

BABYS GROWTH

At the end of the 4th week, when embryo has approximately 28 somites the main external features are somites and pharyngeal arches i.e. somites contribute to later formation of spine muscles and bones.

The age of the embryo is therefore usually expressed in somites

Since counting somites becomes difficult during 2nd month of development age of embryo is indicated as crown rump length (cr) length and expressed in millimeters

Cr length – measurement from vertex of skull to midpoint between buttocks

5 weeks.....baby is made up of three layers the ectoderm, mesoderm and endoderm which will later form all his organs and tissues

The neural tube from which the babys brain spinal cord nerves and backbone will sprout is starting to develop in the top layer called the ectoderm. This layer will also give rise to skin,hair,nails,mammary,sweat glands,tooth enamel

The heart and circulatory system begin to form in the middle layer or mesoderm,the mesoderm will also form the babys cartilage ,bone and subcutaneous (under skin)tissue

The third layer or endoderm,will form,lungs,intestines,urinary system,thyroid,liver,pancrease

The placenta and umbilical cord are already functioning.
(the baby is about 5-8 mm in crown-rump lenth)

6 weeks.....the major developments nose,mouth ,ears

The babys emerging ears are marked by small depressions on the sides of the head and his arms and legs by protruding buds.his heart is beating about 100-160 times a minute.intestines are developing and the bud of tissue that will give rise to the lungs has appeared.pituitary gland and the rest of the brain,muscles and bones are forming.(the baby is about 10 -14 mm in crown-rump length)

7 weeks....the hands and feet are emerging from developing arms and legs.the baby is still considered at this stage an embryo and has a small tail which is an extension of the babbys tail bone.teh tail will disappear with a few weeks.in this week the baby has doubled in size.the brain is growing and the liver is forming red blood cells until the bonemarrow forms and takes over the role.the baby also has an appendix and a pancreas,which will eventually produce the hormone insulin to aid in digestion.

8 weeks....webbed fingers and toes are poking from your babys hands and feet,breathing tubes extend from his throat to the branches of his developing lungs and "tail" is just about gone.in the brain nerve cells are branching out to connect with one another forming primitive neural pathways.at this point the external genitalia hasn't developed enough to reveal whether it's a boy or a girl(the baby is about 28-30 mm in crown rump length)

9 weeks....The baby is nearly an inch long and is starting to look more human.the babys heart finishes dividing into four chambers and valves start to form and teeth.the external sex organs are there but wont be distinguishable as male and female for another few weeks.the embryonic tail is completely gone.the eyes are fully formed,but eyelids are fused shut until 27 weeks.the baby has tiny earlobes and the mouth ,nose and nostrils are more distinct.

10 weeks....beginning of fetal period a time when the tissues and organs in his body rapidly grow and mature.hes swallowing fluid,his vital organs including kidneys ,intestines,brain,liver are in place and starting to function.nails are already forming on fingers and toes and hair growing on skin.the limbs can bend now.outline of the spine is clearly visible and spinal nerves are beginning to stretch out from his spinal cord(the baby is about 5-8 cm in crown rump length)

11 weeks....the babys hands and fist are soon opening and closing into fists ,tiny tooth buds are beginning to appear under her gums and some of the bones are beginning to harden.she is already kicking and stretching.these movements will become more frequent as her body grows and becomes more developed and functional

12 weeks....3rd month upto end of intrauterine life is known as fetal period.babys weight is about 10-45grams and measures about 5 -8 cm.your babys fingers will begin to open and close his intestines which have grown so fast that they protrude into the umbilical cord ,will start to move into his abdominal cavity and his kidneys will begin excreting urine into his bladder.meanwhile nerve cells are multiplying rapidly and in your babys brain connections called synapses are forming.his eyes have moved from the side to the front of his head.

13 weeks....fingerprints have formed on your babys fingers her veins and organs are clearly visible through her still thin skin.if your having a girl.she now has more than 2 million eggs in her ovaries.your baby is now 9-14cm in length and weighs about 60-200grams

14 weeks....your baby can now squint,grimace,frown,pee thanks to brain impulseshis kidneys are producing urine which he releases into the amniotic fluid around him a process he will keep up until birth.he is starting to have hair called lanugo all over his body.your babys liver starts making bile this week and his spleen starts helping in production of red blood cells.

15 weeks....your baby now measures about 4 inches long,crown to rump and is about the size of an apple.she is moving amniotic fluid through her nose and respiratory tract which helps the primitive air sacs in her lungs begin to develop.although her eyelid are still fused shut she can sense light.if you have an ultrasound this week you may be able to find out whether your baby is a boy or girl.

16 weeks...in the next few eeks your baby will double his weight and add inches to his length his legs are much more developed ,hes even growing toe nails.

17 weeks....your babys skeleton is changing from soft cartilage to bone and the umbilical cord is growing stronger and thicker and is about 5 inches long from head to bottom.she can move her joints and her sweat glands are starting to develop

18 weeks....head to rump your baby is about 5 and a half inches long.he is busy flexing his arms and legs movements that youll start noticing more and more in the weeks ahead.his blood vessels are visible through his thin skin anfd his ears are now in their final position.a protective covering of myelin is beginning to form around his nerves .if you are having a girl her uterus and fallopian tubes areformed and in place.if you are having a boy his genitals are now noticeable.

