short gowns are better for the summer. Undershirts help keep a baby warm in the winter and when worn alone, they are quite cool for the summer. Many parents prefer those with snap closures.

Stretch sleeper suits of polyester blends or cotton are both useful and attractive. Be sure to buy the kinds that snap at the neck and down one or both legs. As your baby gets older, overalls with snaps down the legs are both fashionable and practical for daytime wear.

By the fifth or sixth month, many babies are so active that you may prefer to put them to bed in sleepers. There are two basic types: one with a closed end similar to a sleeping bag and the other with legs and plastic footies. Federal law requires all infant sleep wear to be treated with a flame retardant. Read washing instructions to avoid laundering out this protection. Wash all sleepers inside out.

Your baby needs to be kept comfortably warm, but avoid overdressing. All too often, a baby is dressed in an undershirt and sleeper, and then covered with one or two blankets. Try to dress them in a way that seems comfortable to you. Rule of thumb- the same number of layers that seems comfortable to you, perhaps one additional.

Two kinds of blankets are useful. Larger polyester-cotton blends or acrylic blankets are needed for extra protection when it is especially cold. Cotton receiving blankets don't provide much warmth, but they are useful for layering in the spring and fall. They also can be used to swaddle your baby when she needs that extra comfort from being tightly bound.

There are two basic types of diapers. Today most parents use disposable diapers. The disposable diaper, made of a cellulose material with a plastic outer layer, is convenient and easy to use. They come in a variety of brands and shapes. If you use disposable diapers, you must watch your baby's bottom a bit closer since it is harder to know when they are wet. However, they are expensive and may not be biodegradable.

Cloth diapers are still manufactured. They also come in a variety of shapes and materials. When you launder cloth diapers, be sure to completely rinse them free of detergent. Thorough rinsing is more important than the type of soap used, since residual detergent of any kind can cause diaper rash. It is prudent to avoid harsh detergents when washing any baby clothing.

Shoes for the newborn are strictly decorative. Booties can help to keep her feet warm. The uses and types of shoes for older infants and toddlers have changed dramatically in the past several years. We will discuss the essential requirements for shoes when your baby becomes older.

Bathing

Until the umbilical cord has dried and fallen off, your baby should receive a sponge bath. The bathing room should be comfortably warm and free of drafts. Before starting her bath, all necessary supplies for bathing and for later dressing should be placed within easy reach of her tub or changing table. While lying on her changing table, she can be soaped, with a mild soap, such as Dove©, or Johnson's © baby soap, and then sponged off.

Once her cord has fallen off and healed, she can receive her first tub bath. Fill her tub with about three inches of warm water (test with a thermometer or your elbow). Carefully, lower her in the sitting position into the water, supporting her head and back with your hand and arm. A baby should be washed from top to bottom, leaving the genitalia until last.

The corners of her eyes should be cleaned with a soft cotton ball or with the corner of a clean washcloth. The rest of her face can be washed with a soft damp cloth. There is no need to use any soap on the face of a newborn. Wash the rest of her body gently with a mild soap and washcloth.

When bathing little girls, separate the labia and gently wash with downward strokes using separate folds of the washcloth. With little boys, cleanse the penis and scrotum gently with soap and water. If your baby is circumcised, don't do anything to the remaining foreskin until we have checked it in the office. After this evaluation, gently examine the groove around the head of the penis and make sure that it is clean. Always wash the rectal area last.

Pat her dry with a towel. Don't rub her delicate skin with the towel. Most babies don't need lots of bath oils, creams, lotions or powders. In fact, these may clog the pores and lead to increased rashes. (If your child's skin is unusually dry or flaking we can advise you on the use of oils and creams).

Sleeping and SIDS

There has been a dramatic decrease in Crib Death (Sudden Infant Death Syndrome or SIDS) since we have been encouraging infants to sleep on their backs. The current recommendations of the American Academy of Pediatrics on sleep positions include:

- Infants should not be placed for sleep on their tummy. A supine position (wholly on the back) carries the lowest risk and is the preferred sleep position.
- Soft surfaces and all objects should be avoided in an infant's sleeping area. Of particular importance, soft surfaces such as pillows or quilts should not be placed under or around a sleeping infant.
- The current recommendations are for healthy babies only. We will advise you of the relative risks and benefits of sleeping position if your child has significant reflux or other medical problems.
- The current recommendations are for sleeping time only. Increasing amounts of tummy time while your baby is awake and observed are recommended for developmental reasons and to help prevent flattening of the back of the head.

We recommend that most babies have two hours of tummy time daily by four-six months of age.

Infant Feeding

The comparative values of breast and bottle feedings continue to be debated. Although we encourage breast milk-feeding, because of its digestive and immunological advantages, you as parents do have a choice. Much research and experience show that in western cultures babies can be raised safely by either satisfactory breast-feeding or by the use of the newer infant formulas. We will help you feed and nurture your baby, regardless of what you choose to use as an initial feeding.

Breast Feeding

During the 1950's and 1960's fewer and fewer women were breast-feeding their infants. Today, the pendulum has swung back and most newborns begin breast-feeding in the hospital. Since breast-feeding is the biologically natural way to feed, it is usually easier for both mother and baby. Human milk is a superior food for your baby because it offers a full range of nutrients to satisfy all baby's physical needs during the first months of life.

Breast milk also contains a variety of lymphocytes and antibodies, which offer some protection against infection during the early weeks of life. In third-world countries where hygiene and nutrition are poor, breast-feeding often prevents life threatening intestinal infections. In our more affluent culture with its sophisticated sanitation systems and abundance of nutritious foods, these built-in immune functions of breast milk are helpful but they are relatively less important.

Although breast-feeding is a natural and effective method of feeding, it is not without some inconvenience. Breast-fed babies generally require more frequent feedings, because breast milk is more completely and rapidly digested than infant formula. Successful breast-feeding requires support from both family and friends. The letdown reflex, an involuntary reflex that causes milk to pass through the breast ducts into the areola, can be inhibited by stress, pain, tension and fatigue. Without sufficient encouragement, breast milk supply will dwindle within two or three weeks because of fatigue. Sore and fissured nipples can make breast-feeding painful and therefore a negative experience for both mother and baby. Painful nipples can be minimized by:

- Changing the feeding position every other feeding to alter the pressure on the nipple
- Careful air drying of the nipples after each feeding
- Gradual increasing feeding time
- Applying ice bags or tea bags to the nipples to relieve pain after nursing
- Applying a mild lanolin cream to the nipples after drying to soften crusts and prevent fissures
- Never washing the nipple area with harsh soaps

A well-balanced diet and generous amounts of fluids are important in maintaining an adequate milk supply. Many babies will have some discomfort associated with certain foods eaten by their mother. If your baby is bothered by a certain food, you may need to temporarily eliminate it from your diet. We do not suggest the arbitrary elimination of large groups of foods. Please call our nurse for advice on food sensitivity and breast-feeding.

A breast-feeding mother should not smoke both for health and safety reasons. Cigarette smoking often will decrease milk supply. Even more important, nicotine and other harmful substances pass into the milk. Many studies show an increase in respiratory infections in the infants of mothers who smoke, regardless of how they feed their infants. Babies also have been seriously burned from their mother's cigarette ashes.

Since many drugs pass into breast milk, you should always inform your doctor if you are breast-feeding before taking any medications. The newest (2005) recommendation by the American Academy of Pediatrics suggests the "breast feeding mother should avoid the use of alcohol beverages, because alcohol is concentrated in breast milk and its use can inhibit milk production." Until further information is available, drinking alcoholic beverages while nursing is discouraged. If you have any questions about the safety of taking a certain medication while breast-feeding, please call our office.

The American Academy of Pediatrics also recommends all exclusively breast fed infants receive extra vitamin D to prevent rickets. We want your baby to start vitamin drops containing vitamins A, C, & D by two months of age.

Bottle Feeding

For a variety of reasons many parents prefer to bottle feed their baby. Although breast milk is uniquely suited to the newborn's digestive and immune system, today's infant formulas have a nutritional content that closely resembles that of breast milk. Most infant formulas are cow's milk based with the animal fats removed and replaced with more easily digestible vegetable oils. Infant formulas also have added vitamins, minerals and sugars to ensure good infant growth. DHA and ARA are nutrients that are found in breast milk. They are now added to some infant formula. They appear to help brain and eye development.

There are also lactose free infant formulas and formulas that are manufactured with a soy base for infants intolerant to cow's milk protein and sugar. We will advise you if these special formulas are indicated for your baby.

Formula is available in powder, concentrate and ready-to-feed forms. Powder is the least expensive but the most difficult to prepare. Ready to feed is the most expensive, but very convenient to use.

Whatever formula is used, be sure to prepare it carefully according to the manufacturer's instructions. Formula that is too weak or too concentrated can cause your baby to become seriously ill. It is important to sterilize the bottles, the nipples and the water used to prepare the formula to prevent contamination with dangerous

bacteria. The manufacturers of infant formula have prepared excellent booklets on formula preparation that are available at the hospital and in our office.

Ideally, your baby should take twenty-five percent of his bottle in the first two to three minutes and seventy-five percent in the next five to seven minutes. To obtain this rate, the milk should drop from the nipple of an inverted bottle at a rate of a few drops per second without shaking the bottle. If the milk flow is slower, then use a nipple with a larger hole. If the milk flows out in a steady stream, the nipple hole is too big and the nipple should be discarded. Adjusting the tightness of the bottle top screw cap can make minor adjustments in the flow of formula. Typically, most bottle babies swallow more air than breast fed babies and need to be burped frequently during feeding and after feeding. Today many bottles are advertised as decreasing swallowed air. Some babies, but not all, seem to benefit from these alternative bottle and nipple designs. Whatever type of bottle you use, the nipples must be sterilized. You can do this by placing them in already boiling water for 2-3 minutes. Old nipples become unsafe, so discard ones that are sticky, soft, or stretched out of shape.

