

A Guide for Pregnancy, Childbirth & Beyond



*Compliments of
Dr. Robert Edwards, III
304-327-1890*

Dr. Robert Edwards, III, and his office staff welcome you to our services and wish you a happy and healthy pregnancy. Our staff is available to offer information and answer questions you may have. This book is yours to refer to throughout your pregnancy, delivery, and postnatal experience. We hope you find the information helpful.

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PRENATAL VISITS – INTRODUCTION

Regular prenatal visits are important to the health of both you and your unborn baby. If you cannot keep a scheduled appointment, please call to cancel and reschedule. Dr. Robert Edwards III's office number is 304-327-1890.

PROBLEMS BETWEEN CLINIC VISITS

If you have a problem or questions between clinic visits, feel free to call between 8:30 am and 4:00 pm. At any other time, please call 304-431-5018 (Labor & Delivery). Nurses and doctors are available there 24 hours a day. If you have an emergency, please go to the Emergency Room at Princeton Community Hospital. An OB doctor will be notified when you arrive.

SUPPORT SERVICES AVAILABLE

Assistance for specific income groups is available through WIC, a supplemental food program for women, infants and children. If you need assistance, please ask about WIC at the WIC Program Office at 304-325-3922.

There is assistance for specific income groups available also by Medicaid. The Medicaid Worker at Princeton Community Hospital can discuss this with you by calling 304-431-5105.

If you need help with your diet or need a special diet during your pregnancy, you can make an appointment with a nutritionist. The nutritionist will discuss diet with you and help you with the planning of your meals.

NUTRITIONAL NEEDS IN PREGNANCY

Good nutrition is extremely important during pregnancy. Your daily food intake should provide the essential elements to maintain your own body and to help your baby grow and develop.

Well-balanced meals planned around the four basic food groups are a necessity. The caloric requirement during pregnancy is approximately 200 calories greater than the pre-pregnant need. As your pregnancy progresses, the growing uterus places pressure on the stomach. Therefore, small, frequent meals are recommended. You may want to try eating three meals and three snacks a day rather than three large meals. Eating a nutritious snack in the evening also helps to provide nourishment for the baby during the night.

Weight Gain during Pregnancy

Ideally you should gain approximately 22 to 27 pounds during your pregnancy. You should not try to lose weight during pregnancy. Likewise, excessive weight gain is discouraged, as it is not healthy for you or your baby.

Ideal weight gain

First trimester	little weight gain; 2-5 lbs.
Second trimester	10-12 lbs.
Third trimester	10-15 lbs.

Components of weight gain (approximate)

Baby	7 lbs.
Placenta	1 lb.
Amniotic fluid	2 lbs.
Enlarged uterus	2 lbs.
Enlarged breasts	2 lbs.
Increased blood volume	3 lbs.
Increased water and fat	6 lbs.
<i>Total average</i>	23 lbs. (varies individually)

Nutrient Needs

Protein

Protein promotes the growth of tissues and organs and aids in the production of breast milk. Six to eight ounces are required each day. Good sources of protein include meat, fish, poultry, eggs, milk, and cheese. Vegetable protein includes dried beans, dried peas, lentils, nuts, and peanut butter. (With vegetable protein, the food must be complemented with other foods so that the body can make use of essential protein needed. For example, combine peanut butter and bread, beans and cornbread, lentils and rice.)

Iron

Iron promotes blood formation and helps to maintain iron stores. Approximately 60 mgs. of elemental iron are required per day (iron supplement may be needed.) Good sources include red meats, liver, oysters, clams, egg yoke, legumes, and nuts. Fair sources of iron include fruits and dark-green, leafy vegetables.

Folic Acid

Folic Acid promotes formation of blood cells and tissues. One mg. per day is provided in prenatal vitamins. Food sources include green, leafy vegetables, meats, fish, poultry and wholegrain cereals.

Calcium

Calcium promotes the growth of skeletal structure and aids in the production of breast milk. Four servings from the milk group are required each day. Good sources of calcium include milk, ice cream, cheese, cottage cheese, and dark-green, leafy vegetables.

Vitamin A

Vitamin A promotes tooth formation and bone growth and helps develop healthy skin and good vision. One or more servings from food sources are required each day. Good sources include egg yolk, fortified margarine, butter, liver, whole milk, cream, and dark-green and deep yellow vegetables.

Vitamin C

Vitamin C promotes the development of connective tissue, bones, cartilage and muscles and aids in the absorption of iron. One or more servings of food sources are required each day. Good sources include citrus fruits or juices, cantaloupe, broccoli, tomatoes, spinach, greens, collards, and turnips.

BASIC FOUR FOOD GROUP

Meat Group – Choose 6-8 ounces per day; each portion equals one serving

Beef	2 ounces
Pork	2 ounces
Poultry	2 ounces
Hot dog	1 ounce
Liver	2 ounces

Protein equivalents

Eggs	2 medium
Cottage cheese	2 ounces
Cheddar cheese.	2 ounces
Beans	1 cup
Peanut butter.	2 Tblsp.

Fruit & Vegetable Group

½ cup dark green and deep yellow vegetables a day

Broccoli	Yams	Spinach
Carrots	Greens	Sweet potatoes
Yellow squash	Pumpkin	Wild greens

½ cup citrus or high Vitamin C foods a day

Oranges	Orange juice
Grapefruits	Grapefruit juice
Greens	Broccoli
Green peppers	Cantaloupe
Strawberries	

1 cup other fruits and vegetables a day

Potatoes	Cabbage
Tomatoes	Green beans
Green peas	Corn
Apples	Bananas
Prunes	Peaches
Pears	

Milk Group – Choose four servings a day from this group

Milk	1 cup
Yogurt	1 cup
Cheese	2 ounces
Cottage cheese	1 cup
Ice cream	1 cup

Bread & Cereal Group – Choose four servings whole grain or enriched bread/cereal

Bread	1 slice
Rice	½ cup
Cooked cereal	½ cup
Spaghetti/macaroni	½ cup
Grits	½ cup
Dry cereal	½ cup
Biscuit	1 small
Cornbread	2" square

Fats – Use lightly

Salad dressings
Oil
Oleo

Sample Menu

Breakfast – ½ cup orange juice, ½ cup oatmeal and milk, 1 slice toast with margarine, 1 scrambled egg

Morning snack – 1 small apple, milk

Lunch – ½ cup cottage cheese, tuna salad sandwich, sliced tomato, milk

Lunch snack – crackers with peanut butter

Dinner – meat, fish, or poultry, baked potato, broccoli, bread with margarine, ½ cup ice cream

Bedtime snack – graham crackers with peanut butter, milk

Other Dietary Considerations

Drink plenty of fluids. Six to eight glasses per day are recommended. Include water to aid in circulation and elimination. There is no need to restrict salt unless advised by your physician. However, do not over-salt food or eat large amounts of excessively salty foods. Excessive caffeine consumption is not recommended during pregnancy. Intake should be limited to approximately 2 cups of coffee or caffeine equivalent daily. Other sources of caffeine include chocolate, tea and cola soft drinks. One prenatal vitamin containing 1 mg. of folic acid should be taken daily. Additional iron may be recommended if indicated.

PRENATAL VISITS – WHAT TO EXPECT

First visit

During your first visit, you will have a complete history and physical examination, including a pelvic exam. A pap smear will be done and blood will be taken for routine laboratory tests.

The doctor will tell you your estimated due date. Keep in mind that your due date is an estimate. It is perfectly normal to deliver anytime from 2 weeks before to 2 weeks after the due date.

Subsequent visits

Generally, you will be seen every 4 weeks until you are about 28 weeks along in your pregnancy. You will then be seen about every 2-3 weeks until you are 36 weeks along. You will be seen weekly during your last month of pregnancy. At each visit, your weight, blood pressure, and urine will be checked.

The size of your uterus will be assessed and the baby's heart listened to after you are 14-16 weeks along. A pelvic exam generally will not be done again unless you are having particular problems. The assessments done at each visit are extremely important for evaluating the well-being of your baby. Please try to keep regular appointments.

Subsequent Laboratory Work

At around 10-12 weeks gestation (meaning length of pregnancy), a special test called a NIPT is available. This test allows us to screen for some chromosomal abnormalities, as well as tell the gender of your baby.

