



Obstetrical  
**Gynecological**  
Associates, Inc. *We Understand Women.*

# NEW BEGINNINGS



Connor delivered by Dr. Strickland

## A GUIDE TO A HEALTHY PREGNANCY AND BIRTH



## TABLE OF CONTENTS

1.0 Welcome .....	4
1.1 Your Providers .....	5
1.2 Calling During Business Hours .....	6
1.3 Calling the Office After Hours .....	6
1.4 Emergencies .....	6
1.5 Non-Emergencies .....	7
2.0 Good Health Before Pregnancy .....	8
3.0 What to Expect at Your Prenatal Visits .....	12
4.0 Prenatal Development .....	14
4.1 Baby's Growth During Pregnancy .....	14
4.2 Obesity and Pregnancy .....	18
4.3 A Partner's Guide to Pregnancy .....	21
5.0 Health Tips & Safe Meds During Pregnancy .....	26
5.1 Non-Medicinal Remedies for Morning Sickness .....	26
5.2 Over-the-Counter Remedies for Nausea/Vomiting .....	27
5.3 Safe Over-the-Counter Medicines .....	28
5.4 Exercise During Pregnancy .....	29
5.5 Painting During Pregnancy .....	29
5.6 Travel During Pregnancy .....	29
5.7 Color or Highlighting Hair During Pregnancy .....	29
5.8 Foods to Avoid During Pregnancy .....	30
5.9 Avoiding Constipation .....	30
5.10 Healthy Eating During Pregnancy .....	31
5.11 Round Ligament Pain .....	32
5.12 Iron During Pregnancy .....	33
5.13 Iron-Rich Foods .....	34
5.14 Sex During Pregnancy .....	35
6.0 Exposure To Communicable Diseases .....	37
6.1 Hand-Foot-Mouth Disease .....	37
6.2 Chickenpox .....	37
6.3 Fifth Disease .....	37
6.4 Zika Virus .....	38

6.5 Toxoplasmosis .....	39
6.6 COVID .....	39
7.0 Working During Pregnancy .....	40
7.1 Work Policy for the Obstetrical patient .....	40
8.0 Testing During Pregnancy .....	42
8.1 Routine Testing .....	42
8.2 Screening Tests for Birth Defects .....	45
8.3 Second Trimester Blood Tests .....	47
9.0 Special Circumstances in Pregnancy .....	49
9.1 Preterm Labor and Delivery .....	49
9.2 Pregnancy with Twins .....	52
9.3 Pregnancy with High Blood Pressure .....	54
9.4 Signs That You Are Approaching Labor .....	57
9.5 Medications for Pain Relief During Labor .....	58
10.0 Vaccinations .....	61
10.1 TDAP Vaccine .....	61
10.2 Influenza .....	62
10.3 COVID .....	64
11.0 Other Information .....	66
11.1 Gender Ultrasound .....	66
11.2 Fetal Kick Counts .....	66
11.3 Pediatrician List .....	67
11.4 Stuff No One Told Me About Having a Baby .....	68
12.0 Childbirth & Breastfeeding Classes .....	70



## **1.0 WELCOME**

Welcome to Obstetrical and Gynecological Associates (OGA)! Thank you for choosing us for your prenatal care. We are women, mothers, sisters, aunts and daughters just like you, so we understand your concerns and relate to your needs.

Our mission is to provide care and compassion to all women, with women.

Most childbirth experiences are uncomplicated: the mother does fine, the baby cries, the family is overjoyed. With OGA, the joy and excitement of your first pregnancy visit all the way to the birth of your child, will be shared with our doctors, midwives and staff. We will answer your questions and help you to achieve the pregnancy and birth that you desire in a safe environment. We support your decisions about your birth experience. If, however, there is a complication or concern with your health, your baby's health or the labor process, we are right there by your side with the appropriate care plan.

In order to remain certified and relevant, all of us at OGA take classes and courses throughout the year to keep up with evidence based care.

Here at OGA, the primary c-section rate is 12.5% and the episiotomy rate is less than 1%. These are well below the national average.

Our motto at OGA is to always expect the best outcome and provide caring, competent and compassionate care for your pregnancy and your birth.

## **1.1 YOUR PROVIDERS:**

Crystal Strickland, MD  
Cheryl Short, MD  
L. Jennifer Murphy, MD  
Jessica Oppolo, CNM  
Valerie Allmon, CNM  
Jaclyn Petrov, CNM  
Ashley Kohler, NP  
Ashleigh Peterson, NP

## **WHAT IS A MIDWIFE?**

OGA is excited to offer Midwifery services at our practice. Midwifery means “with women” and that is exactly what our midwives do! A Certified Nurse Midwife (CNM) is an advanced

practice registered nurse who cares for women throughout their lifespan with an emphasis on normal physiologic pregnancy and birth. CNMs are board certified to care for patients and prescribe medications along with attending births and catching babies. Some midwives are even certified to assist in cesarean sections. Evidence shows that midwives are experts in their field and consistently produce exceptional statistics in birth outcomes. The midwives provide evidence-based care during their longer than usual prenatal visits with a focus on educating patients about their options when it comes to their pregnancy and birth. This is done through the power of shared decision making, where care is individualized to each patient and decisions are made in an informed and safe way. Our CNMs are here to guide you through your pregnancy and birth journey in a personal yet safe environment. The midwives will be present throughout your labor providing hands on and hands off support. We support women who choose unmedicated birth as well as those who choose medications for pain relief throughout the labor process. We promote active movement and offer many different position changes to help aid in labor progression. Wireless monitoring is also supported. All of this is done while striving to maintain a calm and warm atmosphere. It is our privilege to be able to support you and your family during this special time and we are very excited to offer “with women” support and care.

## **1.2 CALLING DURING BUSINESS HOURS**

If you have any questions, you may call the office during regular business hours (9AM - 4:30PM) at 219-462-6144, dial extension 308 to be connected with a staff member. If you leave a voicemail, know that messages are checked and calls are returned throughout the day. If you have a non-emergency question, you may either call with your concern or you may opt to use our provider portal. Note that portal messages may not be answered within the same business day. Emergent matters should be a call to our office nurse.

## **1.3 CALLING THE OFFICE AFTER HOURS**

We are available to provide emergency care 24 hours a day, 7 days a week, every day of the year, including holidays. We consider it a privilege and a responsibility to provide continuous availability for your obstetrical needs. However, due to the large number of patients in our practice, and the fact that we are often performing surgery and delivering babies, we ask that you consider several 'common sense' rules for the use of this service. To reach in the case of an emergency after hours, call the office at 219-462-6144. We have an answering service that will notify the provider on-call.

- Please call for yourself rather than have someone call in on your behalf. A provider talking directly to the patient can always obtain the best history.
- When you have the on-call provider paged, please make sure you will be available at the given number. We may be in a delivery, surgery or have several calls ahead of you.
- Please stay off the phone so that we can reach you.
- Have your pharmacy number ready if you anticipate needing a prescription.
- After office hours, please call ONLY for emergencies.

## 1.4 EMERGENCIES

\*\*\*Please do not use the computer patient portal for emergency questions. We do not want a question or concern to go unanswered if the message does not get reviewed right away.

- Severe abdominal or pelvic pain in any trimester.
- Contractions prior to 37 weeks gestation, lasting for more than 6 hours that do not end with rest and hydration.
- Significant bleeding in any trimester (bleeding like a period, more than spotting or discharge).
- Ruptured membranes / leaking of amniotic fluid from the vagina that occurs before 37 weeks of gestation.
- Fever >100.4°F.
- Severe nausea and vomiting; inability to keep down liquids.
- Sudden, severe swelling of the hands and face. Swelling of the legs and feet is common late in pregnancy, especially in hot weather/summer months.
- Blurring of vision or spots >20 weeks of pregnancy.
- No fetal movement for >2 hours of time (and after drinking liquids, laying on your left side, eating a snack).
- Burning with urination, bloody urine or back pain that is not relieved by rest, water hydration and 1000mg of acetaminophen (tylenol).
- Loss of consciousness or seizure, CALL 911.

For an emergency visit to a hospital, if at all possible, try to come to Northwest Health Porter. We are more likely to be informed about your visit and care and to obtain your records of any testing or studies done if you come to NWH.

## 1.5 NON-EMERGENCIES

Please do not call the office after hours for non-emergent matters. These non-emergency problems are important to us, but are better handled during office hours. We encourage you to bring a list of questions to your regular visits.

- “I have wondered” questions.
- Prescription refills - unless medically urgent.
- Long-standing minor problems.
- Billing or appointment questions.

We highly recommend the book titled *Your Pregnancy and Childbirth, Latest Edition* by ACOG (American College of Obstetricians and Gynecologists). Please use this as a reference source. There are many different books and websites that you can find regarding pregnancy, but be very careful as to what you read; anyone can write an article or put information on the web that may not be medically reliable.

Here are a few other sources of information:

- Evidence Based Birth - [evidencebasedbirth.com](http://evidencebasedbirth.com)
- The Bump - [thebump.com](http://thebump.com)
- What to Expect - [whattoexpect.com](http://whattoexpect.com)
- Count the Kicks - [countthekicks.org](http://countthekicks.org)

## **2.0 GOOD HEALTH BEFORE PREGNANCY**

### **What is a preconception care checkup?**

A preconception care checkup is an exam done prior to pregnancy. The goal of this checkup is to identify risk factors that could affect your pregnancy. Evaluating these factors before pregnancy allows steps to be taken to increase the chances of having a healthy pregnancy and a healthy baby. The provider will ask you about your diet, lifestyle, medical history, family history, medications, and any past pregnancies. Certain medications may be changed to safer choices for a pregnancy. Tests for infections and genetic risks may be recommended.

### **Who should have a preconception care checkup?**

If you are planning to become pregnant, it is a good idea to have a preconception care checkup.

### **Why is a healthy diet important?**

Your body needs a regular supply of nutrients to grow, replace worn-out tissue and to provide energy. How much of each nutrient you need each day is called the dietary reference intake. You can get your daily dietary reference intake of nutrients from food as well as from supplements. However, most of your nutrients should come from the foods that you eat.

### **How can I make sure that my diet is healthy?**

To be sure that your diet gives you enough nutrients, you need to know which nutrients are in the foods that you eat. The U.S. Department of Agriculture's food-planning guide called *My Plate* ([www.myplate.gov](http://www.myplate.gov)), can help you to make healthy food choices. My Plate takes into account your age, sex, and how much you exercise every day.

### **How can being overweight affect my pregnancy?**

Excess weight during pregnancy is associated with several pregnancy and childbirth complications, including high blood pressure, preeclampsia, gestational diabetes and preterm labor. Obesity during pregnancy can be associated with having a "larger-than-normal" baby. It also puts you at an increased risk of birth injury during labor and delivery and ultimately an increased risk of a cesarean section delivery. It increases the risks of birth defects, especially neural tube defects. Having too much body fat may make it more difficult for your provider to monitor your fetus with ultrasound and to hear the baby's heartbeat.

### **How can I lose weight if I am overweight?**

To lose weight, you need to use up more calories than you take in. The best way to lose weight is by making changes in your diet and by being more physically active. Cutting back on the number of calories you consume is a good first step. Exercise burns calories and helps you to lose weight. Call to make an appointment in our Wellness Solutions program to achieve a healthier weight before becoming pregnant.

### **Are there medications to help me lose weight before getting pregnant?**

If you have tried to lose weight through diet changes and exercise and you still have a BMI of 30 or greater, or a BMI of at least 27 with certain medical conditions such as diabetes or heart disease, weight-loss medications may be suggested. These medications should not be taken if you are trying to become pregnant or are already pregnant.

**Is there surgery to help me lose weight before getting pregnant?**

Bariatric surgery may be an option for people who have major health problems caused by obesity. If you have weight loss surgery, you should delay getting pregnant for 12-24 months after surgery. If you have had fertility problems, they may resolve on their own as you rapidly lose the excess weight. It is important to be aware of this because the increase in fertility can lead to an unplanned pregnancy. Some types of bariatric surgery may affect how the body absorbs medications taken by mouth, including birth control pills. You may need to switch to another form of birth control.

**Can I still have a healthy pregnancy if I am obese?**

Despite the risks, yes, you can still have a healthy pregnancy if you have the disorder of obesity. It takes careful management of your weight, attention to diet and exercise, and regular prenatal care to monitor for complications and special considerations for your labor and delivery.

