# INSTRUCTIONS
# FOR
# NEWBORN CARE
# OF

Baby's Name _____

Birth Date ___/___/___

Weight _____Length_____

Head Circumference _____ Apgar Score _____

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# INTRODUCTION

Congratulations on your new arrival! The following information and suggestions are guides in helping you with your new baby.

IMPORTANT: Please call my office at the time your infant is discharged from the hospital nursery to schedule baby's first check-up. Dr. Eisner likes to see infants within a few days of discharge from the nursery in order to check how infant and parents are doing, and in particular to check weight gain, possible jaundice and feeding problems.

During this important first year, your baby should have regular medical examinations even though apparently well. These visits give me the chance to check on your infant's growth and development, and to institute a program of immunizations which will protect your child against many serious infectious diseases such as polio and diptheria. In addition, I will be screening for possible problems, which may not be readily apparent, but which have the best prospects for correction if caught early. And, I will do my best to assist you in maintaining the best possible health for your baby through guidance and counseling on the many different aspects of your infant's care.

Please note that if your child is sick, we will always try to work you into our schedule on the day that you call. When emergencies arise outside of office hours, you will be able to reach me or one of my colleagues by calling my office number.

GETTING TO KNOW YOUR BABY

Sometimes new mothers are a little unsure of themselves at first.
As long as your infant is well-fed, well-loved, warm and comfortable, even if the service does not meet your baby's expectations, s/he will be O.K. Don't be shy about asking questions, and don't be embarrassed about things you don't know. The best parents are often those who ask a lot of questions and try to learn as much as possible.

Your baby will do some things all babies do, just because they are babies. All babies sneeze, yawn, belch, have hiccups, pass gas, cough, and cry. They may occasionally look cross-eyed. Sneezing is the only way in which a baby can clear the nose of mucus, lint or milk curds. Hiccups are little spasms of the diaphragm muscle and are very common in new babies. They may often be stopped by giving a few swallows of warm water. Coughing is baby's way of clearing his throat. Crying is his way of saying, "I'm hungry, I'm wet, I'm thirsty, I want to turn over, I'm too hot, I'm too cold, I have a stomach ache, or I'm bored." You will gradually learn to know what your baby means.

Enjoy your infant. Enjoy watching your baby grow, learn, develop, and bring a great deal of joy to you. Keep your sense of humor. Remember, parents generally survive this experience.

## THE APGAR SCORE

The Apgar score is a way of evaluating the infant at birth, devised by pediatrician Dr. Virginia Apgar. It is based on a scoring system of 0-2 points on each of 5 items: color, heart rate, tone, respiratory effort, and reflex irritability, with the best score a perfect 10. The Apgar score is routinely given at one and at five minutes after birth, and is an objective guide for immediate care of the baby right after delivery. While it is wonderful when baby gets a very high score, often infants with low scores also do very well.

## NEWBORN SCREEN, OFTEN REFERRED TO BY ORIGINAL NAME, PKU

The PKU is a test required by state law for 5 diseases or conditions which an infant could be born with: 1) Phenylketonuria, or PKU, 2) Galactosemia, 3) Thyroid problems, 4) Hemoglobinopathies such as sickle cell anemia, and 5) Congenital adrenal hyperplasia.

Phenylketonuria and galactosemia are both due to inborn errors of metabolism which require dietary modifications in order to avoid or minimize severe problems, such a mental retardation. Untreated hypothyroidism (which often has clinical manifestations of poor feeding, constipation, prolonged jaundice, and an umbilical hernia) can lead to cretinism and mental retardation if not treated early. Hemoglobinopathies such as sickle cell anemia do not generally cause problems in the newborn period. This information is helpful for genetic counseling, and for management if and when related clinical problems develop. Congenital adrenal hyperplasia can present with a host of problems, some very severe, which have a much better prognosis when caught early. The PKU test is done first in the hospital nursery, and then repeated at one to two weeks of age.

# OFFICE VISITS AND PROCEDURES; VACCINATIONS

OFFICE HOURS
Our office hours are Monday, Tuesday, Wednesday, and Friday from 8:30 A.M.-12 noon, and 2 P.M. –5 P.M., and Thursday 8:30 A.M.-12 noon.
OUR OFFICE IS CLOSED ON THURSDAY AFTERNOON.

PHONE CALLS
1) DURING OFFICE HOURS
My staff is skilled at answering questions by phone, and will give assistance by telephone whenever possible, or schedule an appointment if needed.

2) AFTER OFFICE HOURS
For emergencies after office hours, Dr. Eisner or another pediatrician delegated by Dr. Eisner may be reached by dialing our office number (713-688-8393). If the emergency is such that it cannot wait for a return phone call, please call 911, or go directly to the emergency room at Texas Children's Hospital (713-770-5454) or Memorial Northwest Hospital. Also, keep the number of poison control handy (1-800-764-7661).

OFFICE POLICIES AND PROCEDURES
In this era of "efficiency" and managed care, I make an effort not to run my practice like a factory. I try to be thorough, to answer questions completely, and not make patients and their parents feel rushed.
Our office is generally able to separate sick and well children by moving children quickly out of the waiting room and into one of the exam rooms. We will always take care of an emergency as soon as possible on the day you call. Examples of pediatric medical emergencies are fevers of over 101 degrees in an infant under two months of age, or over 104 degrees in an older child. Our office tries to see your children in a timely fashion and avoid long waits. We will also try to help you out by phone when this is possible and appropriate.

