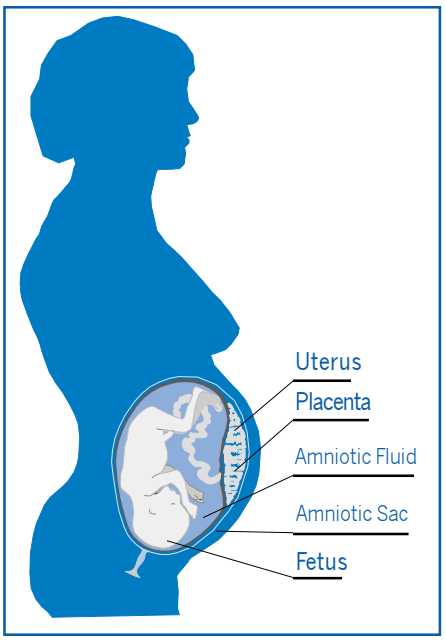
MATERNITY AND NEWBORNS

Few words can cause a wider range of emotional reactions in women than, "You're pregnant." Yet, no matter how a women reacts, ignorance is not bliss when it comes to pregnancy and childbirth. The more information known about reproduction, the better the challenges will be met.

Most women have normal pregnancies and after nine months have a healthy baby. Any discomforts during the birthing process are not a threat to the mother or baby. Sometimes, however, a pregnancy may have problems that could result in a threat to the health of the mother, baby, or both. This chapter should assist you in determining if your symptoms are normal expectations of pregnancy or if it is important to seek medical advice.

PRECONCEPTUAL CARE



Every woman of reproductive age will benefit from preconceptual consultation. Such care is provided by an obstetrician and gynecologist, a family physician, or possibly a nurse who specializes in maternity care (nurse midwife). Preconceptual care is designed to identify risks or problems before pregnancy, provide information about any special needs a woman may have to prepare for pregnancy, and make sure a woman is as healthy as possible before she becomes pregnant.

Care for the pregnancy and birth can also be provided by an obstetrician, family physician, or a nurse midwife. Regardless of the choice, the prenatal care should be started as soon as the pregnancy is confirmed. If you do not have a doctor or nurse with whom you have confidence and trust, it is important to find and establish a professional relationship early in the pregnancy.

FERTILIZATION

Approximately once each month, one of a woman's ovaries releases an egg (ovulation). If a man's sperm penetrates the egg, fertilization takes place. The sperm fuses with the egg, usually in the fallopian tube, and forms one cell. The cell migrates and begins maturation and division through the fallopian tube into the uterus and at this time, it has divided into a cluster of many cells that float until it implants into the lining of the uterus (endometrium). The outer cells start to spread into the lining to form a blood supply (placenta), right next to the mother's blood stream. The placenta provides the unborn baby with food and oxygen and takes away waste products generated by the baby. With a successful implantation, the placenta produces a hormone called human chorionic gonadotropin (hCG), which signals new life. Laboratory tests for hCG is the basis of a pregnancy test. The placenta connects to the mother and the unborn baby begins to float in amniotic fluid connected to the baby by an umbilical chord. The amniotic fluid regulates the unborn baby's temperature and acts as a shock absorber, protecting it from injury.

AFTER CONCEPTION

Common signs and symptoms that are felt by a pregnant woman are: missing a menstrual period (although you may occasionally bleed a small amount at the time of the usual menstrual period); tender, enlarged breasts; nausea and vomiting (often in the mornings); fatigue; frequent urination; and aching or heaviness in the pelvic area.

Methods of confirming pregnancy are:

- A positive urine or blood test for human chorionic gonadotropin (hCG) (home pregnancy kits, laboratory testing).
- Physical examination (enlarged uterus) confirmation may occur about four weeks following a missed period.
- Ultrasound examination (high speed sound waves) is accurate about the sixth to eighth week of pregnancy.

During the first eight weeks of development, the unborn child is called an embryo. By the end of the third week, a tube has formed (which becomes the spinal cord) and between the third and fourth weeks, the heart starts to beat and the liver and lungs can be seen through screening. By the eighth week, the embryo starts to move and is now referred to as a fetus. From the eighth week of pregnancy until childbirth, the unborn child (fetus) develops inside a sac in the uterus that is filled with the amniotic fluid that is swallowed by the fetus, absorbed into its bloodstream, and excreted as urine.