**How can being underweight affect my pregnancy?**

Being underweight can pose risks during pregnancy. Being underweight increases the risk of having a low-birth-weight baby and increases the risk of preterm birth.

**Should I take a vitamin supplement?**

Although most of your nutrients should come from the foods that you eat, it is a good idea to start taking a prenatal vitamin supplement before pregnancy. It is important that your prenatal vitamin has iron, DHA and folate. Prenatal vitamins come in pill form and gummy form. Most gummies do not contain iron, therefore we recommend prenatal pills or an additional iron pill with your prenatal gummy. Sometimes, your provider may also suggest additional iron supplementation and/or vitamin D throughout your pregnancy.

**Why is it important for me to get enough iron?**

Iron is important during pregnancy because it is used to make the extra blood needed to supply oxygen to the growing baby. Not getting enough iron can lead to anemia. It is important that your prenatal vitamin has iron. We will check your iron levels (Hemoglobin) throughout the pregnancy and sometimes we suggest additional iron. Please take your iron pills at a different time than your prenatal vitamin so that you can optimize absorption.

\*\*\*Iron is absorbed the best on an empty stomach. Yet, iron supplements can cause stomach cramps, nausea, and diarrhea in some people. You may need to take iron with a small amount of food to avoid this problem. Milk, calcium and antacids should not be taken at the same time as iron supplements.

**Why is it important for me to get enough folate/folic acid before I get pregnant?**

Folate is the natural form of folic acid. Folate helps to prevent neural tube defects (NTDs) when taken before and during pregnancy. It is recommended that all women consume 400 micrograms of folate per day in the form of folate or folic acid. Not all women can digest folic acid appropriately, therefore we recommend that you find a prenatal vitamin with folate rather than folic acid.

**Can my lifestyle affect my pregnancy?**



Smoking, drinking alcohol, and using drugs during pregnancy can have harmful effects on a growing fetus. The first trimester of pregnancy is when the fetus is most vulnerable to the harmful effects of these substances. There is no medical research that indicates any safe level of tobacco, alcohol, marijuana, and/or any other street drug use. Therefore, our advice is to stop completely.

### **How can my environment affect my pregnancy?**

Some substances found in the home or the workplace may make it harder for a woman to become pregnant or can harm a growing fetus. If you are planning to get pregnant, please look closely at your home and workplace. Think about the chemicals that you use in and around your home. Find out from your employer whether you might be at risk for exposure to toxic substances, chemicals, solvents, and/or radiation.

### **Can medical conditions affect my pregnancy?**

Some medical conditions such as diabetes mellitus, high blood pressure, and seizure disorders can cause problems during pregnancy. If you have a medical condition, your provider will discuss concerns related to pregnancy and possible changes that might need to occur before or during pregnancy to control your condition.

### **Can the medications I take affect my pregnancy?**

Some medications including vitamin supplements, over-the-counter (OTCs) medications, and herbal remedies can be harmful to the fetus and should not be taken while you are pregnant. It is important to tell your provider about all of the medications, including supplements and herbal preparations that you are taking. Do not stop taking prescription medication until you have talked with your provider.

### **If I have an infection, can it affect my pregnancy?**

Infections can harm both the mother and the fetus. Some infections during pregnancy can cause birth defects or illness in the baby. Infections passed through sexual contact called sexually transmitted infections (STIs) can also be harmful during pregnancy. Many types of STIs can affect your ability to become pregnant in the future. If you think you have or have been exposed to an infection, please contact your provider so that we can plan for the appropriate treatment (antibiotics, antivirals, ect.).

### **Can I prevent infections?**

Vaccinations (also called immunization) can prevent some infections. Some vaccines are not safe to receive during pregnancy. It is important to know which vaccines you may need and to get them before becoming pregnant. If you are Rubella Non-Immune in the pregnancy, you will receive a rubella booster in the postpartum period and not during pregnancy. TDAP, FLU and COVID are all safe vaccinations in pregnancy.

### **What if I had a problem in a previous pregnancy?**

Some pregnancy problems may increase the risk of having the same problem in a later pregnancy. These problems include preterm birth, high blood pressure, preeclampsia, cholestasis and gestational diabetes. However, just because you had a problem in a past pregnancy does not

mean that it will happen again, especially if you receive proper care before and during your pregnancy. Your provider may recommend medications and/or therapies to reduce your risks.

### **Why is it important for my partner and me to share our family health histories with my health care professional?**

Some health conditions occur more often in certain families or ethnic groups. These conditions are called genetic or inherited disorders. If a close relative has a certain condition, you or your baby could be at greater risk of having that condition. There is a blood test available to test for certain genetic disorders to help avoid, plan, and predict.

## **3.0 WHAT TO EXPECT AT YOUR PRENATAL VISITS**

### **First appointments**

Your first visit is called a Pregnancy Confirmation (PECON). PECON visits are usually with a midwife but it can also be with a physician or nurse practitioner. Your provider will review your last menstrual period (LMP) and early dating ultrasound to confirm an estimated due date (EDD). Once an EDD is established at this visit, the date is never changed. Your provider will also do a health history intake and discuss initial prenatal care and what future visits will look like.

Your second prenatal visit is called a New OB Physical. At this visit we will perform a physical exam. This is when due pap smears are performed. All bloodwork is usually performed at this visit. If you desire to have any genetic testing, it is usually ordered and performed at this visit.

Your prenatal care will consist of scheduled routine visits also known as return OB visits. Your visits should rotate between providers so that you have met all providers that can possibly attend your delivery. You will schedule your next appointment before leaving each visit.

### **16-18 WEEKS**

Between 16-18 weeks, the baby is resting between your pubic bone and belly button. It is during these visits that we will start to listen to your baby's heartbeat with the handheld doppler.

During this visit, your provider will give you the option for a blood test known as Alpha Fetoprotein (AFP). AFP tests for spina bifida in the baby, which is a condition in which the skin and tissue around and over the spine may not close properly. Even if you had early genetic testing, this test is ordered in addition to any previous testing, as it is only accurate if collected 16-18 weeks of pregnancy. Your appointments are about every four weeks at this point and moving forward.

### **22 WEEKS**

A second ultrasound for fetal anatomy is usually performed between 22-24 weeks gestation.

### **24-28 WEEKS**

- Around, but no sooner than 24 weeks, you will have blood work drawn to test for gestational diabetes and anemia. You will drink a 50g glucola drink followed by a 1hr blood draw for blood glucose level and a CBC to look for blood counts, specifically anemia.
- At 27 weeks we offer the TDAP vaccine, which is offered in every pregnancy in order to pass along antibodies to the growing fetus. Those around the future newborn should have

- a TDAP booster every 10 years.
- At 28 weeks, if you have a Rh negative blood type, an order will be given for an injection called RhoGAM. Only the hospital is authorized to administer this injection.
- Appointments will now be every two weeks after the 28 week visit.

### **36 WEEKS**

At the 36 week visit, we will perform the Group Beta Strep (GBS) vaginal swab test. This test looks for the GBS bacteria that can be present in the vagina. This bacteria is not an STI and you can not share/spread it between you and your partner. If the test is positive, there is nothing to do for now but we will administer antibiotics in labor. We will also perform a vaginal exam to check your cervix. We will explain cervical dilation and percentage thinned out along with the station of your baby with these exams. Your appointments will be weekly from this point forward until delivery.

Please keep in mind this is strictly an outline and some visit and testing times may vary based on your provider's discretion.

## **4.0 PRENATAL DEVELOPMENT**

### **4.1 BABY'S GROWTH DURING PREGNANCY**

#### **How does pregnancy begin?**

Pregnancy begins with fertilization. Fertilization is the union of an egg and a sperm into a single unit, and is the first step in a complex series of events that leads to a pregnancy. Fertilization takes place in the fallopian tube. Over the next few days, the fertilized egg divides into multiple cells called a zygote. While these cells continue to divide and multiply, the small cluster of dividing cells moves through the fallopian tube to the lining of the uterus. Once in the uterus, the zygote is now called a blastocyst, the cluster of cells implants itself into the uterine lining and starts to grow. From implantation until the end of the eighth week of pregnancy, the baby is called an embryo. From the ninth week of pregnancy until birth, it is called a fetus.

#### **What is the placenta?**

The placenta is formed from some of these rapidly dividing cells. The placenta functions as a life-support system during pregnancy. Oxygen, nutrients, and hormones from the mother are transferred across the placenta to reach the baby. Alternatively, waste products from the baby are transferred to the mother for removal through the placenta.

#### **How will my uterus change during pregnancy?**

During pregnancy, the lining of your uterus thickens and the blood vessels within the uterus enlarge to provide nourishment to the fetus. As pregnancy progresses, your uterus expands to make room for the growing baby. By the time your baby is born, your uterus will have expanded to many times its normal size. Don't worry, it will also return to pre-pregnancy size during the postpartum period.

#### **How long does pregnancy last?**

A normal pregnancy lasts about 40 weeks from the first day of your last menstrual period (LMP). Pregnancy is assumed to start 2 weeks after the first day of the LMP. Therefore once you have

missed a period, you are about 4 weeks pregnant. An extra 2 weeks is counted at the beginning of your pregnancy when you are not actually pregnant. Pregnancy officially lasts 10 months (40 weeks), not 9 months, because of these extra weeks.

### **How is the length of my pregnancy measured?**

Pregnancy can be divided into weeks and days. A pregnancy that is “36 and 3/7 weeks” means 36 weeks and 3 days of pregnancy. The 40 weeks of pregnancy are often grouped into three trimesters. Each trimester lasts about 14 weeks (about 3 months).

First trimester:	0-13 weeks (Months 1-3)
Second trimester:	14-27 weeks (Months 4-7)
Third trimester:	28-42 weeks (Months 7-9)

### **What is the estimated due date (EDD)?**

The day your baby is due is called the estimated due date (EDD). Only about 1 in 20 women actually give birth on their exact due date. Still, the EDD is useful for a number of reasons. It determines your baby’s gestational age throughout pregnancy. This allows us to track growth throughout the pregnancy. This also provides a timeline for certain tests that you will have throughout the pregnancy.

### **How is my EDD calculated?**

Your EDD is calculated from the first day of your last menstrual period (LMP). The EDD is confirmed by an early dating ultrasound that will either confirm the dating by LMP or we will change your EDD based on the ultrasound findings. If you have gone through IVF, the EDD is set by the age of your embryo and the date that your embryo is transferred to your uterus. This dating is usually determined by your fertility specialist.

### **Weeks 1-4 of Pregnancy:**

- The dividing fertilized egg moves down the fallopian tube toward the uterus.
- About 5 days after fertilization, the cluster of dividing cells enters the uterus.
- At about 8-9 days after fertilization, the cluster of cells (now called a blastocyst) attaches to the lining of the uterus.

### **Weeks 5-8 of Pregnancy:**

- The placenta begins to form.
- The brain and spinal cord begin to form.
- The tissues that will form the heart begin to beat. The heartbeat can be detected during an ultrasound exam at about 6 weeks of pregnancy.
- Buds for limbs appear with paddle-like hands and feet.
- The eyes, ears, and nose begin to develop. Eyelids form but remain closed.
- The genitals begin to develop.
- By the end of the eighth week, all major organs and body systems have begun to develop.

### **Weeks 9-12 of Pregnancy:**

- Buds for future teeth appear.
- Fingers and toes start to form. Soft nails begin to form.

- Bones and muscles begin to grow.
- The intestines begin to form.
- The backbone is soft and can flex.
- The skin is thin and transparent.
- The hands are more developed than the feet.
- The arms are longer than the legs.

#### **Weeks 13-16 of Pregnancy:**

- Eyebrows, eyelashes, and fingernails form.
- Arms and legs can flex.
- External sex organs are formed.
- The placenta is fully formed.
- The outer ear begins to develop.
- The fetus can swallow and hear.
- The neck is formed.
- Kidneys are functioning and begin to produce urine.
- In male fetuses, the testicles begin to descend from the abdomen.
- Genitals become either male or female at week 14.

#### **Weeks 17-20 of Pregnancy:**

- The sucking reflex develops. If the hand floats to the mouth, the fetus may suck his or her thumb.
- The skin is wrinkled, and the body is covered with a waxy coating, call vernix, and fine hair, called lanugo.
- The fetus is more active. You may be able to feel him or her move.
- The fetus sleeps and wakes regularly.
- Nails grow to the tips of the fingers.
- The gallbladder begins producing bile, which is needed to digest nutrients.
- In female fetuses, the eggs have formed in the ovaries.
- It may be possible to tell the sex of the baby on an ultrasound exam.