Never prop a bottle by supporting it on a pillow and leaving your infant unattended. If your baby spits up, he could choke on the formula and inhale this thick liquid into his lungs. Cradle your baby close to your body during every feeding. An intense mutual bond of love and trust develops during this shared time. Even when your baby can hold the bottle, you should continue to cuddle during feeding time. This helps a baby to learn to depend on people for comfort, not a hard plastic bottle. A shared feeding time is part of a foundation of love and trust that lasts a lifetime.

Nurturing and Scheduling

The nutritional aspects of feeding are easy to meet in our culture. Maintaining a loving, supportive feeding schedule for the newborn is often challenging for even the most experienced parents. Child psychologists agree that feeding time should be a time of closeness, love and talking with your infant. To stimulate both sides of the baby's brain, hold him in your right arm for one feeding and your left for the next. Bilateral perception, i.e., using each of the two eyes and two ears equally, is the beginning of our ability to learn spatial relationships. This happens automatically with the nursing mother, because she uses both breasts during feeding. The bottle-feeding parent should change sides too.

Breast-feeding provides natural skin contact that helps develop the sense of touch. Bottle-feeding parents should also foster contact by massaging, stroking, soothing baby several times a feeding. Physical and emotional closeness are often difficult, if not impossible, when you are tired and sore, or when the other children choose baby's feeding time as the moment to tear up the house. We feel that scheduling can help minimize these distractions and contribute to making feeding time a physically and emotionally rewarding time for everybody.

Early in the twentieth century, it was thought that infant diarrhea was partially caused by irregular feeding times. This led to the tradition of very strict feeding schedules. Often babies can fill and empty their stomachs on a three to four hour schedule, and eventually this became the norm for a healthy baby. However, many babies are unable to adapt to such a strict schedule. Since breast milk is more rapidly

digested, breast babies need to feed more often. To build a good milk supply some mothers need for their baby to nurse every two to three hours. Many normal breast and bottle fed babies don't fit into a neat four-hour schedule.

Some physicians and parents, in an attempt to become more progressive, went to the opposite extreme and fed their babies whenever they wanted to suck. The sucking reflex is often not associated with hunger, and parents were soon feeding their babies every thirty to sixty minutes. All too often, this type of demand feeding led to demanding infants and exhausted parents, who were too tired to give adequate nurturing to their babies.

Today, we believe that an infant should be fed on a modified demand schedule. A breast-feeding baby should nurse until his hunger is satisfied. Except for the first few sleepy days, he will usually eat every two to five hours, taking two to four ounces each feeding. If you are formula feeding, have a bottle prepared in advanced to quickly meet his needs. Don't force him to finish the entire bottle if he falls asleep or turns away satisfied; his natural control has told him to stop.

Soon most babies will do best when fed every three to five hours. Babies naturally develop at least one longer sleeping time during the twenty-four hour day. We suggest that they be awakened for feeding during the daytime, so they won't decide to have their long sleep from 10:00 A.M. to 4:00 P.M. and then be up most of the night for frequent feedings. The easiest rule for the infamous 2:00 A.M. feeding is not to awaken him at night, but to feed him when he becomes insistent about his hunger. It also seems reasonable to influence him to give up his 2:00 A.M. feeding as soon as possible. If he awakens in the middle of the night, try letting him fuss for a few minutes. If he continues to fuss, offer a bit of sterile water. If the water doesn't work, feed him. Repeat this ritual every ten to fourteen days, until he agrees to give up the 2:00 A.M. feeding. Most authorities feel that a baby over ten pounds does not nutritionally require a 2:00 A.M. feeding.

We define sleeping through the night for a baby as six to seven hours of sleep. Very few babies can go from their evening feeding until morning without eating.

Feeding your baby – Transitioning to solids

The transition to solids should not be done before being recommended by your baby's physician. This will usually take place between four to six months of age depending on your child's specific nutritional and developmental needs. The introduction of solid foods makes feeding more cumbersome and time consuming. It is important to keep your baby's mealtimes relaxed and pleasant. Be yourself, and stay relaxed and cheerful. Your baby's first solid feeding should start on a day when you are both rested and eager to start the transition. Your child should be hungry but not cranky. Hold him in the upright position either in his highchair or in your arms depending on his head control. Using a small long-handled infant spoon, place a small amount of food on his tongue. It will take some practice for both of you, so don't get discouraged if he spits out almost as much as you put in. If your child still has so much tongue thrust that he cannot spoon feed, it is unlikely that he nutritionally needs supplemental solid foods. Since spoon-feeding is a learned behavior, baby foods should not be mixed with milk or juice and fed through a bottle.

These first feedings should be mixed quite thin, two teaspoons of dry cereal plus enough liquid to make a thin gruel. It is best to use a liquid your baby already likes. Rice cereal, because of its low antigenicity, is the ideal first cereal choice. As with all new foods, it should be fed for five to seven days before starting another food. Careful adherence to this rule will allow you to identify any food to which your baby might be intolerant or allergic.

Rice cereal should be followed by oatmeal. Most babies easily tolerate single-grain cereals. Once he gets used to a cereal, he should take two or three tablespoons of cereal morning and evening. Four tablespoons of dry cereal provide 45% of the Recommended Daily Allowance for iron. We do not recommend mixed grains or wheat cereals at this age because of the high incidence of allergic reactions to these foods in the first months of life.

Once your baby has accepted two of the cereals, he may start eating single-ingredient vegetables. Just as with cereal, each new vegetable should be introduced one at a time, five to seven days apart. We suggest starting with green beans and then adding peas. You may then add carrots and sweet potatoes. After he has accepted these basic vegetables, other vegetables may be added. It is good taste training and sound nutritional sense to offer at least one green and one yellow vegetable daily.

Next start him on single-ingredient strained meats. Strained meats provide protein, niacin, riboflavin, and Vitamins B-6 and B-12. Most babies start with chicken or turkey and then advance to beef. After he is taste trained with these single ingredient meats he may start on fruits.

The Sick Infant

We all get sick from time to time, and your child will be no different. Since a baby cannot talk to us about their feelings, they will use other methods to let us know when they are not feeling well. They may start refusing to eat, or become fussier and stay awake more than usual. Sometimes a baby will do just the opposite and sleep more than usual. They may spit up or vomit. The color, frequency and consistency of their bowel movements may change.

A child registers pain by crying. The cry of pain is sharper and more high-pitched than a usual cry. Babies tell us about pain by rolling their head, pulling their ears, or doubling up in bed. Unfortunately, babies also do these things for other reasons. They may cry because they are angry. They may pull their ears because they are there, just as babies will play with their toes once they discover them.

If your child acts sick or has a temperature, call the office so we can help you learn what your baby is trying to tell you. When you call, have a pencil and paper handy to write down instructions. The following list will help you to be prepared if you need to call.

INFORMATION TO HAVE WHEN CALLING ABOUT A SICK CHILD

- Patients name (as listed in our files)
- Age
- Usual office
- Usual doctor (who do you usually see for checkups)
- Date and reason for last visit (checkup, earache, etc.)
- Weight (at last visit)
- Temperature (tell us how it was taken)
- General appearance (pale, flushed, dry, etc)
- Symptoms (vomiting, cough, rash, etc)
- Sequence and duration of symptoms.
- Current treatment or medications (OTC or RX)
- Specific questions you may have

There are several physical **signs and symptoms** that often help to understand a child's illness.

Fever

Fever is not a disease, but it is a sign of illness. Babies can be very sick without a fever, and small children often run very high fevers with only a minor cold. Any fever in a baby under four months is significant and should be reported to us. The reappearance of fever after being fever free for more than a day often signifies a new or changing infection. You should also call the office and report any prolonged or recurrent fever, without an obvious cause, regardless of the age of the child.

A fever signifies an elevated body temperature, so if your child is carrying a fever, he may feel hot and often dry to the touch. It is important to know how much fever. The only accurate way to quantify how much fever is by taking his temperature. Feeling the forehead is not enough.

Traditionally fever was best measured in infants and young children by use of a glass mercury filled thermometer. Due to the risks of mercury and broken glass, the use of mercury containing thermometers have been discontinued. If you still have a mercury containing thermometer in your house they should be disposed of by special procedures. Call the Poison control center or your local board of health for access to resources for the safe disposal of mercury.

There are a variety of electronic thermometers that vary in cost, accuracy and ease of use. As with all electronic devices they must be maintained carefully. Most electronic thermometers become inaccurate if dropped or if their batteries are old. The accuracy of the new ear thermometers is very dependent on proper technique.

Diarrhea

Diarrhea refers to an excessive number of bowel movements or to an excessive amount of liquid in the stools. Breast-fed babies tend to have more frequent and softer stools than bottle-fed babies. The color of the stool is rarely significant. Color may be affected by the foods eaten (beets-dark red, carrots-yellow), medications (iron-black) and by the speed with which foods travels through the intestines. New foods, medications, germs, and even new experiences may all cause a change in the stool patterns.

Most of the time diarrhea is best controlled by stopping the offending food and briefly feeding balanced electrolyte supplements such as Pedialyte®. It is important for your child to quickly resume normal feedings. Continued electrolyte supplements or diluted formula can lead to prolonged diarrhea and inadequate growth.