Pregnancy typically lasts 40 weeks from the first day of a woman's last menstrual period. It is divided into three trimesters, each approximately three months long. During this time, a woman's body changes in many ways to support the fetus and prepare for childbirth.

FIRST TRIMESTER

A woman's breasts become enlarged and tender. Weight gain begins, vaginal discharge sometimes increases, and the areola surrounding the nipple darkens. Urination increases, and vomiting and nausea are also common.

SECOND TRIMESTER

As the uterus enlarges, a woman often begins to look pregnant. Circulatory changes cause her heart rate to increase. The fetus often begins to move at 8 weeks, however, most women don't feel the baby move until after 20 weeks.

THIRD TRIMESTER

The skin stretches over the abdomen, the enlarged uterus presses on the bladder (which may cause slight incontinence), and sometimes very mild contractions are felt. Common symptoms at this time are fatigue, back pain, heartburn, or breathlessness.

PRENATAL CARE

Soon after confirming a pregnancy, a woman should begin regular visits to a health care provider or midwife to check on her health and the health of the growing baby.

Today, prenatal care includes maternal laboratory tests, such as blood typing, blood counts, and tests for infections. Blood pressure readings are done at each visit. Being able to detect problems at an early stage allows more time for effective treatment.

INITIAL VISIT

A complete physical examination includes a detailed pelvic examination. Other screening tests are done including blood type, blood count, tests for sexually-transmitted diseases, and urine tests (for protein and glucose).

THROUGHOUT PREGNANCY

At each visit, the blood pressure is measured and urine is analyzed. The abdomen is felt and measured for progressive growth and the fetal heartbeat is checked. Any warning signs can then be investigated and treated.

OTHER PRENATAL TESTING

The following prenatal tests may be done on selected women based on their assessment of risk and the results of screening tests. When tests are ordered, ask your health care provider to give reasons for the procedure, including the value to the pregnancy, the risks to the mother and fetus, and the cost — prior to the tests.

ULTRASOUND SCANNING

Ultrasound scanning allows a clear image of the fetus. This test is safe and reliable. Scans are very accurate at 16 weeks to check on the growth and position of the baby, the development of the body parts and internal organs (eg, heart, lungs), and confirm the estimated date for delivery.

ALPHAFETOPROTEIN TESTING

Alphafetoprotein is produced in the liver of the fetus and passes into the mother's bloodstream where it can be measured. Elevated values may suggest the possibility of twins or even an abnormality in the fetus, such as spina bifida (the vertebrae fail to close around the spinal cord).

AMNIOCENTESIS

The amniotic sac surrounds and protects the fetus. Fluid taken from the sac contains many chemicals, which are analyzed. Fetal cells may be cultured and examined for a chromosome analysis. Amniocentesis may be performed between 16 and 18 weeks of pregnancy to check the fluid for fetal abnormalities, such as Down syndrome or spina bifida. A sample of the amniotic fluid may also determine fetal lung maturity when planning induction of labor or planning an elective repeat cesarean section.

CHORIONIC VILLUS SAMPLING

The chorion is the outer covering of the two membrane layers of the amniotic sac that surrounds the fetus. A sample of the chorion may be removed after eight weeks of pregnancy. Fetal cells from this sample may be cultured for chromosomal analysis to assess the risk of chromosome abnormalities.

FETAL HEART MONITORING

During pregnancy and labor, the most reliable measure of fetal health is the heart rate. The heart rate is measured during the contractions of the uterus. Continuous electronic heart monitoring is done usually for babies who are thought to be at a higher than average risk for complications.

Home Fetal Monitoring When bed rest is recommended at home for threatened premature labor or multiple gestations (twins), the patient can wear a belt with a fetal monitor. The monitor may have an alarm system that activates if the fetal heart slows or the contractions increase. Or, it may be connected electronically with the physician's office or with an alarm to alert the pregnant woman.

OTHER FETAL TESTS

If the fetus is thought to have a blood disorder, a blood sample can be taken from the umbilical cord. If fetal problems cannot be diagnosed by other tests, fetoscopy (fetus is viewed inside the uterus through an endoscope) may be done. The procedure does carry a risk of miscarriage.