At 28 weeks gestation, some routine blood work will be done. Tests done at 28 weeks include:

Hemoglobin & Hematocrit: These tests are done to make sure that your iron count is within normal limits. If your iron count is low, we will notify you to take additional iron.

Antibody screen: This test is done to check for any antibodies in your blood that might cross to the baby and cause it to become anemic.

Screening for diabetes: Due to hormone effects, some people develop diabetes during pregnancy. It is called “gestational diabetes” and usually disappears at the time of delivery. Usually no symptoms occur. Therefore, every pregnant woman should be screened in the middle of pregnancy.

You will be given a drink of glucose solution and will have labs drawn exactly one hour after you drink the solution. During the hour, you should have nothing to eat or drink. You cannot have anything to eat, drink, smoke or chew after 10pm the night before your test.

You will be notified if your screening result is elevated. An elevated screening test means that you could have gestational diabetes. In that case you would need to have a 3 hour glucose tolerance test to either confirm or rule out diabetes. If you need the glucose tolerance test, specific instructions will be given to you for preparing for the test.

RH-negative mothers only: If your blood type is RH negative, you will be set up for a Rhogam injection at 28 weeks gestation. Rhogam is given to RH-negative mothers to prevent the formation of antibodies against RH-positive babies. Since we do not know the RH factor of your baby before birth, Rhogam is given to all RH-negative mothers as a preventative measure during pregnancy.

After your blood is drawn for the antibody screen, it will be approximately two hours before the Rhogam is ready. You will be told where to return for your injection. After your baby is born, you will be given another injection of Rhogam before you are discharged if the baby is positive. If the baby is RH-negative, another injection will not be necessary.

BODY CHANGES DURING PREGNANCY AND COMFORT MEASURES

Morning Sickness/Nausea

Some women experience nausea during pregnancy. Often called morning sickness, the nausea is usually worse in the morning. Sometimes the nausea will last throughout the day. Try the following comfort measures to reduce the nausea:

1. Eat something dry such as soda crackers or dry toast before getting out of bed in the morning.
2. Get out of bed slowly, 5 or 10 minutes after eating something dry.
3. Eat small, frequent meals throughout the day rather than three large meals. Most women feel better with something in their stomach.
4. Avoid lukewarm foods. Eat and drink hot foods hot and cold foods cold.

If you are vomiting and unable to keep anything down for several hours, you should notify your doctor. Keep in mind that the nausea usually subsides after the first trimester.

Fatigue

Women commonly feel extremely tired during pregnancy, especially during the first trimester. Get plenty of rest, including a nap or rest during the day. The fatigue is caused by some of the hormone effects of pregnancy. As with morning sickness, this overwhelming tired feeling usually lessens after the first trimester.

Urinary Frequency

Due to pressure on the bladder from your growing uterus, you will probably need to urinate more often. This frequency may decrease in the middle of pregnancy as the uterus grows upward, but it then recurs in the last month as the baby drops lower into the pelvis.

You can reduce the discomfort by emptying your bladder often. You may need to get up during the night to empty your bladder. Do not cut back on fluid intake; you need adequate fluids during pregnancy.

Heartburn/Indigestion

As the growing uterus pushes up against the stomach, some food may reflux into the esophagus, causing a burning sensation. Also, the esophageal sphincter may relax due to hormone effect which makes the reflux more likely to occur.

To reduce the problem, eat small amounts rather than large meals. Do not lie down immediately after eating. Elevating the head and shoulders when lying down will help facilitate emptying of the stomach. Avoid spicy and highly-seasoned foods. Check with your doctor about recommended antacids for use during pregnancy. Don't take over-the-counter medication without checking with your doctor.

Constipation

Many women experience constipation during pregnancy due to pressure on the intestines from the growing uterus and slowed digestion due to hormone effects.

Drinking plenty of water (6-8 glasses per day) can help to reduce the problem. Eat fresh fruits and vegetables and high-fiber foods. Bran cereal is often very helpful. Maintaining moderate activity can also help alleviate some of the constipation. If these measures do not help, consult your doctor. A stool softener may be recommended.

Hemorrhoids

Some women experience problems with hemorrhoids during pregnancy due to increased blood supply to the pelvic region and pressure on vessels. Use the measures mentioned to avoid constipation to prevent hemorrhoids.

If hemorrhoids become painful, mention this to your doctor at your next visit.

Varicose Veins

Pressure on the pelvic veins during pregnancy interferes with circulation and blood return from your legs. Some women develop problems with varicose veins. To reduce this problem, do not wear garters or tight, constricting clothing. Avoid wearing knee high hose or socks that are tight.

Try not to stand still in one place for long periods of time. Don't sit with legs crossed. Try to elevate your legs when possible. If you develop pain in your legs, especially the calf area, bring this to your doctor's attention.

Leg Cramps

Pressure on veins makes leg cramps common in late pregnancy. If you experience a leg cramp while lying down, extend your leg and flex your foot (point toe toward baby). If someone is with you, have them push down against your knee and up against the sole of your foot as you extend your leg.

Vaginal Discharge

Vaginal secretions usually increase during pregnancy. Normal vaginal secretions are whitish in color and are not malodorous. If vaginal discharge is excessive, foul smelling, bloody, yellowish or greenish, or if it is causing burning or itching, you should report this to your doctor.

Practice good perineal hygiene. When cleaning the perineal area, always wipe from front to back, never from the rectal area up to vaginal opening. You should not use vaginal douches during pregnancy.

Backache

Some women experience backache during pregnancy due to strain on the spinal area from the growing uterus and relaxation of pelvic bones from hormone effect.

Practice good posture to avoid undue strain on your back. Squat down to pick up objects and hold object close to your body, using leg muscles rather than back muscles for lifting.

Always get up from lying position by turning to your side first and pushing up with your arm, rather than straining your back and abdominal muscles. Having someone apply counter pressure to your lower back by rubbing can relieve some of the discomfort.

The pelvic tilt/pelvic rock exercise can help to strengthen back muscles and reduce back discomfort. You can do this exercise while lying down or standing.

Lying down: Lie on your back with your knees bent; tighten your lower abdominal muscles and buttocks and push the arch of your back flat against the floor, then relax; repeat 5-10 times.

Standing: Stand with your feet about 6 inches from a wall with your back against the wall; tighten your abdominal muscles and flatten the arch of your back against the wall, then relax; repeat 5-10 times.

Shortness of Breath

As the uterus grows and pushes up against the diaphragm in late pregnancy, you may experience some shortness of breath. To alleviate this problem, avoid lying flat. Instead, elevate your head and shoulders with pillows when lying down. You can strengthen the muscles of the diaphragm by doing the following exercise:

Sit on the floor Indian style (called Tailor sitting); extend your arms over your head and stretch one arm, then the other arm bending slightly to the side. Extend your arm high as if you are reaching for something (sometimes called "cherry-picking" exercise.)

Skin Changes

Some skin changes will occur during pregnancy due to hormone effects and stretching of the skin. Some of the changes include:

Mask of pregnancy: Tan colored blotches on the face; will fade after pregnancy

Stretch marks: Pink or reddish streaks on the abdomen may occur due to stretching of the skin; usually becomes lighter and much less noticeable after pregnancy

Linea nigra: A narrow tan colored line may appear vertically from the umbilicus to the pubic area; will fade after pregnancy

Dry skin: Skin may be very dry during pregnancy; rinse soap well when bathing as soap can be drying; may use lanolin type cream or lotion for moisturizing

HYGIENE DURING PREGNANCY

You may experience increased perspiration during pregnancy. Remember to practice good hygiene. You may shower or tub bathe. When tub bathing, be careful getting in and out of the tub because you may become a little off balanced as your uterus enlarges.

You should avoid soaking in very hot water for long periods of time as this can raise your core body temperature and may be harmful to the baby. Generally, you should avoid prolonged bathing in water temperatures above 101° F. Do not use hot tubs or saunas during your pregnancy.

Good perineal hygiene is extremely important to prevent vaginal infections and urinary tract infections. Always clean the perineal area by wiping from front to back. Never clean in the direction from the rectal area to the vaginal area as this can spread bacteria from the rectum to the vagina.

Do not use tampons or douche during pregnancy.

Keep your teeth in good condition during pregnancy. You may need to see a dentist. If dental X-rays are done, your abdomen should be shielded with a lead apron.

