

Mother Craft and Human Development

B.A. IV semester (NEP 2020)

Unit I

Stages of Pregnancy

1. Germinal stage

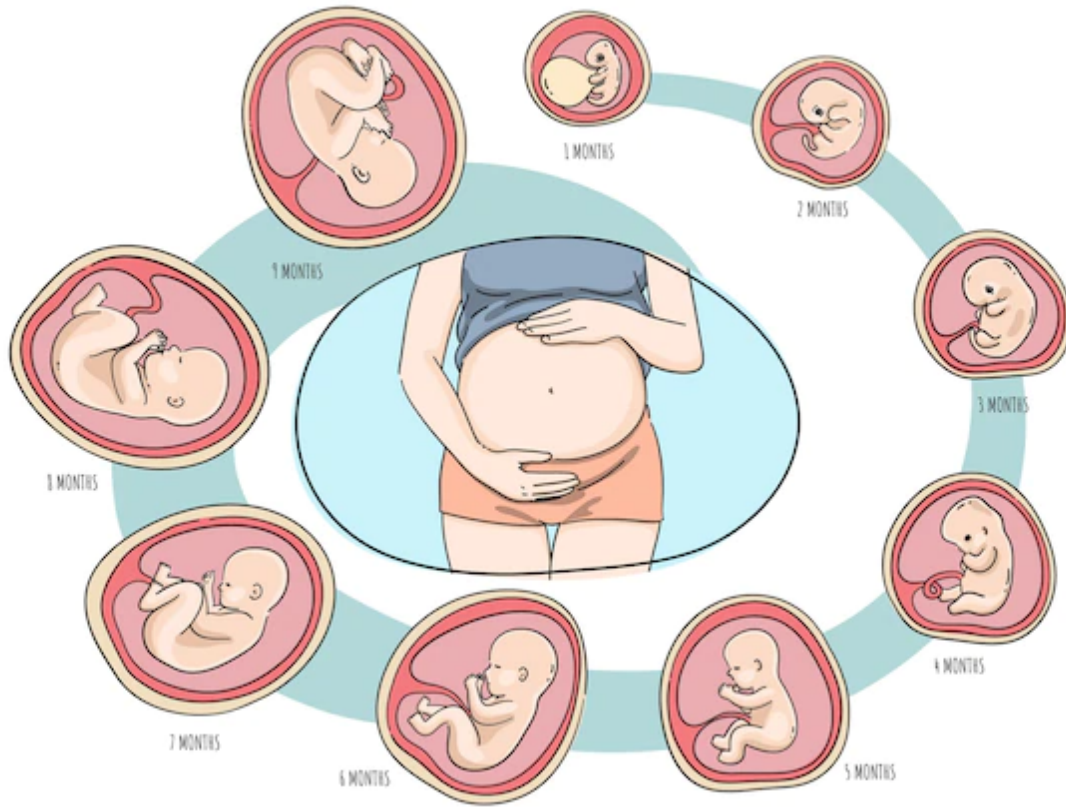
The germinal stage is the shortest stage of fetal development. It begins at conception when a sperm and egg join in your fallopian tube. The sperm fertilizes the egg and creates a zygote. The zygote begins its journey down to your uterus over the course of about one week. During this journey, the zygote divides many times, eventually creating two separate structures. One structure eventually becomes the embryo (and later, the fetus) and the other becomes the placenta. Cell division continues at a rapid pace. Eventually, the zygote turns into a blastocyst. The blastocyst arrives at your uterus and implants into your uterine lining. If implantation is successful, your body immediately begins producing hormones to support a pregnancy. This also stops your menstrual period.

2. Embryonic stage

The embryonic stage lasts from about the third week of pregnancy until the eighth week of pregnancy. The blastocyst begins to take on distinct human characteristics. It's now called an embryo. Structures and organs like the neural tube (which later becomes the brain and spinal cord), head, eyes, mouth and limbs form. The embryo's heart begins to develop and pulse around the sixth week. Buds that will become arms and legs also form around the sixth week. By the end of the eighth week, most of the embryo's organs and systems take shape. For a lot of people, this is the point in pregnancy where morning sickness begins.

