My 1-4 Week Pregnancy Total Women's Health of Baltimore Embryo-4 weeks

Every month your uterus prepares itself for pregnancy by creating a thick, lush and vascular bed of endometrial tissue in preparation for implantation of a fertilized egg. When this does not happen, this lining is shed resulting in a "period." Prior to pregnancy and about 2 weeks after your last period, an egg is released from the ovary and enters the fallopian tube. Sperm are very competitive! If you are sexually active or have been inseminated, millions of sperm travel via semen into the vagina, through the cervix and uterus and enter the fallopian tube to penetrate this egg. For singleton pregnancies, just one sperm out of the millions that have made the journey is successful in penetrating the egg. This process is called "fertilization". The fertilized egg then travels, taking 3-4 days before it makes it to the uterus where it implants and embeds into the thick, plush and vascular bed created in preparation for its arrival. This fertilized egg is now known as a "blastocyst". The blastocyst, a teeny ball of cells, is busy settling into its new home, prepping for all the crucial changes that will happen over the next 6 weeks. It continues to make a network of new blood vessel connections with the uterine lining.

Development

In reality, the sperm and egg don't meet until about 2 weeks after the start of your period but pregnancy weeks are calculated by the number of weeks from your last menstrual period.

One week following implantation, the hormone of pregnancy called "human chorionic gonadotropin" (hCG) starts to be produced by cells forming the placenta. The rudimentary cells of the placenta are called syncitrophoblasts at this stage. The most sensitive pregnancy tests can detect hCG levels at as low as 20 mIU. This level of hCG is present in your urine at about 7-10 days post ovulation. These levels start to rise even before you are late with your next period! Blood tests can pick up on the hCG hormone levels even earlier, at about 6-8 days post ovulation or 8-10 days before a missed period.

At 4 weeks pregnant, baby is smaller than a poppy seed. So, can we see anything by ultrasound at this very early stage of pregnancy? An early ultrasound may show only thickening of the lining of the uterus, called a "decidual reaction." A small fluid filled gestational sac can then be seen on ultrasound between 4-5 weeks. And at about 5 weeks, the yolk sac, a rounded circle within the gestational sac, will also be seen. The yolk sac functions as a source of nourishment for the developing fetus until the placenta takes over. It is not until about 5 ½ to 6 weeks that an actual fetus can first be visualized on ultrasound. A viable pregnancy is not confirmed until a heartbeat is seen at about 6 weeks.

My Body & Symptoms

Congratulations! If you know you're 4 weeks pregnant, you found out the news earlier than most. You may be totally excited or you may be bummed! Either way, physically, you may not be feeling any different (for now at least). If you are experiencing symptoms, this may present as nipple and breast tenderness, fatigue, bloating, mild cramping, spotting and morning sickness.

Things To Consider

Definitely celebrate this amazing news with your partner, but you may not want to tell the whole world...just yet. Your first call at week 4 of pregnancy should be to Dr. Oliver to schedule your first prenatal visit, where she will confirm your pregnancy with a urine or blood test. Start taking a prenatal vitamin and eating healthy. Light bleeding can occur at 4 weeks as a result of implantation.





- Begin taking prenatal vitamins
- Quit smoking (if applicable)
- Quit drinking (if applicable)
- Cut down on caffeine
- Start eating well
- Make an appointment with Dr. Oliver

Date of Visit:	
Weight:	

Memories & Milestones

My thoughts on becoming a pregnant:

I suspected I might be pregnant because:

How does my partner feel about the pregnancy?

I found out I was pregnant on:

My 5-6 Week Pregnancy Total Women's Health of Baltimore Total Women's Health of Baltimore Total Women's Health of Baltimore

Development

The gestational sac first appears at around 4 weeks and grows at a rate of around 1 mm/day. Usually an embryo and heartbeat are first detectable at 5 weeks and 5 days. The baby's first blood cells are already being produced in the yolk sac. At 5 weeks pregnant, baby is the size of an apple seed. Yep, your embryo is now measurable-though at week five of pregnancy, it's a wee 0.13 inches from crown to rump (a.k.a. head to bum)- and baby's gearing up for much more growth. In fact, in the next week he or she will almost double in size.