LIFESTYLE TIPS DURING PREGNANCY

A pregnant woman can help ensure the health of her baby through proper nutrition. This includes avoiding things that could be harmful to the fetus in the crucial stages of development. During the first three months of the pregnancy (first trimester), the unborn baby's organs are forming. Anything that the mother eats, drinks, and breathes is passed on to the fetus.

Do not smoke tobacco. Tobacco deprives the fetus of oxygen.

Do not drink alcohol. Alcohol can lead to fetal alcohol syndrome (mental retardation and addiction to alcohol).

Do not take any drug unless it is prescribed by a physician. Drugs can prevent proper development. Babies can be born addicted to drugs.

Avoid exposure to infection. Certain infections can cause birth defects when passed to the fetus during pregnancy or birth. The high risk infections are toxoplasmosis (a parasite found in cat feces — have someone else empty the litter box — and raw meat), rubella (if the woman has not been immuned), syphilis (venereal disease), hepatitis B (blood borne viral disease) and other sexually transmitted diseases.

Avoid hazards in the workplace. They include chemicals, gas, dust, fumes, or radiation.

Avoid household products. These include cleaning products, fumes, or paints.

Avoid high body temperatures. Take precautions to avoid illness causing fevers; avoid hot baths, saunas, or hot tubs.

NUTRITION AND WEIGHT GAIN DURING PREGNANCY

During pregnancy, a woman is really taking care of two people at once. She's eating, breathing, and being responsible for her own health, as well as her baby's health. Nutrition should be a high priority with a pregnant woman. Eating right for support of the growth of the fetus, exercising for muscle strengthening, and appropriate rest is important. Generally, a healthy pregnant woman may gain 20-30 pounds during a pregnancy.

WARNING SIGNS

Any of the following symptoms could be a sign of a problem that requires immediate medical attention:

- Vaginal bleeding can be a sign of miscarriage or a problem of the placenta later in pregnancy.
- Vaginal discharge — either a change in the type or an increase in the amount — could be a sign of preterm labor or infection.
- Cramps and back pain could signal a miscarriage or preterm birth.
- Swelling, headache, and blurred vision are often signs of high blood pressure during pregnancy.
- Severe sharp abdominal pain should be evaluated, if not quickly relieved by a position change.
- Fever or chills may be a symptom of an infection.
- Fluid discharge from the vagina may signal rupture of the amniotic fluid and impending labor.
- Decreased fetal movement for 12 hours after week 28 should be investigated by a physician.

COMPLICATIONS OF PREGNANCY AND/OR LABOR

ECTOPIC PREGNANCY

If the fertilized egg is implanted outside of the main cavity of the uterus, the pregnancy is known as ectopic. Ectopic pregnancies most commonly occur in a fallopian tube. The cause is not always known. Symptoms are severe pain and bleeding when the conceptus enlarges beyond the size of the tube. Rupture of the tube may occur.

MISCARRIAGE

Also called spontaneous abortion, miscarriage is the loss of the pregnancy before week 20. It occurs in 15 percent of pregnancies, usually in the first trimester, or sometimes before the pregnancy has been confirmed. The reason may not be known but the common causes are fetal chromosomal abnormalities or developmental defects. The risk of miscarriages increase with the mother's age, chronic illness, and infections.

PRETERM LABOR

If labor begins before the 37th week of pregnancy, it is called preterm labor. Sometimes the labor can be stopped to allow the fetus more time for growth and development. Treatment includes bed rest and agents that relax the uterus. The goal is to prolong the pregnancy as long as possible until the fetus is fully developed. Today, there is hope with newborn intensive care units (NICU) and drugs available to help a premature infant survive.

PLACENTAL PROBLEMS

In order to nourish the fetus, it is essential to have a healthy placenta that develops early in the upper wall of the uterus. Problems may occur if the placenta detaches from the uterine wall. This may lead to sudden abdominal pain and intense bleeding through the vagina (abruptio placenta). Or, the placenta may have implanted over or near the cervix rather than the upper uterus (placenta praevia). These conditions usually result in a cesarean section.

MEDICAL CONDITIONS

Both high blood pressure and diabetes associated with pregnancy can occur in patients who previously were not affected.