You will notice some changes in your breasts during pregnancy. The breasts will enlarge and may become tender. The areola, the brownish area around the nipple, will darken and small 'bumps' may appear. The breasts may secrete small amounts of fluid from about four or five months on. The veins in your breasts may also become more prominent.

Breast care should include daily bathing or showering. Avoid using soap on the breasts as this can cause your nipples to become dry and irritated. Wearing a good supportive bra may make you more comfortable as the breasts enlarge.

If you are planning to breast feed, you may consider buying nursing bras near the latter part of your pregnancy. Breast preparation for breast feeding will be discussed later.

ACTIVITY DURING PREGNANCY

Exercise in moderation is ideal during pregnancy. Use common sense in deciding the type of activity in which you participate. One of the very best ways to get exercise is by walking. Swimming is also good exercise. Avoid any activity that might cause injury, such as contact sports or skiing. Also, avoid over-strenuous exercises that raise your pulse rate above 140. Strenuous activity that increases blood flow to your heart may in turn decrease the blood flow to the uterus which deprives the baby of oxygenation. Scuba diving is discouraged during pregnancy as this also decreases oxygenation to the baby. Discuss any particular questions you have regarding exercise during pregnancy with your doctor.

SEXUAL ACTIVITY DURING PREGNANCY

Unless particular problems develop, there is no reason to alter your sexual relationship during pregnancy. Sharing love and affection throughout pregnancy is important. You may find that your sexual desire changes during pregnancy. Some women experience an increased desire, while others may experience a decrease. It is

important to communicate your feelings with your partner. As your pregnancy progresses, alterations of position during intercourse, such as side-lying, may be necessary for comfort as your uterus enlarges. If you experience bleeding or pain with sexual relations, consult your doctor. Keep in mind that if for some reason you must curtail intercourse, it is important to express other signs of affection.

TRAVEL DURING PREGNANCY

Exercise common sense when traveling during pregnancy. Avoid long, uncomfortable trips. If you must take a long trip, do not stay seated for more than two hours. You should get up and walk around every two hours or so. Traveling on a plane is acceptable during pregnancy, since cabins of planes are pressurized.

Remember that babies are very unpredictable. Traveling at anytime during pregnancy poses the risk of being away from familiar medical care if problems arise. Be sure to become aware of local medical care when traveling in case a need for care arises.

SAFETY TIPS DURING PREGNANCY

Wear seat belts when traveling in an automobile for the protection of yourself and your unborn baby. Begin thinking about an infant car seat for your baby. Seats vary in cost. You may consider borrowing one from a friend if you are not able to purchase one. Also, ask about an infant seat loan program available in your area.

ILLNESSES DURING PREGNANCY

You should avoid coming into contact with persons who are ill. If you develop any illnesses or flu-like symptoms, contact your physician.

Rubella

If contracted early in pregnancy, Rubella (German measles) can harm the baby and cause serious birth defects. If you had Rubella as a child, you will not get the disease again. You must have the disease during your pregnancy before the baby can be infected. Exposure to someone with Rubella will not affect the baby unless you yourself develop the disease.

A blood test will be done at your first prenatal visit to determine whether you are immune to Rubella. If you are non-immune to Rubella you will be vaccinated against the disease after delivery. The vaccine is not recommended during pregnancy.

Toxoplasmosis

Toxoplasmosis is a disease caused by an organism called toxoplasma. Toxoplasmosis is harbored by cats and some food animals (sheep, pigs, and cattle). A mild disease, toxoplasmosis, usually causes very little symptoms in the adult – perhaps mild, flu-like symptoms. However, if a pregnant woman develops toxoplasmosis, the baby can have serious birth defects.

Cats pass parasite eggs from the toxoplasma organism in feces. Therefore, you can protect yourself from the disease by never handling cat litter. Have someone else clean the litter box while you are pregnant. Make sure the litter box is changed daily, since the parasite eggs do not become infective for approximately 24 hours. Always wash your hands thoroughly after handling your cat or its belongings.

Remember that some food animals also harbor the organism. You can protect yourself by cooking meat well. Heat can kill the organism. Avoid eating meat rare. Always wash your hands after handling raw meat.

Sexually Transmitted Diseases

Some sexually transmitted diseases such as AIDS, Chlamydia, Herpes, Gonorrhea and Syphilis, can be harmful to the baby. Some of these diseases can be treated. If you have a history with a sexually-transmitted disease or suspect your sexual partner has a sexually-transmitted disease, you should discuss this with your doctor so your pregnancy can be managed appropriately.

SUBSTANCE USE DURING PREGNANCY

Medications

Do not take any medication during your pregnancy without consulting your physician. This includes over-the-counter medications, such as cough and cold remedies, laxatives, sedatives, nose drops, and ointments.

Alcohol

Pregnant women should avoid drinking alcohol. Studies have indicated that alcohol can have harmful effects on the unborn baby. No minimum level of alcohol can be clearly safe for the unborn baby, so avoid alcoholic beverages altogether.

Smoking

Tobacco smoke also can harm the unborn baby. A byproduct of tobacco is carbon monoxide which can interfere with the oxygen supply to the baby. Smoking can result in smaller babies, premature delivery, and miscarriage. You should stop smoking for both you and your baby. If you cannot quit completely, make an effort to cut down considerably on the amount of cigarettes you smoke. Remember, when you smoke your unborn baby also smokes. Try to use pregnancy as an opportunity to kick the habit.

Illegal drugs

Marijuana, cocaine, and other drugs can cause serious problems for the unborn baby. You should not use drugs during your pregnancy.

Necessary drugs

There are times when a pregnant woman needs medication. In these cases, medication that has been tested and used in pregnant women without known risk to the unborn baby is used. Please check with your obstetrician before taking any medication including over-the-counter medication or medication prescribed by someone other than your obstetrician.

WARNING SIGNS TO REPORT TO PHYSICIAN AT ONCE

1. Vaginal bleeding
2. Gush or trickle of fluid from the vagina
3. Severe pain anywhere
4. Chills or fever
5. Burning on urination or increased frequency
6. Constant vomiting
7. Signs of preeclampsia (toxemia)
 - Swelling of hands or face
 - Constant headache
 - Blurred vision or dimness of vision or seeing “spots” before eyes
8. Signs of pre-term labor
 - Menstrual-like cramps
 - Low, dull backache
 - Abdominal cramping with or without diarrhea
 - Increase or change in vaginal discharge
 - Pressure feeling in pelvis
 - Frequent or regular uterine tightening (contractions) even if not painful
9. Decrease in fetal movement

After 28-30 weeks gestation, the baby should be moving often and usually moving about the same every day. If you notice a significant decrease in the amount your baby moves, you need to notify the doctor immediately. Do not wait for your next appointment. You should call 304-431-5018 (Labor/Delivery) if you are concerned about the movement or come in to Labor & Delivery to have the baby checked. A test can be done called a non-stress test to make sure the baby is doing well.

GROWTH AND DEVELOPMENT OF THE FETUS

A term pregnancy is 40 weeks long. Delivery anytime between 38 and 42 weeks is normal. The growth and development of your baby is shown by weeks in the following section.

FIRST TRIMESTER

Week number

0date of 1 st day of last menstrual period	}	Nourished by endometrium
1	.....	
2	.....conception	
3	.....implantation	
4placenta begins developing	}	1 ounce/3" long
5	.....missed period	
6	.....brain & major organs forming	
7	.....eyes formed; muscles developing	
8ear structure forming	}	
9	.....fetus moving (unable to feel movement)	
10	.....heart functioning	
11	.....	
12	.....toes and fingers formed	

SECOND TRIMESTER

Week number

13placenta transfers nutrients and wastes	}	4 ounces/6 ½" long
14	...heart beat audible by ultrasound 12-14 weeks		
15	.....	
16	.....lanugo hair forming	
17sex identifiable	}	1 ½ lb./12" long
18	.....heartbeat audible by fetoscope	
19	.....movement felt approx. 18-20 weeks	
20	.....scalp hair growing	
21	}	
22	.....	
23	....vernix forming (protective covering on skin)	
24	.....	
25	}	
26	.....	
27	.....	
28	.....fetus sometimes gets hiccups	

THIRD TRIMESTER

Week number

29.....	fat layers forming	}	2 lbs./15" long
30.....			
31.....			
32.....			
33.....	organs maturing	}	4 lbs./16 ½" long
34.....			
35.....			
36.....	kidneys mature	}	6 lbs./18" long Grows about ½ lb./week
37..	lightening (baby drops) in first-time pregnancy		
38.....			
39.....			
40.....	due date		
41.....			
42.....			
.....	past due		

TESTING AVAILABLE DURING PREGNANCY

Ultrasound

Ultrasound allows physicians to view an image of the fetus on a TV-like screen. The test is painless and does not carry the risk of X-ray exposure to the fetus. Presently, there is no proven risk to the fetus from modern ultrasound equipment.