THE FRIDAY/ HOLIDAY RULE
If your child is ill on a Friday or before a holiday, bring the child in to be seen. There are few things more miserable than spending a long weekend with a very sick child, and emergency rooms are best avoided unless there is a true emergency.

VACCINATIONS
We are fortunate that vaccines are currently available that protect against serious diseases such as polio or diptheria which could result in very serious illness or even

death, and were common, dreaded diseases at one time. MAKE SURE TO GET YOUR CHILDREN VACCINATED.

The cost of vaccines has been escalating markedly in the past 15 years. Our office does provide vaccines at our cost. Your insurance may cover most of the cost. If your insurance does not cover vaccines, you may prefer to get them at a government-subsidized facility. Our office will be happy to assist you in giving you the names of facilities that would be convenient for you.

If you do obtain vaccinations at other facilities, please bring copies of all your vaccination records, so that we can keep a complete master copy. KEEP YOUR CHILDREN'S VACCINATION RECORDS WITH OTHER VALUABLE PAPERS, so that you will be able to find them when they are required for daycare, school, college, camp, and at unexpected times such as an epidemic of measles, or if your child steps on a nail.

The recommendations for vaccinations are constantly being revised and changing. Recommendations included here are as of (DATE).

# VACCINE SCHEDULE

(SEE VACCINE SCHEDULE IN BACK OF THIS BOOK)

# FEEDING: BREAST AND BOTTLE

To breast-feed or to bottle feed…that is the question.

Breast milk is the ideal food for human infants. It is easily digestible, and the antibodies which it contains may help to protect your infant against disease. It has other obvious advantages:

1. It is inexpensive.
2. There is no need for refrigeration.
3. Breast-feeding provides a special closeness between mother and infant.

In addition, there are many benefits for the mother. Breast feeding causes the secretion of a hormone called oxytocin, which in turn causes the uterus to contract. This helps to naturally decrease the size of the uterus, and the amount of bleeding, after childbirth. Also, mother's milk usually comes in whether or not a mother chooses to breastfeed.

Therefore, breast feeding on a full or part-time basis avoids the difficult problem of “drying up.”

However, there are many reasons that a mother cannot or does not wish to breastfeed her infant. If, for any reason, breastfeeding does not work out, there is no cause for feelings of guilt. Even if breastfeeding is done for only a few weeks or on part-time basis, it will be very beneficial to mother and infant. Being a mother involves much more than infant feeding. There are many ways to express devotion, and many maternal rewards to enjoy fully. And many of today's strong and healthy children were bottle-fed infants.

Whether you breast or bottle feed your infant, the following basic guidelines apply:

## FEEDING GUIDELINES

### FREQUENCY OF FEEDINGS: A schedule with flexibility

Feeding is one of your baby's most pleasant experiences. A feeding schedule should be flexible, allowing your baby to eat when hungry. Very young babies usually want to feed every 2 to 3 hours, but older babies may wait for 4 to 5 hours between feedings. Breast-fed babies will usually feed more frequently than bottle-fed babies, since breast milk is more easily digestible. By 4 to 8 weeks of age, many (but unfortunately not all) infants will begin to sleep through 1 or 2 feedings during the night allowing the parents 5 to 8 hours of uninterrupted sleep.

### HOW MUCH FORMULA OR BREAST MILK?

A good rule of thumb is to feed your infant until your infant seems satisfied. Most formula fed infants will start out taking 1 to 4 ounces every 3 to 4 hours and this amount will gradually increase. The best gauge of whether your infant is getting "the right amount" is by his growth. Each time you bring your infant in for a check-up, the growth will be charted so that you and I can both check that your child is growing appropriately.

### FEEDING TECHNIQUE/ BURPING

Infants swallow air when they feed from either breast or bottle. The purpose of burping is to help your infant get rid of this excess swallowed air, which can cause gas, and lead to the spitting up of formula. What happens if your baby doesn’t burp? Nothing terrible, but there may be more spitting up and more problems with gas. To burp your baby, hold him upright on your shoulder, or in a sitting position in your lap with baby leaning slightly forward. Pat the baby gently a few times or gently rub the back.

It is common for infants to spit up some milk during or after a feeding. Spitting up will frequently accompany a burp. This is due to the fact that when an infant burps, the air from the stomach rises and carries with it some milk that is in the upper stomach and esophagus.

Good feeding technique can often be helpful in minimizing spitting up. In addition to frequent burping, smaller, more frequent feeds as well as propping your infant up after feeding can reduce spitting up.

Two other causes of spitting up are formula intolerance and reflux (gastro-esophageal reflux), which is essentially a “weak valve” between the esophagus (feeding tube) and the stomach, and these are fairly common problems in the newborn. The distinction between spitting up and vomiting can sometimes be blurry. Vomiting can be caused by an infection such as a viral gastroenteritis, or by an obstruction which may require surgery. Pyloric stenosis is the most common example of the latter, and is caused by a markedly enlarged pylorus (part of the stomach). Excessive spitting up or vomiting is not normal, and Dr. Eisner should evaluate your infant if these problems occur.

Often, infants do not feed well during the first couple of days of life. Do not get discouraged -- it takes time to "get the hang" of feedings.

## WATER

Since both breast milk and formula contain about 85% water, supplemental water is usually not necessary and should never be forced. During hot weather, your baby may need extra fluids, and water should be offered. If he needs the fluid, he will take it, and if not he will refuse it.

## BREASTFEEDING

As with so may things in life, breastfeeding is a learned technique, and involves both preparation and motivation. You may find it helpful to talk with other women who have breast-fed, and to take advantage of the help offered by nurses, breast–feeding consultants and classes at the hospital where your infant is delivered.