#### **Weeks 21-24 of Pregnancy:**

- Real hair begins to grow.
- The brain is rapidly developing.
- The eyes begin to open.
- Finger and toe prints can be seen.
- The lungs are fully formed but not yet functioning.

#### **Weeks 25-28 of Pregnancy:**

- The eyes can open and close and sense changes in light.
- Lanugo begins to disappear.
- The fetus kicks and stretches.
- The fetus can make grasping motions and responds to sound.
- Lung cells begin to make surfactant.

#### **Weeks 29-32 of Pregnancy:**

- With its major development finished, the fetus gains weight very quickly.
- Bones harden, but the skull remains soft and flexible for delivery.
- The different regions of the brain are forming.
- Taste buds develop and the fetus can taste sweet and sour.
- The fetus may now hiccup.

#### **Weeks 33-36 of Pregnancy:**

- The fetus usually stays in a head-down position in preparation for birth.
- The brain continues to develop.
- The skin is less wrinkled.
- The lungs are maturing and getting ready to function outside the uterus.
- Sleeping patterns develop.

#### **Weeks 37-42 of Pregnancy:**

- The fetus drops lower into the pelvis.
- More fat accumulates, especially around the elbows, knees, and shoulders.
- The fetus gains about 1/4 pound per week during this last month of pregnancy.

## **4.2 OBESITY AND PREGNANCY**

### **What is obesity?**

Being overweight is defined as having a body mass index (BMI) of 25-29.9. Obesity is defined as having a BMI of 30 or greater. Within the general category of obesity, there are three levels that reflect the increasing health risks that go along with increasing BMI:

Lowest risk is a BMI of 30-34.9

Medium risk is a BMI of 35.0-39.9

Highest risk is a BMI of 40 or greater

### **Does being obese during pregnancy put me at risk of any health problems?**

- Gestational diabetes is diabetes that is first diagnosed during pregnancy. This condition can increase the risk of having a cesarean delivery. Women who have had gestational diabetes also have a higher risk of having diabetes in the future, as do their children. Obese women are screened for gestational diabetes early in pregnancy and also may be screened later in pregnancy.
- Preeclampsia is a high blood pressure disorder that can occur during pregnancy or after pregnancy. It is a serious illness that affects a woman's entire body. Preeclampsia can lead to seizures, a condition called eclampsia. Severe cases need emergency treatment to avoid these complications. The baby may need to be delivered early.
- Sleep apnea is a condition in which a person stops breathing for short periods during sleep. Sleep apnea is associated with obesity. During pregnancy, sleep apnea not only can cause fatigue but also increases the risk of high blood pressure, preeclampsia, eclampsia, and heart and lung disorders.

**Does being obese during pregnancy put my baby at risk of any problems?**

Obese women have an increased risk of pregnancy loss (miscarriage) compared with women of normal weight. Babies born to obese women have an increased risk of having birth defects, such as heart defects and neural tube defects.

Having too much body fat can make it difficult to see certain problems with the baby's anatomy on an ultrasound exam. Checking the baby's heart rate during labor also may be more difficult.

In a condition called macrosomia, the baby is larger than normal. This can increase the risk of the baby being injured during birth. For example, the baby's shoulder can become stuck during delivery. Macrosomia also increases the risk of cesarean delivery. Infants born with too much body fat have a greater chance of being obese later in life.

Problems associated with a woman's obesity, such as preeclampsia, may lead to a medically indicated preterm birth. This means that the baby is delivered early for a medical reason. Preterm babies are not as fully developed as babies who are born after 39 weeks of pregnancy. As a result, they have an increased risk of short-term and long-term health problems.

The higher the woman's BMI, the greater the risk of stillbirth.

**If I am overweight or obese, should I plan to lose weight before getting pregnant?**

Losing weight before you become pregnant is the best way to decrease the risk of problems caused by obesity. Losing even a small amount of weight (5-7% of your current weight) can improve your overall health and pave the way for a healthier pregnancy.

**How can I lose weight safely?**

To lose weight, you need to use up more calories than you take in. You can do this by getting regular exercise and eating healthy foods. Your obstetrician may refer you to the Wellness Solutions program or a nutritionist to help you plan a healthy diet. You also can use the My Plate website at [www.myplate.gov](http://www.myplate.gov). Aim to be moderately active (for example: biking, brisk walking, or gardening) for 60 minutes or vigorously active (jogging, swimming laps, or doing heavy yard work) for 30 minutes on most days of the week. You do not have to do this amount all at once. For instance, you can exercise for 20 minutes, three times a day.

**How do I plan healthy meals during pregnancy?**

Finding a balance between eating healthy foods and staying at a healthy weight is important for your health as well as your baby's. In the second and third trimesters, a pregnant woman needs an average of 300 extra calories a day, about the amount of calories in a glass of skim milk and half of a sandwich. You can get help with planning a healthy diet by talking to a nutrition counselor. Help also can be found at the USDA My Plate website, which has a special section for women who are pregnant or breastfeeding [www.myplate.gov](http://www.myplate.gov).

**How much should I exercise during pregnancy?**

Even if you have never exercised before, pregnancy is a great time to start. Discuss your exercise plan with your obstetrician to make sure it is safe. Begin with as little as 5 minutes of exercise a day and add 5 minutes each week. Your goal is to stay active for 30 minutes on most or all days

of the week. Walking is a good choice if you are new to exercise. Swimming is another good exercise for pregnant women. The water supports your weight so you can avoid injury and muscle strain. It also helps you stay cool.

#### **How will my weight be monitored during pregnancy?**

Your weight will be tracked at each prenatal visit. The growth of your baby also will be checked. If you are gaining less than the recommended guidelines and if your baby is growing well, you do not have to increase your weight gain to catch up to the guidelines. If your baby is not growing well, changes may need to be made to your diet and exercise plan.

#### **How can I manage my weight after my baby is born?**

Once you are home with your new baby, stick to your healthy eating and exercise habits to reach a normal weight. Breastfeeding is recommended for the first year of a baby's life. Not only is breastfeeding the best way to feed your baby, it also may help with postpartum weight loss. Overall, women who breastfeed their babies for at least a few months tend to lose pregnancy weight faster than women who do not breastfeed.

### **4.3 A PARTNER'S GUIDE TO PREGNANCY**

#### **Why is it important to be supportive during your partner's pregnancy?**

Women who have an involved and supportive partner during pregnancy are more likely to give up harmful behaviors, such as smoking, and lead healthier lives. Babies may be born healthier as well, with lower rates of preterm birth and growth problems. Women who are well-supported during pregnancy may be less anxious and have less stress in the weeks after childbirth. You can be supportive by educating yourself about pregnancy, going with your partner to prenatal care appointments, and joining her in making healthy lifestyle choices.

#### **How long does pregnancy last?**

A normal pregnancy lasts about 40 weeks from the first day of the woman's last menstrual period (LMP). Weeks of pregnancy are divided into three trimesters. Each trimester lasts about 3 months.

- 1st: 0 -13.6 weeks
- 2nd: 14 - 27.6 weeks
- 3rd: 28 - 42 weeks

#### **How is the due date estimated?**

The estimated date that the baby will be born is called the estimated due date (EDD). This date is based on the LMP or an early dating ultrasound exam. The LMP and ultrasound dating methods are often used together to estimate the EDD. Keep in mind that only 1 in 20 women actually give birth on their estimated due date.

#### **What happens during the first trimester of pregnancy?**

During the first trimester (the first 13 weeks), most women need more rest than usual. They may have symptoms of nausea and vomiting. Although commonly known as 'morning sickness', these symptoms can occur at any time during the day or night. Early pregnancy can be an



emotional time for a woman. Mood swings are common. Pregnancy and parenthood are huge life changes and it can take time for you to adjust. Listen to your partner and offer support.

### **What happens during the second trimester of pregnancy?**

For most women, the second trimester of pregnancy (weeks 14-27) is the time that they feel the best. Many women begin to feel better physically. Energy levels improve, and morning sickness usually goes away. As your partner's abdomen grows, the pregnancy becomes more obvious. Your partner will start to feel the baby move. This typically happens at about 20 weeks of pregnancy but can happen earlier or later.

### **What happens during the third trimester of pregnancy?**

The last trimester (weeks 28-40) is the most uncomfortable for your partner. It can also be a very busy time as you prepare for the baby's arrival. Your partner may feel discomfort as the baby grows larger and her body gets ready for the birth. She may have trouble sleeping, walking quickly, and doing routine tasks. It is normal for both of you to feel excited and nervous.

Many couples take childbirth classes around the 30th week of pregnancy. Classes are a great way to learn what to expect during labor and delivery and how to support your partner during childbirth. You can also meet and talk with other expecting parents.

### **What lifestyle changes do my partner and I need to make during pregnancy?**

Your partner needs to make her health a top priority during pregnancy and you can support her by doing this too. Eat healthy meals together and make sure that she gets plenty of rest. Exercise during pregnancy is very important. It is especially important for your partner to avoid harmful substances such as smoking, alcohol, and recreational drugs.

No amount of alcohol is considered to be safe during pregnancy. Drugs such as heroin, cocaine, methamphetamines, and prescription drugs used for non-medical reasons, can harm a developing baby. Although marijuana is legal in some states, its use is not recommended during pregnancy.

### **Do I need to quit smoking if my partner is pregnant?**

You and your partner should both avoid smoking. Smoking during pregnancy increases the risk of fetal growth problems and preterm birth. Secondhand smoke also is harmful. Pregnant women who breathe in secondhand smoke have an increased risk of having a low-birth-weight baby.

Infants and children who are around secondhand smoke have higher rates of asthma attacks, respiratory infections, ear infections, and sudden infant death syndrome (SIDS) than those who are not around smoking. For all of these reasons, smoking should not be allowed in your home or in your car. Before the baby arrives, transition your home into a non-smoking home, with smoking ONLY occurring

### **Is it safe to have sex during pregnancy?**

Unless your partner's obstetrician or other health care professional has told her otherwise, you can have sex throughout pregnancy. You may need to try new positions as your partner's belly grows. Also, keep in mind that intercourse may be uncomfortable at times for your partner. Because the cervix is a little more fragile during pregnancy, it is not uncommon for your partner

to have light vaginal spotting for a few hours after sex. Keep in mind that semen can make your partner have abdominal cramps.

### **How can I prepare?**

There is plenty that you can do to help make labor and delivery go as smoothly as possible:

- **Tour the hospital.** The tour is a good time to ask about the hospital's policies on who can be in the room during labor and delivery, whether you can stay overnight in the room, and if you can take pictures or videotape the birth. Also, ask about parking areas at the hospital and where to check in.
- **Install a rear-facing car seat.** You cannot take your baby home unless you have an infant car seat. Plan to get a rear-facing car seat well before the due date and make sure it is installed correctly. The web site [www.nhtsa.gov](http://www.nhtsa.gov) offers tips on choosing and installing the car seat that is best for your baby.
- **Get vaccinated.** If it is the flu season (October to May), get a flu shot. The CDC recommends that everyone 6 months of age and older get the flu vaccine each year. It is also recommended that everyone who will be in contact with the baby receive a dose of the tetanus, diphtheria, and acellular pertussis (Tdap) vaccine at least 2 weeks before the delivery to protect the newborn from potentially dangerous whooping cough. Tdap vaccines are received every 10 years. Get the proper doses and booster doses of the COVID vaccine.

### **How can I help my partner during labor and delivery?**

- Help distract your partner by playing games with her or watching a movie during early labor.
- Take short walks with her unless she has been told to stay in bed.
- Time her contractions.
- Massage her back, shoulders, and hips between contractions.
- Offer comfort and words of support.
- Encourage her during the pushing stage.

Friends or family members can be there to offer support. You can also hire a childbirth assistant called a doula.

### **When can we take our baby home from the hospital?**

After the baby is born, you most likely can take your new family home after 1-2 days. If your partner had a cesarean delivery, she and the baby may need to stay in the hospital longer.

### **What is postpartum depression?**

It is very common for new mothers to feel sad, upset or anxious after childbirth. Many have mild feelings of sadness called postpartum blues or 'baby blues'. When these feelings are more extreme or last longer than a week or two, it may be a sign of a more serious condition known as postpartum depression. Often, women with postpartum depression are not aware that they are depressed. It is their partners who first notice the signs and symptoms.

What are the signs and symptoms of postpartum depression?

