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## STAGES OF PREGNANCY

**M**ost people say that pregnancy lasts nine months and talk about trimesters of about three months each. Actually, doctors count pregnancy from the first day of your last normal menstrual period. That means that in medical terms, pregnancy usually lasts about 280 days or 40 weeks. Since the fetus is actually conceived about 2 weeks after your last period, the true age of the fetus will always be about 14 days younger than the length of the pregnancy. For example, when the doctor says you are 10 weeks pregnant, the fetus is actually 8 weeks old.

Often the first sign of pregnancy is a missed menstrual period about four weeks after the last normal period. There are different kinds of tests to determine pregnancy. Some may not be accurate for up to three weeks after conception, or five weeks after the last normal period.

During the first ten weeks the organs are forming and the embryo (called a fetus at 10 weeks) is most at risk of harm from medications, drugs, nicotine in cigarettes, alcohol, viruses (like German measles), and vitamin deficiencies (such as folic acid).

The size of the embryo from 10 weeks onward is measured from the crown or top of the head to the rump or bottom.

### CONCEPTION

# 2

## WEEKS



- Conception means a woman's egg has been fertilized by a man's sperm.
- Within a day, the egg begins to divide and develop rapidly.
- A few days later a cluster of cells arrives in the uterus (womb).
- By the eighth day after conception, this cluster has increased to hundreds of cells and attaches to the wall of the womb where it continues its rapid growth.

## FIRST TRIMESTER

### 4 WEEKS

- After the cluster of cells attaches to the womb it is called an embryo.
- The embryo is between  $\frac{1}{100}$  and  $\frac{4}{100}$  inch long at this time.
- The embryo continues rapid growth.



### 6 WEEKS



- The embryo is about  $\frac{1}{4}$  inch long and has developed a head and a trunk.
  - Structures that will become arms and legs, called limb buds, first appear.
  - A blood vessel forms and begins to pump blood. This will develop into the heart and circulatory system.
- At this time, a ridge of tissue forms down the back of the embryo. That tissue will develop into the brain and spinal cord.

# 8

## WEEKS

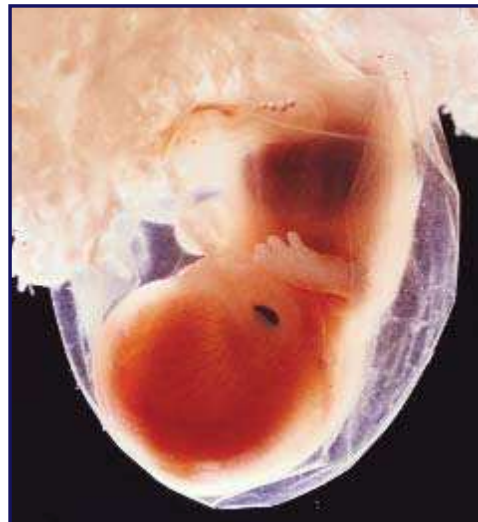


- The embryo is about  $\frac{1}{2}$  inch long.
- The heart now has four chambers.
- Fingers and toes begin to form.
- Reflex activities begin as the brain and nervous system develop.
- Cells begin to form the eyes, ears, jaws, lungs, stomach, intestines and liver.

# 10

## WEEKS

- The embryo is about 1 to  $1\frac{1}{4}$  inches long (the head is about half this length) and weighs less than  $\frac{1}{2}$  ounce.
- The beginnings of all key body parts are present, but they are not completed.
- Structures that will form eyes, ears, arms and legs can be seen.
- Muscles and skeleton are developing and the nervous system becomes more responsive.



# 12

## WEEKS



- The fetus is about 2½ inches long and weighs about ½ ounce.
  - Fingers and toes are distinct and have nails.
  - Hair begins to develop, but won't be seen until later in the pregnancy.
  - The fetus begins small, random movements, too slight to be felt.
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- The fetal heartbeat can be detected with a heart monitor.
  - All major external body features have appeared.
  - Muscles continue to develop.

## 14 WEEKS

- The fetus is about 3½ inches long and weighs about 1½ ounces.
- The fetus begins to swallow, the kidneys make urine, and blood begins to form in the bone marrow.
- Joints and muscles allow full body movement.
- There are eyelids and the nose is developing a bridge.
- External genitals are developing.



## SECOND TRIMESTER

## 16 WEEKS

- The fetus is about 4½ inches long and weighs about 4 ounces.
- The head is erect and the arms and legs are developed.
- The skin appears transparent. A fine layer of hair has begun to grow on the head.
- Limb movements become more coordinated.



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# 18

## WEEKS



- The fetus is about 5½ inches long and weighs about 7 ounces.
  - The skin is pink and transparent and the ears are clearly visible.
  - All the body and facial features are now recognizable.
  - The fetus can grasp and move its mouth.
- Nails begin to grow.
  - The fetus has begun to kick. Some women feel this movement.