In preparation for breastfeeding, women should massage their nipples several times daily, starting during the 6th or 7th month of pregnancy. A damp washcloth or soft toothbrush can be used for this, and this will help to toughen the skin and prevent sore, cracked nipples.

## MATERNAL DIET

Breastfeeding mothers must remain cognizant of the fact that they are feeding two people, and that a nutritious diet is of prime importance. A breastfeeding mother will require an additional 500 calories, 50% more calcium, 50% more protein, and an increased amount of almost all vitamins and nutrients. A nursing mother requires 6-8 glasses of liquid each day. Drinking a quart of milk each day is particularly important, since this provides the calcium which will enable your infant to develop good bones and teeth.

Below is a table which shows some of the increased daily dietary needs of

breastfeeding mothers:

table was not included

## SUBSTANCES WHICH PASS INTO THE BREAST MILK; CIGARETTES, ALCOHOL, AND DRUGS

Breastfeeding mothers must keep in mind the fact that many substances pass into the breast milk. For example, the nicotine from cigarette smoke passes into breast milk and may cause a reduction in milk production. Some studies have reported that breast-fed infants of mothers who smoke sleep less and cry more. Please remember, all infants' lungs are adversely affected by smoke in the air. Infants who breathe second-hand smoke have a much higher incidence of respiratory illnesses. If a mother does smoke, she should never do so while feeding her infant. Babies can be burned or even blinded by cigarette ashes. A woman who can be convinced to stop smoking while she is breastfeeding may be convinced to rid herself of the habit permanently. In my experience, parents may do this very difficult task for their child's sake and for their own long-term health even if they could never do this before.

Alcohol has been demonstrated to pass into the milk, and babies have been known to become intoxicated from alcohol in breast milk.

Many drugs pass into breast milk and may affect the infant. Certain laxatives ingested by the mother may cause diarrhea in the infant. Caffeine, which is in many soft drinks as well as in coffee, can cause a breast-fed infant to be irritable and sleep less. Antihistamines may have a drying effect on mother's milk. Antibiotics taken by the breast-fed mother generally cause no problems, but may cause the infant's stool to be somewhat looser. Limited data is available on the effects of different drugs in breast milk on infants, but a good rule of thumb is to take as few drugs as possible if you are breastfeeding, and to consult your physician before taking any new medications.

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Spicy foods such as tex-mex, onions, beans, and broccoli are notable for causing colic. If a breast-feeding mother notices that a particular food which she eats seems to cause gas or colic in her infant, she should avoid that food.

## GENERAL COMMENT AND INFORMATION ON BREASTFEEDING

Breast secretions are scanty until about the third to the fifth day at which time the milk comes in. The initial secretions are called "colostrum", and are rich in protein and contain a laxative-like agent; both of these are beneficial for the infant. Once the milk flow has been established, let your baby nurse 10 minutes on the breast that was used at the last feeding, and up to 30 minutes on the other breast. Breast feeds should not take so long

that they cause mom’s nipples to crack and bleed, particularly early on, as this will cause more problems with breastfeeding.

As the baby comes to the breast, grasp the dark part of the nipple between your thumb and forefinger and gently touch your baby's cheek with the nipple. He will utilize his “rooting reflex” to turn toward the nipple. Be sure that all of the nipple is taken into the mouth and that the baby is sucking on the brown area behind the nipple. If the baby chews on the nipple, he can cause it to be sore and even cracked. The milk sinus is located behind the brown portion, this is the area he needs to suck on to obtain milk. To take your infant away from your breast, press down on your breast just in front of your infant's mouth in order to break the suction.

It is a matter of preference whether to exclusively breast feed, or to give “relief bottles” of expressed breast milk or a formula such as Similac or  Similac with iron. The advantage of “relief bottles” is that this will provide some flexibility in mother’s schedule, allowing an occasional evening out. In addition, this will give father or older children the opportunity to help out and enjoy feeding the new member of the family.

FORMULA FEEDING

Formula feeding has been made safe, healthy, and efficient and can be as satisfactory as breastfeeding if handled properly. There is no need to feel that baby is being denied something that is essential to his well-being. Your baby will sense your love and respond to it regardless of how you feed him, if you hold him in your arms, talk to him and cuddle him. S/he needs your affection more than your milk.

When you bottle-feed, every effort has been made to supply your baby with a formula that contains the basic substances necessary for proper growth. You, in turn, must satisfy emotional needs, and make sure your infant gets enough to eat.

Seated comfortably and holding your baby, hold the bottle so that the neck of the bottle and the nipple are always filled with formula. This helps your baby get formula instead of sucking and swallowing air. If he doesn't waste energy sucking air, he's more likely to take enough formula. Air in his stomach may give him a false sense of being full and may also make him uncomfortable. Angulated bottles, or the playtex nurser are both very helpful in minimizing the amount of air your infant takes in. Playtex nipples have 2 holes at the base which should be kept open so that milk will flow. During the feeding period, hold the baby close, speak softly and most important, avoid any outside distractions.

Your baby has a strong, natural desire to suck. For him, sucking is part of the pleasure of feeding time. Babies will keep sucking on nipples even after they have collapsed. So take the nipple out of the baby's mouth occasionally to keep the nipple from collapsing. This makes it easier for him to suck, and lets him rest a bit.

Never, never prop the bottle and leave baby to feed himself. First of all, sucking a bottle while supine may contribute to ear infections. Secondly, this can be bad for tooth development and can contribute to tooth decay. Third, the bottle can easily slip into the wrong position. Remember too, baby needs the security and pleasure it gives him to be held at feeding time. It's time for both of you to relax and enjoy being together.