The following are signs of postpartum depression:

- The baby blues do not start to fade after about 1-2 weeks or the feelings get worse.
- She has feelings of sadness, doubt, guilt, or helplessness that seem to increase each week and get in the way of her normal routine.
- She is not able to care for herself or her baby.
- She has trouble doing tasks at home or on the job.
- Her appetite changes.
- Things that used to bring her pleasure no longer do.
- Concern and worry about the baby are too intense OR interest in the baby is lacking.
- She feels very panicked or anxious. She may be afraid to be left alone with the baby.
- She fears harming the baby. These feelings may lead to guilt which makes the depression worse.
- She has thoughts of self-harm or suicide.

If your partner shows any of these signs, tell her of your concerns. Listen to her and support her. Assist in getting her the professional help she may need. You also should be aware that all new parents can have postpartum depression. Talk to a health care professional if you have any of the signs.

### **How can I feel involved when my partner is breastfeeding?**

Medical experts agree that breastfeeding provides the greatest health benefits for most women and their babies. Some partners feel left out when watching the closeness of breastfeeding. But if your partner has chosen to breastfeed, there are ways that you can share in these moments:

- Bring the baby to her for feedings.
- Burp and change the baby afterward.
- Cuddle and rock the baby to sleep.
- Help feed your baby if your partner pumps her breast milk into a bottle.

### **When is it ok to have sex again after the baby is born?**

We recommend no intercourse for 4-6 weeks postpartum. The chances of a problem occurring, like bleeding or infection, are small after about 2 weeks following birth. However, it is important to make sure that your partner has completely healed from the birth. We will check your partner's bottom at her 4-6 week postpartum visit. Please abstain from intercourse until your 4-6 week postpartum visit.

## **5.0 HEALTH TIPS & SAFE MEDS DURING PREGNANCY**

### **5.1 NON-MEDICINAL REMEDIES FOR MORNING SICKNESS**

Nausea and vomiting is very common in the early months of pregnancy. Although it is frequently referred to as 'morning sickness', it can occur anytime of the day or night. Usually it disappears after about the third month (12-14 weeks).

Morning sickness is usually the result of the increased hormones that are produced by the ovaries early in pregnancy. Because of the increasing levels of these hormones, the stomach increases the production of gastric juices. But at the same time, the bowel slows down its ability to empty the contents of the stomach. This, then causes a feeling of nausea, and in some cases, vomiting.

### **Preventing morning sickness**

- Eat a few crackers before you get out of bed in the morning (put them close to your bed the night before).
- Get out of bed slowly. Avoid sudden movements.
- Have a small snack before bed.
- Eat several small meals during the day so that your stomach doesn't remain empty very long.
- Eat high-protein foods such as eggs, cheese, nuts, meats, and beans. These can help prevent low levels of sugar in your blood which can also cause nausea.
- Drink liquids between meals instead of with meals.
- Avoid greasy or fried foods. They are hard to digest.
- Avoid spicy or heavily seasoned foods.
- Do not lie down right after you eat.

### **Remedies for morning sickness**

- Sip soda water (carbonated water) when you begin to feel nauseated.
- Get fresh air, take a walk, sleep with a window open, use an exhaust fan, or open a window when you cook.
- Take deep breaths.
- Drink spearmint, raspberry, or peppermint tea. Try sucking on a mint or chewing mint gum. Peppermint essential oil is safe and may also help. Grate ginger root into herbal tea.
- Ginger candies are great for nausea / stomach upset.

If vomiting persists or it becomes difficult to retain foods or liquids, please contact your provider. Anti-nausea medications are available over-the-counter, but should be avoided unless discussed with your provider.

## **5.2 OVER-THE-COUNTER REMEDIES FOR NAUSEA/VOMITING**

### **Medications**

- Vitamin B6 25 mg in the AM and PM and 1-2 Unisom tablets at bedtime.
  - You can also take a unisom tablet in the AM, but it can cause drowsiness similar to a benadryl.
- Sea Bands (motion sickness wrist bands)
- Emetrol

### **Or choose one of the following to try**

- Benadryl 25 mg, up to three times a day OR
- Dramamine 50 mg, up to three times a day
  - \*\*Remember both of these will make you very drowsy and you should not drive while taking these medications during the day.

### **Foods**

- Ginger (candies, cookies, ginger ale with real ginger)
- Lemon/citrus (candies, fresh lemon added to tea)
- Mint (candies, peppermint tea)

**Avoid greasy, fried, or spicy foods**

- Bland foods such as crackers, rice, and plain pasta are often tolerated.
- Keep crackers next to your bed. Eat a few before rising and then get up slowly. Having a little something in your stomach before sitting up can help prevent nausea.
- Do not brush your teeth first thing in the morning, wait until after you eat.
- Eat small, frequent meals throughout the day (every 2 hours). An empty stomach tends to feel more queasy.
- Stay hydrated by sipping fluids throughout the day. (try adding sliced lemon, oranges, limes, or cucumber to the water). You should be drinking at least 60oz of water a day.

**5.3 SAFE OVER-THE-COUNTER MEDICINES**

- Headache, fever, Pain
  - Tylenol (regular or extra strength)
  - Excedrin Migraine
  - AZO for bladder pain
- Congestion / Cold
  - Tylenol Cold & Sinus
  - Regular Tylenol or Tylenol PM
  - Benadryl
  - Chlor-Trimeton, Claritin, or Zyrtec
  - Vicks
  - Mucinex
  - Saline nasal spray
  - Neti Pot
- Cough / Sore Throat
  - Robitussin
  - Honey
  - All cough drops
  - All throat sprays
  - Emergen-C
  - Zicam and Airborne
- Heartburn
  - Tums, Rolaids
  - Pepcid (20mg up to 2x per day)
  - Maalox, Mylanta
  - Prilosec
- Constipation
  - Magnesium (200mg up to 2x/day)
  - Metamucil
  - Senekot
  - Milk of Magnesia
  - Citrucel
  - Benefiber
  - Colace
  - Dulcolax

- Miralax
- Gas Pain
  - Gas-X
  - Mylicon
- Diarrhea
  - Kaopectate
  - Imodium
- Hemorrhoids
  - Anusol
  - Preparation H
- Skin Care
  - Moisturizers
  - Aloe
  - Sunscreen
  - Calamine lotion
  - Hydrocortisone
  - Neosporin
  - \*\*\*Nothing with retinol
- Yeast infection
  - 3 or 7 day Monistat vaginal inserts - ok after 12 weeks
- Poison Ivy
  - Tecnu
  - Hydrocortisone cream
  - Benadryl

#### **5.4 EXERCISE DURING PREGNANCY**

Women should exercise during pregnancy. It improves fitness and keeps the heart healthy. It also eases many of the physical discomforts of pregnancy. Walking, running, swimming, and cycling are safe for most pregnant women. We will instruct you not to exercise if you have any conditions in the pregnancy that may worsen with exercise.

- Limit your exercise by fatigue. You should not work out so hard that you are out of breath.
- Avoid exercises that could result in loss of balance or trauma to your abdomen.
- Avoid getting overheated. Do not use the hot tub or sauna.
- Stop immediately if you experience any pain or contractions.

#### **5.5 PAINTING DURING PREGNANCY**

There are no known birth defects associated with latex paint fumes. Some report the fumes cause nausea or dizziness. If this is the case, it is best to ventilate with an open window or fan or to leave the area for a few hours.

## **5.6 TRAVEL DURING PREGNANCY**

We recommend that you not travel more than an hour away from the hospital after 36 weeks. You may fly in an airplane or travel by car up until that time. Prior to your trip, find the nearest hospital to your destination. In the event of any urgent care, your prenatal records can be faxed to your destination.

## **5.7 COLOR OR HIGHLIGHTING YOUR HAIR DURING PREGNANCY**

If you color or highlight your hair, avoid doing it in the first trimester. Highlights may be preferable to all-over color that touches your scalp. Make sure you are in a well ventilated area.

## **5.8 FOODS TO AVOID DURING PREGNANCY**

You may review this list but please also use common sense and remember to enjoy your pregnancy

- Do not eat or drink unpasteurized milk cheese.
- Avoid lunch meat, unless it is cooked steamy hot. Lunch meat can have a potential bacteria called listeria.
- Listeria can also be found in fresh produce, make sure you wash all fruits and vegetables before you eat them.
- Do not consume raw eggs or uncooked meat or fish.
- The bigger the fish, the more the mercury. Large fish with high mercury are shark, swordfish, tilefish, tuna. You should only consume this type of fish a couple times a month.
- Shellfish, and all other cooked fish is safe in pregnancy.

## **5.9 AVOIDING CONSTIPATION**

- Drink plenty of water daily - 60oz.
- Increase your physical activity.
- Eat a diet rich in fiber (whole wheat grains, dark green leafy vegetables, apples and pears with the peel on).
- You can also take a fiber supplement (Konsyl, Metamucil, Citrucel, or Benefiber).
- Take a stool softener (Colace or Senekot). Avoid laxatives as your bowels may become dependent on them to move.

## 5.10 HEALTHY EATING DURING PREGNANCY



## 5.11 ROUND LIGAMENT PAIN

Beginning in the early second trimester (14 weeks or so) or you may notice severe pains on the sides of your abdomen near your groin. This 'knife-like' pain occurs especially with movement, like rolling over in bed or going up stairs. If you stop the activity that started it, it will subside quickly. It will not harm your baby. Think of the uterus like a hot air balloon tethered to the ground (the uterus tethered to the pelvis). As the uterus gets bigger, it pulls on those ligaments causing the pain known as round ligament pain. It generally becomes less frequent in the third trimester. You can look up at home exercise to stretch and alleviate that pain.

## 5.12 IRON DURING PREGNANCY

The pregnant body requires about 30 mg of iron per day in order to carry oxygen to your tissues and to your developing baby. Development of anemia in the second trimester of pregnancy is very common. Common symptoms of anemia include weakness, dizziness, shortness of breath, rapid heartbeat, and trouble concentrating.

Treatment of anemia is as follows:



- Recommendation of an additional iron supplement (may also add stool softener to prevent constipation).
- Use of a cast-iron pan or pot to increase the iron content of a meal 300-fold.
- Combining vitamin C-rich foods with iron-rich foods and iron supplements to enhance absorption (such as drinking orange juice with your prenatal vitamin or with iron supplements).
- Combining heme iron (animal foods) and non-heme iron (plant-based foods) together to help your body absorb more.
- If you take an additional iron pill, make sure that you take it at a different time than you are taking your prenatal vitamin, so that you can absorb the iron better.

### 5.13 IRON-RICH FOODS

The amount and type of iron in your diet is important. Some iron-rich foods are:

<b>Meat &amp; Eggs</b>  <ul style="list-style-type: none"> <li>• Beef</li> <li>• Lamb</li> <li>• Ham</li> <li>• Turkey</li> <li>• Chicken</li> <li>• Veal</li> <li>• Pork</li> <li>• Dried beef</li> <li>• Liver</li> <li>• Liverwurst</li> <li>• Eggs (any style)</li> </ul>	<b>Seafood</b>  <ul style="list-style-type: none"> <li>• Shrimp</li> <li>• Clams</li> <li>• Scallops</li> <li>• Oysters</li> <li>• Tuna</li> <li>• Sardines</li> <li>• Haddock</li> <li>• Mackerel</li> </ul>	<b>Vegetables</b>  <ul style="list-style-type: none"> <li>• Spinach</li> <li>• Sweet potatoes</li> <li>• Peas</li> <li>• Broccoli</li> <li>• String beans</li> <li>• Beet greens</li> <li>• Dandelion greens</li> <li>• Collards</li> <li>• Kale</li> <li>• Chard</li> </ul>
<b>Bread &amp; Cereals</b>  <ul style="list-style-type: none"> <li>• White bread (enriched)</li> <li>• Whole wheat bread</li> <li>• Enriched pasta</li> <li>• Wheat products</li> <li>• Bran cereals</li> <li>• Corn meal</li> <li>• Oat cereal</li> <li>• Cream of Wheat</li> <li>• Rye bread</li> <li>• Enriched rice</li> </ul>	<b>Fruit</b>  <ul style="list-style-type: none"> <li>• Strawberries</li> <li>• Watermelon</li> <li>• Raisins</li> <li>• Dates</li> <li>• Figs</li> <li>• Prunes</li> <li>• Prune juice</li> <li>• Dried apricots</li> <li>• Dried peaches</li> </ul>	<b>Beans &amp; Other Foods</b>  <ul style="list-style-type: none"> <li>• Tofu</li> <li>• Beans (kidney, garbanzo, or white, canned)</li> <li>• Tomato products (e.g., paste)</li> <li>• Dried peas</li> <li>• Dried beans</li> <li>• Lentils</li> <li>• Instant breakfast</li> <li>• Corn syrup</li> <li>• Maple syrup</li> <li>• Molasses</li> </ul>

### **Are some foods with iron better than others?**

Food has two types of iron, heme and non-heme iron. Heme iron is found in meat, fish and poultry. It is the form of iron that is most readily absorbed by your body. You absorb up to 30 percent of the heme iron that you consume. Eating meat generally boosts your iron levels far more than eating non-heme iron.

