



Education

Normal Growth of a Baby During Pregnancy

To understand your pregnancy, it is helpful to know how your baby changes month to month during the 9 months you are pregnant.

First Month

About 5 to 7 days after the sperm fertilizes the egg, the egg attaches to the lining of the uterus. This process is called implantation. The fertilized egg then begins to grow in the uterus, doubling in size every day. At this stage of development the baby is called an embryo.

Shortly after implantation the placenta and umbilical cord begin to form. The placenta and umbilical cord provide nourishment and oxygen to your baby and carry away the baby's wastes. Your baby is enclosed in a sac of fluid to protect the baby from bumps and pressure.

In another week the baby has a spinal cord. A few days later, 5 to 8 bones of the spinal column (vertebrae) are in place. By the end of your first 6 weeks of pregnancy, your baby has a head and trunk. The eyes, brain, mouth, inner ears, and digestive system begin to form, as do tiny buds that will be the arms and legs. The heart also forms, and it begins to beat on the 25th day after conception (5 to 6 weeks after the last menstrual period).

By the end of 6 weeks your baby is about a half inch long (1 centimeter) and weighs a fraction of an ounce (or a few grams).

Second Month

This month is especially critical in the development of your baby. Any disturbance from drugs, viruses, or environmental factors such as pesticides may cause birth defects.

Your baby's development is very rapid during the second month. By the end of the second month, all of your baby's major body organs and body systems, including the lungs, liver, and stomach, have begun developing. Eyelids form and grow but are sealed shut, and ears are formed. Ankles, toes, wrists, fingers, and sexual organs develop. If your baby is a boy, his penis begins to appear now.

At the end of the month your baby looks like a miniature human infant. The baby is a little over 1 inch long (3 centimeters) and still weighs less than 1 ounce (less than 28 grams). The baby is now in a sac called the amniotic sac.

Third Month

By the end of the third month, your baby is completely formed. The fingers and toes have soft nails, and tooth buds have formed under the gums. Hair may start to appear on the head, and the head is large compared with the rest of the body. Swellings on the side of the neck show where the ears will be and the inner ears are forming. There is a bit of a nose and the lips are forming. The kidneys develop and start draining urine into the bladder. The baby's heart has four chambers and beats at 120 to 160 beats per minute. The baby may open and close its mouth and start moving its hands, legs, and head. At this point, however, you will not feel this movement.

Your baby is now 4 inches long (10 centimeters) and weighs just a little over 1 ounce (over 28 grams). This is the end of the first trimester of pregnancy. The baby is now called a fetus.

Fourth Month

The baby is completely formed. The skin is pink and somewhat transparent, and eyebrows and eyelashes begin to appear. The baby's body is covered in fine soft hair called lanugo. The baby is storing fat under the skin, and the bones are making blood cells. The external sex organs have become distinctly male or female. Your baby has vocal

cords, taste buds, and a strong heartbeat. Now the body grows faster than the head.

The baby moves, kicks, sleeps, wakes, swallows, and passes urine. You may start to feel a slight sensation of movement in your lower abdomen. This feeling is like bubbles or fluttering. When you first feel the baby's movement (called quickening), write down the date. This date helps the doctor determine when your baby is due.

Your baby is now 6 to 7 inches (16 to 18 centimeters) long and weighs about 6 ounces (about 170 grams).

Fifth Month

Your baby will have a real growth spurt this month. The internal organs are maturing, and the fingernails have grown to the tips of the fingers. The number of nerve cells in the brain increases rapidly this month. Stool (called meconium) begins to form in the intestines. The baby sleeps and wakes at regular intervals and may suck its thumb. You will find that your baby is much more active, turning from side to side and head over heels. The baby drinks fluid and urinates into the amniotic sac. The amniotic fluid transfers material in the sac to the blood in the mother's circulation. The amniotic fluid is completely replaced every 3 hours.

Your baby is now about 10 inches (25 centimeters) long and weighs about 12 ounces (about 340 grams).

Sixth Month

Your baby grows rapidly in size and strength from now until birth. The skin is wrinkled and red and covered with vernix (a substance of oil and cells). The baby can open and close the eyes and can hear sounds. The baby's fingerprints and footprints have formed.

By the end of this month, your baby is 12 inches (30 centimeters) long and weighs about 1 to 1 and 1/2 pounds (450 to 680 grams). At the end of this month cells inside the baby's lungs begin to make a fatty substance called surfactant. This substance helps the baby breathe after birth. Because babies are still so small and the lungs are not fully developed at this stage, they usually cannot live outside the uterus without very specialized care.

The sixth month is the last month of the second trimester.

Seventh Month

The seventh, eighth, and ninth months are the third and final trimester of pregnancy.

The baby exercises by kicking and stretching. Calcium is being stored, and the bone centers are hardening. The lanugo begins to disappear from the face, and the baby may have more hair on its head. The baby can make grasping motions with its hands. If the baby is a boy, the testicles begin to move down from the abdomen into the scrotum.

Your baby is nearly 15 inches (38 centimeters) long and weighs 2 to 3 pounds (900 to 1350 grams). The baby now has a better chance of survival if born early.

Eighth Month

Your baby is getting too big to move around much, but its kicks are stronger, and you may be able to see the outline of a small heel or elbow against your abdomen. If your baby is a boy, his testicles have descended into his scrotum. Although the baby's bones continue to harden, the bones of the head are soft and flexible. The baby is acquiring immunities (antibodies) from the mother, which will help protect the baby against illness for the first few months after birth. Sometimes the baby will have hiccups.

Your baby is now 16 to 18 inches (40 to 46 centimeters) long and weighs 4 to 5 pounds (1800 to 2270 grams).

Ninth Month

Your baby now becomes plumper and gains about 1/2 pound (225 grams) each week. The baby is getting ready for birth and usually settles into the vertex position, with its head down against the birth canal and its knees against the nose. The bones of the head are soft and flexible for delivery through the birth canal. The lanugo (body hair) is almost all gone.

Your baby is now about 20 inches (50 centimeters) long and weighs 6 to 9 pounds (2700 to 4000 grams). No one knows what makes labor start. You may go into labor and give birth to the child any time between the 37th and 42nd weeks of pregnancy.

Women's Health Advisor 2006.4; Copyright © 2006 McKesson Corporation and/or one of its subsidiaries. All Rights Reserved. Developed by McKesson Provider Technologies. This content is reviewed periodically and is subject to change as new health information becomes available. The information is intended to inform and educate and is not a replacement for medical evaluation, advice, diagnosis or treatment by a healthcare professional.