TOXEMIA/ECLAMPSIA

High blood pressure, protein in the urine and edema (swelling) occur in a syndrome called toxemia. If not promptly treated, it may advance to eclampsia (convulsions and unconsciousness). The most effective management of severe toxemia for both the mother and the fetus is delivery of the baby.

RH DISEASE

Rh factor is a substance (antigen) in the blood cells of most people. A person with this factor is Rh+ (Rh positive), and one without this factor is Rh- (Rh negative). A type of anemia occurs in a newborn who is Rh positive and the mother is Rh negative. The blood of the mother and fetus mix in the placenta and the mother's blood reacts to the fetus' blood as a foreign substance (antigen) and destroys the red blood cells in the fetus' body. This causes high levels of a bile substance (bilirubin) in the fetus, the amniotic fluid, and the placenta. During pregnancy, bilirubin levels are tested in the amniotic fluid, and if this type of anemia is found, the fetus can be given a transfusion inside the uterus or immediately after birth. If it goes untreated, a fatal condition (erythroblastosis fetalis) occurs. It is preventable by giving the mother Rh Gam, an immune globulin, which blocks the antigen-antibiotic reaction before it occurs. It is important that all women know their Rh type.

GESTATIONAL DIABETES

This is the same form of diabetes that occurs in nonpregnant patients. Insulin is sometimes necessary to treat the condition. This usually goes away after the delivery but the mother is at higher risk for later development of diabetes. The baby is at risk of being excessively large (macrosomia) and at increased risk of sudden death in utero (stillborn).

LABOR AND DELIVERY

No two women experience labor the same. Each labor is different. What is important is the understanding of the stages of labor and the options for the safest delivery of the baby. There are three stages of labor that are determined by the fetus' progress.

- The first stage is the time between the onset of regular contractions until the cervix is completely dilated.
- The second stage is the progress of the baby presenting part downward through the pelvis and out of the vagina.
- The third stage of labor is the delivery of the placenta.

Once the first stage of labor is established, the patient goes to the labor and delivery room for management and monitoring.

PAIN RELIEF IN LABOR

Natural childbirth means that the mother is awake, aware, and undrugged. Those patients who successfully complete this type of labor and delivery usually have training in relaxation techniques. Those patients anticipating natural childbirth should read and select the most comfortable and available methods for training and preparation. Pain relief is often needed in some form and women in labor should not feel guilty about this need — pain varies from patient to patient.

Epidural Block An epidural block relieves pain in labor by giving an injection through the back and between the spine to the epidural space surrounding the spinal cord. This provides anesthesia around the lower abdomen and pelvis but not the lower extremities. A higher block occasionally slows labor and the labor needs to be stimulated by a drug called an oxytocin. Using this method, the baby's heartbeat should be continually monitored. If a cesarean section is needed, the block is simply extended during the surgery.

Spinal Block The spinal block uses a needle directed into the spinal canal and is used only once. It lasts about one to two hours and is most frequently used for the delivery phase. It can be used with both a vaginal assisted delivery or a cesarean section. Complications are similar with the epidural block, but the incidence of post spinal headache is greater.

Pudendal Block This is an injection of local anesthesia, used shortly before the delivery, by a guided needle to the pudendal nerve near the upper vagina. It provides perineal anesthesia around the opening of the vagina where an episiotomy (cutting the vagina to enlarge the opening) may be used and later repaired.

General Anesthesia Medications that produce loss of consciousness are used, most often, for cesarean sections. The risk is vomiting and aspiration into the lungs (do not eat when in labor) and sedation to the fetus.

PAIN MEDICATION

Drugs can be injected into the muscle or veins during labor to reduce pain. The side effects are slowing of the labor process and transmission of the drugs across the placenta to the fetus. The drugs are usually given in small doses just before the delivery.

CESAREAN DELIVERY

In a cesarean birth, the baby is delivered through an incision in the mother's abdomen. Sometimes the cesarean section is "scheduled or elective." Other times, the cesarean section is done urgently to treat problems that may occur during labor. Because cesarean sections are a surgical procedure, recovery takes longer and there may be an increased anesthetic risk to the fetus.