Non-heme iron is found in plant-based foods such as fruits, vegetables and nuts. Foods with non-heme iron are still an important part of a nutritious, well-balanced diet, but the iron contained in these foods won't be absorbed as completely. You absorb between 2 and 10 percent of the non-heme iron that you consume.

When you eat heme iron with foods higher in non-heme iron, the iron will be more completely absorbed by your body. Foods high in vitamin C, like tomatoes, citrus fruits, and red, yellow and orange peppers, can also help with the absorption of non-heme iron.

### **5.14 SEX DURING PREGNANCY**

Couples who are happy together sexually before pregnancy should do well afterward. Although there will be changes due to infant care, discomfort, and fatigue on the part of both parents, sexual activity can and should continue during and after pregnancy.

It is safe to have intercourse throughout your pregnancy. Sometimes there are medical reasons that your provider may suggest that you abstain from intercourse or practice pelvic rest. \*\*\*Note that it is not unusual to experience light or mild uterine cramps or vaginal spotting for a few hours after sex. Remain hydrated and observe. If anything seems concerning or longer-lasting, contact the office.

#### **Sex: Your mind and body**

Some physical and emotional changes may affect your sexual desire. During the first trimester, your breasts may be unusually tender; if so, mention this to your partner. If you find that you need to urinate more frequently, emptying your bladder before intercourse may make intimacy more pleasurable.

As your abdomen increases in size you may need to try another position. Vaginal lubrication may decrease as the pregnancy advances, so longer foreplay may be necessary, and if needed, a lubricant such as GOOD or UBERLUBE.

As pregnancy advances, you may desire intercourse less and may want to have more caressing and cuddling. Your partner might misinterpret this as you not being interested in him. Good communication at this point is critical.

#### **After Delivery**

You will be sore in the pelvic area for a while after giving birth. You may resume gentle intercourse once your pelvic area has healed and after your 4-6 week postpartum appointment.

This may take a couple of weeks, but not typically more than six weeks. If you are sore for longer than six weeks, contact your delivering provider.

If you are breastfeeding you may notice milk leaking from your breasts during sexual stimulation. This is normal.

## **6.0 EXPOSURE TO COMMUNICABLE DISEASES**

### **6.1 HAND-FOOT-MOUTH DISEASE**

Hand-foot-mouth disease is common in children under the age of 10. It is caused by the coxsackie virus. Symptoms begin with fatigue, loss of appetite, sore throat, and a fever of 101°F-103°F and followed by blisters on the tops of the hands and feet and in the mouth. The blisters last 7-10 days. There is no treatment for this disease. While easily transmitted to others, it is not thought to harm a baby. Frequent hand washing is recommended. Wear gloves while changing diapers.

### **6.2 CHICKENPOX**

The varicella virus causes chickenpox. Most women have had chickenpox during childhood and therefore are protected from acquiring the disease again as an adult. If you are unsure whether you've ever had chickenpox, a laboratory test can determine your status. If you do not have antibodies in your blood and you have confirmed exposure to chickenpox, you can be given medicine within 96 hours of your exposure to prevent you from acquiring this infection. It may also decrease the risk to your baby.

Your older child(ren) may receive the chickenpox vaccine while you are pregnant. There have been no reported cases of infected mothers from vaccinated children.

### **6.3 FIFTH DISEASE**

Fifth disease (Erythema Infectiosum) is caused by parvovirus B-19. It causes a "slapped cheek" rash, fever, headache, sore throat, and joint pain in children. Adults usually only have a mild flu-like illness with 20% having no symptoms at all. 50% of adults have antibodies against parvovirus which can be determined by laboratory testing.

Most fetuses are not infected even when their mother contracts the virus in pregnancy. However, because on occasion it can cause problems, the baby will undergo serial ultrasounds. There is no drug to treat Fifth disease. If there is an outbreak in your workplace or in your child's school or daycare, contact our office for immunity testing.

### **6.4 ZIKA VIRUS**

Travel to areas endemic for Zika virus (please refer to the CDC website, which maintains this list) is not recommended. If you or your partner must travel to any of these areas please be sure that you consult your provider and take precautions before doing so.

Zika can be transmitted via an infected mosquito or through sexual contact with an infected male. If you think you have been exposed to the virus during pregnancy please notify the office. The Indiana State Department of Health offers Zika virus testing if CDC criteria are met. Testing is done at Northwest Health Porter hospital and sent to the appropriate testing agency.

Symptoms of Zika virus include the following:

- Rash
- Fever
- Joint pain
- Red or pink eye

You can experience these symptoms up to 2 weeks after exposure. If your partner has traveled to an affected area it is recommended that condoms be used throughout the whole pregnancy.

Please refer to the following websites for the newest updates on the Zika virus.

- [www.acog.org](http://www.acog.org)
- [www.cdc.gov](http://www.cdc.gov)

## **6.5 TOXOPLASMOSIS**

Toxoplasmosis (tok-so-plaz-MOE-sis) is an infection with a parasite called *Toxoplasma gondii*. People often get the infection from eating undercooked meat. You can also get it from contact with cat feces. The parasite can pass to a baby during pregnancy. Most people infected with the parasite do not have symptoms.

You do not need to get rid of your indoor cat, just avoid changing the litter box during pregnancy. If you can't avoid changing the litter box, wear gloves. If a household cat is diagnosed with toxoplasmosis, please contact the office for testing or studies.

- Avoid eating raw or rare meat. Wash your hands thoroughly after handling raw meats. Use separate cutting boards for meat.
- Wash or peel fruits and vegetables.
- Wear gloves when gardening and wash hands when completed.

## **6.6 COVID**

The recommended strategies of mask wearing, social distancing, and avoiding high-risk situations apply in pregnancy. The COVID vaccine is safe and recommended during pregnancy, as is the booster vaccine.

## **7.0 WORKING DURING PREGNANCY**

Most patients are able to work their entire pregnancy. Companies are required to allow six weeks of maternity leave after a vaginal delivery and eight weeks after a cesarean section. They are not required to pay you during your maternity leave. You may even be eligible for more time off. Twelve weeks of maternity leave is usually standard. Contact your Human Resources Department or manager at the beginning of your pregnancy. We are happy to complete FMLA or Disability Forms for you and/or your significant other. Please bring them to your regularly scheduled appointment and we will return them to you at your next appointment. Due to the large number of forms we must complete, there is a charge for FMLA forms.

OSHA and The American College of Obstetrics and Gynecology (ACOG) have created safe work recommendations for pregnancy, so those with workplace challenges or strenuous work can review these at the office. Discomforts due to pregnancy are not a disabling condition.

## **7.1 WORK POLICY FOR THE OBSTETRICAL PATIENT**

The providers at Obstetrical & Gynecological Associates advocate that a woman with an uncomplicated pregnancy can continue to work throughout her pregnancy. A normal pregnancy is not considered a disability under the Americans with Disabilities Act (ADA). However, complications during pregnancy can arise without warning. Early detection and timely intervention may improve the pregnancy outcome.

Women with a medical or obstetric complication of pregnancy may need to make adjustments based on the nature of their activities, occupations, and specific complications. These complications may require increased surveillance, monitoring, and special care for the remainder of the pregnancy that require time off of work.

These OGA clinical guidelines are intended to provide guidance for your provider and to support the safest maternal and fetal outcomes for you and your infant. The recommendations within this document were arrived at through careful consideration of the available evidence and should be considered as thoughtful expert advice. The doctors will determine if taking off of work is absolutely necessary. We strongly recommend you review the maternity policy for your place of employment.

If you are having problems fulfilling your job requirements due to the pregnancy (i.e. wearing special personal protective equipment, lifting greater than 30 pounds, or prolonged standing for long periods of time) please discuss this with your human resources department.

### **Useful websites for accommodating pregnant women at work**

- [www.pregnantatwork.org](http://www.pregnantatwork.org)
- [www.dol.gov](http://www.dol.gov)

### **Work recommendations**

- Frequent breaks or at least 1-2 15 min breaks in an 8+ hour day.
- No more than 8 hours per 24 hours or 3x 12 hour shifts in a week.
- Limit lifting to 30-40 lbs.

### **Possible work concerns**

- Unresolved placenta previa/complete previa.
- Shortened cervix.
- Uncontrolled hypertension.
- Preterm labor (singleton or multiple).
- Uncontrolled hyperemesis with weight loss and lab disturbances.
- Growth restriction of the baby.
- Exposure to toxic chemicals or radiation.

### **Reasons that do not warrant a note for time off of work**

- Back ache.
- Round ligament pain.
- Fatigue with pregnancy.
- Work schedules and environment.
- Child care issues.
- Nausea and vomiting with pregnancy.

## **8.0 TESTING DURING PREGNANCY**

### **8.1 ROUTINE TESTING**

#### **Why are tests done during pregnancy?**

A number of lab tests are suggested for all women as part of routine prenatal care. These tests can help find conditions that can increase the risk of complications for you and your fetus.

#### **What tests are done early in pregnancy?**

- Complete blood count (CBC).
- Blood type.
- Urinalysis.
- Urine culture.
- Rubella for immunity.
- Hepatitis B.
- Testing for sexually transmitted infections (STIs).
- Human immunodeficiency virus (HIV).
- Urine drug testing.

#### **What is a CBC and what can the results show?**

A CBC counts the numbers of different types of cells that make up your blood. The number of red blood cells can show whether you have a certain type of anemia. The number of white blood cells shows how many disease-fighting cells are in your blood and the number of platelets can reveal whether you have a problem with blood clotting.

#### **What is blood typing and what can the results show?**

Results from a blood type test can show the blood type (A, B, O, or AB) and if you have the Rh factor. The Rh factor is a protein that can be present on the surface of red blood cells. Most people have the Rh factor (Rh positive). Others do not have the Rh factor (Rh negative). If your fetus is Rh positive and you are Rh negative, your body can make antibodies against the Rh factor possibly causing harm to the red blood cells of the fetus. This is why Rh negative blood types receive a rhogam shot.

#### **What is a urinalysis and what can the results show?**

The urine may be tested for red blood cells or other cells indicating infection, protein indicating kidney issues, or glucose indicating diabetes.

#### **What is a urine culture test and what can the results show?**

A urine culture tests for bacteria which can be a sign of a urinary tract infection.

**What is rubella and what do test results show?**

Rubella (sometimes called German measles) can cause birth defects if a woman is infected during pregnancy. The blood is tested to check for immunity against this disease. If you are not immune you need the vaccine and should get it after the baby is born, even if you are breastfeeding. You should not be vaccinated against rubella during pregnancy.

**What is hepatitis B and what do test results for these infections show?**

Hepatitis B viruses infect the liver. Pregnant women who are infected with hepatitis B or hepatitis C virus can pass the virus on to their babies. All pregnant women are tested for hepatitis B virus infection. If you have risk factors you may also be tested for the hepatitis C virus.

**Which STIs are tested in pregnant women?**

All pregnant women are tested for syphilis, gonorrhea, and chlamydia early in pregnancy. Syphilis and chlamydia can cause complications for you and your baby. If you have either of these STIs, you will be treated during pregnancy and tested again to see if the treatment has worked.

**Why are all pregnant women tested for HIV?**

If a pregnant woman is infected with HIV, there is a chance she can pass the virus on to her baby. HIV attacks cells of the body's immune system and causes acquired immunodeficiency syndrome (AIDS). If you are pregnant and infected with HIV you can be given medication that can greatly reduce the risk of passing HIV to your baby.

**Which pregnant women should be tested for TB?**

Women at high risk of TB (for example, women who are infected with HIV or who live in close contact with someone who has TB) should be tested for this infection.

**What tests are done later in pregnancy?**

The following tests are done later in pregnancy:

- Repeat CBC.
- Glucose screening test.
- Group B beta-hemolytic streptococcus (GBS).