If baby falls asleep before you think he has had enough milk, burping him will sometimes waken him. If he still continues to sleep, but wakens a little later, you can let him finish his bottle at that time.

TO PREPARE THE FORMULA

SIMILAC® WITH IRON CONCENTRATED LIQUID .... 13 OUNCES

WATER ..... 13 OUNCES

1. Measure the prescribed number of ounces of warm water into a quart pitcher.
2. Add the prescribed amount of Similac® and stir to mix well.
3. Pour formula into clean nursing bottles. Divide formula equally into 6 bottles.
4. Store bottles of formula in refrigerator.

Just before feeding, remove a bottle from the refrigerator and warm it in a pan of hot (not boiling) water for a few minutes if you desire. Or use a bottle warmer. Test the temperature of the formula by shaking a few drops onto the inside of your wrist. It should feel warm but not hot. Do not warm a bottle in a microwave. Hot pockets of milk may result which could burn your infant’s mouth. In addition, the microwave may destroy vitamins in the milk.

Testing nipples regularly will save time when you're ready to feed your baby. Nipple holes should be the right size to help baby suck easily. When the nipple holes are the right size, warm milk should drip at a rate of 1-2 drops per second without forming a stream.

If nipple holes are too small, baby may tire of sucking before he gets all the formula he needs and may suck air around the nipple. If holes are too large, baby may gulp the formula, swallow air and form gas. If the formula flows too fast, baby may not get enough sucking to satisfy him.

To enlarge nipple holes that are too small, push a red-hot, size 10 or equally thin needle gently through from the outside. An easy way to prepare the needle is to put the blunt end in a cork and heat the sharp end in the flame of a match or cigarette lighter. If nipple holes are too large, the nipple should be thrown away. A small, sick or weakened baby will

require a more free-flowing nipple to insure sufficient intake with minimum effort. A healthy baby's need for sufficient sucking time will be satisfied by a less rapid flow.

SIMILAC® READY TO FEED FORMULAS

For your convenience, you may desire to use the commercially prepared formula. Similac® Ready To Feed comes in sterile bottles in 4 and 8 oz. sizes and requires the addition of a sterile nipple only. Similac® Ready To Feed also comes in 8 and 32 ounce cans.

VITAMINS

The need for vitamins is determined on an individual basis. In general, I recommend the addition of Vi-Daylin®/F + Iron .25 (prescription item) beginning between 1 and 3 months. I discuss vitamins with parents at the first office visit.

# SLEEPING

Sleep (or lack thereof) is one of the most difficult problems for new parents. A comedian once said, "Children are Mother Nature's way of telling new parents that they've had all the sleep they will need for the rest of their lives." Keep in mind: this too will pass.

Newborn infants are usually night-owls, and generally awaken about every two to four hours to feed. Exclusively breast-fed babies will often require more frequent feeds than bottle-fed babies, and will therefore awaken more frequently during the night. By 4-8 weeks of age, many (but unfortunately not all) infants will begin to sleep through 1 or 2 feedings during the night, allowing the parents 5-8 hours of uninterrupted sleep. Attempts to get your newborn to sleep through the night by waking him during the day are generally ineffective and counterproductive. Some infants will cry for about 5 minutes before going to sleep. However, an infant should never be left to "cry himself to sleep" for more than 5-10 minutes. This is counterproductive. Not only will your newborn not fall asleep at that time, he will be more anxious and fretful about being put to sleep in the future.

Infants are typically fussy and sleep poorly the first night home from the hospital nursery. The home environment is quite different from a nursery, where lights are on and there is constant activity and noise 24 hours a day; this is a big adjustment.

There are many old and new things which may help your infant to sleep: a toy, usually a cuddly toy, which makes sounds simulating the sound of mother's heart beat while in the

womb; an infant swing; “white noise” such as a washing machine, vacuum cleaner, or a car ride.

SLEEPING POSITION

When I first started my pediatric practice in 1981, the recommended sleeping position for infants born in the United States was the stomach or side. Based on one study done in England which found a higher incidence of S.I.D.S. (Sudden infant death syndrome, or “crib death”) for infants who slept on their stomachs, this recommendations was changed to positioning infants on their backs or side. More research is being done on the relationship between S.I.D.S. and sleeping position. Training an infant to sleep on the back or side may be helpful later in life, since many injuries or conditions such as pregnancy necessitate sleeping on the back or side as opposed to the stomach.

# 5. COMMON GASTRO-INTESTINAL PROBLEMS

STOOLS

Your baby may have a bowel movement after every feed or as infrequently as every 3 days and still be normal. However, it is desirable for your infant to have at least one bowel movement every day so as to expel fermenting fecal byproducts, thereby minimizing such problems as gas and spitting up. The consistency of infants' stools is very different from older children or adults. Usually, the bowel movements of bottle-fed infants look like scrambled eggs, and those of breast-fed infants are “soupy”, and yellow or brown. Sometimes, infants’ stools are green, and this does not mean anything terrible. The color of the stool in part reflects the transit time through the bowel. Green bile pigments are introduced high up in the bowel. With rapid transit time through the bowel, as is common in a newborn, or as with insults to the bowel such as diarrhea, bowel movements may remain green. With slower transit, the color of the bowel movement changes to yellow and then to brown.