The amniotic sac now houses the embryo, which floats in a sea of fluid. The neural tube will develop into your baby's brain, spinal cord and nerves. The heart is now a single tube with a few uncoordinated beats. At 6 weeks the baby has tiny webbed hands and feet shaped like paddles.

Even though your just 5 or 6 weeks pregnant, lots of changes are taking place. The placenta and the beginnings of the umbilical cord are already working hard to channel nutrients from your body to the embryo. Oxygen, amino acids, fats, and sugars all play a vital role in healthy development.

My Body & My Symptoms

It is completely normal for you to feel a wide range of emotions. Symptoms such as backaches and menstrual like cramps can be common. Soak in a warm bath, listen to soothing music, indulge in naps. Water and plenty of fruits and vegetables are important.

Morning sickness, light bleeding or spotting, breast tenderness, frequent urination, fatigue, mood swings can occur.

Things To Consider

Prenatal vitamins with at least 400 micrograms of folic acid every day are a great way to support neural tube development. Women who are normal weight should gain 25 to 35 pounds the whole pregnancy. Underweight women should gain at least 35 and those overweight should gain no more than 20 pounds. Fish high in mercury and undercooked meats should be avoided. Ginger and B6 may help with nausea. Have a cat? Now is the time to get someone else to take care of the litter box to avoid transmission of toxoplasmosis, an infection that can harm the baby. Thinking of telling other's this early? Tell a select few. Some people prefer waiting until after the first trimester when the risk of miscarriage is less.





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My 7	ו־ט ו		LIST

- Begin taking prenatal vitamins
- Quit smoking (if applicable)
- Quit drinking (if applicable)
- Cut down on caffeine
- Start eating well
- Check out health insurance and maternity leave coverage

Date of Visit:	
Weight:	

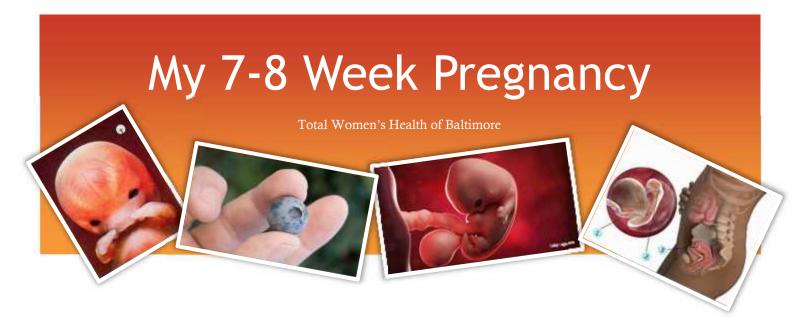
Memories & Milestones

My thoughts on becoming a parent:

I suspected I might be pregnant because:

I'm nervous about:

I'm excited about:



Development

The embryo measures ½ cm at 7 weeks and has doubled in size since last week now the size of a blueberry. By the end of week 8, it will be the size of a raspberry. From 7 to 7 ½ weeks, tendons attach leg muscles to bones, and knee joints appear. Also, by 7 ½ weeks the hands can be brought together, as can the feet. The embryo also kicks and will jump if startled. By 7 to 7 ½ weeks, nephrons, the basic filtration units in the kidneys, begin to form. The kidneys begin to produce urine, which is then released into the amniotic fluid. In the male infant, developing testes begin to produce and release testosterone. By 8 weeks, peristalsis (movement) begins in the embryo's large intestines, a process which will continue throughout life. Although your baby is not eating anything and receives its energy through glucose from the placenta, the alternating contraction and relaxation of the gastrointestinal tract releases its contents into the amniotic fluid. By 8 weeks, the brain is highly developed and makes up approximately 43% of the embryo's total body weight. Squinting, jaw movements, grasping motions, toe pointing and temperature regulation start. The upper and lower eyelids grow rapidly and begin to fuse together with eyes sealed closed by 8 weeks. The earliest signs of right and left handedness begin at 8 weeks. The skin develops two layers and the fetus is no longer transparent. 8 weeks marks the end of the embryonic period. During this time the embryo has grown from a single cell into nearly one billion cells. Forming over 4,000 distinct anatomic structures. The embryo now possesses more than 90% of the structures found in the adult!