Check List of Symptoms Concerning Diarrhea

- Any fever? – How long?
- How many bowel movements?
- What do they look like? – Any blood or pus?
- Any vomiting?
- Any stuffy nose or cough?
- Do the eyes appear sunken?
- When did your child last urinate?
- Does your child appear ill?
- Feel inside your child's mouth-is it wet or dry? (gummy, tacky)

Vomiting

You can be sure that your baby will occasionally spit up. Many babies spit up part of every feeding. This sort of spitting usually occurs with hiccups or with burping. It is normal and of no concern. Vomiting may be a sign of illness or injury. If your child has persistent vomiting, call the office. A child who is having both vomiting and diarrhea can rapidly become dehydrated.

Check List for Symptoms Concerning Vomiting

- Fever? How long?
- How much and how often is the vomiting?
- Does the vomitus roll out or does it shoot out?
- Any diarrhea?
- Is there normal urination? (color, amount and frequency)
- Is there any stomach pain?
- Is your child alert, active, and interested in trying to eat?
- Does your child appear ill?

Constipation

Constipation is an abnormally long time without a bowel movement or an abnormally hard bowel movement. It may occur in as short as two days for a bottle fed baby and as long as nine days for a breast-fed child. Breast-fed infants have frequent bowel movements during the first few weeks and later may have only one bowel movement per week. Simple constipation is not an emergency. Careful dietary management is usually the best way to treat constipation. Many young infants draw up their legs when they have a bowel movement. If the stool is soft, this is of no concern. Do not use laxatives, suppositories or enemas unless we specifically advise their need.

Check List of Symptoms Concerning Constipation

- What is the child's diet?
- How often are the bowel movements?
- What do they look like? (color and consistency)
- Are they painful?

Medication

There is a tendency to give too much medication to children, especially infants. We will give mediation when it will help your child to feel better while he is using his body's own defense to cure common injuries and viral infections. Antibiotics will never be prescribed over the phone or for the treatment of an uncomplicated viral infection. (Antibiotics are not effective against viral infections). Antibiotic usage will be restricted to children with culture proven or clinically suspected bacterial infections. Recently, new drugs have been released that are effective against a few specific viral infections in children. Unfortunately, there are no drugs that kill most of the common childhood viral infections. Many drugs have significant side effects for some children. We will always weigh the benefits of a medication for your child against the possible side effects. If you have any questions about any of the medications your child is, or may be taking, please ask. As a rule, for infants and younger children, we will prescribe medicine in a liquid form. We encourage older children to take medicine in tablet form when they can safely swallow pills. Generally the same medication is less expensive in capsule or tablet forms. Occasionally tablets must be given to small children. Whenever this is necessary the tablets are to be crushed to a powder and then mixed with a teaspoon of water, milk, applesauce, etc.

Unless otherwise directed, you should give your child one or two swallows of water to wash down any remaining medications in the mouth. Liquid preparations that a child may refuse due to taste may be mixed with fruit juice or diluted water. A medicine spoon or dropper is often useful. Liquid medications are often more easily swallowed if they are directed along the side of the mouth, bypassing the taste buds on the tongue.

Home Treatments

Increasing Moisture

The use of steam or cool mist is often beneficial in the treatment of croup or a cold with a barky cough. For the initial treatment with steam, simply turn on the hot water or the shower in the bathroom and let your child breathe the steam for about twenty minutes. Sometimes a toddler requires more prolonged treatment in a croup tent.

A simple croup tent can be made by covering all the child's crib with a sheet, except two feet toward the foot of the bed. Place a cool mist vaporizer on the floor so all the mist goes up under the sheet into the crib. No medication should be placed into the water unless you are so instructed. A croup tent is most beneficial at night. If your child has a lot of mucus the head of his bed should be elevated.

When the humidity is low in the house, it helps to run a vaporizer in the bedroom part of the night. We recommend only cool mist vaporizers or humidifiers because of their inherent safety when compared to hot steam vaporizers.

Nose Drops

There are limited uses for nose drops in pediatrics. Don't use oily nose drops, because they may cause aspiration pneumonia. Occasionally we suggest using salt-water nose drops to loosen mucous crusts in the nose, or to help a young infant sneeze out thick mucus. They may be prepared by boiling one-half cup of water; after removing it from the heat, dissolve one-half teaspoon of salt into the cooling water. When cooled to room temperature, instill one to two drops into each nostril three to four times daily. Many parents prefer the commercially prepared OTC saline nose drops or sprays because of their ease to use.

Fever Management

A fever itself is rarely dangerous. There are times when fever management is helpful, either as a comfort measure or to prevent secondary complications. The primary methods for fever management in infants and children involve the use of antipyretics and sponging. The common antipyretics of childhood include: acetaminophen and ibuprofen. Aspirin is not used in pediatrics because of the risk of Reyes syndrome. Ibuprofen and acetaminophen are available in a variety of forms and concentrations. These products have different dosing amounts and dosing times. Serious complications have resulted from confusion over dosing concentrations.

Medication Dosing

ACETAMINOPHEN DOSAGE CHART

Dosage may be repeated ever four hours, but should not be given more than five times in a twenty-four hours. Milliliter is abbreviated as ml; 5 ml equals 1 teaspoon.

AGE	WEIGHT	DROPS (80 mg/0.8 ml.)	ELIXIR (160 mg/ 5 ml.)	TABLET (80 mg tab)
0-3 mos.	6-11 lbs.	0.4 ml.		
4-11 mos.	12-17 lbs	0.8 ml.	½ tsp.	1 tab
12-23 mos.	18-23 lbs	1.2 ml.	¾ tsp.	1 ½ tabs.
2-3 yrs.	24-35 lbs	1.6 ml.	1 tsp.	2 tabs.
4-5 yrs.	36-47 lbs	2.4 ml.	1 1/2 tsp.	3 tabs.

IBUPROFEN DOSING SCHEDULE

AGE	WEIGHT	DROPS (50 mg./1.25 ml.)	ELIXIR (100 mg/5 ml.)	TABLET (50 mg)
Under 6 mos.	Not recommended			
6-11 mos.	12-17 lbs.	1.25mL		
12-23 mos.	18-23 lbs.	1.875mL		
2-3 yrs.	24-35 lbs.		1 tsp.	2 tabs.
4-5 yrs.	36-47 lbs.		1 ½ tsp.	3 tabs.

Sponging

Most of the time oral antipyretics and fluids will manage the temperature. However, sometimes you will need to use sponging to help your child feel better with the fever. To sponge your child use her regular tub and fill it with two inches of tepid water (88 degrees F to 92 degrees F). Test the water with your hand or wrist. It should feel slightly warm. Do not use cold water as it may cause shivering, which can raise her core temperature. Seat her in the tub and using a clean washcloth spread a thin film of water on her body below the neck. As the water evaporates, it will cool her body without chilling. It usually takes about five to ten minutes to lower her temperature. If she becomes frightened stop sponging and let her just play in the tepid water for awhile. Sometimes it is necessary for a parent to sit with their child in the tub. If she continues to be frightened take her out and try again later.

Immunizations

We are able to administer all routine immunizations in our offices as well as immunizations needed for most special circumstances. Free immunizations are also available through the Health Department Clinics. Ask us for further details if you wish to obtain immunizations at the Health Department Clinic.

The schedule for immunizations changes periodically as new immunizations become available and new dosing recommendations are made. We follow the

immunization guidelines from the American Academy of Pediatrics. Currently, as of this writing, the guidelines recommend four DTaP (diphtheria, tetanus and acellular pertussis) injections, four HIB (Hemophilus) injections, three IPV (inactivated polio vaccine), one MMR (measles, mumps and rubella) injections, four Prevnar, three Hepatitis B injections, three Rotavirus, one Chickenpox and two Hepatitis A vaccines, during the first two years of life. The first Hepatitis B vaccine is usually given in the hospital before your baby is discharged. You will be asked to sign a consent form in the hospital before your baby can receive the Hepatitis B vaccine. The first doses of DTaP, HIB, PCV, IPV and Rota are given at your baby's two-month visit.

Our current immunization schedule is:

Newborn	Hep B #1-normally administered in hospital prior to discharge
1 Month	Hep B #2
2 Months	DTaP #1, HIB #1, IPV #1 & PCV #1 Rota
4 Months	DTaP #2, HIB #2, IPV #2 & PCV#2 Rota
6 Months	DTaP #3, HIB #3, & PCV#3 Hep B #3 Rota
9 Months	Hep B #3 if not previously given
12 Months	MMR #1 PCV#4, Hep A #1 CP #1
15 Months	HIB #4
18 Months	DTaP #4, IPV #3, Hep A #2
4 - 6 Years	DTaP #5, IPV #4, MMR #2 CP #2
11-13 Years	Tdap
11-18 Years	Meningococcal
11-26 Years	HPV (females only) 3 dose schedule 0-60-180 Day

Annual Flu shots for 6 months and older are given between October and February

DTaP	Diphtheria Tetanus acellular Pertussis
IPV	Injectable Polio Vaccine
HIB	Hemophilus Influenza type b
MMR	Measles Mumps Rubella
Tdap	Tetanus diphtheria acellular pertussis
CP	Varicella Vaccine – Chicken Pox Vaccine
Hep B	Hepatitis B
Hep A	Hepatitis A
PVC7	Pneumococcal
HPV	Human Papillomavirus
Rota	Rotavirus

Sleep Advice

General Advice

Sleep and sleep patterns are learned behaviors. Some children have innately more large motor skills, but they must learn the rules of the sports in the same way as their less motor skilled sibling. Likewise there are infants who innately sleep better. But they must learn to regulate their sleeping according to the rules of the family. All children ultimately need to learn how to fall asleep not only at bedtime but to go back to sleep the multiple times we all waken each night. No matter how bad a child's sleep pattern is, a child can be taught to fall back asleep.