A constipated infant will have infrequent, hard stools which may be in the form of small “pellets”. Insertion of a lubricated thermometer or 1/2 of an infant glycerin suppository into the rectum will be helpful in the event of a difficult stool. Infant glycerin suppositories are available without a prescription. Sometimes, constipation problems necessitate a change in formula. In particular, sometimes iron-enriched formulas may result in constipation, and may need to be changed. One to four teaspoons of prune juice or 1 teaspoon of dark karo syrup per four ounces of formula, or 2-4 ounces of apple-prune juice may be very effective in treating constipation. There are also medications for treatment of constipation which are sold over the counter, such as maltsupex and senokot. Please call our office if your infant is having a problem with constipation. I may need to check your infant to rule-out the very

uncommon anatomic causes of constipation such as anal stenosis or Hirschsprung's disease, and to recommend a plan of treatment.

Constipation is a common problem in infants. First, infants are like bedridden adults in that their mobility is low. Moving around stimulates bowel activity. Secondly, infant diets do not contain roughage. The Academy of Pediatrics recommends the introduction of solid foods at 4-6 months. Certain foods or dietary supplements may cause changes in the bowel movements, including changes in consistency, frequency, or color. For example, rice cereal, bananas, applesauce and iron tend to cause constipation, whereas prunes, plums, and green vegetables tend to have the opposite effect.

Occasionally after the passage of hard stools, bright red streaks of blood may be seen. This is generally due to slight rectal tearing and can be seen at the anal opening. Treatment involves "sitz baths" with baking soda, then gently applying A and D ointment to the anal area, as well as treating the underlying constipation problem. I would like to check your infant if this occurs, both to be sure that a fissure is indeed the source of the blood, and to reassure parents, since this is generally a frightening experience for most parents.

Diarrhea is more than loose stools; it is watery movements with little or no solid matter, and an increase in frequency. The danger of diarrhea, particularly in a tiny infant, is dehydration. Some signs or symptoms of dehydration are a sunken fontanel ("soft spot"), decreased urination, decreased skin turgor, weight loss, and listlessness. Please consult me if your infant has diarrhea since this may require attention.

JAUNDICE

Jaundice is a yellowish coloration of the skin and eyes caused by the pigment "bilirubin". The most common cause of jaundice is "physiologic". That is, it is due to the particular characteristics of the physiology of infants. Infants are born with a very high red blood cell count and these cells break down in the first weeks of life. One of the normal breakdown products is bilirubin. The job of the liver is to metabolize the bilirubin, but because the newborn liver is immature, it is often unable to handle the load, and therefore bilirubin builds up in the bloodstream.
Infants are not usually born with significant jaundice; this usually develops with time, and peaks at about the third to sixth day of life. Bilirubin levels on about half of normal newborn infants will get as high as 10 or more. A normal adult level of bilirubin is less than 1. Jaundice, or hyperbilirubinemia, is only dangerous at very high levels, at which point bilirubin could deposit in the brain and cause severe and irreversible brain damage (kernicterus). An infant with significant jaundice or hyperbilirubinemia will often be lethargic in addition to appearing yellow. The exact number value at which an infant will develop kernicterus is not known and may vary in different infants. It is now thought to be over 20 in healthy full-term infants. Treatment of hyperbilirubinemia consists of pushing fluids (either oral or intravenous), ultra-violet light (sunlight or manufactured) or in extreme cases, exchange (blood) transfusions.

Studies have shown that exclusively breast-fed infants will get significant jaundice more commonly than bottle-fed infants. This is probably because these infants take in much less fluid during the first few days of life. Mother's early milk, or colostrum, is rich in protein and good for the baby, but has been estimated at about 4-5 ounces per 24 hours for the first few days of life. Therefore, exclusively breast fed infants don't take in enough fluids to "flush the system" through urination and fecal elimination. In addition, there may be a factor in the breast milk per se that contributes to the jaundice. Because of this problem, I encourage breastfeeding mothers to supplement with formula until their milk comes in, so as to minimize this problem. After mother's milk comes in, she may exclusively breast feed if this is her preference. In my experience, this results in a much higher degree of success with breast feeding, as many mothers who encounter jaundice in their infants requiring home ultra-violet lights or re-hospitalization for their newborns give up on breast-feeding entirely.

Sometimes, breastfed infants will remain jaundiced for several weeks. Tests must be done to be sure that there is not some other cause for infant's jaundice, and to be sure as well that the bilirubin is not at a potentially dangerous level.

Since there are many other less common causes of jaundice, such as blood group incompatibilities, infections, hypothyroidism, or inborn errors of metabolism, more extensive testing may be required if jaundice is unusually severe or prolonged.

## COLIC/
## CRYING & FRETFULNESS

What is colic? Basically, it is a stomach ache with the infant often drawing up his legs and crying in pain. Since an infant cannot tell you what is wrong, it is often difficult to diagnose and is often loosely used to mean a fussy baby. It is thought to be due to immaturity of the gastro-intestinal and nervous systems. Sometimes formula changes, treatment of constipation, or medications may be effective on these infants. For parents who are struggling with a colicky infant, keep in mind : THIS TOO SHALL PASS.
In my experience, colicky infants usually become very bright young people. Even as an infant, they want to explore and learn, and appear to be bored and frustrated by the limitations of their infant condition. So keep in mind that your colicky infant may be a future Thomas Edison.

Infants almost always cry as a reaction to a problem. Your job, which is not always easy, is to find the problem and to correct it. Is your infant colicky, hungry or thirsty, wet or gassy, bored, or in need of love or affection? You will gradually come to learn and know what your infant needs.

The pacifier is a marvelous invention for quieting down infants, by satisfying their powerful need to suck. One particular pacifier, the Nuk orthodontic exerciser, was designed by an orthodontist, and fits the lips quite nicely.