**When will I be tested for Rh antibodies?**

If you are Rh negative, your blood will be tested for Rh antibodies around 28 weeks of pregnancy. A RhoGAM shot prevents you from making antibodies that could cause harm to the unborn baby or in future pregnancies. If you have Rh antibodies, you may need special care.

**What is a glucose screening test and what can the results show?**

A glucose screening test measures the level of glucose (sugar) in your blood. A high glucose level may be a sign of gestational diabetes. This test usually is done between 24 weeks and 28 weeks of pregnancy. If you have risk factors for diabetes or had gestational diabetes in a previous pregnancy, screening may be done in the first trimester of pregnancy and then still repeated again later on.

**What is Group B beta-hemolytic streptococcus (GBS) and why are pregnant women tested for it?**

GBS is a type of bacteria that lives on the skin. Many women carry GBS in the area of the vagina and rectum and do not have any symptoms. GBS can not be passed to and from your partner. GBS can be passed to a baby during birth. Most babies who get GBS from their mothers do not have any problems. A few, however, become sick. GBS can usually be detected with a routine screening test that is done at 36 weeks of pregnancy. For this test, a swab is used to take a sample from the vagina and rectum. If you test positive for GBS, you will receive antibiotics in labor.

**8.2 SCREENING TESTS FOR BIRTH DEFECTS****What is the difference between screening tests and diagnostic tests for genetic birth defects?**

Screening tests are done during pregnancy to assess the risk that the fetus may have certain chromosomal problems. An advantage is that the test is risk-free. Disadvantages are that the test may result in false positives. Further testing is needed to officially diagnose any abnormalities.

Diagnostic tests can detect many, but not all, birth defects caused by abnormal chromosomes. Certain diagnostic tests are available as a first choice for all pregnant women including those who do not have risk factors. Some diagnostic tests like blood work are not risky to the unborn baby. Others that involve procedures with the placenta or amniotic fluid inside the uterus carry a small risk of pregnancy loss. Diagnostic tests for genetic birth defects include amniocentesis, chorionic villus sampling, and a targeted ultrasound exam. Advantages are that the detection rate is highly accurate.

We realize this is a complicated matter and are happy to review this topic with you and your partner.

**What is the first step in screening for genetic birth defects?**

Screening for birth defects begins by assessing your risk factors. Early in your pregnancy, your provider may give you a list of questions to find out whether you have risk factors, such as a personal or family history of birth defects, belonging to certain ethnic groups or maternal age of 35 years or older. In some situations you may want to visit a genetic counselor for more detailed information about your risks.

**What are some examples of genetic or chromosomal disorders?**

There are certain conditions in which there are missing or extra chromosomes. Common extra chromosomal conditions include an extra copy of a certain chromosome number, called a trisomy. Trisomy 21 (Down syndrome), trisomy 13 (Patau syndrome), or trisomy 18 (Edwards syndrome) are among the most common genetic disorders. There is also a condition where there is a chromosome missing which is called Turner syndrome.

**Can I choose whether or not to have testing for genetic birth defects?**

Whether you want to be tested is a personal choice. Knowing early in the pregnancy allows the option of deciding to not continue the pregnancy. If you choose to continue the pregnancy, it can give you time to prepare for having a child with a particular disorder/special need and to organize the medical care that your child may need. Your physician or a genetic counselor can



discuss the options with you and help you to decide.

**\*\*Please review the following information.** These tests will be offered at your first visit with the physician. It is your responsibility to check your insurance benefits for coverage and pay any amount not covered by your policy.

### **What are inherited carrier disorders?**

A carrier test can show if you or your partner carry a gene for a certain disorder, such as cystic fibrosis, Tay-Sachs disease, sickle cell anemia, fragile X syndrome, spinal muscle atrophy, and many more. Ideally, parents would be tested prior to conceiving, but testing can and should be offered in pregnancy.

A carrier of a disorder is unaffected or may have very mild symptoms. If both parents are carriers of an abnormal gene, the risk can be as high as 25% that their child would have the disease. Some disorders are common in certain ethnic groups such as sickle cell disease in those with African-American ethnicity or Tay-Sachs disease in those with Ashkenazi Jewish background. Other recessive disorders, like cystic fibrosis, Fragile X syndrome, and spinal muscle atrophy are present in all ethnicities.

Because so many people have complicated or unknown ethnic backgrounds, universal testing with a panel of recessive disorders may be offered to any couple who desire it. Ideally, parents would be tested prior to conceiving, but testing can and should be offered in pregnancy. Once a woman or man is tested, she or he never needs to be tested again - “Once a carrier, always a carrier. Not a carrier, never a carrier”. The results do not change from pregnancy to pregnancy. We realize this is a complicated matter and are happy to review this topic with you and your partner.

### **What is a physical birth defect?**

A birth defect is a problem that is present at birth, although it may not be noticed until the child is older. The defect may affect the baby’s appearance or bodily function. These are more likely to be detected on routine ultrasound testing, although not all physical birth defects can be seen inside the mother.

## **8.3 SECOND TRIMESTER BLOOD TESTS**

### **Alpha-fetoprotein (AFP)**

AFP is an optional blood test performed on pregnant patients between 15-18 weeks. AFP is a protein produced by a growing fetus inside the amniotic fluid of the mother’s uterus. AFP testing is a screening test that detects neural tube defects (spina bifida). It has an 85% detection rate. If your screening test results are positive, you would have appointments with specialists for detailed ultrasound exams.

### **Gestational Diabetes**

A one-hour glucola is a blood test performed on all pregnant women between 24-28 weeks. Gestational diabetes is diabetes that develops during pregnancy. Diabetes is a condition that causes high levels of glucose in the blood.

Health problems can occur when glucose levels are too high. This condition increases the risk of having a very large baby (macrosomia), a cesarean birth, shoulder dystocia, high blood pressure, and preeclampsia. Babies born to mothers with gestational diabetes may have temporary problems with breathing, low glucose levels, and jaundice.

Gestational diabetes can be controlled with diet and exercise. However, some women require oral medication or insulin injections to control the blood glucose level.

Delivery is recommended between 39-40 weeks. You should be tested again for diabetes 6-12 weeks after the baby's birth. Most women, 98%, no longer have diabetes after the birth but are at increased risk for their entire adult lives.

### **Iron-Deficiency Anemia**

A CBC (complete blood count) is a screening blood test performed on all pregnant women between 24-28 weeks. Although it was checked at the beginning of the pregnancy, many women become anemic in the second and third trimester and may need dietary changes or supplements to improve or maintain their blood count.

### **RhoGAM**

Rh antibody screen is a blood test and RhoGAM is an injection given around the 28th week of pregnancy. This test and injection are offered to all pregnant women who are known to be Rh negative blood type. This test and injection are only available at the Northwest Health Porter Hospital main campus.

## **9.0 SPECIAL CIRCUMSTANCES IN PREGNANCY**

### **9.1 PRETERM LABOR AND DELIVERY**

#### **What is preterm labor?**

Preterm labor is defined as regular contractions of the uterus resulting in cervical change that starts before 37 weeks of pregnancy. Changes in the cervix include effacement (the cervix thins out) and dilation (the cervix opens so that the fetus can enter the birth canal).

#### **What is preterm birth?**

When birth occurs between 20 weeks of pregnancy and 37 weeks of pregnancy it is called preterm birth.

#### **Why is preterm birth a concern?**

Preterm birth is a concern because babies who are born too early may not be fully developed. Their organs may not yet be ready for life outside the uterus. These babies can need to be cared for in a special unit in the hospital called the Neonatal Intensive Care Unit (NICU) for days, weeks, or months. They may be born with serious health problems. Some health problems like cerebral palsy can last a lifetime.

#### **Which preterm babies are at greatest risk of health problems?**

The risk of health problems is greatest for babies born before 34 weeks of pregnancy. But babies born between 34 weeks of pregnancy and 37 weeks of pregnancy also are at risk.

### **What are risk factors for preterm birth?**

Factors that increase the risk of preterm birth include the following:

- Having a previous preterm birth.
- Having a short cervix.
- Short interval between pregnancies.
- History of certain types of surgery on the uterus or cervix.
- Pregnancies with multiples (twins, triplets).
- Lifestyle factors such as low pre-pregnancy weight, smoking during pregnancy, and substance abuse during pregnancy.

### **Can anything be done to prevent preterm birth if I am at high risk?**

If you have had a prior preterm birth and you are planning another pregnancy, a preconception care checkup can help you to get in the best possible health before you become pregnant. You may be referred to a physician who has expertise in managing high-risk pregnancies. In addition, you may be given certain medications to help prevent preterm birth if you have risk factors. Treatment is offered based on your individual situation and your risk factors for preterm birth.

### **What are the signs and symptoms of preterm labor and what should I do if I have any of them?**

Call your provider right away if you notice any of these signs or symptoms:

- Change in type of vaginal discharge (watery, mucus, or bloody).
- Pelvic or lower abdominal pressure, different from the baseline.
- Constant low, dull backache, different from the baseline.
- Mild abdominal cramps, with or without diarrhea.
- Regular or frequent contractions or uterine tightening, often painless, more than 6 in one hour.
- Ruptured membranes (your water breaks with a gush or a trickle of fluid).

### **How is preterm labor diagnosed?**

Preterm labor can be diagnosed only when changes in the cervix are found. Your provider may perform a pelvic exam to see if your cervix has started to change. You may need to be examined several times over a period of a few hours. Your contractions also may be monitored.

Your obstetrician or other health care professional may do certain tests to determine whether you need to be hospitalized or if you need immediate specialized care. A transvaginal ultrasound exam may be done to measure the length of your cervix. The level of a protein called fetal fibronectin in the vaginal discharge may be measured.

### **If I have preterm labor will I have a preterm birth?**

It is difficult for physicians to predict which women with preterm labor will go on to have preterm birth. Only about 10% of women with preterm labor will give birth within the next 7 days. For about 30% of women, preterm labor stops on its own.

### **What happens if my preterm labor continues?**

If your preterm labor continues, how it is managed is based on what is thought to be best for your health and your baby's health. When there is a chance that the baby would benefit from a delay

in delivery, certain medications may be given. These medications include corticosteroids, magnesium sulfate, and tocolytics.

### **What are corticosteroids?**

Corticosteroids are drugs that cross the placenta and help speed up development of the baby's lungs, brain, and digestive organs. Corticosteroids are most likely to help your baby when they are given between 24 weeks of pregnancy and 34 weeks of pregnancy.

### **What is magnesium sulfate?**

Magnesium sulfate is a medication that may be given if you are less than 32 weeks pregnant, are in preterm labor, and are at risk of delivery within the next 24 hours. This medication may help reduce the risk of cerebral palsy that is associated with early preterm birth.

### **What are tocolytics?**

Tocolytics are drugs used to delay delivery for a short time (up to 48 hours). They may allow time for corticosteroids or magnesium sulfate to be given. In addition to its role in protecting against cerebral palsy, magnesium sulfate also can be used as a tocolytic drug.

### **What happens if my preterm labor does not stop?**

If your labor does not stop and it looks like you will give birth to your baby early, you and the baby will usually be cared for by a team of healthcare professionals. The team may include a neonatologist, a doctor who specializes in treating problems in newborns. The care your baby needs depends on how early he or she is born.

## **9.2 PREGNANCY WITH TWINS**

### **What are some symptoms of a twin pregnancy?**

Women who are pregnant with multiples may have more severe morning sickness or breast tenderness than women who are pregnant with a single baby. They also may gain weight more quickly. Most multiple pregnancies are discovered during an ultrasound exam.

### **Do I need to gain extra weight if I am pregnant with twins?**

An extra 300 calories a day is needed for each fetus. For instance, if you are pregnant with twins, you need an extra 600 calories a day. For triplets and higher-order pregnancies, weight gain should be individualized. If your weight was normal when you became pregnant with twins you will likely gain 37-54 pounds. If you were overweight when you became pregnant, you will likely gain about 25-50 pounds.

### **Should I exercise if I am pregnant with twins?**

Staying active during multiple pregnancy is important for your health. Try low-impact exercises, such as swimming, prenatal yoga, and walking. You should aim for 30 minutes of exercise a day. If problems arise during your pregnancy, it may be recommended that you avoid exercise.

### **Is the risk of complications higher if I am pregnant with twins?**

The risk of certain complications is higher if you are pregnant with multiples. Starting in your second trimester, you may have ultrasound exams every 4-6 weeks. If a problem is suspected you

may have special tests, such as a non-stress test or biophysical profile and more frequent ultrasound exams.