General Principles of Sleep

- Establish a good sleep environment that is dark and quiet with a steady slightly cool temperature. Sleep should be in the same place for nights and naps whenever possible.
- Establish a soothing bedtime routine that involves friendly interaction between parent and child. This may include a snack followed by tooth brushing, use of the toilet, several stories read to the child in his or her own bedroom. The presence of "lovies" or favorite toys, prayers or songs, may also be comforting. Ideally the parent should leave the room while the child is still awake.
- Feed infants in the parents arms and place them in bed without a bottle or the breast.
- Put a child to bed when the child is tired enough to get to sleep.
- Teach the child the skill of falling asleep on his or her own by avoiding pacifiers, or body contact with the parent as the child drifts into sleep. This makes it possible for the child to go back to sleep independently when awakening during the night.
- Avoid changing the routine because of demands or tantrums at bedtime: these can escalate into routine problems
- Avoid TV in the child's room because it can delay sleep and become a habit needed to fall asleep.
- Try to keep bedtime, naps and morning wakeups at the same time seven days a week to avoid shifting your child's internal sleep clock.
- Naps should not be too close to bedtime
- Avoid very active play, TV, movies, or arguments before bedtime. They stimulate the child and make falling asleep more difficult.
- Get treatment and correct allergies, itching, pains, snoring or other problems that disrupt sleep

Adapted from: Howard, Barbara, and Wong, Joyce Sleep Disorders, Pediatrics in Review 22:327-341 (October, 2001)

General Information

Sleep consists of two distinct stages: rapid-eye movement sleep (REM) and non rapid-eye movement sleep (NREM). Dreams occur in REM sleep. Cycles of REM sleep alternate four or five times each night with NREM sleep. NREM sleep has four stages. The deepest, stage 4, is essential for optimal and restorative rest. If we do not get enough stage four sleep we don't get completely rested no matter how long we actually sleep.

Sleep cycles vary and mature with age. These variations explain many of the sleep differences between infants, toddlers, and adolescents. Insomnia may result from the inability to get to sleep, from restless (non stage 4 sleep), or from the inability to stay asleep. All of us awaken several times each night as we "cycle" out of deep sleep. The key to sustained good sleep is learning to fall back asleep.

Newborn

Sleep Patterns:

Total sleep time will be 15-19 hours, but newborns seldom sleep more than 3 hours at a time. Likewise, they are generally unable to stay awake more than two hours.

Coaching Good Sleep:

For safety and the avoidance of SIDS always place your baby on his back. Teach him the difference between night and day by playing with him in a lighted room. Encourage daytime noise. At night don't spend a lot of time playing with him. Keep it dark. Go to his sleep area, care for him but leave playing and talking to daytime.

By two months give him the opportunity to fall asleep on his own, snuggle to relax not to sleep. The baby who learns to fall asleep by being rocked or cuddled is more likely to be the toddler who struggles with sleep. Always falling asleep with body contact can cause sleep problems for years.

Young Infants (2-6 months)

Sleep Patterns:

By four months most babies are sleeping about 15 hours per day with 2-4 naps.

Coaching Good Sleep:

For safety and the avoidance of SIDS always place your baby on her back.
Teach bedtime and naptime schedules. This helps you learn when your baby is ready for bed. It discourages getting her to bed too tired to easily fall asleep. If your baby tends to sleep too late in the morning establish a morning wake up time that fits with

the family schedule. If she awakens at night don't rush to feed her. Continue to treat night as a time to sleep. She will soon begin to learn that nights are not for eating.

Infants 6-12 Months

Sleep Patterns:
Most babies will require 13-14 hours of sleep and 2-3 naps. By six months most babies can sleep for 6 hours, and by 12 months, 10 hours.

Coaching Good Sleep:
Firmly establish a bedtime ritual. Keep wake-ups, naps and bedtime as consistent as possible. Look for opportunities for your baby to fall asleep. Get him to bed before he is too tired.

SEPARATION ANXIETY: At about the same time your baby gets unhappy when you walk away to the next room during the day, he may awaken and act frightened and alone at night. A brief visit to the baby is okay but no playtime. Likewise as your baby learns new motor skills he may awaken and try them out. For example, as he learns to stand he may pull up and grasp the crib railing and then "get stuck" because he doesn't know how to let loose and sit down. Help him down but avoid any extended talking or playing.

Young Toddlers (12-24 months)

Sleep Patterns:
Most toddlers require 13-14 hours per night and 1-2 naps.

Coaching Good Sleep:
Refine your bedtime rituals. Constantly strive for a sleep/rest schedule.

By now it is mandatory that your baby has learned to fall asleep without body contact. A transitional object or a special toy is a great nighttime companion.

As a toddler approaches two he will act like a two year old, by testing limits. Bedtime will be no different. Whenever possible offer him choices, but only two! Do you want to go to bed now or in 10 minutes? Do you want to go to bed with your bear or your blanket?

When it is inevitable that your baby can get out of the crib, make his escape as safe as possible. Lower the crib rail or get him a youth bed. Place pillows or padding around the crib and remove all hard and sharp toys.

Older Toddlers (24-36 months)

Sleep Patterns:

Most older toddlers will require 11-12 hours of sleep and one nap, although many will do better with two naps. However, watch out that they do not nap at the expense of a good nighttime sleeping. This is especially problematic when parents work in their home or the child is in a private day care situation.

Coaching Good Sleep:

By now most toddlers are in a "Big Bed". Often the transition into a new bed is precipitated by the arrival of a new sibling. It is best if your child is allowed to adjust to the new bed well before the arrival of a new sibling. Ideally, the crib should be taken down for a few weeks and reappear with the arrival of the new baby. This decreases the feelings of being pushed out by the new baby.

Until age 4-5, most children do not establish prolonged deep sleep patterns. They tend to cycle more often than an older child or adult. Thus they tend to awaken more often. Learning to self-sooth and go back to sleep are mandatory skills.

Recognize that sleep resistance and especially bedtime resistance are normal parts of growing up. Often you will need to be accepting of additional bedtime rituals. But remember that you are ultimately in control and responsible to limit excessive bedtime ritual. There must be a line that cannot be crossed.

Monsters and dragons often appear near the end of the third year. Look for environmental causes such as TV or video games. But even these fears must be lovingly transferred back to the child for an ultimate resolution. Parents can facilitate this by the institution of rules that avoid scary and high-energy activities, especially before sleep.

Childhood to Adolescence

Sleep Patterns:

Sleep requirements will gradually decrease. The average 16 year old requires only 8.5 hours of sleep. During childhood sleep patterns become more and more dependent on situational and environmental factors. If the goals of self-soothing sleep rituals and

adherence to a reasonable sleep schedule are maintained efficient sleep will become the norm for most children. A good sleeper is not bound by rigid sleep rules but rather he or she has learned how to adapt good sleep patterns to the constant changes and challenges of daily life.

If your child or adolescent is having trouble sleeping, first review the basics. For example, often a teenager will essentially develop jet lag over a vacation period by going to bed later and later and sleeping later and later. Getting back on a school schedule is both a physiologic and emotional challenge.

Coaching Good Sleep:

Continually review the sleep environment. The older the child, the more likely that drugs and chemicals may be playing a part in poor sleep. The average child consumes a huge amount of caffeine. Caffeine is a common cause of poor sleep patterns in adolescents.

Suggested Reading and More Information

Children's physical abilities, emotional needs, and opportunities continually change as they grow. Likewise, children's sleep patterns change based upon genetic sleep patterns, and the conflicts between their needs for comfort, assurance and independence. There are many books on these subjects. A few classics include:

Mindell, Jodi, *Sleeping Through the Night: How Infants, Toddlers, and Their Parents Can Get a Good Nights Sleep:* Harper Collins, (1997) Mindell has often been described a kinder more gentle Ferber.

Ferber, Richard, *Solve Your Child's Sleep Problems,* Simon and Schuster, (1986) A classic sleep-training book. Ferber is praised and criticized for his dogmatic sleep rules.

Sears, William, *Nighttime Parenting: How to Get Your Baby and Child to Sleep,* LaLeche League International, (1999) Sears is a well known child advocate with columns in many popular magazines. He is a family bed, bedtime breast-feeding advocate. His philosophy has been criticized by some as being too lenient with resultant undisciplined children.

Durand, VM, *Sleep Better! A Guide to Improving Sleep for Children with Special Needs,* Paul H. Brookes Publishing Company, (1997) A book written by a parent of a special needs child. An excellent read for those with children whose problems that don't seem to respond to traditional approaches.

Special Circumstances

Sleep Patterns:

Up to 50% of children with ADD are reported to have sleep problems. Likewise, as many as 80% of special needs children have sleep problems.

We encourage a sleep visit for all of these special needs children.

Anatomic variations such as large adenoids or narrow nasal passages may interfere with good sleep. If your child seems to gasp or snore loudly during sleep he may not be able to attain deep efficient restful sleep sometimes resulting in anytime sleepiness or ADD- like behaviors.

There are many common sleep associated problems such as night terrors, sleep walking, sleep anxiety and unusual dreams that can be managed with our advice. Drugs are seldom necessary.

Post Partum Depression (PPD)

Having a baby changes everything. As a new mother you are now in charge of a new life while your life, your body and your responsibilities have drastically changed. Add in a sudden change in hormone levels and it is easy to understand why up to 80% of women experience feeling of stress, inadequacy and helplessness shortly after delivery. These “baby blues” are common and generally resolve in couple of weeks.

However 10-15% of women become clinically depressed within a few weeks of childbirth. Post Partum Depression (PPD) is more than anxiety and sadness. It can become so immobilizing that a mother may begin to believe that she can’t be a good mother. This inevitably leads to distancing from her baby and family. Unrecognized PPD is a desolate, painful time for all involved.