19 weeks....your babys sensory development is improving,her brain is designating specialized areas for smell,taste hearing ,vision and touch.your baby measures about 6 inches.some research suggests that she may be able to hear your voice now,so don't be shy about reading aloud,talking to her or singing .the kidneys continue to make urine and the hair on her scalp is sprouting.

20 weeks....Your baby is about 15cm in crown rump length and weighs about 250- 450 grams.hes producing meconium a black sticky by product of digestion.this substance will accumulate in his bowels and youll see it in his first soiled diaper.some babys pass meconium in the womb or during delivery

21 weeks....your baby is approximately 10 and a half inches long(length of a carrot) his eyelids and brows are present now and if your having a girl her vagina has begun to form.

22 weeks....Your baby has started to look like a miniature newborn,hes developing tiny tooth buds beneath his gums ,his eyes have formed but irises(colored part of the eyes) atill lack pigment.skin of the fetus is reddish and has a wrinkle appearance.

23 weeks....the baby is about 22cm in crown rump length weighs about 700 grams -820 gramsblood vessels in his lungs are developing to prepare for breathing.

24 weeks....baby is about 23 cm in crown rump length hes brain is growing quickly now and his taste buds are continuing to develop,his lungs are developing "branches" of the respiratory "tree" as well as cells that produce surfactant,a substance that will help his air sacs inflate once he hits the outside world.his skin is still thin and translucent

25 weeks....head to heels your baby measures about 13 and a half inches her wrinkle skin will begin to smooth out and she will start to look more and more like a newborn.she is also growing more hair.

26 weeks....the network of nerves in your babys ears is better developed he may now be able to hear your voice and your partners.the baby now measures about 14 inches from head to heel.if your having a baby his testicles are beginning to descend into his scrotum.

27 weeks....your baby is about 14 and a half inches long with her legs extended opening and closing her eyes .with more brain tissue developing ,your babys brain is very active now .her lungs sre still immature.

28 weeks....the baby weighs between 900 – 1300 grams and is 24 – 27 cm in crown rump length and is 14.8 inches from top of her head to heels.she can now blink her eyes which now spot lashes shes also developing billions of neurons in her brain and adding more body fat in preparation for life in the outsideworld.

29 weeks....your baby is now about 15 inches long.his lungs ,muscles are continuing to mature and his head is growing bigger to make room for his developing brain.the fetus has well rounded contours as a result of deposition of subcutaneous fat.by the end of intrauterine life the skin is covered by a whitish fatty substance (vernix caseosa) which is composed of glands.

30 weeks....your baby is about 15.7 inches long,her eyesight continues to develop,though not very keen,even after she is born she will keep her eyes closed for good part of the day.

31 weeks....this week your baby measures over 16 inches long.he weighs about 3.3 pounds.he can turn his head from side to side and his arms legs and body are beginning to plump out as needed fat accumulates underneath his skin.hes probably moving a lot too so you may have trouble sleeping.

32 weeks.... By now your baby weighs 3.75 pounds and is about 16.7 inches long,she will gain a third to half her birth weight during the next 7weeks.she now has toe nails ,finger nails,and real hair

33 weeks....this week your baby weighs a little over 4 pounds and has passed 17 inches in length.his skeleton is hardening.the bones in his skull aren't fused together which allows them to move and slightly overlap thus making it easier for him to fit through the birth canal .

34 weeks....your baby is almost 18 inches long weighs about 4 ¾ pounds her fat layers which will help regulate her body temperature once she is born are filling her out making her rounder.her central nervous system is maturing and her lungs are continuing to mature as well.

35 weeks...your baby doesn't have much room to maneuver now that he's over 18 inches long and is about 2700 grams,his kidneys are fully developed now and his liver can process some waste products.most of his basic physical development is now complete.

36 weeks....your baby weighs about 2900grams and is more than 18 ½ inches long.she is shedding more of the waxy substance that covered and protected her skin i.e vernix caseosa.at the end of this week your baby will be considered full term.

37 weeks...your baby is now considered "full term" although your due date is 3 weeks away.if you go into labour now his lungs will likely be mature enough to fully adjust to life outside the womb.your baby measures a bit over 19 inches head to heels,many babies have a full head of hair at birth

38 weeks....your baby weighs about 6.8 pounds and she is over 19 ½ inches long.hes organs have matured and are ready for life outside the womb.

39 weeks....your baby continues to build a layer of fat to help control his body temperature after birth,he measures about 20 inches and weighs over 7 pounds.boys tend to be slightly heavier than girls

40 weeks....at this point its difficult to know your babys weight but average newborns are about 3000 – 3400 grams and about 35-36 cm in crown rump length.his skull bons are not yet fused,which allows them to overlap abit hence allowing the baby easy passage through the birthcanal.