At some time, most parents will encounter a period when their infant is difficult to quiet. Parents may need to try many things: feeding milk or water, checking the diaper, and then cuddling, rocking, patting the back, rubbing the stomach, and walking the baby.

Important: Infants should not be left alone to cry for long periods of time (over 10 minutes). Responding to your infant's needs, whether for food or for cuddling, will not spoil him, but will give him confidence that his needs can be met in a reliable way. An infant whose early needs are not met will be unable to establish healthful relationships and cope effectively later on in life. Also, leaving an infant to cry for prolonged periods causes nasal congestion and a hoarse voice, and may contribute to respiratory infections.

Almost all infants have a fussy period which frequently occurs in the late afternoon or evening between 5 and 10 P.M., and occasionally late at night. This is not colic, but a desire for social interaction. Your infant's desire for activity may fall at a difficult time for you. It may be dinner time and dad and the other children are home and making demands on your time. Several suggestions may be helpful. Have dad or older children entertain the baby. In addition, you can shift some of your daily routines with your baby, such as bathing or powdering, from morning to evening.

# COMMON SKIN AND SCALP PROBLEMS

CRADLE CAP

This is a scalp condition similar to dandruff. It can sometimes be prevented by washing the scalp with a mild shampoo such as Johnson's Baby Shampoo every 2-3 days. If cradle cap does develop, a shampoo designed specifically for cradle cap may be needed. Do not use baby oil or lotions on baby's scalp or face, as these may block the sweat ducts and cause a rash. Please contact our office should your infant develop cradle cap.

THE SKIN: COMMON SKIN PROBLEMS, COMMON RASHES

DRY SKIN
Dry, scaly skin is very common in newborn infants. A good lotion such as Johnson's Baby lotion should be used, but not on the face or scalp.

"STORK BITE"

These are reddish blotches on the back of the neck, on the eyelids, and between the eyebrows, and these are frequently seen in infants. This birthmark is caused by superficial blood vessels, and usually fades with time.

MILIA NEONATORUM
These are pearly-white pinhead-sized spots which occur on the faces of almost half of all newborns, and disappear within a few weeks. They are also common in the mouth, on the gums or palate, where they are called “Epstein’s pearls”.

ERYTHEMA TOXICUM / (URTICARIA NEONATORUM)
These are red blotchy areas with a central whitish or yellowish pustule resembling flea bites, which may appear anywhere but appears predominantly on the trunk. They occur in about half of all newborns, and resolve within the first two weeks of life.

MONGOLIAN SPOTS
These are flat, bluish-black birthmarks which usually occur on the lower back around the buttocks. The prevalence of Mongolian Spots varies with different racial groups, and is much more common in Oriental, Latin American, and Black infants.

MOTTLING
Mottling is a purplish discoloration of the skin in a lacelike pattern which appears when your infant is cold.

CONTACT DERMATITIS
Your infant’s sensitive skin may develop a rash after contact with many things. Some common examples are rashes from contact with mom’s perfume or make-up, dad’s whiskers, material in certain clothing, detergent, or diaper wipes. Discontinue any product which you suspect may be causing a contact dermatitis.

DIAPER RASH
Change your baby’s diaper as soon as possible after each bowel movement or wetting, with a soft cloth, soap, and water. If your baby’s skin is not sensitive to the moist towellette-type products (Chubb’s, etc.), these may be used for cleaning, especially when away from home. A thin coat of Desitin applied with every diaper change will leave a protective layer between the baby’s skin and the acid urine or bowel movements.

A common cause of diaper rash is monilia, commonly called yeast. The diaper area typically looks very red and has pimple-like, satellite lesions. This frequently requires a specialized ointment, such as the over the counter lotrimin cream or Dr. Smith’s cream, or prescription creams containing nystatin. Monilia (or yeast) diaper dermatitis is quite common in infants, since yeast is in our gastro-intestinal tracts and bowel movements. Also, monilia diaper dermatitis will commonly occur within several weeks of a course of antibiotics, since these change the balance of organisms in the bowel and may increase the relative amount of yeast.

All diaper rashes will clear up more quickly with frequent diaper changes. Air drying is desirable, if possible.

# COMMON QUESTIONS AND CONCERNS REGARDING DIFFERENT PARTS OF THE BODY

THE HEAD

Infant's heads often have funny shapes such as a "cone head" as well as "lumps and bumps", particularly after a long period of time in the birth canal, or if forceps are used. Caput (succedaneum) is a soft swelling consisting of subcutaneous edema over the presenting part of the head. Cephalhematoma is a subperiosteal collection of blood, or more simply put, bruising between the layers of the scalp. Both will resolve without treatment. Cephalhematomas may cause more problems with jaundice since there is more break-down of red blood cells, but this is a transient problem. Cephalhematomas may calcify as part of the healing process. Parents may note a bony prominence of the skull when carefully palpating the area where a cephalhematoma had been. This is not easily seen, but may become relevant when a child bumps his or her head several years down the road, and parents feel this for the first time. Six fontanels are usually present at birth; the two that the pediatrician commonly check are the anterior fontanel, on the top of the head, and the posterior fontanel, on the back of the head. The fontanels are areas with no skull bones beneath the scalp. Parents frequently ask me about bony prominences on the skull, and these frequently are suture lines of the skull. These are normal, symmetrical, and important because they make it possible for heads to grow.