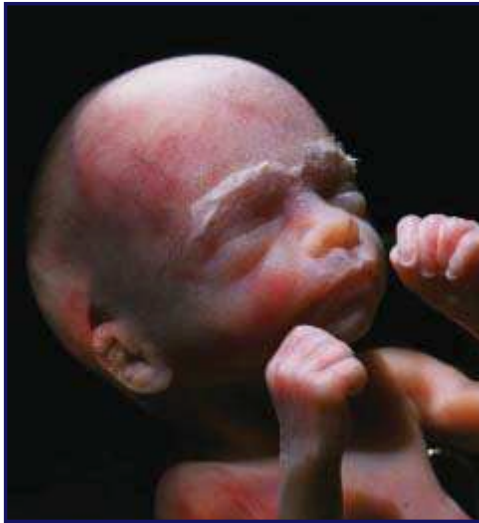
## 20 WEEKS

- The fetus is about 6¼ inches long and weighs about 11½ ounces.
- All organs and structures have been formed, and a period of growth begins.
- The skin is wrinkled and appears pink to reddish in color due to being thin and close to the blood vessels.
- A protective skin coating, called vernix, is beginning to develop.
- Respiratory movements occur, but the lungs have not fully developed enough to permit survival outside the uterus.
- By this time, mothers usually feel the fetus moving.
- At this time an ultrasound can often identify the sex of the fetus.





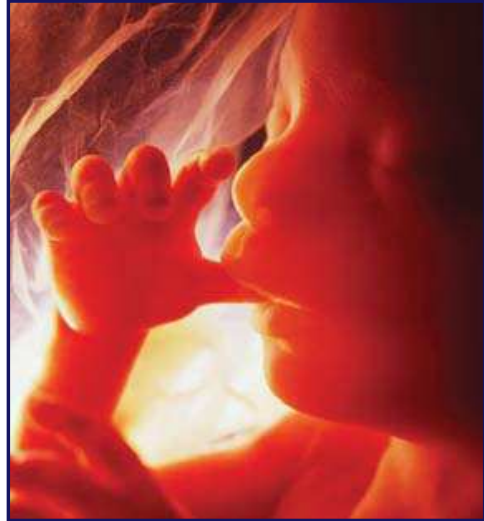
## 22 WEEKS



- The fetus is about 7½ inches long and weighs about one pound.
  - The fetus has fingerprints and perhaps some head and body hair.
  - The fetus may suck its thumb and is more active.
  - The brain is growing very rapidly.
- The fetal heartbeat can be easily heard.
  - The kidneys start to work.
  - At 23 weeks, approximately 31% of babies born survive. Babies born at this age require intensive care and usually have lifelong disabilities and chronic health conditions.

## 24 WEEKS

- The fetus is about 8¼ inches long and weighs about 1¼ pounds.
- Bones of the ears harden making sound conduction possible. The fetus hears mother's sounds such as breathing, heartbeat and voice.
- The first layers of fat are beginning to form.
- This is the beginning of substantial weight gain for the fetus.
- Lungs continue developing.
- At 25 weeks, approximately 68% of babies born survive. Babies born at this age require intensive care and usually have life-long disabilities and chronic health conditions.



## 26 WEEKS



- The fetus is about 9 inches long and weighs about 2 pounds.
  - The fetus can respond to sounds inside and outside the womb.
  - Reflexes continue to develop and body movements are stronger.
  - Lungs continue to develop.
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- The fetus now wakes and sleeps.
  - The skin is slightly wrinkled.
  - At 27 weeks, approximately 87% of babies born survive. Babies born at this age require intensive care and have an increased risk of developmental delays and chronic health conditions.

## THIRD TRIMESTER

# 28 WEEKS

- The fetus is about 10 inches long and weighs about 2 pounds, 3 ounces.
- Mouth and lips show more sensitivity.
- The eyes are partially open and can perceive light.
- More than 90% of babies born at this age will survive. Some survivors have developmental delays and chronic health conditions.



## 30 WEEKS



- The fetus is about 10½ inches long and weighs about 3 pounds.
  - The lungs are capable of breathing air, although medical help may be needed.
  - The fetus can open and close its eyes, suck its thumb, cry and respond to sound.
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- The skin is smooth.
  - Rhythmic breathing and body temperature are now controlled by the brain.
  - Most babies born at this age will survive.

## 32 WEEKS

- The fetus is about 11 inches long and weighs about 3 pounds, 12 ounces.
- The connections between the nerve cells in the brain increase.
- Fetal development now centers on growth.
- Almost all babies born at this age will survive.



## 34 WEEKS



- The fetus is about 12 inches long and weighs about 4½ pounds.
- Ears begin to hold shape.
- Eyes open during alert times and close during sleep.
- Almost all babies born at this age will survive.

## 36 WEEKS

- The fetus is about 12 to 13 inches long and weighs about 5½ to 6 pounds.
- Scalp hair is silky and lies against the head.
- Muscle tone has developed and the fetus can turn and lift its head.
- Almost all babies born at this age will survive.



## 38 WEEKS



- The fetus is about 13½ to 14 inches long and weighs about 6½ pounds.
- Lungs are usually mature.
- The fetus can grasp firmly.
- The fetus turns toward light sources.
- Almost all babies born at this age will survive.

## 40 WEEKS

- The fetus is about 14 to 15 inches long and may weigh about 7½ pounds.
- At the time of birth, a baby has more than 70 reflex behaviors, which are automatic behaviors necessary for survival.
- The baby is full-term and ready to be born.