THE MOTHER, AFTER DELIVERY

Pregnancy and having a baby is hard work. New mothers need rest, sleep, and a quiet environment. At the same time, however, she should have the opportunity to touch and nurse the newborn baby at leisure. The mother's physical changes that should be expected are:

Weight Most women immediately lose about 13 pounds after birth. Weight loss can be dramatic in the first six weeks following a delivery. If you are nursing, however, the calories needed to produce milk may slow this down.

Breast Feeding Those mothers who choose to breast feed should continue their prenatal vitamins and iron, and ingest plenty of calories and liquids.

Cramps As the uterus returns to a normal size, some cramping can be expected. The cramps may be associated with breast feeding since the hormone "letting down" the milk is oxytocic and stimulates uterine contractions (cramping).

Painful Urination After a delivery, the bladder, bowels, and perineum are tender and sore. Sitting in a warm bath with a cup of baking soda will relieve these irritations. Drinking plenty of water to deconcentrate the urine is also helpful. If it persists, or if there are fever and chills, consult your doctor.

Bleeding Bleeding should gradually stop over six weeks. If the bleeding becomes excessive (more than a normal menstrual period) and is associated with cramps, fever, and chills, promptly consult your physician.

Bowel Movements It may take a day or two after delivery to have a bowel movement. Drink lots of liquids and take a mild stood softener or laxative. Avoid straining for bowel movements or requesting harsh enemas — it worsens hemorrhoids and may cause hemorrhoidal bleeding.

Episiotomy This is an incision to allow more room for the delivery. Stitches used to repair the episiotomy take up to two weeks to heal and dissolve. Soreness can be relieved by applying ice to the area initially, and bedrest. Warm sitz baths are helpful.

Sexuality A woman can resume sexual intercourse as soon as the perineum has healed. Reduced sexual desire, due to hormonal changes of the delivery and breast feeding, is a temporary feeling. Do not be alarmed if extra lubricant is needed temporarily while nursing. Keep in mind that even though menstruation has not occurred since the birth, or you are nursing and don't expect menses, you still may become pregnant.

Postpartum Depression Due to hormone changes, for those who are vulnerable to depression, the postpartum period may be difficult. It is aggravated by hormonal changes of the delivery and breast feeding. If it isn't simply "the blues" and is debilitating, early help from your physician should be sought. There is very good medication to help. Unfortunately, most antidepression medications cross into the breast milk and breast feeding may have to be stopped for the safety of the baby. The prognosis is favorable for complete recovery in most cases.

THE BABY, AFTER DELIVERY

Immediately after delivery, suction is applied to the baby's mouth and nose to remove mucous and blood that could interfere with breathing. The umbilical cord, between mother and child, is cut. Your baby receives its first examination in the birthing room by the nurse, pediatrician, or family physician to be sure there are no serious problems.

The baby may be quiet or screaming at the top of its lungs and flailing its arms and legs. The skin will probably be red and mottled or even discolored. The baby at first may be blue. This is normal immediately after birth. Within five to ten minutes after birth, the baby becomes increasingly pink. You may notice that the face of the baby, particularly around the eyes, is swollen. This is often caused by silver nitrate or an antibiotic placed into the eyes to prevent infection. It is temporary. Although the baby's head may be misshapen by the delivery, it will shape up in just a few days. On top of the baby's head is a soft spot, which will close in about nine to 18 months.

By this time, your baby is one minute old and will have been evaluated by an APGAR test, which is an assessment of the baby's general health. The test is repeated again in five minutes. To prevent internal bleeding, the baby is given an injection of Vitamin K. When this is done, the baby will often be given to the mother wrapped in warm blankets. If clinically necessary, the baby is promptly transferred to the nursery for close observation and attention. The management of a newborn in a hospital or birthing center now promotes "immediate bonding" between the mother and baby with amenities such as rooming in and early discharge of the mother and baby to return to a family environment.

THE NEWBORN'S FIRST MONTH OF LIFE

There are few things as exciting as the birth of a baby. The baby has needs that take precedence over your own and depends on you for virtually everything. Some tips on getting through the first month are:

1. Relax!
2. If the baby naps, a mother should too.
3. Forget about preparing gourmet meals.
4. Do not feel duty-bound to entertain all visitors who come for a peek at the baby. As you and your baby begin to adjust to being home together, you will find that things get easier. Even though the baby sleeps most of the time, and seems to be alert only for short intervals, you will soon discover how social the baby is during these brief moments. Holding, cuddling, quietly talking, and especially eye contact are crucial to building a close relationship between mother and baby.

