

Stages of pregnancy



**ASSIGN
BUSTER**

Pregnancy for woman is a very wonderful feeling and an essence of motherhood. It takes nine months for a fetus to fully develop into a child and each day; the development of a child is very crucial for mother. These nine months are divided into three stages: The first thirteen weeks of pregnancy is the stage of the First Trimester, where a baby is still an embryo but is developing different organs. This first stage is very important for the development of the fetus. We cannot see much change in the mother's physical appearance but inside number of changes are taking place.

As the embryo implants itself in the wall of the uterine, some major developments begin to take place. Fetus is surrounded with amniotic sac. This sac has amniotic fluid made up of fetus and the amnion, which is a membrane covering the placenta. The amniotic sac gives a protecting cover to the fetus from any injury and regulates the temperature of fetus. The second is flat cake like shape organ known as placenta, which is only grown at the time of pregnancy. It helps in the exchange of diet having nutritious value and waste with the blood of the mother.

The tiny projections called villi helps placenta to attach to the uterine wall and helps in the growth of the fetal blood vessels, which are separated from the mother blood vessels with the help of membrane. There is also an umbilical cord; containing two arteries and a vein. It joins fetus to placenta and act as a vehicle to carry oxygen and nutrients to the fetus and waste products away from it. (University of Virginia Health System 2007) The First Trimester is very crucial for a mother, as at this stage, fetus is more at risk of danger from alcohol, drugs, certain medicines and illnesses like rubella (German disease).

Each fetus develops differently just like as each child grows and matures at different rates and at different times. Some major changes are seen by the end of the first four weeks: the entire major systems and organs begin to form and the shape of the embryo looks like a tadpole in the pond. The neural tube becomes the brain and the spinal cord, and there is also the formation of the digestive system and circulatory system. The heart starts beating, eyes and ears begin to get its shape and the tiny limb buds also appears. (University of Virginia Health System 2007)

At the end of eight weeks, the development and functioning of all the important body systems including circulatory, nervous, digestive, and urinary systems continue and the embryo begins to take a human form, though the head is slight bigger than the body. The tooth buds begin to appear in the mouth and the eyes, nose, ears, mouth, arms and legs also become quite visible. The fingers and toes are webbed but we can clearly differentiate these. Bones also begin to grow and become stronger, and nose and jaws also take its shape. We can hear the heart beat of the baby with the help of Doppler.

There are movements in embryo though the mother cannot feel at this stage. (University of Virginia Health System 2007) After eight weeks, embryo is referred as fetus (meaning offspring) and now weighs ? to one ounce with an average height of three to four inches. Between nine to twelve weeks, all the external genital organs are developed, fingernails and toenails are also formed, eyelids appear, arms and legs are developed, the voice box known as larynx starts forming in the trachea and the movements of the fetus begin to increase.

University of Virginia Health System 2007) Some physical symptoms and changes are also seen in the mother's body. The rise in the quantity of hormones, estrogen and progesterone make the mammary glands increase leading to the swelling of breasts and at the same time making it tender for breastfeeding. The woman's areolas are also increased. These are the pigmented areas around nipples of breasts and sometimes are surrounded by the white bumps called Montgomery's tubercles (enlarged sweat glands). Uterus also increases in size causing women to urinate quite often.

Due to changes in hormones, many women may experience mood swings; irritability, morning sickness, constipation and muscles may contract in the intestines causing heartburn, indigestion, constipation and gas. (University of Virginia Health System 2007) In the Second Trimester, all organs have developed and the next six months are spent on growth. The weight of the fetus will be more than seven times in the next few months. At this stage, fetus is now kicking, moving here and there, taking turn from one side to another; eyes, ears are approaching at their exact location, and now fetus can hear the voice of mother.

There is also one creamy white substance known as vernix caseosa, or simply vernix that comes on the fetus to protect its skin. Now certain senses also begin to develop, and reflexes from swallowing and sucking also begin to grow, placenta is fully appeared and the color of the skin is red which is covered with soft, downy hair known as lanugo. Hair also begin to grow on the head, fat is formed, fetus begins to open eyelids with eyebrows and eyelashes and fingerprints and toeprints also make its appearance.