3. Fetal stage

The fetal stage of development begins around the ninth week and lasts until birth. This is when the embryo officially turns into a fetus. The fetus gets its assigned sex around nine weeks of pregnancy, although your healthcare provider can't detect it on ultrasound yet. The fetus's major organs and body systems continue to grow and mature. Things like fingernails, eyelashes and hair also grow. The fetus is able to move its limbs, although you may not feel it until 20 weeks of pregnancy. The majority of growth — in both weight and length — happens in the fetal stage.



First trimester (week 1-week 12)

At four to five weeks:

- Baby's brain and spinal cord have begun to form.
- The heart begins to form.
- Arm and leg buds appear.
- Baby is now an embryo and one-twenty-fifth inch long.



At eight weeks:



- All major organs and external body structures have begun to form.
- Baby's heart beats with a regular rhythm.
- The arms and legs grow longer, and fingers and toes have begun to form.
- The sex organs begin to form.
- The eyes have moved forward on the face and eyelids have formed.
- The **umbilical cord** is clearly visible.
- At the end of eight weeks, your baby is a fetus and looks more like a human. Your baby is nearly 1 inch long and weighs less than one-eighth ounce.

At 12 weeks:



- The nerves and muscles begin to work together. Your baby can make a fist.
- The external sex organs show if your baby is a boy or girl. A woman who has an ultrasound in the second trimester or later might be able to find out the baby's sex.
- Eyelids close to protect the developing eyes. They will not open again until the 28th week.
- Head growth has slowed, and your baby is much longer. Now, at about 3 inches long, your baby weighs almost an ounce.

Second trimester (week 13-week 28)

At 16 weeks:



- Muscle tissue and bone continue to form, creating a more complete skeleton.
- Skin begins to form. You can nearly see through it.
- Meconium (mih-KOH-nee-uhm) develops in your baby's intestinal tract. This will be baby's first bowel movement.
- Baby makes sucking motions with the mouth (sucking reflex).
- Baby reaches a length of about 4 to 5 inches and weighs almost 3 ounces.

At 20 weeks:



- Baby is more active. You might feel slight fluttering.
- Baby is covered by fine, downy hair called lanugo (luh-NOO-goh) and a waxy coating called vernix. This protects the forming skin underneath.
- Eyebrows, eyelashes, fingernails, and toenails have formed. Your baby can even scratch itself.
- Baby can hear and swallow.
- Now halfway through your pregnancy, your baby is about 6 inches long and weighs about 9 ounces.

At 24 weeks:



- Bone marrow begins to make blood cells.
- Taste buds form on your baby's tongue.
- Footprints and fingerprints have formed.

- Real hair begins to grow on your baby's head.
- The lungs are formed, but do not work.
- The hand and startle reflex develop.
- Baby sleeps and wakes regularly.
- If baby is a boy, his testicles begin to move from the abdomen into the scrotum. If baby is a girl, her uterus and ovaries are in place, and a lifetime supply of eggs have formed in the ovaries.
- Baby stores fat and has gained quite a bit of weight. Now at about 12 inches long, baby weighs about 1½ pounds.

Third trimester (week 29-week 40)

At 32 weeks:



- Baby's bones are fully formed, but still soft.
- Baby's kicks and jabs are forceful.
- The eyes can open and close and sense changes in light.
- Lungs are not fully formed, but practice "breathing" movements occur.
- Baby's body begins to store vital minerals, such as iron and calcium.
- Baby is gaining weight quickly, about one-half pound a week. Now, your baby is about 15 to 17 inches long and weighs about 4 to 4½ pounds.

At 36 weeks:



- The protective waxy coating called vernix gets thicker.
- Body fat increases. Your baby is getting bigger and bigger and has less space to move around. Movements are less forceful, but you will feel stretches and wiggles.
- Baby is about 16 to 19 inches long and weighs about 6 to 6½ pounds.

Weeks 37–40:



- At 39 weeks, baby is considered full-term. Baby's organs are ready to function on their own.
- As you near your due date, your baby may turn into a head-down position for birth. Most babies "present" head down.

- At birth, baby may weigh somewhere between 6 pounds 2 ounces and 9 pounds 2 ounces and be 19 to 21 inches long. Most full-term babies fall within these ranges. But healthy babies come in many different sizes.