Although the baby seems helpless, remember the baby is born with all the basic senses. He or she can hear, smell, and communicate by crying. Most new parents have many questions. Remember, your physician is a great resource of information and you also have the opportunity to read a number of easy, readable books to help.

NORMAL GROWTH AND DEVELOPMENT

Weight The average newborn weighs between 5 1/2 to 10 pounds, and is between 18 and 22 inches in length. By the time the baby leaves the hospital, it probably will have lost anywhere from 6 to 10 percent of its birth weight because of fluid loss and initial lack of appetite. At the end of the first month, the baby usually weighs two pounds more than it did at birth.

Posture and Motor Capabilities The posture of the newborn simulates the fetal position. At birth, the baby can move its head from side to side. When held on one's shoulder, it can raise its head.

Vision Newborns can see and focus on objects eight to twelve inches from its face. At one month, the newborn continues to stare at objects but will not reach for them. The baby is capable of eye-to-eye contact.

Hearing Babies are born with their sense of hearing and can distinguish volume. A sharp noise may startle the baby, whereas a soft voice may cause the baby to smile or come close to smiling. At one month, the infant can distinguish between voices.

Feeding The newborn is hungry at irregular intervals. It is not uncommon for a baby to show little interest in feeding, particularly in the first few days after birth. By the end of the first week, most infants eat every two to five hours. At one month, feeding is still a bit disorganized. Because breast milk is digested more quickly than formula, a breast-fed baby may eat as often as every three hours during the day and have two night feedings.

Erratic Feeding Do not be alarmed if the baby wants to nurse on each breast for 40 minutes one day and ten the next. By two weeks of age, your newborn may drink 18 ounces of milk per day. At one month, the infant may increase the amount to 25 ounces per day.

Bowel Movements The first bowel movement usually occurs in about 24 hours and is called the meconium stool. It is composed of intestinal secretions and amniotic fluid and is dark green. After the baby begins to drink milk, the meconium stool is replaced by transitional stools, usually on the third or fourth day of life. These stools are usually greenish brown and may contain milk curds.

Sleeping The newborn has an alert period immediately after birth. After this hour or two of alertness, the baby sinks into a deep sleep. During the next several days most newborns sleep anywhere from 14 to 18 hours a day and are alert for only 30 minutes out of every four hours. No matter how little or how much your baby sleeps, he or she is a light sleeper. Even though asleep, you may see the baby grimace, cry out, startle, and move about — all without waking up.

Crying Crying is the first method of communication. Usually it causes everyone to come running. The amount of crying is variable but the most predictable reasons are hunger, being wet, or some babies just cry more often.

SIGNS AND SYMPTOMS OF NEWBORN ILLNESS

Illness can be indicated in many ways. Excessive crying may or may not be indicative of an illness. The most common indicators:

FEVER	Fever in the newborn is usually taken with a rectal thermometer. If the fever is over 100.5 F. with associated listlessness, contact your physician.
EXCESSIVE CRYING	Some babies, who are not ill, cry more than others. Some babies have colic (gas attacks) with the legs drawn up to the chest and the abdomen distended. Burping, rocking, or walking your baby often helps a colicky child. If nothing seems to work and the crying continues for several hours, the baby may be crying because of an illness.
BREATHING DIFFICULTY	This is a definite sign of an illness. If the baby is congested, wheezing, or having difficulty breathing, there may be a respiratory problem. Sneezing in an infant is common and normal.
DIARRHEA	This is a serious condition and if untreated, may lead to dehydration. Babies usually have loose stools but diarrhea describes an increased number of stools and a change in consistency (eg, if the diarrhea loses the appearance of curds and becomes watery). A baby with diarrhea usually appears ill.
VOMITING	This is not the gentle spitting up after eating that occurs in most newborns. True vomiting is when the contents of the stomach are propelled forcefully from the baby's mouth. Although occasional vomiting is not unusual, if the vomiting becomes frequent or contains green bile or blood, contact a physician.
LETHARGY	This may be a bad sign. If your child is suddenly uninterested, limp, and sleeping more than usual, an infection or disease may be present.
LACK OF APPETITE	This occurs in most sick newborns. A baby who has been eating well, but suddenly refuses the bottle or breast, may be ill.
JAUNDICE (yellowing of the skin)	This is not uncommon immediately after birth. If it persists for more than a few days after birth, or if your newborn becomes jaundiced after you are released from the hospital, an infection or other disorder may be present.
FAILURE TO MOVE AN EXTREMITY	This may be a sign of a fracture, sprain, or nerve injury.

