

Fetal Development

Many people need to know about stages of pregnancy and development of the pregnancy before they can make their decision. Or, you might just be curious to know how a sperm and an egg end up as a baby!

“How big is it? Is it formed?”

Doctors date the pregnancy from your last menstrual period (LMP), which is the beginning of your cycle. Most conceptions happen two weeks after your last period. The following descriptions are based on the actual age of the embryo or fetus, also called gestational age. This is usually two weeks less than age by LMP. (The LMP age is also listed.)

Example: If your last period was 8 weeks ago, the embryo is 6 weeks old.

But your doctor will consider you 8 weeks along, because your cycle started then.

How pregnant are you?

First Day of Your Last Menstrual Period? _____

Today's date _____

How many weeks between these two dates? _____

The growing embryo or fetus is two weeks less. It is now _____ weeks old.

This is called the gestational age. An ultrasound may be needed to accurately determine gestational size if your periods are not regular.

(Number of weeks since period less 2 weeks equals gestational age)

Conception

Conception begins when the egg and sperm meet at the top of the fallopian tube after intercourse. After the egg and sperm fuse and become one, the new cell begins to divide. The cells divide and form two joined cells. These two cells divide again and again. By the time the conception reaches the uterus it is now made up of 8 - 16 cells. This ball of cells drops into the uterus and begins to find a spot along the wall of the uterus. This takes 5 days from conception.

Implantation

Over the next 10 days, the ball of cells begins to bury itself into the top layer of the lining of the uterus. Some of the cells have the job to burrow into the uterus and other cells begin to work together to start forming an embryo. Growth happens when cells divide. The embryo grows and becomes a fetus at about 8 weeks gestation.

The sex was decided when the sperm fertilized the egg. There are two kinds of sperm, "X" bearing sperm and "Y" bearing sperm. Sex is determined by type of sperm. If fertilization happened with an "X" sperm then the fetus will be female. If it involved a "Y" sperm then the fetus will be male.

Development

Weeks 2-4 (4-6 LMP)

The embryo begins to take shape. It goes from looking like a ball of cells to the shape of a small summer squash. By the third week, the squash shaped embryo grows a ridge that goes almost all around. Over the next 8 weeks, the ridge will grow and begin to form the spine and the early brain. In the fourth week, a very small tube is formed inside of this squash-shaped embryo. This tube is the first step to many, many more steps that forms a heart. The embryo is the size of a poppy seed.

Week 5-6 (7-8 LMP)

The embryo will grow from the size of an apple seed to the size of a blueberry in these two weeks. The embryo begins to bathe in clear liquid inside the sac. The fetus begins to form limb "buds." which, over the next 4 weeks, grow into arms and legs.

Week 7-8 (9-10 LMP)

The fetus will first be as big as a raspberry and eventually become the size of a small grape. In this two week period the part of the fetus that will eventually be the face begins to form the shape of eyes and ears. The fetal heart has grown from a tube to a four chambered heart. The liver, kidneys and pancreas have begun to form.

Week 9-10 (11-12 LMP)

During this time the fetus grows to the size of an average strawberry. The eyes, ears, nose and mouth continue to form. The soft skeleton is forming and muscle tissue begins to collect around it.

Week 11-12 (13-14 LMP)

By the 12th week, the fetus has grown to the size of lime. The skeleton begins to harden. Blood vessels form in various parts of the fetus and begin to connect to one another.

4th month: 13-16 weeks (15-18 LMP)

By the end of this month (16 weeks) the fetus will measure about 10 centimeters, or about 4 1/2 inches. The stomach, intestine and colon have formed. The four chambered heart begins to build up muscle cells. Blood cells formed in the bone marrow begin to collect in the vessels. The skin covering the body begins to thicken and hair appears. The inner ear forms. The kidneys are formed and working. The ovary, uterus, vagina or penis have been forming over the last couple of weeks.

5th month: 17-20 weeks (19-22 LMP)

By the end of this month the fetus will be at least 12 inches long. The nose takes a more defined shape as cartilage (the soft bone) appears.

6th month: 21-24 weeks (23-26 LMP)

During the sixth month fetus weighs about 2 lb. and is 14 inches long. At this stage of development the various organs have formed. The following months will see increase in body fat.

7th month - 9th month

Over the next three months the fetus will gain at least five pounds and grow another 6 - 7 inches. In the eighth month, taste buds form in the mouth. The lungs continue to make many small pockets to allow for breathing after birth.