In one tenth of one percent of new mothers, PPD may progress into a Post Partum Psychosis with delusions (false beliefs), hallucinations, (false perceptions) and thoughts of suicide. These rare situations require emergency care and treatment.

If you suspect any type of post childbirth mood changes, call your doctor for further evaluation. New mothers can be screened for their PPD risk. Because social support is an important factor in the prevention of serious PPD, early evaluation of risk can enable a woman to seek ongoing support from physicians, spouse or partner, friends and family. Your physician may wish to do some hormone tests to ensure that you are in good health. If indicated, counseling and medication will speed the resolution of PPD.

PPD is a Family Problem

When a new mother is depressed inevitably the mother-child relationship is strained. Often a depressed mother may emotionally withdraw from her baby because

of guilt and fear. She will be less able to understand and respond to her child's needs. (Generally the more serious the PPD the greater is the delay in an infant's development.) These issues are magnified since the first year is a crucial time for cognitive development.

Symptoms of PPD

- Uncontrollable crying or sadness
- Anxiety or panic
- Having headaches, chest pain, heart palpitations (fast heart beats or skipped beats)
- Having numbness or hyperventilation (fast and shallow breathing)
- Inability to get restful sleep even though you are exhausted
- Abnormal eating (too much or too little)
- Feeling of worthlessness and guilt
- Loss of interest in pleasurable activities, including sex
- Being overly concerned about your baby
- Trouble focusing, remembering, or making decisions
- Not having interest in the baby
- Fear of hurting the baby or yourself

Causes of PPD

PPD can occur in any women with any pregnancy. The exact cause is unknown but the rapid changes in hormone levels associated with childbirth contribute to the risk. Exhaustion and sleep deprivation have an obvious detrimental impact on mood. Other risk factors include:

- Previous depression or a family history of depression (including severe PMS)
- Unplanned or difficult pregnancy
- History of childhood trauma or childhood abuse
- Marital problems
- Unsupportive spouse or partner, parents, in-laws, or friends
- Major lifestyle change, such as a job change or big move, around the time of the birth.
- Broken sleep patterns, unable to get enough rest.
- Feeling overwhelmed or having feeling of loss (loss of your identity, lost slim figure)
- Loss of control of time including time to spend with spouse or partner

Treatment of PPD

Of course seeking an evaluation and advice from your physician is essential. PPD may require some medical intervention. Counseling and, if indicated, medication will speed recovery. But there are other things that you can do to help:

- Get some rest. Always nap when the baby does.
- Stop trying to be a super mom. Do as much as you can and leave the rest
- Ask for help and use it.
- Don't spend too much time alone. Get dressed every day. Get out of the house, if only for a brief errand.
- Get some exercise
- Spend time with spouse or partner. Go out on a date.
- Don't be shy in asking your doctor for more help. Ask for a referral to a mental health professional who has special skill in treating depression
- Talk with other mothers, share with them and learn from them
- Join a support group or obtain more information on PPD

Suggested References:

National Mental Health Association
Phone Number (800) 969-NMHA (6642)
Internet Address: www.nmha.org

National Women's Health Information Cntr.
Phone Number (800) 994-9662
Internet Address: http://ww.4 woman.gov

National Institute of Mental Health
Phone Number(s): (301) 496-9576
Internet Address: http://www.nimh.nih.gov/

Depression After Delivery, Inc.
Phone Number(s): (800) 944-4773
Internet Address: http://www.depressionafterdelivery.com/

Postpartum Education Parents
Phone Number: (805)564-3888
Internet Address: www.sbpep.org

American Psychological Assoc.
Phone Number: (800)374-2721
Internet Address: www.apa.org

American College of OB/GYN
Phone Number: (800)762-2264
Internet Address: www.acig.com

Date ____________Length _____________ Weight _____________ HC__________

Feeding and Diet

Most newborns eat five to seven times a day and take two to four ounces per feeding either from the breast or the bottle. Initially, some breast-fed infants require more frequent nursing. After losing up to ten percent of their body weight in the first week, babies start to gain about ½ to 1 ounce per day. By two weeks they will be above birth weight. Newborns have a strong sucking reflex. This reflex should not be confused with hunger. If you do not breast feed we suggest that you feed your baby Similac Advance® with Iron. Breast-feeding mothers may later use this formula if they wish to use a "relief" bottle.

Occasionally a baby, intolerant to milk-based formula, may develop skin rashes, loose stools and irritability. Soy protein formulas, such as Isomil® can be used to replace cow's milk based formula. These formulas supply all the necessary nutrients for good growth and are lactose free.

Babies often spit up after feeding. Spitting up isn't significant if your baby is gaining weight. Spitting is different from projectile vomiting. A "spitter" lets trickles of partially digested milk, containing a few curds, run out of his mouth without any apparent effort. Often a baby seems to spit and smile simultaneously. This is in marked contrast to the forceful projectile vomiting associated with a variety of illnesses.

A baby often swallows air when feeding. These swallowed air pockets in his tummy can often cause discomfort. The best way to get rid of this air is to burp or "bubble" him.

There are three basic ways to burp an infant, and every baby seems to have his favorite. The most popular of the three is to hold baby upright with his head over your shoulder and pat or rub, his back gently until you hear a release of air. Or you may place him, stomach down, on your lap, turning his head to the side and supporting it with you hand while you rub his back with the other hand. Another way to burp your baby is to hold him in a sitting position, leaning his body slightly forward, with your hands propping his head and back. Usually, simply moving him into this position will bring up his bubble. Two or three burps, during and after feeding are usually enough. After burping, holding him on his stomach will help the release of any tiny pockets of air. He should always sleep on his back.

Special Tests

The State of Ohio requires that each baby have PKU, Galactosemia, Homocystinuria, sickle cell and thyroid tests done before discharge from the hospital.

They also do tests for many rare metabolic diseases. If your baby leaves the hospital before he is 24 hours old, these tests need to be repeated. Since these tests screen for diseases that, if undetected, cause disability or retardation, it is important that they are done in a timely manner. Please inform my nurse if he needs repeat tests. Our office will inform you immediately of any abnormal results from the State Lab.

ACTIVITY

Your baby will often lie in the "boxer" position with an arm stretched out and his fist clenched. When on his stomach he will move his head from side to side, but will be unable to raise it off the bed for any sustained time. His head will fall backward or forward when pulled to a sitting position. If startled, he will extend and then flex his arms and legs. This movement is called the *Moro reflex*.

The only language he knows is crying. At times his cry will be for special attention, and at other times he will cry just to experiment. A baby is sensitive to location and pitch of sound. Your smooth, gentle voice has already started to become a source of comfort and security.

Vitamins

Babies, in our culture, receive most of their vitamins and minerals from breast milk or formula. Exclusively breast fed babies are often low in Vitamin D. Breast milk and formula are low in fluoride. Therefore we start all breast babies on Vitamins ACD (TriVi Sol®). After six months we may suggest supplemental fluoride drops or vitamins with fluoride. As your baby's water intake increases, you should stop fluoride if his drinking water contains at least 0.7 parts per million fluoride. If your water does not have adequate fluoride, continue with the supplemental fluoride until your child sees a dentist at age three.

Anticipatory Guidance (things to watch for)

Umbilical Cord: Your baby's umbilical cord should be starting to dry. Each maternity hospital has its own schedule for cord care. If it is still present, apply extra alcohol to the base of the cord to hasten its removal. If this is not successful, we will begin to apply silver nitrate to the cord every five to seven days.

Safety: The average home water heater is preset to 147º F. At this temperature an infant can receive serious second and third degree burns in less than five seconds. Turning down the water heater temperature to 120ºF will give you time to get him out of the water before it causes any serious burns. Car seats save lives! We support the State of Ohio's *mandatory* infant and toddler care seat law. A baby learns most from modeling after his parents. Did you wear your seat belt on the way to the office today?

Infection: The prevention of disease during early infancy is just as important as the prevention of an accident. Small infants are especially susceptible to common respiratory and gastrointestinal infections. Often it is impossible to differentiate a cold from a more serious infection without cultures or special tests. We strongly suggest that you limit your baby's exposure to only the immediate family during the first six weeks. If someone has a cold, the flu, etc., they should not come to visit a new baby under any circumstances.

Date __________ Length ___________ Weight ____________ HC _____________

Feeding and Diet

At one month, babies still eat five to seven times daily. They consume, on average, three ounces of breast milk or formula per pound per day. This amounts to about four to seven ounces each feeding. The daily pattern of eating, sleeping and feeding for most babies continues to be disorganized. However, if you are lucky she may start to get into a fairly regular eating pattern. The first sign of scheduling is her expectation to be fed at a certain time. Many babies require a little persuasion to begin scheduling behavior. The establishment of a set bath time, play time, and bedtime usually is all the encouragement she will need. A few infants will resist scheduling. Let us know if one of the few belongs to you.

As adults we often vary the size of our meals. Your baby is no different. Don't worry when she eats a lot at one feeding and little at another. It isn't important for a formula fed baby to finish each bottle. In fact, pushing her to finish her bottle may predispose her to poor eating habits later in life. Problems, such as obesity or excessive snacking, are associated with mistaking every cry as a hunger cry. Many parents anticipate their baby's varying appetite and make up bottles of different sizes to cut down on both wasting formula and the temptation to overfeed.

A baby's total nutritional needs can be met with either breast milk or formula. There is no rush to start solid foods. Most babies have a natural tongue thrust until four months that makes the swallowing of solid foods difficult.

Activity

The one month old still tends to lie in the "prizefighter" position. Her legs will be less flexed than three weeks ago. While on her back she can begin to thrust her arms and legs in play. A major change during this month will be her smile when she fixates on your face. Her eyes will gradually follow a large object held in front of her, but it will be another month, or so, before she can follow an object out of one field of vision and into another.