If your baby has any one of these symptoms, call your physician.

THINGS TO WATCH FOR

DIAPER RASH

Diaper rash is a rash in the region covered by the diaper. The treatment is to change the diaper more often and cleanse the bottom with a soft cloth with warm water and soap each time the diaper is changed. Stop using rubber pants during the period of the rash. Petroleum jelly or zinc oxide paste may be applied to the skin. If the rash persists, inform your physician.

CRADLE CAP (seborrheic eczema)

This is dry, scaly skin of the scalp. The cause is unknown and may be present for the first year of life. The best treatment is daily washing with soap and water. You may want to apply some baby oil on the affected areas.

INFANTILE ECZEMA

This is a rough, red, patchy rash that usually is associated with dry (atopic dermatitis) skin. Light red or tannish pink patches of rough scaly skin appear. Typically, a baby will try to rub the patches against the crib due to the tremendous itching. If this is suspected, see your physician to exactly define the diagnosis and recommend treatment. Do this before the eczema becomes crusted and infected.

BIRTHMARKS

Birthmarks in children are common and come in a variety of presentations. These are most often benign.

THRUSH

This presents as a thin layer of milky matter on, in, and around the baby's mouth. This is a mild fungal infection. If you suspect the baby has thrush, call your physician.

UMBILICAL HERNIA

You may notice a bulge around the navel that may protrude when the baby cries, coughs, or strains. This is failure of the ring around the navel to close after the umbilical cord stump drops off. Usually there is nothing to worry about unless it enlarges. It most often disappears after six months. If it persists or enlarges, there is a risk of the intestine getting caught in the pouch and surgical correction may be necessary. It is safer to do the surgery after one year.

PARENT'S DECISIONS

CIRCUMCISION

Not long ago, babies were circumcised routinely after birth. It was believed that the surgical removal of the foreskin of the penis helped in keeping it cleaner and prevent problems, such as penile infections and cancer. Today, evidence suggests that circumcision is not medically necessary. The teaching of good hygiene eliminates the old indication. Most of the circumcisions are done for religious or cultural reasons. Before the decision is made, consider all of the pros and cons. The surgery is irreversible and the risk of a complication should be considered.

BOTTLE OR BREAST FEEDING

As in all decisions about health, there are various views. There seems to be two alternatives. Regardless of the decision, mothers should not feel intimidated by enthusiasts at either option. Regardless of the choice, when the style of feeding is decided, there should be no guilt since either style, given with love and caring, is good for the baby.

Breast Feeding The advantages of breast feeding are numerous. Human breast milk has the perfect ingredients to develop the maturation process of the baby. Mother's milk contains many active enzymes that help the infant to digest milk and help the infant's intestinal tract to mature and absorb nutrients. It also contains antibodies to prevent infection. This seems to reduce the incidence of diarrhea, ear infections, and respiratory infections in newborns. This group has fewer admissions to hospitals and fewer allergies. The benefits for the mother are a lower incidence of breast cancer, ovarian cancer, and less likely to be obese.

Formula Feeding The alternative to breast feeding is formula feeding. Today, commercially available formulas have proven adequate nutrition as determined in the laboratories. Most formulas (except hypoallergenic ones) are made with cows' milk, which is altered to make it easily digestible for the infant. Preparing a formula is not as handy as breast feeding, keeping it sterile, and warming to the perfect temperature. In the world of career women, formula feeding has the advantages because a care giver can feed the baby. In some ways, formula feeding is easier because others can take over, as in the middle of night when sleep is so important to a tired mother, or in women who have to go to work to support the family.