Over and above, now the baby is sleeping and waking in phases and along with that, its size and weight is also growing. Now at the 20th week, mother is half way of her pregnancy. (University of Virginia Health System 2007) This stage is fully enjoyed by Mother. Level of human chorionic gonadotropin (hCG) hormone is reduced to a considerable degree. She no longer feels morning sickness and fatigue and breast becomes less tender. Mothers feel hungrier than before, an essence of motherhood is increased in the heart and soul of mother when she for the first time begins to feel the movement of her child.

The height of the uterus is increased making the belly protrude. There may be itching on the skin of belly and mother may feel pain on the sides of the body and on the lower abdomen when the uterus is stretched. There may or may not be certain complications like congestion of nose and may experience nosebleeds due to increase in the level of hormones. The gums of woman may get spongy and bleed. Varicose veins and hemorrhoids may get visible and a woman may have vaginal discharge of white color known as leukorrhea.

The increase in weight may also cause backache, and the pigmentation of the skin may change on the face or abdomen because of the pregnancy but heart burning, indigestion, and constipation may continue. (University of Virginia Health System 2007) The Third Semester is the stage whereby mother should prepare herself for the delivery of the baby. There is a continuous growth of size and weight of a baby. The lungs are developing and the position of fetus is now head-down. By the end of this trimester, the fetus is 19 to 21 inches long and weighs six to nine pounds.

The fetus at this stage can fully and properly see and hear everything. The brain, kidneys and lungs continue to develop and when the lady reaches 36th week, the head may “engage,” means “drop itself into the pelvic area”, and this process is known as lightening. The skull bones are lighter in weight as it is much easier for a baby to pass through birth canal. The irises of many babies are blue and it is only after several days or weeks of the birth that the permanent eye color of a baby appears. The lanugo of fetus has disappeared after 38 to 40 weeks and lungs are now completely matured.

The baby is still enveloped with vernix caseosa, which is a protective covering on the skin. Now it is the time when baby is sucking its thumb and has the capability to cry. And during the last weeks of the stage of pregnancy, the head of the child will turn upside down. (University of Virginia Health System 2007) Now the mother is finally preparing to welcome her baby and naturally she may also face number of changes in her body. Now when the fetus is growing, it may cover the abdominal cavity and may result in mother having problem in deep breathing.

Mother may face increase in skin temperature and may feel hot due to the body heat being radiated out by fetus. The frequency rate of urinary may increase due to the increase in pressure in bladder and the blood pressure may become less mainly because of the pressure exerted on the main vein returning blood to the heart. Ankles, hands and face may swell, cramps in legs may become frequent and hair may begin to grow on arms, legs and face, as stimulation of hormone may increase in hair follicles. There may be occurrence of false labor pains known as Braxton-Hicks contractions.

This occurs due to the preparation of childbirth. Many women may face stretch marks. A fluid known as Colostrum, which nourishes the baby until the breast milk becomes available, may begin to leak from the nipples. The skin may get dry and itchy particularly on the abdomen. A sexual desire of woman may become less. Skin pigmentation may become more apparent and white-colored vaginal discharge (leukorrhea) containing more mucus may get increased; backaches, Hemorrhoids and varicose veins may persist and increase in severity.

But certain steps and precautions should be taken care of by mother to bring healthy child in this world. For this purpose, health of a mother herself is very paramount to ensure the health of a child. A mother should take prenatal vitamins, try to keep and maintain healthy weight, perform regular exercises, manage to reduce the stress or lead a happy and stress free life, go for regular prenatal check ups and never take any medications without doctor's advise.

She should not indulge in smoking, drinking or illicit drugs and adopt nutritious and healthy diet including proteins, fats, carbohydrates, minerals and vitamins consisting of foods like fresh fruits and vegetables, whole grain products like breads or cereals, meat, fish or milk and other dairy products etc. She should avoid having canned and processed and spicy foods, coffee, tea, hot chocolate, sugary foods such as cakes, cookies, candies, sodas and colas and as far as possible mothers should avoid use of salt.

There should be intake of variety of food but not in excess. Three meals every day or six smaller meals are best. Calorie intake should be 2, 200 or 2,

800 for a healthy pregnancy. Besides, mothers should also take iron, calcium and folic acid, as advised by doctors during their routine medical check ups. (Insel, Turner & Ross 2005) If these few and simple steps are followed, then the child birth will add to the pleasures of mother, father and whole family as not only the child will be healthy but the mother will also be healthy to take care and rear her child.