If on her abdomen she can lift her head briefly. She needs extra support for her head (when lifting her) for the next two months. One of the most rewarding changes in her motor skills will be her ability to cuddle into your body. These early skills of rooting will be comforting to both of you.

Anticipatory Guide (things to watch for)

Safety: As your baby becomes more active, place a washcloth in the bottom of the tub at bath time to prevent her from slipping. Never leave her alone, since even at this age she may extend her arms and legs enough to slip off the changing table.

Smoke detectors save lives! We recommend the use of smoke detectors throughout your house or apartment as well as in the nursery.

Crying: A crying baby stresses everyone in the house. A baby's crying generally increases during the first six to eight weeks. As the volume and intensity increase, she can be hard to listen to and sometimes almost impossible to escape. Many babies pick one or two times a day to give their crying skills extra practice. Unfortunately, they usually choose late afternoon or mid evening for these virtuoso performances. Babies cry for many reasons. It is their primary means of communicating with you. Babies cry when they are hungry, wet, uncomfortable, frustrated and bored. It will only take you a short time to sort out most of their different cries. When she wakes wailing after a prolonged nap, she is most likely hungry. Hunger cries are characteristically rhythmic with loud bursts, a pause for breathing and then increasing intensity and volume until fed. When she is wet or uncomfortable, she will tell you with a sudden cry often more shrill than that of her hunger cry. She wants her diaper changed, a little cuddling, and then to be left alone. A cry of frustration sounds like a persistent throaty moan. It is a baby's way of saying "I've had enough" or "I don't want to play anymore". She will often use this type of cry to shut out her environment from disturbing stimuli before falling asleep. If you try to cuddle her during these times, she will become more frustrated and fall asleep only with exhaustion. Babies also cry to let off pent up tension. You can usually recognize this type of crying by its cyclical nature. Crying is part of your baby's basic temperament and not the result of any inadequacy on your part. If this pattern of crying persists, call the office for suggestions on decreasing its duration. Fortunately, this type of crying usually decreases at about three months.

The cries of pain or serious illness are difficult to describe. One cry of pain tends to come in long, loud anguished bursts, one right after another. The cry of serious illness is a strange cry that "just doesn't sound right". If either of these cries persists check your baby carefully for signs of illness or injury, take her temperature and call us.

No parent likes to hear his or her baby cry. Your immediate response to these cries should be with appropriate love and corrective action (i.e., feed her when she is hungry, change her when she is wet, etc.) If you pick up your baby and feed her and she stops crying, you are not encouraging her to cry; you are just making her happy. Comforting your baby is a trial and error process. What works for one baby may not work for another.

Too frequent attempts to calm your baby will only frustrate both of you. If she is never able to communicate her need to be alone, she will soon become dependent on you for all emotional release. This frustrates a baby and often she becomes the child who, at two years, still hasn't learned to modulate her emotional needs.

Date ____________ Length _________ Weight ___________ HC __________

Feeding and Diet

Feeding intervals for a two month old average three to four hours during the day, often stretching a bit longer during the night. He will generally take from five to seven ounces during his "big meals". Breast milk or formula will supply him with more than enough calories for rapid physical and mental growth. We discourage any solids at this age.

Safety

Many parents who stopped smoking during pregnancy are now drifting back into smoking. Secondary smoke can increase the severity and incidence of respiratory infections by 40%. If you must smoke-do it outside. Smoking in the car even when your baby is not present still puts him at risk. Your baby should still be sleeping on his back.

Activity

Your baby can now hold his head at a forty-five degree angle when placed on his stomach. As you hold him upright, he will hold his head erect for a short time. He can also briefly hold onto his rattle. He should show a definite reaction to loud sounds. A more exciting behavior will be the appearance of a social smile. He will also start to "coo" when he is rested and in a good mood. Most of his communications with you will continue to be in the form of increasingly sophisticated crying.

Many babies are now awake as much as nine hours per day and a few are sleeping six or seven hours at night. Sleep patterns are highly variable and are not related to the amount or type of feeding. Many studies show that most babies put to bed with a full tummy, dry and relaxed, but awake, will learn to fall asleep on their own by three to five months. Now is the time to start this ritual. Where your baby goes to sleep has no relationship to how long he will sleep, or how easily he falls or goes to sleep. However by age two "on their own" sleepers have consistently better sleep patterns than "rocked" sleepers.

Work toward at least two hours of supervised tummy time. It will help strengthen the back and neck muscles and avoid flattening of the back of his head.

Anticipatory Guide (what to watch for)

Baby-sitter safety: Anytime you leave your baby, no matter how briefly, give the sitter the following information:

- Where you can be reached
- Your address and telephone number (this information may be important in a 911 situation)
- Telephone numbers of our office, the hospital, the poison control center, 800-222-1222. (they should be posted next to the phone)
- Name and telephone number of a responsible relative or friend who can be reached while you are out

- Details about your house (how to lock and unlock the windows and doors, alarm systems, etc)
- When and what to feed the baby
- When you will return **(be exact and be on time)**

Siblings: As the novelty of the new addition wears off, older brothers and sisters begin to act out more of their frustrations over having to share time and attention with “the baby”. Some jealousy and friction are inevitable. You can minimize these episodes by spending individual time playing, talking and reading with each child.

Observation Skills

So far we have talked about the mechanical aspects of infant care: feeding and motor development. In recent years, we have learned more about babies capacity for being calm (regulated) and interested in the world. Stanley Greenburg, M.D. a child developmental specialist is nationally respected for his writings about the importance of observing and then interacting with babies and their developing senses. He maintains that careful observation during babies’ playtimes can help us be better parents.

Vision: It’s easy to observe your baby’s sense of sight. If his face brightens to your smile and if he can follow large objects within his visual field, you can be sure that he is using his vision as a means of taking an interest in the world.

Hearing: To test your baby’s sense for sounds, pitch your voice at a level you think he finds appealing, then “goo” and “coo” in varying rhythms and pitches. Usually you will find certain pitches and rhythms are more interesting to him than others. By discovering these likes and dislikes you can then “talk” in a pitch and rhythm that is neither boring nor over stimulating to your baby.

Touch: Wait for a relaxed time when your baby is not too sleepy before testing his sense for touch. Gently stroke different parts of his body from his toes to his head. You will notice that he becomes tense and irritable when touched in some areas, relaxed when stroked in others. His gentle and soft expressions will tell you the areas that are most calming to him. At first this will be difficult to judge. Some babies are hypersensitive to soft touch and need more firm massaging or holding. Many babies feel most secure when tightly wrapped in a soft blanket.

Position: Hold your baby vertically as you do when looking him in the face. If he brightens or becomes more alert, you know he likes this position. Do the same in other positions (at an angle in your arm, horizontal as in football carry) You will soon learn which positions are his happy balance between calmness and stimulation.

Movement: Most babies are calmed by rocking, but not all. Just as with the other tests, you must experiment to find out if your baby is calmed or stimulated by gentle rocking, bouncing, quiet dancing, etc. As you learn how your baby responds to different sensory inputs, you can use this information to calm him or interest him depending on the specific situation.

Infant Massage: Many parents find that formal infant massage is helpful in regulating their baby. The maternity hospitals periodically offer infant massage classes. Vimala McClures *Infant Massage, A Handbook for Loving Parents,* (Bantam Doubleday Del) (2000) is an excellent resource.

Date_________ Length ________ Weight ___________ HC _________

Feeding and Diet

Feeding for a three to four month old should have some defined regularity. Most babies will take from five to eight ounces of breast milk or formula four or five times daily, with many sleeping through at least one night feeding. Breast milk or formula feedings are still adequate for the nutritional and growth needs of your infant. Eighty percent of our breast-feeding mothers use a relief bottle by three months, at least on special occasions.

As a rule we suggest the introduction of supplemental solid foods at four to six months. But remember, each baby is an individual. The criteria for an early introduction of supplemental solid foods include: nursing more often than every three hours, regularly consuming more than thirty-two ounces of formula daily, doubling of the birth weight (in a full term infant) and increasing dissatisfaction due to hunger in an infant weighing more than thirteen pounds. If you baby meets these criteria, you may wish to start solids. We suggest that you first give her rice cereal.

In response to the epidemic of childhood obesity, The American Academy of Pediatrics does not suggest the introduction of fruit juices until after six months. Until age six years juice should be limited to 6 ounces each day. Juice should never be given in a bottle.

Activity

Most babies can now sit up with support. When pulled to a standing position, she will press her feet against the floor and stand briefly. Placed on her abdomen, she is able to raise her upper chest on her forearms with her legs straight out behind her. If your baby does not like tummy time get down on the floor and play with her at eye level. Our goal is for 2 hours of tummy time by 4 months. You will notice that she is becoming increasingly social: she smiles easily and spontaneously. While eating, she will stare into your face and respond specifically to your voice. Often by this age, she will start or stop crying depending on who is holding her.

While she’s awake, her hands will open most of the time. If rested, she can grasp an object put it into her hand. She may clasp one hand with the other. Since she has now “found” her hands she will spend much time watching them move, putting them to her mouth and then bringing them back into her line of vision. When she is extremely pleased, she may put all her new abilities together, so that she smiles, burbles, kicks and waves simultaneously. This “greeting” behavior will first be noted when you feed her, prepare her for an outing, etc. Soon she will learn to react with this sort of pleasure to her own motor play.

Anticipatory Guidance

Safety: A playpen is an island of safety, which many parents begin to use by three months. Many babies enjoy sitting and playing in a stable activity center. However, these devices are safe only if well designed and properly set up. Many babies have been seriously injured when placed in improperly designed or assembled playpens. We strongly discourage the use of infant walkers.