My Body & My Symptoms

Sore breasts, fatigue, constipation, morning sickness, heightened sense of smell, cramping and weird dreams as well as spotting are common symptoms. Your hormones are doing some wild things!

Spotting, in particular can be alarming, because, yes, blood can be a sign of miscarriage. But there are some other causes of spotting in the first trimester, including sex (since your cervix may be more sensitive these days).

Things To Consider

Schedule allotted time off for visits. Once the pregnancy has been established and if there are no complications, you will be seen every 4 weeks until you are 28 weeks.





- Don't eat raw meat or seafood and avoid deli meats and raw eggs
- Exercise- at least 150 minutes per week of moderate intensity aerobic activity
- Get plenty of sleep
- Listen to your doctor
- Go with the flow
- Don't believe everything you read

Date of Visit:
Weight:

Memories & Milestones

Foods I've been craving:

Foods that make me queasy:

How I'm feeling physically:

How I'm feeling emotionally:



Development

Your baby has graduated from embryo to fetus and is now about the size of a cherry at 9 weeks. By the 12th week your baby will be almost 3 inches long and about the size of a plum. Fingernails, toenail and bones are forming. The face is slowly forming and by 9 weeks there is a mouth, tongue and tiny taste buds! At 10 weeks the ears are developing and forming ear canals. If you could look at your baby's face you would be able to see upper lips and two tiny nostrils. At 10 weeks the jaw bones are developing and contain all the future milk teeth. The heart is fully formed.

At 11 weeks the fetus is growing quickly and the placenta is rapidly developing and will be fully formed at 12 weeks. Your baby's head makes up 1/3'd of its length but the body is also growing fast and straitening, and the fingers and toes are separating. At 12 weeks all the organs, muscles, limbs and bones are in place and the sex organs are well developed. From now on it just has to grow and mature. It's too early for you to be able to feel the baby's movements yet, although it's moving quite a bit.

My Body & My Symptoms

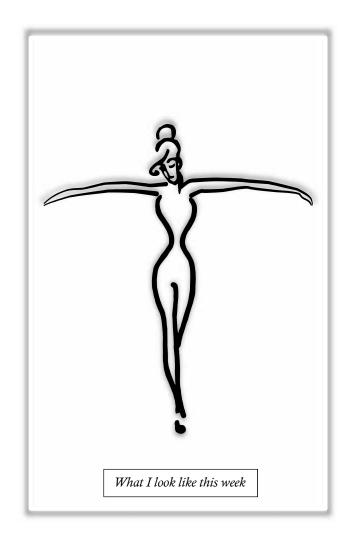
Right now, the pregnancy hormone hCG is circulating through your body at its peak level. That means at 9 weeks, some pregnancy symptoms may be at their most severe! Hang in there-you're just weeks away from those hormones leveling out a bit, leaving you feeling a lot more like yourself by the end of the $12^{\rm th}$ week.

Your breasts are bigger and you feel happy one moment and sad the next! Mood swings occur because the hormones just keep raging and can be exacerbated by the nausea, vomiting and fatigue you may be experiencing, making it even more difficult to control your emotions. Remember, it's OK to slow your usual pace, to take breaks (nap), to meditate, or just veg out and binge watch Netflix! Over 80% of pregnant women experience some form of morning sickness. It really should be called all day sickness!! Eat what works for you. But remember, spicy and greasy foods can exacerbate nausea. Ginger and small, frequent meals may help, along with vitamin B6 supplements. If nausea is severe talk to me (Dr. Oliver) about it. There are treatment options. Frequent urination because of your expanding uterus and increased blood supply to the area is common. Don't let that stop you from drinking lots of water. It's important to stay hydrated. Nasal congestion- Surprise! Pregnancy causes higher mucus production. Keep tissues handy. Headaches due to surges in hormone levels. This can also be exacerbated by dehydration, caffeine withdrawal, hunger, lack of sleep and stress. Warm cold compresses and Tylenol are OK. Stay away from aspirin and ibuprofen (Advil). Speak to me if symptoms don't resolve.