THE EYES

Can my baby see? Pediatricians routinely check the "red reflex" on infants in the nursery. When the red reflex is present, there is an intact visual arc from the eye to the brain and back to the eye, and this means your baby can see. Sometimes, infants will appear to be "off in their own world" and not pay attention to visual cues. Your infant may be particularly interested in looking at faces or pictures of faces, lights, or moving objects such as ceiling fans. Bear in mind that vision involves perception based on experience. For example, sometimes adults can be confused by "figure-ground" pictures, or other pictures in an unclear context.

A common eye problem in infants is Lacrimal Duct Stenosis, or a stopped-up tear duct. This generally presents as a tearing watery eye, due to the fact that the opening of the tear duct in the nose is closed off, and therefore tears back up in the eye. I recommend massaging the tear ducts to help them to open up, and refer to a pediatric opthalmologist for possible probing of the tear duct if not open by 6 months of age. Antibiotic eye drops may be required if flare-ups of infection occur with an eye discharge with pus.

Infants often have crossed eyes in the first few months. If this persists beyond 4 months, this requires careful evaluation and may require evaluation and treatment by a pediatric

opthalmologist. This may be due to strabismus, or “lazy eye” muscles, and may require patching or even surgery to prevent loss of vision. Sometimes the eyes may appear to be crossed but may not be—called “pseudo-strabismus”. Simple non-invasive tests, including seeing whether the light reflex falls on the same place on both pupils—can differentiate these two.

## THE EARS/ HEARING

Parents often ask me, “Can my baby hear?” Sometimes, infants with intact hearing will be “off in their own world” and will not seem to respond to certain noises, even loud ones. If your infant ever responds to loud noises with the “startle reflex”, or follows the sound of your voice, then s/he can hear. It is a good idea for parents to test infant’s hearing in both ears with different noises, such as a bell. In addition, more and more hospital nurseries are checking hearing, particularly on premature infants or those with special problems.

## THE NOSE

Some nasal congestion or sneezing is common in the newborn period. Infants do not know how to blow their noses and sneezing is their way of clearing their nasal passages. Over the counter saline nose drops may be helpful for nasal congestion. In my experience, the bulb used for nasal aspiration causes irritation to the tip of the nose and to the baby in general more often than it produces results. Therefore, I generally don’t recommend it. Infants are generally extremely uncomfortable if their nose is stuffed up. Please let me check your infant if nasal congestion makes breathing uncomfortable or difficult.

## THE MOUTH

### THRUSH

Oral thrush is a common problem in the newborn period. Thrush consists of white curd-like plaques on the tongue, gums, lips, and the inside of the cheeks. Unlike milk, these lesions are not washed off by a water feeding. Infants with thrush may cry with feeding because of discomfort. Thrush, also called monilia, candida, or yeast may be contracted at birth if mother has monilia vaginititis. It may also be contacted from caretakers, particularly if caring for other infants with thrush. Since monilia is in infants’ stools, it is extremely important that caretakers use good handwashing technique after diaper changes. Please call our office if you suspect that your infant has thrush.

## TEETH

The average age for the first teeth (usually the lower, middle two teeth) is 4-6 months, but occasionally newborns have teeth at birth. It is not uncommon for the first teeth to come in as late as a year of age. There are a number of good over-the-counter products for teething, including teething rings which can be frozen, orajel, and ambusol. Sometimes, parents will blame illness on teething. Any infant with a fever over 100.6 degrees, yellow or green nasal discharge, cough, or diarrhea should be evaluated, since these are signs of possible infection.

## BREASTS

Often, both male and female infants are born with well-developed breast tissue. This is due to the maternal hormone estrogen, which your infant was exposed to “in utero”. In some infants, milk may even extrude from the nipples. This will be self-limited as long as the breasts are left alone except for gentle cleansing. Breast tissue will gradually decrease in size as the estrogen is used up.

## UMBILICUS

The umbilical cord should be cleansed 3 times daily with alcohol. The cord usually falls off when the infant is 1-2 weeks old, but may fall off somewhat later. Sponge bathe your infant until the cord falls off, so as to avoid getting the cord wet. When the cord falls off, a small amount of blood will frequently ooze from the umbilical stump. If this occurs, apply gentle but firm pressure to the area with a dry cotton ball for 5-10 minutes in order to stop the bleeding, and stop using alcohol for cleaning (since alcohol is an anticoagulant and may cause more bleeding). Hydrogen peroxide may be used instead of alcohol for cleaning the umbilical area.

An umbilical hernia is a protrusion of the umbilicus due to weakness of the abdominal wall. It rarely causes any problems, and may disappear by the time the child is age 4 or 5 and has developed stronger abdominal musculature. Do not use tape, binder, coin, or bandage for a protruding navel. This will not “cure” a hernia, but will create a warm, moist area under the bandage where a bad infection could develop.

## THE HIPS

Pediatricians routinely check infants for congenital subluxation or dislocation of the hips, both in the nursery and on “well-baby” visits to the office. These are usually easy to treat and have a very good prognosis when detected early. They are more problematic to treat later on, and are good examples of why “well-baby” exams are so important.

## THE FEET

“Turning in” of the feet is quite common in infants, and is often the result of the infant’s “in utero” position. It is of concern if the forefoot itself turns in, or “metatarsus adductus”. This may be corrected by passive stretching, reverse shoes, or casts, depending on the severity. “Clubfoot” is a more severe deformity and always requires orthopedic treatment.

“Turning in” of the feet may also occur when the feet are straight, due to turning in of the legs from the knees down, or “tibial torsion.” This is also usually due to the infant’s position “in utero” and generally corrects with time. Passive stretching exercises may be helpful in promoting correction.

