

Chapter Three: Growth and Development During Pregnancy

First Trimester

1st Month

Fetal development. By the end of the first month, the embryo has a head and a trunk. Features are beginning to form, and tiny limb buds begin to appear. The heart also forms and begins to beat on the 25th day. At the end of this month the embryo is about 1/2 inch long and weighs less than 1 ounce.

Maternal development. You may not yet have noticed anything different. However, your body is going through many changes. The lining of the uterus is thickening to receive the fertilized egg. The hormones, progesterone and estrogen, are being produced in greater quantities. Perhaps you have not had a period or it is very different from normal (scanty bleeding or spotting). Breasts are slightly enlarged and tender, and nipples may have become more prominent.

2nd Month

Fetal development. At the eighth week the developing embryo is now called a fetus. It has all of its major body organs and systems, though they are not completely developed. The first bone cells have appeared. Eyelids form and grow but are sealed shut. Ears, ankles, and wrists are formed, and fingers and toes are developed. At the end of the second month the fetus is a little over 1 inch long, but still weighs less than 1 ounce. The placenta is now developed. It will provide nourishment and oxygen for the fetus.

Maternal development. The amount of your blood increases to accommodate the growing fetus, and your breasts are still tender. The uterus at this stage of pregnancy is about the size of a tennis ball and becomes soft. A mucus plug forms at the mouth of the cervix to protect the baby. Weight gain may be as little as 1 pound. You may still be experiencing some of the early discomforts of pregnancy as your body continues to adjust.

3rd Month

Fetal development. Fingers and toes of the fetus have soft nails. There are 20 buds for future teeth, and hair is beginning to appear on the head. Kidneys develop and excrete urine into the bladder. By the end of this month, the fetus is completely formed. It is now 4 inches long and weighs a fraction over an ounce.

Maternal development. The uterus is now the size of an orange, and your waistline is disappearing. You may need to start looking for a larger bra and maternity clothes. Your abdomen and breasts are growing. There is an approximate weight gain of 3 - 4 pounds.

Second Trimester

4th Month

Fetal development. The fetus is now completely formed. The rest of its time in the uterus will be spent maturing and gaining weight. Your baby now has a strong heartbeat; he moves, kicks, sleeps and wakes, swallows, and can pass urine. She has eyebrows and a small

amount of hair. Her skin is pink and transparent. At twelve weeks you can usually hear the heartbeat with a Doptone. Your baby is now 6 - 7 inches long and weighs about 5 ounces.

Maternal development. You may gain about 3-4 pounds this month. The abdomen begins to swell with the increased size of the fetus. Your uterus is now the size of a grapefruit. Your nipples and the area around them start to darken. The next few months are some of the easiest in pregnancy, as most of the early discomforts have disappeared. Sometime from the end of this month on, you may begin to feel the movement of the fetus. This is called quickening. It feels like a fluttering of wings or like small bubbles. Let your nurse-midwife know when you first feel this, as it helps establish or confirm your due date.

5th Month

Fetal development. The fetus has a real growth spurt. The internal organs are maturing and the fingernails have grown to the tips of his fingers. Your baby sleeps and wakes at regular intervals. She is much more active - turning from side to side and sometimes moving head over heels. Your baby may also suck his thumb. At the end of the month, the fetus is 8-12 inches long and weighs anywhere from 1/2 to 1 pound.

Maternal development. This month again you may gain 3-4 pounds. Your uterus has expanded to reach the height of your navel, and the skin of the abdomen stretches. If you have not already, you will begin to feel fetal movements.

6th Month

Fetal development. The fetus is growing very rapidly, but her systems are still developing. The skin is wrinkled and red; it is covered with fine soft hair, called lanugo, and with vernix - a substance of oil and cells. At the end of the sixth month, the fetus will be 11-14 inches long and weighs about 1 1/2 pounds. But because the baby is still so small and the lungs are not fully developed, the baby usually cannot live outside the mother except with very specialized care.

Maternal development. This is your period of greatest weight gain. You may feel the fetus kicking high in your abdomen or near your pubis and may also experience a stitch-like pain at times down the side of your abdomen as the uterine muscle stretches.

Third Trimester

7th Month

Fetal development. This is a rapid growth period for the fetus. He is gaining weight, now about 3 pounds and 15 inches long. She exercises by kicking and stretching, sucks her thumb and opens and closes her eyes. Calcium is being stored; fetal bone centers are hardening. He now has a better chance of survival if born early.

Maternal development. Increased growth of the fetus adds stress to your system, causing some minor side effects. Size of the breasts and uterus continue to increase. Stretch marks may appear on the abdomen and breasts, and occasional contractions may be felt. Weight gain may average 3-4 pounds this month.

8th Month

Fetal development. The fetus continues to grow in size and weight. She is too big to move around much, but her kicks are felt much more strongly and a small heel or elbow may be visible to you. The bones of the head are soft and flexible. He is now about 18 inches long and weighs about 5 pounds.

Maternal development. You may gain 3-5 pounds this month. Stronger contractions may be felt, and you may notice a leakage of colostrum from your breasts. Aches and pains due to increased weight may now occur more frequently. Your uterus has grown to just under your diaphragm.

9th Month

Fetal development. The fetus is now gaining about 1/2 pound per week. The bones of his head are soft and flexible for the delivery. He is getting ready for birth, and usually settles into a position favorable for birth. She is curled up with her knees against her nose and her thighs tight against her torso with her head usually down against the birth canal. At 40 weeks he will be full term and weigh 6-9 pounds. He then descends into the pelvis. Your baby could arrive anywhere from your 37th to 42nd week of pregnancy.

Maternal development. You may now notice your umbilicus protruding and shortness of breath, but if "the baby drops" (the top of your uterus moves below the level of your diaphragm) you may experience easier breathing. Your cervix will soften, and contractions will increase. Colostrum may be increasing. You may feel stronger contractions and experience feelings of tiredness, anxiousness, concern, tension, and gladness. All of these feelings are normal.

This information provided by the American College of Obstetricians and Gynecologists.