Things To Consider

Think about how life will change when baby is in the picture. Consider wearing a more supportive bra. Find out about healthy eating and which foods to avoid in pregnancy. Find out about exercises and keeping active in pregnancy.





- Buy a more supportive bra
- Start looking for ways you and your partner can budget so you have extra cash when baby arrives
- Check out your company's handbook to see how maternity leave is handled
- Avoid stressful situations
- Go with the flow

Date of Visit:	
Weight:	

Memories & Milestones

I first hear my baby's heartbeat on:

When I heard it I felt:

My message to baby:

One pet name for baby is:

My 25-26 Week Pregnancy

Total Women's Health of Baltimore

At 25 weeks, your baby is the size of an acorn squash. The baby's developing a firm grasp and may reach out and grab the umbilical cord. By 26 weeks, she/he will be nearly as long as a zucchini. Her/his eyebrows and eyelashes are well defined. The baby now weighs 1 2/3 pounds and is 14 inches (the length of a scallion) from head to heel. The network of nerves in your baby's ears are better developed and more sensitive than before. He/she is now able to hear both your voice and your partners as you chat with each other. The baby's inhaling and exhaling small amounts of amniotic fluid, which is essential for development of his lungs. If you are having a boy, his testicles are beginning to descend into the scrotum. This trip will take about 2-3 months. By the end of week 26, the baby will measure approximately 14 inches and weight over 1.7 pounds. The tiny feet are just 2 inches (5 cm) long. Thumb sucking calms the baby and strengthens the cheek and jaw muscles. The end of week 26 marks the sixth month, which is the last month of the second trimester.

My Body & My Symptoms

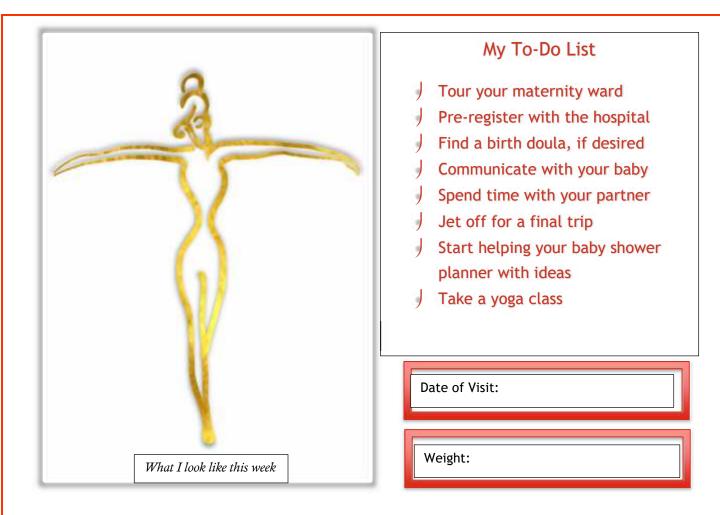
Development

You haven't met your baby yet, but he or she is taking over your life! Interfering with your sleep, messing with your memory, and giving you a stress headache or two. Um, he or she will be doing all these things after birth, too! Trouble sleeping, headaches, pregnancy brain and Braxton Hicks contractions are all normal. Yes, your body has been taken over by an alien! It's common for weight to jump around and fluctuate. One week you may not have gained any weight, then suddenly in one week you've gained 3 lbs. Realistically, gaining the exact same amount of weight each week just isn't going to happen. You've probably gained about 16-22 pounds by now if your pre-pregnancy weight was normal. Your belly will be growing about a half inch a week for the rest of the pregnancy and at 26 weeks, the top of the uterus is about 2-3 inches above your belly button. The placenta produces a hormone called human placental lactogen which allows build-up of glucose in your blood. This enables you to feed your baby through the placenta. Usually your pancreas can make enough insulin to handle that. If not, your sugar levels will rise and can cause gestational diabetes. Because of the increase in insulin levels, which lowers blood sugar levels, going long hours without eating or drinking will result in dizziness and possibly syncope(you done fell out!) from hypoglycemia. So, it is even more important to eat small frequent, healthy meals. Also, the blood vessels have relaxed to accommodate the almost doubling of your blood supply. This results in a decrease in blood pressure. Blood pressure falls toward the end of the first trimester, and it tends to reach a low at about 22-24 weeks. Long periods without hydration or food can also result in hypotension and again, you done fell out! It's important to eat during pregnancy.