## THE PENIS: CIRCUMCISION

Cultural, religious, medical, and whether dad is circumcized, are all factors in the decision of whether to circumcize a baby boy. Newborn Jewish infants undergo a ritual

circumcision, or “bris”, on the eighth day of life, as was done in the days of the Bible. The eighth day of life is also the day on which the factors which minimize bleeding are the highest, and infants with bleeding disorders such as hemophilia would be at lowest risk.

Medical reasons for circumcision include a somewhat lower incidence of urinary tract infections and cancer of the penis in circumcized males. In addition, problems including phimosis (inability to retract the foreskin, sometimes preventing urination) or balanitis (infection under the foreskin) may occur in later years, and may necessitate a circumcision at that time. One study done on Scandinavian men found that about 6-10 % of adult men had to have circumcision performed as adults for medical reasons. (Circumcisions are not done routinely on newborns in Scandinavian countries, or other countries which practice socialized medicine.) This is a major surgical procedure requiring anesthesia and a long period of recuperation in adult males. If done in the first month of life, a circumcision can be done very quickly, and without the use of general anesthesia. Local anesthesia can be used or not used, depending on the preference of the family and physician performing the procedure.

Care of  the circumcision should be discussed with the physician who does the circumcision, particularly since different techniques( the mogen, the gomco, or the plasti-bell) may require somewhat different care. In general, the circumcision should be gently cleaned with diaper changes. Vaseline should be applied for several days after the circumcision, to keep it from sticking to the diaper. Yellowish material may appear on the head of the penis. This is part of the healing process and should not be scrubbed off.

## THE VAGINA

Most infant girls have a white vaginal discharge at birth, and this is a sign that your baby girl is healthy, and responding appropriately to the high (estrogen) hormone level to which she was exposed in the womb. This will disappear in the first several weeks of life. The genitalia may appear enlarged and pigmented temporarily as well. In addition, some female infants have a small amount of vaginal bleeding between the third and sixth day of life (a “mini period”). This is normal, temporary and again has to do with the influence of maternal hormones.

## THE NERVOUS SYSTEM/ REFLEXES IN THE NEWBORN/ DEVELOPMENT

Newborn infants have a number of fascinating and amazing reflexes.  One such reflex is the stepping reflex, in which the infant seems to “walk” when held upright and inclined forward with the soles of the feet touching a flat surface. Newborn infants have sucking, rooting, and grasping reflexes.  They can see, hear, and smile—whether or not with gas is debatable. So while big brother or sister may note that all the baby does is eat, sleep, and poop, your baby in fact is “wired” with some reflexes which will later develop into more sophisticated skills.

## CHILDCARE ARRANGEMENTS/ DAYCARE

Pediatrician, developmental specialist, and author T. Berry Brazelton recommends that, if possible, mother stay home for a year with her newborn infant. For many women, this is not a realistic possibility. These suggestions are intended to help you select the best possible child-
care arrangement, whether it be daycare or a babysitter.

The biggest advantage of a babysitter as compared with a daycare is that there are generally fewer children, and therefore less exposure to contagious diseases. A frequent concern of parents is that things could happen which they would not be aware of. Sometimes simple things such as the frequency of diaper rash or the number of diapers used in a day, or the amount of formula consumed, give parents some idea of the care their infant is getting. If parents suspect a problem, a tape recorder or video camera hidden in the home may prove very helpful.

The advantage of a daycare is that licensure is required, which sets certain standards for care. For older children, it provides socialization and a school-like learning environment in which some children thrive. The disadvantage of a daycare is more exposure to contagious diseases, and often, more frequent illness.

In choosing a daycare, certain measurable traits which link to quality are experienced, trained, educated, caregivers, small class size, low child-adult ratios, and stimulating materials. Essential intangibles such as nurturing and stimulation are also important, but less easy to measure. Visiting a daycare in advance is often very helpful. Things to look for would be how often a caregiver responds promptly and comfortingly to a child's distress, or has physical contact with a child such as holding a child on his or her lap. It may also be helpful to note how many children have colds or coughs.

It may be helpful to drop in unexpectedly once your infant is in daycare or staying with a sitter.

Keep in mind that your infant cannot talk and cannot tell you if there is a problem, either with a babysitter or in a daycare. If you have a strong gut-sense that your baby is not happy or that there is a problem, change sitters or daycares.

WHEN TO BRING YOUR INFANT TO PUBLIC PLACES

***Since the immune system of infants is not fully developed and their immunities are low, I recommend not bringing infants to public places until at least 3 months of age, or until after 1 year of age if this is possible. Unfortunately, some parents will bring their children to public places such as malls even though they have contagious diseases such as colds, or even chicken pox. Vaccinations for chicken pox or measles are not routinely given until after the first birthday, so an infant is not protected. In addition, diseases which might be very minor in an older child or adult could potentially be very serious in and infant, and might require such invasive tests as a spinal test, or require hospitalization.***

STIMULATION FOR YOUR INFANT`

Help your infant to explore our bright and beautiful world by talking and reading to him, providing interesting things to look at such as colorful mobiles, and music (no rap music, please). But don't overdo it either. Like us, infants need some time to relax, unwind, "chill out". Responding to an infant's need for quiet time by such activities as rocking in a rocking chair, swinging in an infant swing, or watching "Barney "or "Sesame Street" may help your infant's disposition and sleep patterns.

PHONE NUMBERS

DR. EISNER'S OFFICE 713-688-8393

POISON CENTER (24 hours/daily) 1-800-764-7661

AMBULANCE HARRIS COUNTY 911

PHARMACY Day

Night

TEXAS CHILDREN'S HOSPITAL EMERGENCY ROOM

713-770-5454

OTHER NUMBERS