The test is most often used to assess the growth of the baby, especially when uterine size does not correlate with the expected size for the gestational age of the pregnancy. It can also be used to detect fetal anomalies such as spinal defects, limb abnormalities, bladder obstructions, or some heart problems.

Sometimes the sex of the baby can be identified on the ultrasound. However, this is not always true. The test is never ordered just for the purpose of identifying the sex.

If an ultrasound is recommended for you, you will be instructed to arrive at your scheduled test with a full bladder. A full bladder helps to produce a good image of the fetus.

An ultrasound test may also be done during the last part of pregnancy to evaluate how the baby is doing and how the placenta is nourishing the baby. The physician can evaluate fetal well-being by assessing fetal movement, fetal breathing, movement, fetal muscle tone and amount of amniotic fluid present.

Amniocentesis

An amniocentesis involves inserting a long needle through the maternal abdomen into the uterus and obtaining a sample of amniotic fluid. The amniotic fluid can then be sent to the lab for evaluation. Amniocentesis may be done for the purpose of detecting some genetic abnormalities. When done for this reason, the test is done at about 16 weeks gestation, after detailed genetic counseling.

The amniocentesis may also be done later in pregnancy for the purpose of evaluating the fluid for substances that would indicate the maturity of the baby's lungs. The test can also be used in certain cases of blood incompatibilities between the mother and the fetus to assess the effect on the baby.

An amniocentesis is used only for specific conditions. If you need to have an amniocentesis, the procedure will be explained to you in detail.

Non-stress test and Contraction stress test

There are two fetal monitoring tests that can be used to assess fetal well-being when there is concern about how well the placenta is functioning and nourishing the baby with nutrients and oxygen. The non-stress test and/or contraction stress test are done routinely in some pregnancies at risk for utero-placental insufficiency, such as pregnancies complicated with diabetes, hypertension, suspected growth retardation of the fetus, or significant decreased fetal movement.

Non-stress test

The non-stress test is performed to monitor the baby's heart rate. After placing a belt around the mother's abdomen to pick up the rate, the baby's heart rate is traced out on graph paper. When the baby moves, the tracing is marked. The heart rate should increase when the baby moves, much like your own heart rate does when you exercise. An increase in the baby's heart rate in relation to movement is a good indicator that the baby is doing well.

Contraction stress test

With the contraction stress test, the baby's heart rate is evaluated in relation to uterine contractions. Any contraction is somewhat stressful to the baby because, as the uterus contracts, the blood vessels are constricted and blood flow through the placenta to the baby is diminished. If the baby is doing well and there is good placental function, the heart rate should remain stable during and after a contraction.

If a contraction stress test is done, uterine contractions will usually need to be stimulated so you will have three contractions within ten minutes. The contractions can be stimulated by stimulation of the breasts (rolling the nipples through the bra or with a terry wash cloth) or with intravenous infusion of oxytocin. The stimulation is continued until three contractions occur within ten minutes. You will be carefully monitored during the test to prevent possible overstimulation of contractions.

In some circumstances fetal monitoring tests are done weekly in the latter part of pregnancy. If you are to have any of these tests performed, someone will explain the reason and procedure for the test. Please ask any questions you may have.

LABOR AND DELIVERY

Signs of Labor

Discharge of mucus plug or “bloody show” – Labor is sometimes preceded by the discharge of a small amount of blood-tinged mucus from the cervix. Many people refer to this mucus as “bloody show.” While this is a sign that labor is about to begin, it may be several hours to several days before true labor starts.

Contractions – A contraction is a rhythmic tightening and relaxation of the uterus. The uterus is a muscle and will contract off and on throughout pregnancy. The contractions that are not true labor are referred to as “practicing” or Braxton Hicks contractions.

It is often difficult to differentiate Braxton Hicks contractions from true labor. Labor usually begins with rhythmical contractions beginning in the small of the back and spreading around the front of the abdomen. True labor contractions gradually become regular in frequency and progressively stronger in intensity.

Rupture of membranes – The ‘bag of waters’ or amniotic fluid sac may rupture before labor begins or during labor. Sometimes, the membranes are ruptured by the physician in labor during a vaginal exam. Amniotic fluid is normally clear and odorless.

When To Go To The Hospital

Rupture of Membranes – When your membranes rupture, you should go to the hospital even if you are not having contractions. If you are unsure whether your membranes have ruptured, but think you are leaking amniotic fluid, you need to go to the hospital regardless of how far along you are in your pregnancy.

Contractions – When you begin having several contractions that seem to be coming at regular intervals, you need to time some of them. To determine the frequency or how far apart contractions are, you should time from the beginning of one contraction to the beginning of the next contraction. To determine the length or how long the contraction lasts, you should time them from the beginning of the tightening to the time the uterus relaxes.

The time at which you should go to the hospital varies from individual to individual. With the first baby, you can generally wait until the contractions are 5 minutes apart. For subsequent babies you can usually wait until contractions are about 5-10 minutes apart. When deciding when to go to the hospital, you need to consider the length of labors during previous pregnancies, as well as the weather conditions and how far you are from the hospital.

It is not always easy to know when to go to the hospital. Remember that true labor contractions are regular in nature and become progressively stronger in intensity. A physician is available to examine you. There is no harm in coming in to be examined and finding out that you are not in true labor. Please feel free to come in or call (304) 431-5018.

If you think you are in labor, do not eat large meals. Digestion is slowed in labor, so eat small amounts and avoid heavy, starchy foods. It is okay to drink fluids.

Admission To The Hospital – What To Expect

Admission

You should enter Princeton Community Hospital through the emergency room. You will be registered and taken directly to labor and delivery. A nurse in labor and delivery will help you change into a hospital gown and check your vital signs and the baby's heart rate. A physician will examine you and assess your progress in labor. If in labor, you will be assigned to a labor room. The father of the baby or your support person can be with you, but other visitors should be restricted during labor. If someone else does visit, visitors are restricted to one person at a time.

What to Bring to the Hospital

You will be given a hospital gown to wear during labor and delivery. After delivery, when you are transferred to the postpartum unit, you may change into your own gown and robe if you desire. You should bring any personal items that you might need such as cosmetics, deodorants, hair brush, etc. Plan to bring one or two bras. Sanitary napkins will be provided in the hospital, as well as all clothes, diapers, and supplies for the baby's stay in the hospital. However, you will need to bring clothes for the baby to wear home.

Procedures:

Fetal monitoring – A fetal monitor will probably be used to watch the baby's heart rate and uterine contractions. The monitor tracing helps to evaluate the well-being of the baby and to alert the staff to any signs that indicate the baby may be in distress.

IV fluids – An IV may be started. The IV provides hydration during labor and may provide a route for administration of medications if needed.

Laboratory work – When you are admitted to labor and delivery, some blood samples will be drawn to evaluate your iron status.

Vaginal exams – The physician or nurse will do periodical vaginal exams throughout labor to assess your progress.

Childbirth Education Classes

We strongly encourage you to attend childbirth preparation classes. These classes are taught by obstetric nurses and will give you very in-depth information about what to expect during labor and delivery. You will learn some breathing and relaxation exercises to help you cope with pain in labor and learn about medications available for pain relief if needed. Classes are offered during the last few months of pregnancy. If you are interested in attending the childbirth classes, please ask to register for classes when you are about 28 weeks along. Refresher courses are also available for those having second or third babies.

Labor Process

How long does labor last – The average length of labor for first babies is approximately 16 hours. However, there are exceptions, and sometimes first time labors can be very short – three hours or less. Subsequent labors are generally shorter than previous labors.