Things To Consider

Headaches are often due to hormone fluctuations or stress. Hunger and dehydration can also cause headaches so it is important to drink plenty of water and to continue to eat small, frequent and healthy meals low in salt. Processed and salty food can exacerbate symptoms. Try fresh fruits, vegetables and complex carbohydrates. Stay away from the Kool-Aid! If you notice your belly occasionally tightening, yep, those are Braxton-Hicks contractions. Don't freak out- your muscles are flexing to practice for labor. If the contractions start to become more painful and closer together, this may be a sign of preterm labor. Take a nice warm bath, drink plenty of water and eat a meal. If the contractions do not go away, call Dr. Oliver. If you're having backaches, a warm bath or hot or cold compresses might bring relief. Try to keep good posture. You've probably got a couple of weeks before your next ultrasound and your itching to know what is going on! Be patient. We do certain tests along the way to ensure that you and the baby are doing well. Between 24 and 28 weeks is when you'll drink the "sweat drink" to check for diabetes in pregnancy.





Memories & Milestones

The first time I felt baby's hiccups:

The foods I've been craving:

The foods that give me heartburn:

How I'm feeling about my body changing:

My 27-30 Week Pregnancy Total Women's Health of Baltimore 27 Weeks Pregnant

Development

weeks, your little one y

Right around 27 weeks, your little one will open his/her eyes (they've been closed up till now). Eve lashes also start to appear around this time. After 28 weeks which marks the beginning of the third trimester, the baby's main job is to bulk up. At the start of the third trimester the average baby weighs about 2 ½ pounds and measures 12-16 inches. Your baby will have blossomed from the size of a small head of cauliflower to a big old coconut between 27 to 30 weeks. With the big job of organ and nerve development just about wrapped up, your baby will gain weight, mostly in the form of body fat- very quickly now. The fat will fill out most of the wrinkles in his/her skin and supply him/her with insulation and energy. Your baby has a big head! The brain is also growing quickly now that his/her soft, flexible skull bones are being pushed outward. Once relatively smooth, the brain is looking more wrinkled as interconnections between individual nerves and brain wave patterns start to form. At 29 weeks the muscles have grown rapidly and the baby is at the peak of its movement. Later in the third trimester, space starts to get cramped and, in turn, fetal acrobatics decrease. By 30 weeks the baby likely tops 3 pounds and measures up to 17 inches in length. The lanugo, the downy hair that has covered most of his/her body during the past weeks, begins to disappear at this point. When born, the baby may still have a few fuzzy patches, usually on the back and shoulders. These remnants will disappear within a few weeks of birth. The hair on the head is thickening and is often a temporary topping that sheds about a month after birth, being replaced down the road by more permanent hair.

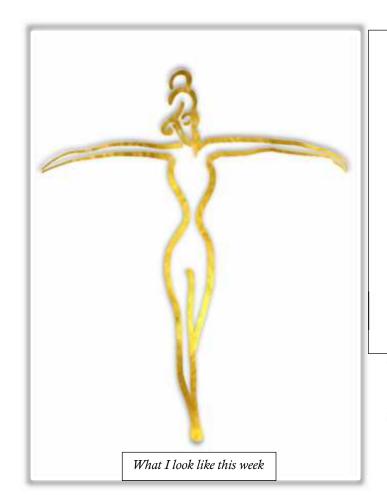
My Body & My Symptoms

Welcome to the beginning of a new phase of symptoms. Ankles, fingers and face swelling, more vaginal discharge, shortness of breath, difficulty sleeping and pelvic pressure all accompany the third trimester. More frequent urination occurs as the bladder battles (and loses the battle) for more room. The mighty uterus encroaches on everything! Varicose veins may start to pop-up as venous blood flow is decreased due to compression of pelvic vessels by the uterus. Some women develop varicose veins in the vulva, as well. The hormone relaxin continues to relax and loosen the ligaments and joints in preparation for the birth process. But this same process can cause ligaments that support the spine to loosen, leading to instability and back pain. If you are working, you may be feeling as if you are dragging the chain. It's getting hard to focus on other people's agendas even if they're paying you to be interested.