Rashes: Diaper rash isn't a single condition, but a term referring to any skin eruption in the diaper area. There are several kinds of diaper rashes, but common to each is the heat and moisture trapped inside all diapers regardless of brand or design. Typically, though not always, a rash will affect the rounded surfaces in the diaper area, such as the buttocks and the lower abdomen, sparing the folds of skin. Ammonia formed by the action of bacteria on the urine soaked skin or diaper is the usual cause. Usually this red, slightly raised rash looks worse than it feels, but sometimes it will ulcerate or bleed.

White patches inside the cheeks of the mouth in combination with fiery red papules primarily in the rectal-genital area are usually the result of a yeast infection. Both affected areas will require medication for successful treatment.

Soreness confined mainly to the rectal and genital area is usually the result of loose stools. If it occurs in a breast fed baby, mother may wish to look at her diet for new foods that may be causing increased stools. This type of rash clears spontaneously with a decrease in stools. A protective coating of zinc oxide, provides a useful measure of protection.

Raw, red areas confined to the folds of skin in the diaper area are often the result of heat and friction. They may be caused by eczema or seborrhea. If the diaper rash begins to form large blisters, please call the office, since this often suggests the beginning of a bacterial infection that left untreated could spread to other parts of the body.

To treat all types of diaper rashes, remove diapers as soon as they are wet or soiled. Try to leave diapers off as much as possible until the rash heals. Most newer brands of disposable diapers will "wick" away moisture from baby's bottom. For non-infected diaper rashes, petroleum jelly or a mild protective ointment should be applied *after careful cleaning and drying* of the inflamed skin.

Occasionally, we suggest medication for diaper rashes secondarily infected with yeast or bacteria. Use them only as directed since many diaper rash medications, if overused, will either thin the skin or cause secondary allergic rashes.

Date _________ Length ________ Weight _________ HC _______

Criteria for Introduction

Months four through eight are often referred to as the "transition period". This is when most infants begin the transition to solid foods and to more traditional regularity with their meals. As mentioned last visit, there are great variations in growth patterns and needs for supplemental foods. Your baby should have supplemental foods when she needs additional calories. Any rigid guidelines, including those based on weight alone, may not recognize the individuality of your child and her environment. Most studies show that a baby will not overeat if you allow her to regulate her own intake by feeding in response to hunger. This is not true if food is used for quieting.

The caloric intake of most term healthy infants will be regulated by the simple acceptance or rejection of foods. However, some families are genetically predisposed to obesity; their children may be unable to regulate calorie intake. If you, as parents, tend to "put on weight" easily, a rigid schedule for supplemental foods is especially inappropriate for your child's long-term weight control. One guide we use for suggesting the introduction of supplemental foods is the growth chart. Each visit we plot your baby's length and weight against age. Ideally the "percentile" for length and weight will be the same. If her weight percentile begins to drop, we will suggest extra calories in the form of supplemental solid foods, and if her weight percentile rises we will suggest the deferral of supplemental solid feeding for several weeks.

As your baby doubles her birth weight (13 to 16 pounds), she will tend to slow in her rate of growth but increase her activity. Increased activity is associated with an increase in appetite. This increased hunger will usually be your best sign for the introduction of solids. This introduction of solid foods does not mean a change in milk feeding. Breast milk or formula will continue to provide the bulk of her nutrition for the next several months. Food allergy and food intolerance may develop if solid foods are introduced too rapidly.

It is important to introduce your baby to solid foods gradually and individually. In case of a reaction, you will all sleep better if you introduce new foods no later than noon. General guidelines for the introduction of solid foods include:

- Add only one new food at a time.
- Add foods groups by twos i.e. two cereals (rice and oatmeal), two green vegetables (peas and green beans), two yellow vegetables (carrots and sweet potatoes), two meats (beef and turkey), two fruits (applesauce and pears). When she has successfully eaten all the above introduce the stage 2 dinners starting with component foods i.e. turkey and rice.
- Feed each new food five to seven days before introducing another. (peas for a week, then green beans, etc.)

- If a rash, stuffy nose, wheezing or a significant change in bowel habits occur with the introduction of a food, avoid giving this food for four to six weeks.
- New foods should be started in small portions
- If your baby spits out her new food or refuses it, do not force the issue. Try again the next day.
- Baby's develop taste preference early, therefore introduce sweet foods, i.e., fruit, and desserts last.
- No fruit juice before six months, never more than four to six ounces a day and never in a bottle.

It is not critical that a given food is cool, room temperature, or slightly warmed. It is preferable that you feed the same food at the same temperature. Traditionally, most parents feed their infants cereal and fruits at room temperature and slightly warm meats and vegetables. The heating of baby food should be done with great deal of care. Microwave heated foods often splatter and warm unevenly. Many infants have been burned by the "hot spot" in a jar of baby food.

Initially, your baby will eat only a few teaspoons of food at each meal. Take what he is likely to eat and put it into a small dish; place the closed jar into the refrigerator. Feed him from the dish and not directly from the jar. This method prevents the contamination of the baby food jar with saliva and bacteria. An opened jar of baby food should be used within three days.

Infant food manufacturers have a "safety button" on the cap of the baby food jar. Always check this button to assure the jar has not been previously opened. A vacuum should be present before you open the jar for the first time. Never use a jar that does not have a distinctive popping sound when first opened.

In recent years we have become aware of long-term risks of high blood pressure in children who consume excessive salt. Commercially prepared Stage 1 baby food has no added salt, so it tastes very bland to most adults. Do not add additional salt to his food. A long-term goal in infant feeding is to decrease the amount of salt and sugar in all our children's diets. We feel that infants given baby foods with no added salt will less likely acquire the taste for excessive salt. Likewise, we encourage the late introduction of fruits and desserts. Often in the past, children were encouraged to eat their cereals by mixing it with fruits. Too often children then acquired the taste for presweetened cereals, which they carry over into later childhood and adolescence.

*Refer back to your Crib To Bib book under "Feeding your Baby – Transitioning to solids" for more feeding guidelines.

Date ___________ Length _________ Weight ___________ HC ________

Feeding and Diet

Most babies begin the transition to solid foods by the sixth month (see pages on solid foods). All babies eat differently but on average babies will eat:

At six months:

6-8 ounces of breast milk or formula 3-5 times a day, Infant cereal 3-6 tablespoons twice a day, Vegetables 2-4 tablespoons twice a day.

By nine months:

They will eat breast milk or formula 6-8 ounces 3-4 times per day, Cereal 3-6 tablespoons twice a day,

Vegetables 4-8 tablespoons daily, Meats (or mixed dinners) 2-4 tablespoons per day.

Six months is an ideal time to introduce water in a cup. Many infants enjoy drinking fruit juice. Start with apple juice mixed with one ounce to two ounces of water. Nutritional guidelines suggest a maximum of 4-6 ounces of juice per day for the first 6 years.

Remember to let your baby decide how much she wants. Most babies vary their daily intake depending on their activity and their growth spurts. Although it is certainly easier, don't ever put her to bed with a bottle.

Activity

Your six month old has started to become a part of the sitting world. With support, he should sit for up to thirty minutes at a time. He will soon entertain himself by grabbing and grasping in all directions for anything in his reach. Although he will still need help to sit, he can occasionally get into a near-sitting position by bending himself in the middle while he rolls.

His vocalizations will still differ from mature language. He should vocalize pleasure and displeasure by grunting and growling his complaints and cooing and gurgling his pleasures. His squeals of delight will become more and more interspersed with vowel sounds. Language is a back and forth game. You will learn quickly that different sounds mean different things to your baby. He will learn to respond to your voice and different tones you use. He soon will smile at the pleasant tones and pucker at the scolding ones. You should babble back at him, imitating his sounds. After some practice he will master enough vowels to begin to imitate your sounds. The hours you spent with him in these pre-language games will soon lead to his first words.

He will use his newfound skills to play cooperative games, such as peek-a-boo, come and get me, and go and fetch. If no one is ready for play, he will lie on his back and grasp his feet and toes in a myriad of new games.

Anticipatory Guidance

Safety: A contained area or activity center continue to be essential. They will provide islands of safety for your baby to practice the swimming that precedes crawling. He can safely play with his toys while you carry on your daily tasks. It is important that the playpen or play area is away from vulnerable objects such as dangling tablecloths and light cords, the stove with pots and pans of hot liquids, and the trash with potentially lethal plastic wrappers and plastic bags.

Gates make excellent barriers to keep your baby from creeping into an unsafe room or down unguarded stairs. When buying a gate, avoid the expandable gates that have openings large enough for his head or arms. Several infant deaths have occurred with these poorly designed gates. If something is on the floor or in a cabinet near the floor, he will soon find it. Occasionally, get down on the floor and survey all the corners and crevices in which your baby might find harmful objects.

Teething: Teething usually starts during the sixth or seventh month (resulting in a front/bottom tooth) but can start as early as 4 months and as late as 12 months. Most babies cut four new teeth every four months until all 20 primary teeth are in around age 2 ½. Suspect teething when you notice drooling, chin or facial rash, biting to help relieve pressure, refusal to eat, loose stools, wakefulness, pulling or cheek rubbing and irritability.

Sore gums can be helped by using a chilled teething ring or other cold chewing object. Simply rubbing your fingers gently on her gums helps. Often when the discomfort is at its worse (usually at night), try some ibuprofen or acetaminophen.

Sleep: Many infants will show a renewed resistance to going to sleep due to separation anxiety. If this occurs, give a transitional object, such as his favorite stuffed animal or blanket. It is also very common for a baby to awaken several times during the night during these weeks of separation anxiety. We strongly urge you not to start a night bottle. Although it may provide some short-term comfort, a night bottle will only prolong his dependence on others to give him comfort at night. It also is a major cause of cavities in his teeth.