### **What is the most common complication of a twin pregnancy?**

The most common complication of multiple pregnancy is preterm birth. More than half of all twins are born preterm. Higher-order multiples are almost always born preterm. Babies born before 37 weeks of pregnancy may have an increased risk of short-term and long-term health problems including problems with breathing, eating, and staying warm.

### **What are chorionicity and amnionicity?**

Early in a twin pregnancy, an ultrasound exam is done to find out whether each baby has its own chorion (chorionicity) and amniotic sac (amnionicity). There are three types of twins:

- **Dichorionic–diamniotic:** Twins who have their own chorions and amniotic sacs. They typically do not share a placenta and can be fraternal or identical.
- **Monochorionic–diamniotic:** Twins who share a chorion but have separate amniotic sacs. They share a placenta and are identical.
- **Monochorionic–monoamniotic:** Twins who share one chorion and one amniotic sac. They share a placenta and are identical.

### **What are the risks associated with monochorionic twins?**

Monochorionic babies have a higher risk of complications than those with separate placentas. One problem that can occur in monochorionic–diamniotic babies is twin–twin transfusion syndrome (TTTS). In TTTS, the blood flow between the twins becomes unbalanced. One twin donates blood to the other twin. The donor twin has too little blood, and the recipient twin has too much blood. The earlier TTTS occurs in the pregnancy, the more serious the outcomes for one or both babies.

Although monochorionic–monoamniotic babies are rare, this type of pregnancy is very risky. The most common problem is an umbilical cord complication. Women with this type of pregnancy are monitored more frequently and are likely to have their babies by cesarean delivery.

### **How can a twin pregnancy affect my risk of preeclampsia?**

Preeclampsia is a blood pressure disorder that usually starts after 20 weeks of pregnancy or after childbirth. It occurs more often in multiple pregnancies than in singleton pregnancies. It also tends to occur earlier and is more severe in multiple pregnancies. When preeclampsia occurs during pregnancy the babies may need to be delivered right away, even if they are not fully grown.

### **How can a twin pregnancy affect my risk of gestational diabetes?**

Women carrying multiples, you have a high risk of gestational diabetes. This condition can increase the risk of developing diabetes later in life. The newborns may have breathing problems or low blood sugar levels. Diet, exercise, and sometimes medication can reduce the risk of these complications.

### **How can a twin pregnancy affect fetal growth?**

Multiples are more likely to have growth problems than single babies. Multiples are called discordant if one fetus is much smaller than the other. If growth restriction is suspected in one or both babies, frequent ultrasound exams may be done to track how the babies are growing.

### **Are tests for genetic disorders as accurate in twin pregnancies?**

Screening tests for genetic disorders that use a sample of the mother's blood (serum screening tests) are not as sensitive in multiple pregnancies. The diagnostic test of the blood for genetic abnormalities (cell-free DNA or Maternit21) can be done with a twin pregnancy, however it may not be as accurate. If one of the twins is a boy, genetic testing will result in XY and therefore it will be unknown if the other twin is a girl or a boy. Diagnostic tests for genetic disorders include chorionic villus sampling and amniocentesis. These tests are harder to perform in multiples because each fetus must be tested. There also is a small risk of loss of one or all of the fetuses. Results of these tests may show that one fetus has a disorder, while the other(s) do(es) not.

### **How can a twin pregnancy affect delivery?**

The chance of needing a cesarean delivery is higher with multiples. Ideally, twins can be delivered by vaginal birth. How your babies are born depends on the following:

- Number of babies and the position, weight, and health of each baby.
- Your health and how your labor is going.
- Gestational age.

### **Can a twin pregnancy affect my risk of postpartum depression?**

Having multiples might increase your risk of postpartum depression. If you have intense feelings of sadness, anxiety, or despair that prevent you from being able to do your daily tasks, let your provider know.

### **Can I breastfeed if I have twins?**

Yes, absolutely! Your milk supply will increase to the right amount. You will need to eat healthy foods and drink plenty of liquids. Lactation specialists are a good resource as well as breastfeeding support groups. Most women report that learning to tandem feed the babies, meaning feeding them at the same time, is a key to successful breastfeeding.

## **9.3 PREGNANCY WITH HIGH BLOOD PRESSURE**

### **What is high blood pressure?**

Blood pressure is the pressure of the blood against the blood vessel walls each time the heart contracts (squeezes) to pump the blood through your body. High blood pressure is also called hypertension. During pregnancy severe or uncontrolled hypertension can cause complications for you and your baby.

### **What is chronic hypertension?**

Chronic hypertension is high blood pressure that was present before you became pregnant or that occurs in the first half (before 20 weeks) of your pregnancy. If you took blood pressure medication before you became pregnant you have chronic hypertension.

### **What is gestational hypertension?**

Gestational hypertension is high blood pressure that occurs in the second half (after 20 weeks) of pregnancy. Although gestational hypertension usually goes away after childbirth, it may increase the risk of developing hypertension in the future.

### **What kinds of problems can hypertension cause during pregnancy?**

High blood pressure during pregnancy can place extra stress on your heart and kidneys, increasing your risk of heart disease, kidney disease, and stroke. Other possible complications include the following:

- **Fetal growth restriction:** High blood pressure can decrease the flow of nutrients to the baby through the placenta. The baby may have growth problems as a result.
- **Preeclampsia:** This condition is more likely to occur in women with chronic high blood pressure than in women with normal blood pressure.
- **Preterm delivery:** If the placenta is not providing enough nutrients and oxygen to your baby, it may be decided that early delivery is better for your baby than allowing the pregnancy to continue.
- **Placental abruption:** This condition, in which the placenta prematurely detaches from the wall of the uterus, is a medical emergency that requires immediate treatment.
- **Cesarean delivery:** Women with hypertension are more likely to have a cesarean delivery than women with normal blood pressure.

### **How is chronic hypertension during pregnancy managed?**

Your blood pressure will be monitored closely throughout pregnancy. Ultrasound exams may be done throughout pregnancy to track the growth of your baby. If growth problems are suspected, you may have additional tests that monitor the baby's health. This testing usually begins in the third trimester of pregnancy.

If your hypertension is mild, your blood pressure may stay that way or even return to normal during pregnancy, and your medication may be stopped or your dosage decreased. If you have severe hypertension or have health problems related to your hypertension, you may need to start or continue taking blood pressure medication during pregnancy.

### **What is preeclampsia?**

Preeclampsia is a serious blood pressure disorder that can affect all of the organs in a woman's body. A woman has preeclampsia when she has high blood pressure and other signs that her organ systems are not working normally. One of these signs is proteinuria (an abnormal amount of protein in the urine). Recent research studies have determined that almost all pregnant women should take low dose aspirin (81 mg) daily during pregnancy to reduce the risk of having preeclampsia by 20 - 40%.

A woman with preeclampsia whose condition is worsening will develop other signs and symptoms known as severe features. These include low platelets in the blood, abnormal kidney or liver function, pain over the upper abdomen, changes in vision, fluid in the lungs, or a severe headache. A very high blood pressure reading also is considered a severe feature.

**When does preeclampsia occur?**

It usually occurs after 20 weeks of pregnancy, typically in the third trimester. When it occurs before 32 weeks of pregnancy, it is called early-onset preeclampsia. It also can occur in the postpartum period.

**What causes preeclampsia?**

It is not clear why some women develop preeclampsia, but the risk of developing preeclampsia is increased in women with the following:

- Pregnant for the first time.
- Have had preeclampsia in a previous pregnancy or have a family history of preeclampsia.
- Have a history of chronic hypertension or kidney disease.
- 40 years or older.
- Carrying more than one baby.
- Medical conditions such as diabetes mellitus, thrombophilia, or lupus.
- Obesity.
- In vitro fertilization.

**What are the signs and symptoms of preeclampsia?**

- A headache that will not go away.
- Seeing spots or changes in eyesight.
- Pain in the upper abdomen or shoulder.
- Nausea and vomiting (in the second half of pregnancy).
- Sudden weight gain.
- Difficulty breathing.

**What steps can I take to help prevent preeclampsia?**

Prevention involves identifying whether you have risk factors for preeclampsia and taking steps to address those factors. If you have hypertension and are planning a pregnancy, see your provider for a pre pregnancy check-up to find out whether your hypertension is under control and whether it has affected your health. If you are overweight, weight loss usually is advised before pregnancy. If you have a medical condition, such as diabetes, it usually is recommended that your condition be well controlled before you become pregnant. As stated above, recent research studies have determined that almost all pregnant women should take low dose aspirin (81 mg) daily during pregnancy to reduce the risk of having preeclampsia by 20-40%.

**9.4 SIGNS THAT YOU ARE APPROACHING LABOR**

As labor begins, the cervix opens (dilates). The uterus, which contains muscle, contracts at regular intervals. When it contracts, the abdomen becomes hard. Between the contractions, the uterus relaxes and becomes soft.

Your uterus may contract off and on before true labor begins. These irregular contractions are called false labor or Braxton Hicks contractions. They are normal but can be painful at times. You might notice them more at the end of the day.



**How can I tell the difference between true labor and false labor?**

Usually, false labor contractions are less regular and not as strong as true labor. Sometimes the only way to tell the difference is by having a provider perform a vaginal exam to look for changes in your cervix that signal the onset of labor.

One good way to tell the difference is to time the contractions. Note how long it is from the start of one contraction to the start of the next one. Keep a record for an hour.

**9.5 MEDICATIONS FOR PAIN RELIEF DURING LABOR****What are the types of pain-relieving medications that can be used during labor and delivery?**

In general, there are two types of pain-relieving drugs: 1) analgesics and 2) anesthetics. Analgesics relieve pain without total loss of feeling or muscle movement. They are used to reduce pain but usually do not stop pain completely. This is usually IV medicine. Anesthetics block all feeling including pain. This form of medication is usually an epidural.

**What are systemic analgesics?**

These medications often are used during early labor to allow you to rest. Systemic analgesics usually are given as a shot. Depending on the type of medication, the shot is given into either a muscle or an intravenous line (IV). This is a small tube that is placed into a vein through which medications or fluids are given.

**What is local anesthesia?**

Local anesthesia is the use of drugs that affect only a small area of the body. Local anesthetics provide relief from pain in that area. Local anesthetics are injected into the area around the nerves that carry feeling to the vagina, vulva, and perineum. The drugs are given just before delivery. They also are used when an episiotomy needs to be done or when any vaginal tears that happened during birth are repaired.

**What is an epidural block?**

An epidural block is the most common type of pain relief used during labor and delivery in the United States. In an epidural block, medication is given through a tube placed into the lower back.

An epidural block can be used during labor and for a vaginal delivery or cesarean delivery. This type of block causes some loss of feeling in the lower areas of your body, but you remain awake and alert. You should be able to bear down and push your baby through the birth canal. For a cesarean delivery, the dose of anesthetic may be increased. This causes loss of sensation in the lower half of your body.

**Will I be able to move or feel anything after receiving an epidural?**

You can move with an epidural, but you may not be able to walk around. Although an epidural block will make you more comfortable, you still may be aware of your contractions. You also may feel your provider's exams as labor progresses.

**What are the risks of an epidural?**

Although it is rare, an epidural block can cause the following side effects:

- **Decrease in blood pressure:** An epidural can cause your blood pressure to decrease temporarily. This in turn may slow the baby's heartbeat.
- **Fever:** Some women develop a low-grade fever as a normal reaction to an epidural.
- **Headache:** If the covering of the spinal cord is pierced while the tube is being placed and spinal fluid leaks out, you can get a bad headache. This happens rarely.
- **Soreness:** After delivery, your back may be sore for a few days. An epidural will not cause chronic or long-term back pain.

### **What is a spinal block?**

A spinal block is somewhat like an epidural block but without the tube that remains in the back. The numbing medicine begins to work quickly and lasts for a few hours. It is most commonly used for a cesarean delivery.

### **Will I be able to move or feel anything after receiving a spinal block?**

You will be numb from about the waist down after receiving a spinal block and will need assistance moving.

### **What is general anesthesia?**

General anesthesia causes you to lose consciousness so that you do not feel pain. It usually is used only for emergency situations during childbirth.

### **How is general anesthesia given?**

It is given through an IV line or through a mask. After you are asleep, your anesthesiologist will place a breathing tube into your mouth and windpipe.

## **10.0 VACCINATIONS**

### **Are vaccines safe?**

Vaccines are developed with the highest safety standards. The U.S. Food and Drug Administration approves all vaccines. The CDC continues to monitor all vaccines after they are approved. They have been used for many years in millions of pregnant women and are not known to cause pregnancy problems or birth defects.