Things To Consider

Manage heartburn by eating 4-5 small meals each day instead of large meals. Avoid spicy and greasy foods. Manage swelling by lying down and putting your feet up. Excessive weight gain can exacerbate back pain. Moderate exercise can help you stay fit and feel better during pregnancy. Talk to Dr. Oliver about back pain symptoms. You may need a good maternity belt to help support your back if the pain is unbearable. Not sleeping at night? Very little can be done about the insomnia that accompanies the discomfort of the third trimester. Try to keep a regular pre-bed-time routine, avoid caffeine in the afternoons, aim for quiet time before winding down for bed and of course, sleep in a comfortable bed with a firm mattress. Declutter your bedroom. It needs to be restful and serene. Supportive underwear with Lycra (TED hose) can help with varicose veins. If work is becoming a drag, ask your employee about the option of working at home. Unless you have a medical problem, now may not be the time to take excessive time off. You'll need that leave for when the baby comes. Maternity leave is fleeting! When the time comes to leave the baby, trust me, you won't want to go back to work!





- Choose a color for the nursery
- Research cord blood banking
- Find a birth doula, if desired
- Babyproof your house
- Eat a high fiber diet to prevent constipation and hemorrhoids
- Try exercises designed to prepare your body for D-day.

Date of Visit:	
Weight:	

Memories & Milestones

The first time I felt baby's hiccups:

The foods I've been craving:

The foods that give me heartburn:

How I'm feeling about my body changing:

My 31-35 Week Pregnancy Total Women's Health of Baltimore Development

From 31 to 35 weeks, your baby goes from the size of a coconut to that of a honeydew melon! Your baby's iris color begins to appear around the 31st week. Most babies are born with dark bluish brown or bluish gray eyes, but this shade almost always changes after birth. True eye color won't be apparent for 6 to 9 months. Final formation of eye pigmentation happens in response to exposure to the strong light of the outside world. In the meantime, pupils start to dilate in response to the soft pinkish red light that filters into the uterus. Eyes are usually open during alert times and closed during what we believe is sleep. At about 7 months in the womb, the infant spends most of its time in what appears to be sleep from eye movement studies. Directly measuring brain activity of a human fetus in the womb is impossible. Around the 7th month of a fetus' development rapid REM and non-Rem eye movements that suggest sleep and wake cycles occur every 20-40 minutes. Although baby is getting its oxygen from the placenta, it continues to practice taking deep breaths intermittently. The lungs are taking in amniotic fluid which encourages the lung cells to produce more surfactant, the protein that is essential for healthy lung development. Your baby is starting to have less elbow room and fetal movements start to slow down. By 35 weeks, the average baby weighs approximately 5 lbs and is about 16-19 inches in length Still not considered "full term", the tiny details of the fetus are complete.

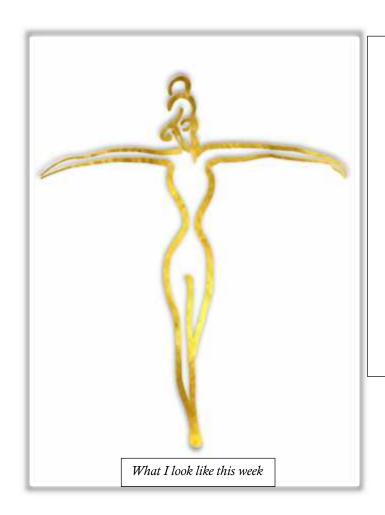
My Body & My Symptoms

Swelling may start or worsen if you already have it and you may continue to get backaches and leg cramps. The Braxton-Hicks contractions are becoming more painful and frequent. You may start to notice more colostrum leaking from your breasts. It is a prelude to breast milk production. The mighty uterus encroaches on everything! Varicose veins may start to pop-up as venous blood flow is decreased due to compression of pelvic vessels by the uterus.