NEWBORN CONCERNS

Everyone would like the enjoyment of the newborn to be perfect, but unfortunately this is not the case. In a small number of infants, problems with various degrees of severity do occur. When the problems are identified and clarified by a pediatrician, adjusting and planning is less complicated.

Feeding Problems Maybe your infant simply won't eat, eats very little, or falls asleep during the middle of feeding. If this occurs, just relax. If your breasts are uncomfortable, the use of suction removes some of the breast milk. When the baby comes home from the hospital, one or two days of poor feeding is not disastrous. Your pediatrician will prescribe vitamins and minerals that help to sustain the nutrition of the baby.

Not Eating Enough Do not expect the baby to eat at the same time or eat the same amount each time. Begin to trust the infant to know how much to eat.

The Infant Falls to Sleep While Feeding and Wakes Up Crying This may signal an upset stomach after feeding (as colic or a gas bubble) rather than a cry for more food. Burping and rocking the baby seems to help in these circumstances. If that helps, allow the baby to go back to sleep rather than try to feed again.

The Underfed Infant This is a baby that is restless, cries a lot, may be constipated, is unable to sleep, and most importantly, fails to gain weight. This baby may respond to smaller, more frequent feedings; increasing the size of the nipple holes (if bottle feeding); or increasing the amount of liquid and calories ingested by a breast feeding mother.

When the Infant is Overfed An overfed baby usually regurgitates.

Loose Stools This is normal for newborns. It is only a problem if the stools become watery.

Failure to Thrive The average weight gain is two pounds per month, but your baby may gain more or less. If your baby is not gaining weight, your pediatrician may suggest changing the formula or style of feeding.

Genetic Disorders Genetics is the study of heredity. Genetic disorders are caused by the absence or excessive number of chromosomes. These disorders occur in one of 150 births. The most common disorder is Down syndrome.

Birth Defects These may occur from chromosomal or simple mistakes that occur in the division of the cells during development. Cleft lips, palates, and congenital heart disease are examples. All birth defects should be investigated to determine future reproductive planning.

Abnormal Hands and Feet When an infant is born with an absence of a finger, toe, or hand, he/she should be referred to a specialist as soon as possible. Extra fingers (polydactyly), fused fingers (syndactyly), and clubbed hands and feet are examples of congenital abnormalities and many of these abnormalities can often be corrected.

Skeletal Defects Congenital dislocation of the hip and dwarfism are examples of this congenital anomaly.

Defects of Sexual Organs In boys, phimosis (tightness of foreskin) resulting in the inability to pull back the fold of skin that covers the uncircumcised penis. It can result from infection or congenital causes. The treatment may require circumcision. Undescended testes is the absence of the testes in the scrotum, and is often associated with a hernia. An operation later in life is usually recommended to correct the problem.

In girls, hormone changes in the mother before birth often influence these disorders. Enlarged breasts, enlarged clitoris, and vaginal discharge or bleeding are examples. Usually this is a temporary condition.

The term ambiguous genitalia is used to describe ambiguous or absence of characteristic external genitalia or the baby may have both ovaries and testes. When the sex of a newborn is questioned, careful evaluation by a specialist is needed to clarify the diagnosis for planning the baby's development.

MATERNITY "RISK MANAGEMENT"

Maternity risk management is significantly improving maternal and child health and is well worth undertaking. This may be done by your attending physician(s) or may be offered by consultive services, such as a hospital based program. Regardless of the approach, education to both parents about preconception, prenatal, postpartum, and postnatal care management is a wise investment.

AVAILABLE RESOURCES

The American College of Obstetricians and Gynecologists, 409 12th Street, SW, Washington, D.C. 20024 or American College of Nurse-Midwives, 1522 K Street NW, Washington, DC 20005.

To check the credentials of the physician specialists, phone the American Board of Medical Specialists toll free number 1-800-776-2378. (Specialists have four years additional training in the specialty.)

REFERENCES

The Good Housekeeping Illustrated Book of Pregnancy and Baby Care (Hearst Books)

Dr. Spock's Baby and Child Care (Dutton)

Your Baby and Child From Birth to Age Five (Knopf)

What To Expect When You Are Expecting (Workman)

Caring for Your Baby and Young Child, Birth to Age 5 (American Academy of Pediatrics, edited by Steven P Shelov, MD, FAACP.)