Mechanism of labor – Three major things happen during the labor process- effacement of the cervix, dilatation of the cervix, and descent of the baby. As the uterus contracts, the cervix (opening of the uterus) effaces, or thins out. The thinning is described from 0-100% effaced, with 100% being completely thinned out. The cervix also dilates, or opens, and is described from being closed to 10 centimeters open. The effacement and dilatation of the cervix causes the baby to move down the birth canal.

Stages of labor – Labor and delivery is divided into three parts or stages.

- Stage 1: The longest part of labor. This stage lasts from the onset of labor until the cervix is completely effaced and fully dilated.
- Stage 2: During this stage the baby is actually born. It lasts from the time of complete effacement and dilatation until the baby has been pushed out. This stage can last from a few minutes to a couple of hours. Average time for first time babies is about an hour.
- Stage 3: This is the time of the expulsion of the placenta or afterbirth.

Anesthesia

Injection: Narcotic analgesics can be injected directly into the skin or through an IV route to lessen the pain of contractions. The narcotic does cross the placenta to the baby, so the dosage and timing of the injection is monitored closely. The baby may be born sleepy depending on when the drug is administered in relation to the time of delivery. Medication is readily available in the delivery room to reverse the effect of the narcotic on the baby if needed.

Local anesthesia: Local anesthesia can be administered by injecting medication at the time of delivery to numb the area around the perineum. (This is much like the local anesthesia used for dental work.)

Epidural anesthesia: A very small, soft catheter is inserted beside the spinal column, below the level of the spinal cord. Numbing medication is then injected through the catheter. The numbing lasts about 2 hours and can be reinjected as needed since the catheter remains in place until after delivery.

Spinal or saddle block: The spinal or saddle block is given at the time of delivery. Medication is injected into the lower spinal column to numb you from about the waist down.

General anesthesia: With general anesthesia you are “put to sleep.” General anesthesia is used only for emergency situations.

Relaxation/Breathing Techniques

Relaxation and breathing techniques are taught extensively in childbirth education classes as tools for coping with pain in labor and delivery.

Relaxation: You can practice relaxation by lying down and tightening and relaxing the muscles of your toes. Then continue to tighten the muscles in other parts of your body moving upward to your facial muscles. The contrast between tightening and relaxation helps make you aware of the feeling of complete relaxation. Later you can practice relaxation without first tightening the muscles. Relaxation can help hasten labor and delivery.

Summary of breathing patterns

Cleansing breath (also called releasing or signal breath): This is a deep complete exchange breath taken at the beginning and end of each contraction. You inhale through the nose and exhale through slightly pursed lips. This type of breathing is sometimes called candle-blowing because it is gentle enough to just bend the flame of a candle, without blowing it out. Rate of breathing should be comfortable. Slow, easy breathing is used in early labor.

Patterned breathing: This is light chest breathing with an intermittent blow of various patterns. Patterned breathing can be done as all mouth breathing, or you can breathe through the nose and out the mouth. Inhalation is slightly less than normal and exhalation is of an equal amount blown out quickly and lightly through pursed lips. The pattern can be 1:1 (one breath, one blow), 4:1 (four breaths, one blow) or any variation or combination. The rate is a little greater than normal. Patterned breathing takes more concentration and is used as labor becomes more uncomfortable.

Blowing to keep from pushing: This is high, shallow blowing into the cheeks (puff out cheeks and blow). It is all done through the mouth and should be kept light and high to avoid hyperventilation. Blowing helps to keep from pushing if the urge to push is present before the cervix is completely dilated.

Breathing for pushing: As the contraction begins, start with two or more cleansing breaths. Suck in a third breath through pursed lips (as though sucking through a straw). Let the air out slowly through pursed lips while maintaining the pushing effort. Repeat this sequence during contraction, remembering that long steady pushing is more effective than starts and stops. When the contraction has ended, exhale, relax and breathe slowly while waiting for the next contraction.

Cesarean birth

There are times when it is best for the baby and/or mother if the baby is born through an incision in the uterus and abdomen rather than vaginally. Some indications for a C-section include the baby being too large to pass through the pelvis, some breech presentations, fetal distress, severe preeclampsia (toxemia), and infection of the amniotic sac due to prolonged ruptured membranes without labor progress.

A C-section is major surgery. Preparation includes starting an IV, inserting a catheter to empty the urinary bladder during surgery, cleansing and shaving of the abdominal area, and administration of some type of anesthesia. The C-section is done in the delivery room, and if it is not an emergency and the mother is not "put to sleep," the father of the baby can be present for the delivery. Often epidural or spinal anesthesia is used.

Two different types of incisions may be made in the abdomen. The incision done most commonly is a horizontal one sometimes called a "bikini" incision. The other is a midline incision done vertically. With both techniques, a separate incision is also done in the uterus. This incision is most often done transversely from side to side in the lower part of the uterus. However, depending upon the circumstances, the incision may be done vertically.

You should know the type of incision done in the uterus. If the incision is done transversely in the lower uterine segment, you may be a candidate for a vaginal delivery with future pregnancies. If you have a C-section for some reason, talk with your physician about future delivery options should you have future pregnancies.

Remember that a C-section is sometimes necessary and in no way indicates failure on your part. Having a C-section is having a baby. The important thing is to keep both the baby and mother healthy.

After a C-section you will have an IV for 1-2 days until you are able to resume your diet. Occasionally an IV will be in place a little longer to give antibiotics if needed. The urinary catheter will be removed after about 24 hours. Nursing personnel will assist you with getting out of bed and walking.

Postpartum Care in the Hospital

Nursing personnel will help you with questions you may have concerning your own care and will help you with all aspects of baby care. (Baby care will be discussed in a later section of this booklet). You will be given a maternity care kit containing sanitary napkins and a perineal wash bottle to cleanse the perineal area after urination. You will also be given a sitz bath and shown how to use it during your hospital stay. The sitz bath aids in cleansing the perineal area and soothing the episiotomy.

Discharge Instructions

Before you are discharged from the hospital, the nurse and physician will discuss things to expect and give you any special instructions indicated.

Uterus: Your uterus will continue to contract back to normal size. It takes about 6 weeks to get back to normal. This process is called involution.

Lochia: Your vaginal discharge after delivery is called lochia. The drainage should change from a red to a brown color and gradually decrease in amount. It may last up to 4-6 weeks.

Sitz bath: You should use your sitz bath at home as instructed until the soreness of your episiotomy is gone. The sitz bath will also help with discomfort of hemorrhoids.

Breast care:

Non-nursing moms: Wear a good, tight bra day and night until breasts become soft and normal. You can apply ice packs for sore, full breasts as needed. Avoid stimulation of breasts for a week or two. Use warm water, not hot for showers.

Nursing mom: Wear a good, supportive bra day and night. Allow nipples to air dry after baby feeds. Bathe normally, washing your breasts first. Use lanolin cream sparingly as needed after nursing to help prevent nipple cracking.

Hygiene:

Vaginal delivery: You may take tub baths or showers.

C-section: Only shower or sponge bathe until your abdominal incision is well healed. Check with the doctor at your follow-up appointment about tub baths.

Activity: Keep stair climbing to a minimum. Do no heavy lifting or heavy work until after your check-up. You will need most of your energy to care for your new baby the first several weeks. Try to rest when your baby is napping.

Diet: Eat three well-balanced meals a day. Breast feeding moms need to drink extra fluids. Continue to take your iron and vitamins for about 6 weeks or as long as breast feeding.

Sexual intercourse: We suggest you wait about three weeks or until vaginal discharge stops and stitches are not sore, to resume intercourse. To protect against infection and pregnancy, we recommend you use a condom (rubber) during intercourse until the time of your postpartum check-up. Extra lubrication may be necessary. Use a water-soluble jelly such as K-Y jelly. Do not use petroleum jelly.

Do not douche or use tampons until after your check-up.

Please notify Dr. Edwards if the following occurs:

1. Fever, sweats, chills (temperature 101°F. or greater) for longer than 4 hours.
2. Lower abdominal pain (persistent pain should be evaluated by a physician).
3. Difficulty urinating or burning sensation with urination.
4. Heavy bleeding or foul odor to drainage.
5. Breast lumps or hard, sore areas.
6. Pain, tenderness, or redness of incision.
7. Severe pains in the chest, lower abdomen, or legs.

Return of menstruation: Your menstrual period may return anywhere from 4-6 weeks after delivery, but it may not return for 3-4 months. If you are breast feeding, you may not have a menstrual cycle for up to 8-10 months or so. Normally variations can be expected. After a couple of cycles, your system usually regulates itself and things get back to normal for you. Remember that even though you may not have had a menstrual cycle, you may still ovulate and can become pregnant. Breast feeding does not protect you from becoming pregnant.

Birth Control

Discuss your options for birth control methods with your physician before you are discharged from the hospital.

Oral contraceptives: If taken properly, birth control pills are approximately 99% effective

Spermicide & Condoms: When used together and used properly, this method is approximately 90% effective.

Natural Family Planning (Rhythm method): This involves abstaining from sexual intercourse during the "fertile" period. The fertile time is calculated by the menstrual period. Ovulation occurs approximately 14 days before the onset of menses. Ovum and sperm are fertile for 24-48 hours; abstinence for about 2 days prior to and 2 days following ovulation may prevent pregnancy. Predictability of ovulation time is much decreased with irregular menses. Basal body temperature recording to predict ovulation may be used.

Sterilization:

Female: Bilateral tubal ligation (tying off the fallopian tubes) is performed to prevent fertilization of the egg. It should be considered a permanent procedure, but cannot be 100% guaranteed. There remains a very slight chance of pregnancy occurring after tubal ligation.

If you plan to have a tubal ligation during your hospital stay after delivery, please discuss this with your physician during your pregnancy. Some types of medical coverage require that a consent form be signed 30 days prior to the procedure. Arrangements can be made to have a tubal ligation done as a one-day surgical procedure 6 weeks or so after delivery.

Male: Vasectomy (tying off the tubes that carry sperm into semen) can be performed in the male. This procedure should also be considered permanent, although not guaranteed 100% effective.

Reversal of both of these procedures is possible, although the success rate is not very high. Careful thought should be used when choosing sterilization as a method of birth control, and the procedure should be considered a permanent method of birth control.

LEARNING TO CARE FOR YOUR BABY

Supplies

Individual instruction and assistance will be provided to help you become comfortable with baby care before you are discharged. You will be offered the opportunity to view films and/or special TV programs at your bedside on subjects including breast feeding, bottle feeding, bathing the baby, and routine baby care. We encourage the father of the baby to participate in the instruction.

Preparing for your new baby:

There are a number of things you will want to gather to be prepared for your new baby at home.

Diapers: Begin thinking about whether you will use disposable or cloth diapers. Babies tend to wet or soil diapers every 3-4 hours (breast-fed babies a little more often), so you need to have a few dozen diapers on hand when you take the baby home.

Undershirts: You will need at least a dozen undershirts because babies tend to spit up on and soil clothing.

Gowns/sleepers: At least a dozen gowns or sleepers will be needed.

Blankets: You will need to have at least a half-dozen receiving blankets for the new baby.

Feeding supplies: You will need bottles if planning to bottle feed. You may choose bottles with disposable plastic liners or glass or plastic bottles. If you choose bottles without disposable liners, you will need to have a large sterilizing pan. If planning to breast feed, you will still want to have a few bottles on hand for supplemental feedings.

Furniture: You will need something for the baby to sleep in. Babies can sleep in a bassinet for a couple of months, but then will need to have a baby crib for safety. Make sure the crib rails are spaced close enough so the baby cannot get his/her head through the rails.

Infant Car Seat: Most states, including West Virginia, require that babies and children up to age 4 be secured in a car seat when traveling in a car. You should begin looking for a car seat before your baby is born. If you are unable to buy one, perhaps you might be able to borrow one from a friend or relative. Ask about a car seat rental program in your area. Often seats are loaned for a period of nine months for a small deposit.

Feeding Your New Baby

During your pregnancy you should think about whether you will breast feed or bottle feed your baby. This is one of the most important decisions you will be making, so look into the subject...read and talk with your health care professionals so you can have information to help you make the right decision.

Breast Feeding:

There are many advantages to breast feeding. Numerous studies have shown that breast fed babies have more resistance to disease throughout infancy due to antibodies received through breast milk. This is true even if only breast fed for a few weeks. Breast fed babies also tend to have less allergy problems.

Breast feeding is economical and convenient. A ready supply of sterile milk at the perfect temperature is always available. The breast milk is more easily digested than commercial-made formula, thus decreasing intestinal and stomach disturbances in the baby.

The breast feeding experience is reported to be a satisfying and special experience by most breast feeding mothers. And, although it is the mother who is responsible for most of the feedings when breast feeding, fathers can help with other aspects of baby care and give occasional supplemental feedings of expressed breast milk, formula or water from a bottle.

Breast feeding also helps the mother physiologically. With breast feeding, the uterus is stimulated to contract and returns to normal size faster. The nursing mother needs to eat a well-balanced diet and needs 300-500 more calories than when not breast feeding. The extra calories are used up in nursing. Breast feeding mothers also need to drink more fluids, juices, milk, and water... to help with milk supply.

If you are planning to breast feed, you should begin to prepare the nipples of your breasts about the seventh or eighth month of pregnancy by massaging them a couple times a day with a terry cloth towel for a few minutes. This helps to toughen the nipples and reduces the incidence of soreness as the baby begins to suck. Caution: Nipple stimulation may cause uterine contractions. If contractions are stimulated, you may need to curtail the nipple preparation. Discuss this with your physician or nurse if you develop problems.

While breast feeding is natural, it is not always easy at first. Breast fed babies usually eat quite frequently (every 1 ½-2 hrs.) in the first several days. It will take some time and patience to develop a good breast feeding routine between you and your baby. Many good books are available that may help you, as can the pamphlets on breast feeding available at the clinic. It is often very helpful to talk with someone who has breast fed before. They can offer practical advice and answer many questions. Nursing personnel will give you assistance while in the hospital.

How long you nurse your baby is another decision you will be making. Many women breast feed for several months, even if they work outside the home. Breast milk can be expressed and stored for feeding while you are away. There are different breast pumps available for expressing milk, or the milk can be expressed manually by breast massage. Some women breast feed only while they are with their baby and have the baby's care giver feed formula at other times. There are booklets that give great advice and helpful hints to the working mother

who is breast feeding. You can pick up these booklets while in the hospital. Talking with someone who has breast fed while working can help you tremendously. However long you might decide to breast feed, the experience will be very beneficial to both you and your baby.

Bottle Feeding:

While breast feeding is encouraged, millions of babies have grown and developed satisfactorily on formula feedings. If you decide that bottle feeding will be best for you and your baby, you need not feel guilty about the decision.

Advantages to bottle feeding include the fact that others can more readily help with feedings. You also can judge just how much your baby is eating. Disadvantages include the need for preparing formula and sterilizing bottles. Bottle-fed babies also tend to have greater intestinal upsets as formula is not as easily digested as breast milk. Bottle feeding is also more expensive.

If you decide to bottle feed, you will be instructed on how to prepare formula and how to sterilize bottles before you leave the hospital. Booklets are also available explaining these procedures.

The Final Decision:

If you are unsure about how you would like to feed your baby, you should give breast feeding a try. If you find that breast feeding is not the best thing for you and your baby, you can always change to bottle feeding. In the process, the baby has benefited from receiving some antibodies against disease because the antibodies are present in the very first secretions from the breast (colostrum), even before milk actually comes in. The important thing is that you feel comfortable and happy with the feeding method you choose.

However you decide to feed your new baby, medical evidence indicates that all babies should be fed either breast milk or formula until one year of age. You should not feed your baby homogenized milk before one year because the baby's digestive system is not ready to handle the protein content.

Solids, including cereals, strained vegetables and fruits, are not recommended for at least the first four months. The baby will receive all the nutrients needed in breast milk or formula. Solids place an undue load on the baby's digestive system and on the baby's kidneys. Early introduction of these foods may also result in allergy problems later.

Vitamins are included in most formulas, so you do not need to give your baby vitamins if you are formula feeding. If breast feeding, discuss the possible need for vitamins with your baby's doctor at the baby's first check-up.

Circumcision

During circumcision the foreskin of a baby boy's penis is surgically removed. Whether or not to have your baby boy circumcised is another decision you will need to make. Expectant parents should give this matter serious thought.

Some controversy remains as to whether circumcision should be done. However, the consensus of opinion is that no absolute medical indication exists for circumcision of the newborn.

Advocates of circumcision believe that circumcision prevents infection of the penis, and decreases incidence of cancer of the penis and eliminates the need for careful hygiene of the penis.

Those opposed to circumcision argue that it does not prevent cancer of the penis and that careful, proper hygiene of the penis is possible when parents are instructed on proper penile hygiene.

You should remember that circumcision is a surgical procedure and involves some risk. The risks are minimal, but nonetheless do exist. Risks include bleeding, infection and stenosis (narrowing of the urinary opening). If you have your baby circumcised, you will be given instructions on how to care for the circumcision when the baby is discharged.

Parents should discuss circumcision and try to make a decision on the matter before the baby is born. Talk with your obstetrician and/or pediatrician to obtain information to help you with this decision.

Characteristics of the Newborn

Often newborn babies do not look exactly as the parents have expected them to look. Most babies do not have perfectly round heads. They usually are not wide-eyed and alert, and do not have a nice pink color to their skin. The labor and birth process causes some temporary changes in the baby's appearance: The baby may have swollen eyes, a long narrow head, and a reddish color to his skin with some blueness of the hands and feet for several hours. Gradually, the baby's appearance will change. As circulation improves, the blueness of the hands and feet will disappear. His eyes will focus on you as you hold him and talk to him, and the head will become more round as swelling from the birth process decreases.

Bathing and Skin Care

Most new parents are very anxious and nervous about bathing the new baby. But you will soon become very comfortable with this task. Nursing personnel will give you instruction and information on bathing the baby. Films are available for viewing, and you can attend a class with a bath demonstration.

Until the umbilical cord has healed and fallen off, sponge bathe the baby rather than putting the baby in a tub of water. After the cord has fallen off, you can bathe the baby in a tub of water.

Babies have very dry skin. So use a mild, unperfumed soap. Use the soap sparingly being careful to rinse well since soap can be drying. Avoid applying lotions or oils to the baby's skin since it is generally very sensitive.

Illness Prevention – Newborn

Newborns can easily pick up colds and viruses. You should avoid taking the baby out into crowds for several weeks. Visitors at home should be kept to a minimum, and anyone who is ill should not visit the baby.

If your baby does become ill, you need to notify the baby's doctor. Report any fever of 101° F. or greater.

Crying

Crying is your baby's way of communication. Babies will cry for many different reasons. Before long, you will begin to recognize some of the reasons your baby may be crying. The baby may be hungry, have a wet diaper, be uncomfortable, or just need to be held. A little crying won't hurt the baby, but avoid long periods of crying. Go ahead and comfort your baby. You will not "spoil" him by picking him up and comforting him in the early months of life.

PARENTING

In case no one ever told you, learning to take care of a baby is not easy. It takes time to get used to being a parent. Remember that you are not alone. There are people all around you that have had to learn what you are learning. Take advantage of talking with someone when you need help or have questions. You may want to pick up a book on general baby care. Just remember that all babies are different, so there are usually no absolute wrong or right ways of doing most things. You have to use common sense and go with your own feelings much of the time.

We sincerely hope that this booklet will be useful as a guide to help you gather information and answer some of your questions during your pregnancy, delivery, and postpartum experiences. Pregnancy, childbirth, and parenting are all very special and unique times, and we wish you a very happy and healthy pregnancy.

PREGNANCY WEEK BY WEEK

This is a week by week guide to what may be happening to you and your baby throughout pregnancy. As different women's pregnancies develop at different rates, do not expect to be at exactly the same stage for the week described.

Since pregnancy is dated medically from the first day of your last period, the record begins with what is termed the third week of a 40-week pregnancy, the week of conception.

Taken from
"The Complete Book of Pregnancy and Childbirth"
by Sheila Kitzinger.

Week 3

You have ovulated and an egg is traveling along one of the two fallopian tubes toward your uterus. During intercourse one of the millions of sperm your partner has ejaculated has fertilized the egg while still in the fallopian tube.

Your baby is a cluster of cells which multiply rapidly as they continue the journey along the fallopian tube.

Week 4

You have probably not noticed anything different, though some women have a strange, metallic taste in their mouths.

The fertilized egg has arrived in your uterus and after floating in the uterine cavity for about three days, has embedded itself in the uterine lining. It is nourished from blood vessels in the lining of the uterus, and the placenta begins to form around it.

Week 5

You are beginning to think that you may be pregnant. Your period is late, but you can't be sure because you may feel as though it is about to start at any time. Your breasts are slightly enlarged and tender and you may find you need to urinate more often than usual.

The embryo is about 1/10 inch (2 mm) long and would be visible to the naked eye by now. Its spine is beginning to form and the brain has two lobes.

Week 6

You may be feeling sick first thing in the morning or when you are cooking a meal. Your vagina will have become a bluish or violet color. From the 10th day after your period was due it should be possible to find out by a urine test whether or not you are pregnant. Your uterus is now the size of a plum.

The baby has a head and trunk, and a rudimentary brain has formed. Tiny limb buds are beginning to appear. By the end of this week its circulation is beginning to function. The jaw and mouth are developing and 10 dental buds are growing in each jaw.

Week 7

You may sometimes feel dizzy or faint when you stand for a long time. Your breasts are noticeably larger and small nodules (Montgomery's tubercles) may appear on the areola at about this time, while your nipples may become more prominent. By this date the doctor should be able to confirm your pregnancy by a vaginal examination.

The limb buds have developed rapidly and now look like tiny arms and legs. At the end of these limbs are small indentations which will later become fingers and toes. The spinal cord and brain are now almost complete and the head is assuming a human shape. The baby is now about ½ inch (1-3 cm) long.

Week 8

You may find that you have "gone off" certain foods. Many pregnant women can no longer drink alcohol, even if they enjoyed it, and a dislike of cigarettes or tobacco smoke is common. Your hair may seem less manageable than usual. You may also have a slight vaginal discharge. This is quite normal as long as it is not irritating or painful.

The baby now has all its main internal organs though they are not yet fully developed. The eyes and ears are growing, and the face is taking on a recognizably human shape. The baby is just under an inch (2-3 cm) long.

Week 9

You may notice changes in your skin because of the pregnancy hormones in your system. Any wrinkles you have may be less obvious. Your gums may be softening, again because of these hormones, and you need to be especially careful about dental hygiene now and through the rest of the pregnancy. The thyroid gland in your neck may be more prominent.

The baby's limbs are developing very rapidly, and the fingers and toes are beginning to be defined on the hands and feet. The baby is moving about gently to exercise its muscles, although you cannot feel these movements. At this point the baby weighs only about as much as a grape.

Week 10

Your uterus has expanded to the size of an orange, but is still hidden away within your pelvis. You should be wearing a bra with good support by now. If you buy a bra that fits your breasts but is adjustable to allow for later chest expansion, you should not need to get another size during pregnancy.

The placenta, to which the baby is attached, begins to produce progesterone in a process which is completed by the end of the 14th week, when the progesterone produced is sufficient for the placenta to take over the function of the corpus luteum. The baby's ankles and wrists are formed, and fingers and toes are clearly visible. The baby has grown to about 1 ¼ inches (4-5 cm) long.

Week 11

If you have been nauseous during the past weeks, the sickness should gradually lessen from now onward. The amount of blood circulating through your body has started to increase, and will go on increasing until about the 30th week. You should be thinking about arranging prenatal classes as they often tend to get booked up early.

Your baby's testicles or ovaries have formed, as have all of its major organs. Since these organs will not develop much further, but will merely continue to grow during its time in the uterus, the baby is relatively safe from the risk of developing congenital abnormalities after the end of this week.

Week 12

You will probably have your first doctor's visit this week. You will have a complete medical examination and the doctor will be able to feel the uterus by external examination, as it has risen above your pelvis. Arrangements are made for you to have appointments once a month until you are 32 weeks pregnant. This first visit is time to ask about anything bothering you.

The baby's head is becoming more rounded and it has eyelids. Its muscles are developing and it is moving about inside the uterus much more. It is now about 2 ½ inches (6-7 cm) long but still weighs only ½ oz (8 g).

Week 13

If you have had morning sickness this will probably be gone completely by the end of this week. From now on your uterus will be enlarging at a regular and noticeable rate.

The baby is now completely formed. From now on its time in the uterus will be spent in growing and maturing until it is able to survive independently of its mother.

Week 14

You will be feeling less tired than you were at the beginning of your pregnancy and feel quite fit. You may notice a dark line (the linea nigra) down the center of your abdomen. This will probably start to fade after your baby is born. Your nipples and the area around them are also starting to darken. Your uterus is the size of a large grapefruit.

The baby now has eyebrows and a small amount of hair has appeared on its head. Its heart can be heard by ultrasonic scan. The baby drinks some of the amniotic fluid and can pass urine. It is now receiving all of its nourishment from the placenta and measures about 3 ¼ inch (8-9 cm).

Week 15

Your clothes will be getting too tight for you. It is best not to try and cram yourself into tight jeans. To cope with the increased amount of blood circulating in your body and the baby's need for oxygen, your enlarged heart has increased its output by 20%.

The hair on your baby's head and brows is becoming coarser. If it has a gene for dark hair, the pigment cells of the hair follicles are beginning to produce black pigment at this stage.

Week 16

Your second prenatal clinic is now due. Some doctors do a scan at this visit. You will be able to see the outline of the baby's head and body. You feel butterflies in your stomach that just might be the baby moving. Your waistline will be starting to disappear. If you have not already done so, book childbirth education classes now. Sometimes an "early bird" class is available to discuss diet, exercise, posture, emotions and health.

Lanugo (fine down) is starting to form all over the baby, following the whorled pattern of the skin, and the baby has fingernails and toenails. It is 6 ¼ inches (16 cm) long and weighs nearly 5 oz (135 g).

Week 17

You may find that you are sweating more than usual (the extra blood circulating in your system) and also that your nose feels congested. This is a common result of pregnancy and will end after delivery. Vaginal secretions may increase now.

The growing baby has pushed the top of the uterus to halfway between your pubic bone and your navel. From now on the baby weighs more than its placenta. It is probably aware of, and may be startled by, sounds outside your body.

Week 18

If this is your first baby, this is the time when you may feel the first prod which is definitely nothing to do with indigestion! At last you know that there is a baby in there! Trouble sleeping at night will be helped by increasing the number of pillows supporting you.

Measuring about 8 inches (20 cm) long, your baby is now testing out its reflexes. As well as kicking, it is grasping and sucking. Some babies find their thumbs and are confirmed thumb-suckers before they are born.

Week 19

Now is not too early to start practicing deep relaxation and steady, rhythmic breathing. Set aside some time each day for this. You may notice that you are putting on weight on your buttocks as well as your abdomen.

Buds for permanent teeth are forming behind those that have already developed for the milk teeth.

Week 20

You will notice your baby being more and more active, and may even be able to see some of its movements. The growing uterus is pushing up against your lungs and pushing your tummy outward. Your navel may suddenly pop out and stay that way until after delivery. Your chest (rather than breasts) has expanded and, if you do not already have an adjustable bra, now is the time to buy one.

Sebum from the sebaceous glands mixes with skin cells and begins to form the vernix. This protective vernix clings to the lanugo all over the skin, especially on the hairier parts and in the creases. The baby is now about 10 inches (25 cm) long.

Week 21

You may start having heartburn (a burning sensation in the lower part of the chest) and may also bring up small amounts of acid fluid. Ask your doctor to give you some antacid tablets to neutralize the acid.

The baby weighs just under 1 lb (450 g). It is still moving about freely in the amniotic fluid and can be felt kicking sometimes high in your tummy, at other times down near your pubis.

Week 22

Your gums may be swelling because of the pregnancy hormones in your system. Do not forget that dental hygiene is important throughout pregnancy.

The baby is settling into a pattern of activity and sleep. It is probably at its most active while you are resting.

Week 23

The different parts of the baby can be felt (palpated) through your abdominal wall. You may feel a stick-like pain at times down the side of your tummy; this is the uterine muscle stretching and the pain should go after you have had a rest.

At about this time the Braxton Hicks “rehearsal” contractions may become more pronounced, gripping and massaging the baby at regular intervals.

Week 24

Your next visit to the doctor – by now the doctor will be able to hear the baby’s heart through a stethoscope. The top of your uterus (the fundus) now reaches to just above your navel.

The baby is growing rapidly. It is now about 13 inches (32 cm) long and weighs over 1 1/4 lbs (0.5 kg). Although its vital organs are quite mature by now, its lungs are not yet sufficiently developed for survival outside the uterus.

Week 25

You may get a cramp now and later. Avoid pointing your toes down. The baby may also be pressing against your bladder, causing you to go to the toilet little and often.

The baby’s bone centers are beginning to harden.

Week 26

You should make arrangements for maternity leave and discover to what benefits you are entitled.

The baby’s skin is beginning to change from being paper-thin and transparent to being opaque.

Week 27

You will be putting on weight fairly regularly now until about the 36th week. It may be a good idea to start thinking about what to get for the baby before you become so big that shopping becomes an unpleasant chore.

The baby's skin is very wrinkled, but is protected and nourished by the covering of vernix.

Week 28

Colostrum may leak from your breasts. From now on you will probably be visiting the clinic every 2 weeks. If you are Rhesus negative, an antibody check is done.

At this stage of development the baby is considered legally viable, which means that if delivered it must be registered. It is about 14 inches (38 cm) long and weighs around 2 lbs (0-9 kg).

Week 29

You probably feel as if all your internal organs are being crowded out by the baby. There is pressure on your diaphragm, liver, stomach and intestine.

By now the baby's head is more or less in proportion with the rest of its body.

Week 30

It is important to remember to maintain good posture when you are standing or sitting, even though the weight of the baby seems to be dragging you off balance.

The baby is probably very aware of the Braxton Hicks contractions, even when you do not notice them.

Week 31

You may be getting very breathless when you climb stairs or exert yourself. In fact, the tidal volume of your lungs has increased from about 500 cubic cm of air with each breath in, to 600 cubic cm.

However breathless you feel, the baby is getting enough oxygen. It now weighs about 4 lbs (1-8 kg).

Week 32

At each clinic visit the baby's position is felt, its rate of growth assessed and its heart checked.

The baby is 16 inches (42 cm) long. It is perfectly formed but the fat reserves beneath its skin are only gradually laid down. Born at this time, it would still need to be cared for in an incubator.

Week 33

You may be able to distinguish the baby's bottom from a foot or knee. You feel its movements more as prods and kicks. It may be too big now to swoop around in the amniotic fluid.

Your baby has probably adopted the most usual head down (vertex or cephalic) position, in which it will now stay until delivery.

Week 34

You will be attending prenatal classes by now.

The baby's skin is becoming pinker. The baby can differentiate between dark and light, and is bathed in a red glow when sunlight is on your tummy.

Week 35

You may have some backache at about this time. This is because the ligaments and muscles supporting the joints in the small of your back relax.

The fetus measures approximately 18 inches (44 cm) in length and weighs around 5 ½ lbs (2-5 kg).

Week 36

Doctor visits will be every week from now on. If this is your first baby, it will probably engage sometime this week or soon after, and may have done so already. Your lump will settle lower down and you may also need to urinate more often.

The baby is almost fully mature and any time now, the presenting part may drop into your pelvis ready for birth. It is about 19 inches (49 cm) long.

Week 37

You may have a chance to tour the maternity floor and labor room of the hospital in which you are planning to give birth.

The baby may be rehearsing slight breathing movements, though there is no air in its lungs. In this way amniotic fluid passes into the baby's trachea, giving it hiccups!

Week 38

You may notice that the baby moves less now, and instead of whole body movements, there are only jabs from the feet and knees, and the strange buzzing sensation inside your vagina of the head moving against your pelvic floor muscles.

The baby may be putting on as much as 1 oz (28 g) in weight a day at this stage.

Week 39

Your cervix is ripening in preparation for labor. You may feel heavy and weary and be experiencing quite strong Braxton Hicks contractions.

The amniotic fluid is renewed every 3 hours. The baby's bowel is filled with greenish-black meconium, excretions from the baby's alimentary glands mixed with bile pigment, lanugo and cells from the bowel wall.

Week 40

The long-awaited day is near, and perhaps after the long wait you are now wishing that it had not come so quickly! You will soon hold your child in your arms.

The baby is about 20 inches (55 cm) long. The presenting part is in the lower segment of your uterus and pressing through the softened, partially-opened, cervix. It is about to leave the security it has always known and then it will need all your love and care.

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