Development 6-9 months: Your baby's next visit will be in three months. So much happens during this time

Motor	**Social**	**Language**
Sits unsupported	Mimics facial expression	Makes 2 syllable sounds
Rolls over both ways	Shy of strangers	Experiments with volume, pitch
Points at objects	Responds to name	Longer more varied sounds
Stands holding on	Raises arms to get picked up	
Feeds self	Exhibits varied moods	
Drinks from cup		
Gets up on all fours		

"WHAT IN THE WORLD WILL HE GET INTO NEXT?"
Facts about childhood's greatest enemy-accidents

To a little boy or girl, everything in the world is interesting. Everything is fun to handle, explore, take apart, peek into, and quite often, to taste or swallow.

It's natural for a youngster to investigate almost everything. This is one way in which a child learns. But in finding out "the way of things", many youngsters are hurt or crippled or killed.

Even if it were possible to watch and caution a youngster constantly, it would be unwise to do so. This would make a child timid and dependent and deprive him of some of the greatest delights of growing up. But it's a mistaken belief that children are bound to have accidents, and that it's useless to try to prevent them. In fact, studies have proven that most childhood accidents never need happen. For example, consider the deadly threat of accidental poisoning. Each year several hundred thousand youngsters under age five swallow some kind of poison and as many as 300 to 400 die as a result.

These grim statistics could be drastically cut by observing these simple precautions:

STORE ALL DRUGS-especially flavored or brightly colored medicines- in a LOCKED CLOSET OR CABINET

STORE ALL GUNS IN CHILD PROOF LOCKED CABINETS- 10 children die every week from gunshot wounds. There are no safe concealed guns.

DESTROY ALL LEFT-OVER MEDICINES- Don't throw them into a wastebasket where a child might find them.

PUT ALL HOUSEHOLD PRODUCTS- such as disinfectants, insecticides, furniture polishes, bleaches, metal cleaners, lye ammonia, and acids out of reach and out of the sight of children. Replace covers or stoppers tightly.

KEEP ALL POTENTIALLY HARMFUL substances in their original containers. Don't transfer them to unlabeled containers, particularly those meant to hold food or beverages.

READ ALL LABELS CAREFULLY and follow warning directions to the letter- whether it's a label on a bottle of medicine or a container of paint solvent.

CAR SEATS SAVE LIVES- but they must be used properly to work.

IMPROVING THE SAFETY OF YOUR CHILD'S ENVIRONMENT

By planning in advance, parents often can help prevent choking. Here are some tips:

KEEP THESE ITEMS, AND OTHERS LIKE THEM, OUT OF THE REACH OF YOUNG CHILDREN:

-small batteries	-coins
-paper clips	-keys
-small toy parts	-balloons
-nails and screws	-marbles
-small toy figures	-jewelry

Be watchful when feeding your young child any firm foods unless they are completely chopped. Infants and young children don't always chew their food well, so you should cut it appropriately for them. The most common choking foods are peanuts, popcorn, hot dogs and gum.

BE PARTICULARLY CAREFUL WHEN OFFERING THE FOLLOWING:

-hard candies	-hot dogs
-nuts and raisins	-raw carrots
-chunks of meat	-grapes

Make sure that children eat at the table and not when running around the house. And make certain older siblings don't offer inappropriate foods to a young child.

Prevent your toddler from playing with toys that are age-graded for older siblings. Be sure these toys are stored out of reach of your one or two-year-old.

Contact the manufacturer if you are unsure about the age-grading of any products.

Be sure to spend sufficient time discussing safety measures with anyone who watches over your young child.

If your child swallows anything contact the Poison Control Center immediately. The phone number of the Poison Control Center is 800-222-1222 please put this number by your telephone.

Date _______ Length _______ Weight ________ HC ________

Feeding and Diet

By now your baby should be on a variety of foods. The types and amounts will vary depending on when you introduced solid foods into his diet. Most infants will want to start experimenting with finger foods by this age and will need to have finger foods before the next visit. The suggested diet does not contain any dessert items. We feel that the introduction of sweets will inevitably occur, however, we do not feel that they should become a regular part of a child's diet. Because there is so much pressure from the mass media, especially TV, to encourage excessive sugars in our children's diets, we encourage them to eat the basic food groups before the introduction of sweets. This training will prove a real asset when you are facing the tyranny of the two year olds diet choices.

The choice of milk beverage will depend on the amount and balance of foods in your child's diet. The American Academy of Pediatrics recommends, and we agree, that most infants should continue on a balanced milk beverage containing supplemental iron until a year of age.

Breakfast: Single grain or mixed cereal
Toast
Breast milk or
6-8 ounces of an iron fortified infant formula
AM Snack: Finger Foods or dairy such as yogurt, cottage cheese
Lunch: Vegetables (single or mixed)
or Vegetable-meat dinners
(stage 2 and 3 depending on teeth)
Breast milk or
6-8 ounces of an iron fortified infant formula
PM Snack: Dry cereal (Cheerios etc.), fresh, ripe soft fruit
Dinner: Meat and vegetable or high protein mixed dinners
(Stage 2 and 3)
or Cereal and fruit
Breast milk or
6-8 ounces of an iron fortified infant formula

Finger foods should be introduced cautiously to avoid choking. In a recent study of foods that caused children to choke or aspirate: grapes, hot dogs, peanuts and popcorn lead the list. We do not advise allowing children under four to eat peanuts, popcorn or hard candy under any circumstances.

Activity: Your baby is now becoming part of the moving world. He should be sitting alone and soon will be crawling with speed and ease. As he learns to stand and pull up, nothing is safe. His jabbering will start imitating words and in a short time he will combine syllables into mamma and dada. He will also begin to explore how things work and enjoy playing peek-a-boo. He will start to enjoy being read to and will mimic by holding his own books. Parallel to his desire to explore will be his increasing stranger anxiety. Often this separation anxiety will cause a major upheaval in night-time sleep.

During this phase don't push him into new situations. Alert friends and family to his new anxieties. If they move slowly and talk to him quietly he will soon warm up. During these weeks he may even get upset when you leave the room. Just accept this as another phase and move on.

Most babies will still be taking two naps, however their night sleeping may temporarily be put on hold by their newly discovered fears. Having a transitional object such as a Teddy Bear or blanket often helps. Avoid giving in to a night-time bottle or bringing him to your bed.

Anticipatory Guidance:

Pacifier: If he is still using a pacifier now is a good time to being to limit its use to bed only.

Safety: His newfound motor skills and boundless energy make him an accident waiting to happen. Safety-proof everything. He can now easily grasp dangling cords. Tie up all dangling blind cords and keep cords from hair curlers and coffee pots well out of his reach. His pincher grasp now allows him to gobble any thing that falls to the floor. Do you have the Poison Control number next to your phone? Since he can now pull up be sure you have lowered his crib mattress.

Here is a brief list of things he will do between 9 and 12 months.

Motor	**Social**	**Language**
Masters crawling	Starts to understand phrases	Simple words
Can stand when supported	Touches everything	Understands simple phrases
Climbs on furniture	Points to things he wants	Understands no
Walks with help	Likes games like peek-a-boo	Mimics sounds like raspberries and coughs
Excellent pincher grasp	Explores by touching everything	

Date _________ Length __________Weight _______ HC _______

Feeding and Diet

Many babies have now tripled their birth weight and it is time for change. By now your baby should be feeding himself a variety of foods. There is nothing wrong with continuing baby foods for convenience but more and more of her food should come from the family table. Avoid excess spices, salt and fats. Cut her food into small pieces. All babies cough and choke a little, but that does not make it any less scary. Most serious choking occurs when children are running or lying down. Keep her supervised and in her highchair for all meals. Although most babies like to eat at this age they aren't very skilled and generally make a big mess. Feed her small amounts at a time and use a huge bib.

Unless she has a milk allergy you should switch to whole milk. Ideally put the milk only in her cup and within a few weeks she will be completely off the bottle. Bottle feeding after a year is associated with a large number of cavities. Since regular milk does not have the added vitamins and iron found in formula we may suggest supplemental vitamins.

An average feeding schedule would include: 6 servings of grains (bread, cereal, rice, pasta) 2-3 servings of fruit, 2-3 of vegetables, 4 servings of milk, yogurt or cheese and 1-2 servings of meat, poultry, fish or eggs.

Activity

You can expect your baby to walk while holding and perhaps to take a few steps. She will enjoy making you laugh and wants you to read with her. She can hold out her arms to help in dressing. She has a definite sense of humor. But at the same time she will start testing our responses to her actions. Soon this negativism will increase as she explores refusal of naps or foods. You may even see a first tantrum. Over the next months she will walk with ease, feed herself with a spoon or fork, and understand simple commands while using 3-6 words.

Anticipatory Guidance

Safety: Impressive strides in motor skills combined with increasing curiosity and occasional tantrums will be your challenge. It is important to give her lots of praise and opportunities while providing her with a safe environment. It is probably time to graduate into the next size car seat. This year will be your first big test of water and sun safety.

Teeth: Her teeth should be wiped with a soft cloth. Soon she should handle brushing with a soft brush and a pea sized drop of toothpaste.

12-15 months

Motor	Social
Walk alone	Copies and imitates
Climbs up stairs	Temper when angry
Grips a crayon	Waves goodbye
Dances to music	Understands words
Favors one hand	Understands cause and effect
Runs	Begins to use objects correctly

Children all grow at different rates however there are some warning signs that bear further evaluation. Tell us if any of the following signs are present.

Does not crawl
Drags one side of body while crawling
Cannot stand unsupported
Does not search for objects that are hidden while he watches
Says no single words
Does not use gestures such as waving or shaking head
Does not point to objects