### **Can vaccines made with thimerosal cause autism?**

There is no scientific evidence that vaccines made with thimerosal, a mercury-containing preservative, can cause autism or other health problems in babies. Thimerosal-containing vaccines do not cause autism in children born to women who received these vaccines. There is a flu vaccine made without thimerosal, but experts have not said that the thimerosal-free version is better for any particular group, including children and pregnant women. The suggestion that vaccines are responsible for autism is a myth.

### **Do vaccines have any side effects?**

Most side effects of vaccines are mild, such as a sore arm or a low fever and go away within a day or two.

## 10.1 TDAP VACCINE

### Why get vaccinated?

Diphtheria, tetanus and pertussis are serious diseases caused by bacteria. Diphtheria and pertussis are spread from person to person. Tetanus enters the body through cuts or wounds.

- **Diphtheria** causes a thick covering in the back of the throat and can lead to breathing problems, paralysis, heart failure and even death.
- **Tetanus** (Lockjaw) causes painful tightening of the muscles, usually all over the body and can lead to "locking" of the jaw so the victim cannot open his mouth or swallow. Tetanus leads to death in up to 2 out of 10 cases.
- **Pertussis** (Whooping cough) causes coughing spells so bad that it is hard for infants to eat, drink or breathe. These spells can last for weeks. Unfortunately in cases of severe newborn pertussis, 1-2 out of 100 babies could die from the infection.

The best way to protect a newborn from pertussis is to vaccinate the adults around him or her. Siblings, as long as they are up to date on their scheduled vaccinations, are not a risk to the newborn baby. Therefore mother, father and any adults providing a close and caregiving relationship are encouraged to get the TDAP vaccine.

## 10.2 INFLUENZA

Influenza (the flu) is more than a bad cold. It usually comes on suddenly. Signs and symptoms may include fever, headache, fatigue, muscle aches, coughing and sore throat. It can lead to complications such as pneumonia. Some complications can be life-threatening. Who is at risk of developing complications from the flu?

Certain people have an increased risk of developing flu complications. These include the following groups:

- Adults 65 years and older.
- Children younger than 5 years old.
- People who have illnesses or conditions like asthma, heart disease or cancer.
- Pregnant women.

### How does being pregnant increase my risk of complications from the flu?

Normal changes in the immune system that occur during pregnancy may increase your risk of flu complications. You also have a higher risk of pregnancy complications such as preterm labor and preterm birth if you get the flu. You are more likely to be hospitalized if you get the flu while you are pregnant than when you are not pregnant. Your risk of dying from the flu is increased as well.

### Who should get vaccinated against the flu?

The Centers for Disease Control and Prevention (CDC) recommend that everyone 6 months of age and older, including pregnant women and women who are breastfeeding, get the flu vaccine each year. If you are pregnant, it is best to get the vaccine early in the flu season (October through May), as soon as the vaccine is available. You can get the shot at any time during your pregnancy.

**Which type of flu vaccine should I get?**

There are two types of flu vaccines: 1) a shot and 2) a nasal mist. The flu shot contains a form of the flu virus that is inactive. It cannot cause disease. The shot can be given to pregnant women at any time during pregnancy. The nose spray vaccine is not recommended for pregnant women. However, it is safe for women after they have given birth, including those who are breastfeeding.

**How often should I get the flu vaccine?**

With some types of vaccines the antibodies that are made remain active for many years. But the types of viruses that cause the flu change every year. The antibodies made in response to one year's flu vaccine may not work against the next year's flu viruses. For this reason the flu vaccine is updated each year. To be fully protected you need to get the flu vaccine yearly.

**How does getting the flu vaccine when I am pregnant help my baby?**

The flu vaccine does double duty by protecting both you and your baby. Babies cannot get the flu vaccine until they are 6 months old. When you get a flu shot during pregnancy, the protective antibodies made in your body are transferred to your baby. These antibodies will protect your baby against the flu until he or she can get the vaccine at 6 months of age.

**What should I do if I get the flu while I am pregnant?**

If you think you have the flu and you are pregnant contact your physician right away. Taking an antiviral medication as soon as possible is recommended. Flu symptoms may include the following:

- Fever or feeling feverish.
- Chills.
- Body aches.
- Headache.
- Fatigue.
- Cough or sore throat.
- Runny or stuffy nose.

Antiviral medication is available by prescription. It is most effective when taken within 48 hours of the onset of flu symptoms but there still is some benefit to taking it up to 4-5 days after symptoms start. An antiviral drug does not cure the flu but it can shorten how long it lasts and how severe it is.

**What should I do if I come into close contact with someone who has the flu while I am pregnant?**

You also should call your provider if you are pregnant and come in close contact with someone who has the flu. This includes living with, caring for or talking face-to-face with someone who has a positive laboratory test for influenza. You may be prescribed an antiviral drug to reduce the risk that you will get the flu.

**10.3 COVID****Should I get the COVID vaccine while pregnant?**

Although there are no pregnant women specifically enrolled in vaccine trials, millions of women have received the vaccine while pregnant, by choice or by accident. No adverse outcomes have

been seen or reported. There is no increase in miscarriage risk, no increased risk of birth defects, and no change in pregnancy outcomes. If you are like 15% of people and get a low grade fever from a vaccine dose, just peel off layers to stay a little cooler, drink cool fluids, and take Tylenol to bring your temperature down below 99.5.

### **What if I get COVID while I am pregnant?**

This is one of the reasons to get the vaccine. Compared to women of the same age, a pregnant woman with COVID infection is 3 times more likely to get severe COVID, be admitted to the Intensive Care Unit, or get intubated. And of women who get severe COVID, a pregnant woman is 65 times more likely to die than a non-pregnant woman her age. In the last 2 weeks of pregnancy, there is a very small risk that the virus could pass across the placenta to the baby causing the newborn baby to be infected with COVID. In women who have had COVID in any stage of pregnancy, there might be higher risks of preterm birth and/or a baby who is undersized (called IUGR, intrauterine growth restriction).

### **What do I do if I am exposed to COVID or I am ill and believe I have COVID while pregnant?**

With an exposure to a COVID positive person (an exposure time of 15 minutes, with or without masks) then please watch for symptoms but a COVID test is not necessary. Please cancel and reschedule all appointments for 7-10 days. While this is overly cautious, we have a waiting room full of pregnant women or elderly women. If you have COVID symptoms such as cough, shortness of breath, loss of taste or smell, or loose stools, then COVID testing can be ordered by our office. If a pregnant woman tests positive for COVID, she should quarantine at home, try to stay separate from others in the home, and watch for symptoms.

A person with mild symptoms may not need to go to a hospital or urgent care center. If you have severe symptoms like difficulty breathing with basic activities, go to an emergency department, as testing, treatment, or hospitalization may be needed.

### **If I am hospitalized with COVID while pregnant, what will happen?**

There are some monoclonal antibody therapies and antiviral medications that are safe in pregnancy and some that are not. Steroids and antibiotics are also sometimes used. The baby will be monitored with heart rate checks according to gestational age.

### **Should I go to work if I have been exposed to COVID?**

You will need to call your workplace or manager and follow their workplace guidelines. Those rules are different at each workplace.

## **11.0 OTHER INFORMATION**

### **11.1 GENDER ULTRASOUND**

Gender reveal ultrasounds are now offered to our patients. Unfortunately, insurance will not approve this service for their clients. The following conditions apply:

- 16 weeks and over.
- Cost \$50 with payment due at the time of service.
- Scans by appointment only.

## 11.2 FETAL KICK COUNTS

It is normal that women who are pregnant do NOT feel consistent movement until after 24-26 weeks. Fetal movements are a good indicator of fetal well-being. Sometimes during pregnancy women are asked to keep a record of their baby's movements. This is called a kick count. After 24-26 weeks, the baby should move 10 times in an hour multiple times throughout the day. If you notice that the baby has not been moving much, do the following:

- Sit down or lie down to assess movements. Many times when you are busy doing something and you don't notice the movements as much.
- Get something to eat and drink. Sometimes the baby will not move very much if you have eaten very little.
- If you have done the above listed and still do not feel the baby moving, you need to call the office.

## 11.3 PEDIATRICIAN LIST

Please check with your insurance payer for a list of contracted Pediatricians.

## 11.4 STUFF NO ONE TOLD ME ABOUT HAVING A BABY

*Fourteen Perfectly Frank Pregnancy and Birth Pointers from a Second-Time Mom*  
*By Marjorie Ingall from Parents Magazine*

1. During my first pregnancy, I was determined to do everything right. I devoured books by "Important Experts," monitored every morsel I put into my mouth, practiced regular prenatal yoga, and gently rubbed my belly with fragrant lotions. Now I have a toddler, and I'm expecting my second child. The closest I get to downward dog pose is bending to pick up Legos. I wish I had more time to obsess about this pregnancy, but I'm just too busy. On the upside, I learned so much from my first experience that I'm far less worried. And I'm delighted to share my hard-won wisdom with you.

2. Okay, you know how when you first get pregnant, you go with a girlfriend to try on maternity clothes and there's this cute little stunt-belly pillow in the dressing room? So you strap it on and model some outfits and joyfully cry a little? Guess what? That pillow gives an idea of how you'll look when you're five months pregnant. By the time you reach nine months, it will taunt you with its daintiness. To know what you'll actually look like, you'd need to strap a small planet to your midsection.

3. Don't buy Goodnight Moon. You will receive approximately 10,000 copies as gifts.

4. Do not freak out if you wake up and find yourself lying on your back. I'd gotten the impression from my far-too-extensive reading that the weight on my uterus would crush my spine, give me hemorrhoids, and deprive my baby of oxygen. None of these things ever occurred. What did? I woke up. I rolled over. Everyone lived!

5. Every now and then the baby wants Ben & Jerry's. Have a scoop. Guilt is not healthy.

6. Do not be suckered into buying ridiculous baby items you do not need, such as a “prenatal sound system.” This \$50 device, which comes with a headset, a belt, and a Mozart CD lets you listen to the baby in utero and communicate with him via microphone. I imagine thousands of parents leaning down, loudly conjugating French verbs, periodically shrieking, “Make us proud! Win a scholarship to Yale!”
7. Expect that at some point during your pregnancy, you may fail a screening test. You will become convinced that your baby has a genetic defect, any number of fatal maladies, or gills. Most likely, she doesn’t. Learn to take deep, cleansing breaths while you wait for follow-up tests (And good preparation for labor).
8. Do buy the goofy body pillow. Yup, it will take up most of your hubby’s bed space. Get it anyway. I spent months creating museum-worthy soft sculptures out of pillows, reconfiguring them a dozen times a night as I flipped like a fat pancake. A body pillow would have done the trick.
9. Get your husband involved: ask him to make you a playlist of music to play during labor. And explain that this is not the time to get funny with the punk-rock polka songs. Have him do an upbeat mix and a soothing mix (FYI, one might not want anything with words, only instrumental music.).
10. I didn’t realize it then, but newborns are actually quite portable. Like footballs, I wish I’d gone to more movies, eaten more brunches out, had my hair cut, and gotten manicures.
11. Let the housekeeping slide. When you have a newborn (and cannot afford a cleaning staff or elves), it is okay to live in your own filth like the fish in the aquarium in Finding Nemo. Ease up on yourself. You are exhausted, hormonal, and the baby is your full-time job. When the baby sleeps, go ahead and nap, read, take a bath, call a friend. Accept that the house will go to hell in a Moses basket.
12. If you’re planning to breastfeed, be sure to get the name of a good, non-judgmental, board-certified lactation consultant before the baby arrives. The Northwest Health Porter Hospital Lactation consultants are wonderful. Call them(219) 983-8543.
13. Don’t buy cuddly toys for the baby unless you really have no friends. Stuffed animals, like rabbits, and tribbles (on an ancient Star Trek episode), have a way of breeding. Soon every surface of your home will be covered. Why rush this?
14. And most important of all, accept that people will criticize your parenting decisions no matter what. Your prenatal diet, your baby’s name, whether you work or stay home, etc.. Get used to it. Just learn to smile brightly and say, “Thanks for sharing!” Then continue doing what feels right, operating on the basic principle that Mother really does know best!

## **12.0 CHILDBIRTH & BREASTFEEDING CLASSES**

Visit [www.nwhealthporter.com](http://www.nwhealthporter.com) for Northwest Health Porter Hospital’s list of pregnancy and breastfeeding classes.