Things To Consider

At this point, your baby is probably already head down. If you're concerned that your baby is not moving enough as fetal movement starts to slow down during this stage, get away from distractions that might prevent you from paying attention to the baby's movements. Try lying down and feeling for kicks. You should feel at least 5 kicks in a one hour period. You also may be concerned because you may be carrying differently from others at this stage of your pregnancy. Even if you've been pregnant before, every pregnancy is different. Whether you are carrying higher or lower, bigger or smaller, wider or more compact depends on the size and position of the baby, your body type and how much weight you've gained this pregnancy.





- Start researching breast pumps if you plan to breastfeed
- Drink plenty of fluids
- Keep having sex- it helps!
- Have your partner give you back rubs and foot massages
- Continue weekly date nights with your partner
- Start making childcare
 arrangements for when you return
 to work after maternity leave

Date of Visit:	
Weight:	

Memories & Milestones

How I'm feeling these days:

My clumsiest pregnancy moment:

A recent dream:

What I'll miss most about being pregnant:

My 36-40 Week Pregnancy Total Women's Health of Baltimore Development Baby fat is a very good I thing! Your baby is working foard to produce unuse fat and is growing

Baby fat is a very good thing! Your baby is working hard to produce more fat and 16 growing rounder and plumper. Those adorable dimples are forming at the elbows and knees. This build-up of fat- about 15% of total body weight- will help the baby to maintain his/her body temperature and give him/her a store of energy. By 37 weeks, the baby is considered full term. Up until this time, he/she has been growing about ½ pound per week, but now growth slows to an ounce or so a week. That's good news for you! The average full-term newborn weighs between 6 and 9 pounds and is 18 to 21 inches long. I (Dr. Oliver) can probably give you an idea of your baby's size at this point. Throughout most of the pregnancy, the baby has relied on your immune system. Over these past few weeks, though, the baby has started to develop its own immune system. This process will continue after birth.

My Body & My Symptoms

In a first-time mother, the baby often "drops" two to four weeks before delivery, as the baby's head descends into the pelvis. This is called engagement and it means that your body is getting ready for D-day. Studies suggest that the highest rate of engagement in first time moms occurs between 38 and 42 weeks. Sometimes engagement doesn't occur until labor begins. This is more common in women who have previously delivered. Varicose veins may start to pop-up as venous blood flow is decreased due to compression of pelvic vessels by the uterus.

Things To Consider

Breastfeeding helps to promote the development of the baby's immune system after birth. In the first days after birth, your breasts produce "colostrum", a thin fluid that fortifies the baby's immune system. The breast milk that follows is also chock-full of immunity building benefits.

No one will know the baby's precise size until birth. Unlike in the movies, labor is a long process. If you think your water has broken, call Dr. Oliver at the office for an immediate appointment. Our office will see you immediately if we are open. At night I can be reached on my cell phone (443) 540-1481. If your water hasn't broken and you are having contractions wait until your contractions are consistently 3-5 minutes apart before being seen on labor and delivery. Once again, if the office is open, we will accommodate you.

It is not a crime to go over your due date! Remember, it is just an estimation. I know, by now, you are absolutely over it and tired of being pregnant! However, the natural processes of labor are less painful and much more effective than induction of labor. Induction is usually not performed prior to 39 weeks, due to poor fetal lung development and risk of fetal lung distress. However, there may be maternal or fetal risk factors and medical conditions that outweigh the benefits of staying pregnant. Throughout the pregnancy, I (Dr. Oliver) will communicate any concerns that I may have about the pregnancy with you. After 41-42 weeks and if you have good dating, there is no added benefit to remaining pregnant and the risks start to outweigh the benefits as the placenta ages and is less able to supply nutrients and oxygen to the baby. We will discuss induction options should you need them.





- Consider talking to a lactation consultant and buy a breast pump
- If you don't already have one, find a pediatrician for the baby
- Make sure you don't wait too late to have a baby shower (you might be in the hospital Facetiming your guests if you wait too late!)
- Start a birth plan and go over it with Dr. Oliver
- Clean the car out to make room for baby and install car seat

Date of Visit:	
Weight:	

Memories & Milestones

My biggest fear about labor and delivery:

What I wish people would stop telling me about labor:

I predict I'll go into labor on:

My message to baby: