

## Pregnancy week-by-week guide – Weeks 1 to 20

Our comprehensive week-by-week guide will give mothers-to-be insight into the physiological and emotional changes they are likely to experience; baby's development from the time of conception right up to birth; and things to be on the lookout for during the various stages of pregnancy.

	Week 1	Week 2	Week 3	Week 4	Week 5
What's happening to me?	<p>During the time that you have your menstrual period, new eggs start to develop in your ovaries.</p> <p>Conception only happens about two weeks after your period starts.</p> <p>Nevertheless, once you have fallen pregnant, your doctor will calculate your expected due date from the first day of your last normal menstrual cycle.</p> <p>Your due date is calculated on the basis that you will be pregnant for 40 weeks.</p>	<p>In the ovaries, the eggs mature. You will ovulate at the end of week two. This means that, one of your eggs erupts from its follicle and is swept away from your ovary and into a fallopian tube.</p> <p>The lining of the uterus thickens in preparation for possible fertilisation and implantation.</p>	<p>This is the week during which fertilisation and conception take place.</p> <p>The egg will be fertilised if one of the sperms that your partner ejaculates manages to swim all the way from your vagina through your cervix, up into your uterus to the fallopian tube, and penetrates the egg.</p>	<p>Your body is experiencing a huge transformation as the tiny ball of cells that will become your baby transforms into a multi-layered embryo.</p> <p>This change may cause symptoms like cramping, bloating and emotional highs and lows, similar to premenstrual symptoms.</p>	<p>You've missed your menstrual period and have passed an at-home pregnancy test. You're starting to experience pregnancy related symptoms – breast tenderness, fatigue, nausea, bloatedness and an increasing need to urinate.</p>
What's happening to my baby?			<p>Once the egg is fertilised, the cells begin to divide. At this stage the product of fertilisation develops into a blastocyte, consisting of two parts — the external part will become the placenta, and the internal part will develop into the embryo.</p> <p>Your baby's gender is decided at fertilisation. The baby, which at this stage is called an embryo, consists of 150 cells that will begin to divide into three separate layers:</p> <ul style="list-style-type: none"> <li>• The internal layer, known as the endoderm or endoblast, becomes the respiratory tract and the digestive system with glands such as the pancreas, thyroid, liver and thymus.</li> <li>• The middle layer, known as the mesoderm, becomes the baby's skeleton and muscles, circulatory system, excretory system and genitalia.</li> <li>• The outer layer, known as the ectoderm or ectoblast, becomes the nervous system, which includes the brain; as well as the epidermis, which includes the baby's skin, nails and hair.</li> </ul> <p>During this time of transformation, the embryo simply floats within the uterus, protected by the secretions of the uterus lining. If an ultrasound was performed, you wouldn't be able to see the embryo with the naked eye.</p>	<p>The amniotic sac and yolk sac develop during this week. The amniotic sac and yolk sac fill with amniotic fluid which protects the embryo. The yolk sac produces blood and helps nourish the embryo until the placenta takes over.</p> <p>Your baby's vascular network (arteries, veins and capillaries) is growing and helping to transport blood, oxygen and nutrients from you to your baby by way of the umbilical cord.</p> <p>The heart is beating, blood is beginning to pump and organs are starting to develop.</p>	<p>Major organs are starting to develop, including the heart, liver, kidneys, lungs and brain.</p> <p>Your baby is about 0.25cm long and resembles a tadpole at this stage.</p> <p>Externally, little buds have developed that will become your baby's arms and legs.</p>

	Week 1	Week 2	Week 3	Week 4	Week 5
<p>Things that you should look out for</p>			<p>If you've been monitoring your morning basal body temperature (temperature at rest when you first wake up in the morning, before you get out of bed, go to the bathroom or do any physical activity), you will notice that it remains elevated beyond day 16 post ovulation.</p> <p>This is the first physiological sign that you're pregnant.</p> <p>The most important thing you could do during this stage is to quit habits such as smoking, drinking and the use of recreational drugs. This is important for a healthy pregnancy, birth and baby.</p> <p>Now is the time to start thinking about supplements and antenatal multivitamins.</p> <p>At least 400 micrograms of folic acid (vitamin B9) daily is recommended to reduce your baby's risk of birth defects.</p> <p>Folic acid has a number of important functions, including assisting with making new proteins and red blood cells. During pregnancy, folic acid is important for women because it helps to prevent spina bifida (a condition where the backbone and spinal canal do not close properly before birth) and other defects of the neural tube along the spine.</p>	<p>At this stage the tiny embryo starts to produce human chorionic gonadotropin (hCG), the hormone produced after conception, enabling you to confirm, by means of a pregnancy test, if you are pregnant.</p> <p>If the results are positive, call your healthcare practitioner and schedule an antenatal appointment.</p>	<p>At this stage it will not be noticeable that you are pregnant, even though there are dramatic changes taking place within your body.</p>

	Week 6	Week 7	Week 8	Week 9	Week 10
<b>What's happening to me?</b>	<p>Emotional highs and lows are especially prevalent at this time. This is due to hormones fluctuating as your baby develops.</p> <p>Hormones aside, your life is about to change dramatically and who wouldn't feel emotional about that?</p> <p>You will have your first antenatal consultation with your healthcare practitioner. During this visit your first pregnancy ultrasound gives you a glimpse of the developing embryo.</p>	<p>Your uterus has doubled in size over the past five weeks.</p> <p>Eating may not be quite as easy as it used to be because of nausea.</p> <p>You may also start craving certain foods, even some that you previously didn't like. This is normal, as long as you ensure that your diet remains balanced.</p> <p>One of the major changes occurring in your body during the seventh week is that a mucous plug starts developing in your cervix. This plug is formed in the opening of the cervical canal to seal off the uterus and protect it against infection. The plug will eventually be expelled when labour and childbirth are imminent.</p>	<p>Higher levels of hormones in your body will stimulate more breast development at this stage, preparing your body for lactation.</p> <p>Your breasts may continue to increase in size throughout your pregnancy, so you will need to invest in bras with a bigger cup size.</p> <p>A dramatic rise in the hormone, progesterone, may cause fatigue, nausea and vomiting.</p> <p>Your sleep may also be interrupted due to discomfort and the need to urinate more frequently.</p>	<p>Your waist circumference might be increasing slightly at this point.</p> <p>You might be noticing weight gain; however it's more likely due to water retention than from the baby's growth.</p> <p>You're probably also feeling bloated and may be a bit lethargic. Many women experience severe mood swings at this stage, but this is due to the hormones (especially progesterone) in your system.</p>	<p>Your uterus has grown from the size of a small pear to the size of a grapefruit.</p> <p>Exercise is important during pregnancy. It will help your body prepare for the physical stress of labour and to carry the extra weight. It may also help you get back into shape after your baby's birth.</p> <p>Swimming and walking are exercises that you could usually do for the whole nine months.</p> <p>Be sure to consult your healthcare practitioner before beginning any exercise programme.</p>
<b>What's happening to my baby?</b>	<p>Your baby's heart is beating about 100 to 160 times a minute, allowing for development of her organs.</p> <p>External features such as the nose, mouth and ears begin to form.</p> <p>The baby is starting to move; however, these are too gentle to be felt by you yet.</p>	<p>Your baby is beginning to take shape. Her little hands and feet, resembling paddles at this stage, begin to grow. The embryonic 'tail' becomes smaller.</p> <p>Your baby is 1.25cm long and is about the size of a blueberry or a chickpea.</p> <p>Your baby has also developed a pancreas and appendix to aid in digestion.</p>	<p>Your baby is starting to resemble a little human as eyelids begin to form. The lungs and the brain have developed further.</p> <p>In the brain, nerve cells are branching out to connect with one another, forming primitive neural pathways.</p>	<p>Your baby is 2.3cm long, about the size of a grape, and weighs about two grams. Her essential body parts are almost fully formed.</p> <p>The process whereby the heart divides into four chambers concludes and valves start to form.</p> <p>Your baby's eyes are fully formed, along with teeth, earlobes, the mouth, nose and nostrils. The embryonic 'tail' has now completely disappeared.</p> <p>The placenta is sufficiently developed to take over the critical job of producing hormones.</p> <p>Now that your baby's basic physiology is in place, she will start to gain weight rapidly.</p>	<p>This week marks the beginning of the foetal period, when tissues and organs in the body grow and mature rapidly.</p> <p>By now your baby's heartbeat may be heard by means of a handheld ultrasound device called a Doppler stethoscope. Your healthcare practitioner may let you listen to the heartbeat at your next antenatal visit.</p> <p>Your baby will now be able to swallow fluid as well as bend and flex limbs. Her organs start to function independently.</p> <p>The outline of the spine is visible through translucent skin and spinal nerves are beginning to extend from the spinal cord.</p>
<b>Things that you should look out for</b>	<p><i>Do not be alarmed by spotting, especially if you're not simultaneously experiencing pain or cramping. Spotting is light bleeding from your vagina, similar to a menstrual period but much less. The colour of the blood can vary from red to brown.</i></p> <p><i>You should, however, consult your healthcare practitioner, as it could also be a sign of miscarriage or an ectopic pregnancy (when a fertilised egg has implanted outside the uterus, this condition can be dangerous for the mother if a rupture leads to internal bleeding).</i></p>	<p><i>Frequent urination is common as your blood volume increases, additional weight on your bladder causes pressure and the kidneys are filtering extra fluid.</i></p> <p><i>Urinate as often as you feel the need to, as holding in urine is not good for the bladder.</i></p>	<p><i>Your clothes may no longer fit comfortably, so it may be time to start looking at buying maternity clothes.</i></p>	<p><i>This is a great time to start a daily ritual to connect and bond with your baby through breathing, meditating and reflecting.</i></p>	

	Week 11	Week 12	Week 13	Week 14	Week 15
What's happening to me?	<p>At this stage, the nausea may start to subside. Do not be concerned if you don't have much of an appetite.</p> <p>Other slight discomforts such as mild or intense heartburn and constipation may arise due to hormonal changes.</p> <p>On the plus side, you may start to feel more energetic.</p>	<p>Your uterus is now appearing above the pubic bone, and through weeks 12 to 16 you will definitely start 'showing'.</p>	<p>The risk of a miscarriage decreases as you reach the last week of your first trimester.</p> <p>At this stage your breasts may have already started producing colostrum, a nutrient-rich fluid that precedes the production of breast milk for a few days after birth.</p> <p>You may notice stretch marks appearing around your abdomen, breasts, hips, and buttocks. Gaining weight slowly may help reduce the chances of getting stretch marks, so it's important for you to follow a well-balanced diet.</p>	<p>This is the start of your second trimester.</p> <p>Nausea, breast sensitivity and other discomforts should be diminished by now. If not, they should soon start abating.</p> <p>Your pregnancy may be somewhat noticeable at this stage, evidence of the little one growing inside.</p>	<p>You may experience nosebleeds or a blocked nose. This common condition is called 'rhinitis of pregnancy.' It is a result of increased blood volume and blood vessel expansion in the nose.</p>
What's happening to my baby?	<p>Your baby is 3.1cm long and weighs four grams).The head makes up for half of her size.</p> <p>The fingers and toes will be formed by the end of the week.</p> <p>Your baby's bones are hardening and the skin is still transparent.</p> <p>She is very active, but still too small for you to feel her moving.</p> <p>Your baby has learned to swallow surrounding amniotic fluid, is processing this fluid and passing urine.</p> <p>Other organs are continuing to form and grow.</p>	<p>Vocal cords form during this week. The nails on all 20 fingers and toes form and become visible. The intestines are still growing and are moving into the abdominal area.</p> <p>More features on the face are starting to appear, such as the eyebrows and lips.</p> <p>The umbilical cord helps to circulate blood. The brain continues to develop as it makes hormones of its own and the nerve cells multiply rapidly. Muscles start responding to impulses from the brain. As the brain and muscles develop together, natural movements such as bending of the arms, clenching and opening of the fists, and twisting of the wrists and elbows become easier and more frequent.</p> <p>From head to toe, your baby is just over 5cm long and weighs 14 grams.</p>	<p>Many significant changes are occurring.</p> <p>There is still plenty of room to grow inside of the uterus, and the foetus now looks more like a baby. Her eyes are moving away from the sides of the head and are drawing closer to one another, and the fine hairs that make up the eyebrows are starting to grow. Her abdomen also continues to grow, enabling the intestines to continue to move into position.</p> <p>The pancreas begins to produce insulin, which is critical for regulating sugar levels after birth and later in life. The bones continue to harden. Oxygen and nutrients pass through the placenta to your baby and carbon dioxide and waste pass from the baby back to you.</p> <p>Your baby also reached another milestone as it has a functional intestinal system at this point.</p>	<p>Your baby now shows facial expressions and is able to suck her thumb as brain impulses stimulate the muscles.</p> <p>The kidneys are now functioning and will be releasing urine into the amniotic fluid until birth.</p> <p>Your baby has stretched out a little from her foetal position and is now 8.8cm from top to bottom (about the size of a lemon) and weighs around 42 grams.</p> <p>With the body growing faster than the head, the arms have grown to a length that's almost in proportion to the rest of the body by the end of the week.</p> <p>Your baby is covered in ultra fine hair (called lanugo), all over her little body.</p> <p>The liver and spleen start to function, aiding in digestion and the production of red blood cells.</p>	<p>Your growing baby is now about the size of an apple. Although the eyelids are still fused shut, she can now detect light.</p> <p>Primitive air sacs in the lungs are developing through the process of moving amniotic fluid through the nose and upper respiratory tract.</p> <p>Limbs are longer and more in proportion and joints more flexible.</p> <p>This is the week during which your healthcare practitioner may be able to determine the sex of your baby.</p>
Things that you should look out for	<p>It is important to remain alert to abnormal symptoms. Monitor the symptoms you are experiencing, go for regular check-ups and discuss any concerns you might have with your healthcare practitioner.</p>	<p>It's important that you continue to take care of yourself and your baby.</p> <p>If pregnancy related symptoms such as fatigue, morning sickness and general nausea have not disappeared or at least reduced, you should let your healthcare practitioner know, as this could be a sign of a thyroid condition, multiple pregnancy, or a molar pregnancy, especially if bleeding or spotting is detected.</p> <p>A molar pregnancy, also referred to as water filled cysts, occurs due to abnormal development of the placenta. It could cause a miscarriage at this stage of the pregnancy.</p>	<p>Talk to your healthcare practitioner before applying any lotions or creams to try and stop stretch marks from forming. There are several brands of skin care products that are safe for pregnant women to use.</p>	<p>As your appetite increases, it's important that you continue to eat healthily and exercise appropriately. Eat smaller portions more frequently throughout the day.</p> <p>If you feel you have gained too much weight, <i>do not</i> start dieting, as this may deny your baby the crucial nutrients she needs to continue her development. However, do cut out all unnecessary calories from cold drinks, fruit juices and unhealthy snacks.</p> <p>You could also start an exercise routine, but only after discussing it with your healthcare practitioner.</p>	<p>You may decide to have an amniocentesis between now and 18 weeks gestation.</p> <p>During the test, a small amount of amniotic fluid, which contains foetal cells, is sampled from the amniotic sac surrounding the developing foetus. This test can identify some genetic and chromosomal disorders.</p> <p>Ensure you familiarise yourself with the potential risks associated with this test before deciding whether or not you're going to go ahead with it.</p>

	Week 16	Week 17	Week 18	Week 19	Week 20
What's happening to me?	<p>You're probably feeling much better physically as you settle into pregnancy, with fewer mood swings and less nausea.</p> <p>The top of your uterus is now about halfway between your pubic bone and your navel. The round ligaments that support the uterus are thickening and stretching.</p>	<p>Your internal organs are repositioning, providing space for the uterus which contains the baby.</p> <p>Your centre of gravity changes at this stage and you may experience that you are somewhat off balance. Try to avoid anything that may put you at risk of falling, such as wearing high heels. Trauma to your abdominal region could seriously impact you and your baby's health.</p> <p>You might occasionally feel pain in the legs, called sciatic nerve pain, which could be extremely painful. The sciatic nerve is the largest nerve in the body and runs under the uterus, travelling right down the entire length of the leg. The pain is usually caused by pressure on the nerve, caused by the growing baby. The pain may be reduced by changing your posture, not standing in one position for too long or putting pillows under the legs while sleeping to provide support. Physiotherapy may also provide relief.</p>	<p>You will continue to experience an increase in appetite. Make sure to eat balanced meals rich in nutrients to help your baby develop and grow.</p> <p>Your blood pressure may be lower than usual due to your cardiovascular system undergoing dramatic changes. Be careful not to get up too fast, feeling dizzy is normal at this stage.</p> <p>Also make sure to lie on your side or tilted on your side. Lying on your back could cause your uterus to compress a major vein, which may decrease the blood flow to your heart.</p>	<p>As you go through your 19th week of pregnancy, you might notice more changes such as dry, flaky skin. Your metabolic rate and blood volume increase. Your need for fluid and your sensitivity to heat will increase, so it's important that you continue to drink plenty of water.</p> <p>Chloasma and skin abnormalities caused by extra oestrogen may cause some changes in your appearance. Do not be alarmed, this is perfectly normal. Symptoms include red palms, patches of skin pigmentation and darkening of your nipples, freckles, scars, underarms, inner thighs, and vulva. Darker patches on your face are referred to as 'mask of pregnancy' and will probably fade soon after the birth of your baby. As a precaution, avoid from direct sunlight as it may intensify the pigmentation changes.</p>	<p>You have reached the halfway mark of your pregnancy.</p> <p>This is when major weight gain begins to take place.</p> <p>Your waistline continues to expand, and indigestion, heartburn and constipation probably occur more frequently. You may experience itching. You're also making more trips to empty your bladder.</p>
What's happening to my baby?	<p>Your baby is now around 12cm long and weighs 100 grams.</p> <p>The legs continue to develop and toenails start to grow. The head develops further. Facial features are in place and the ears are positioned to the sides.</p>	<p>As the umbilical cord becomes thicker and stronger, the skeleton is changing from soft cartilage to bone.</p> <p>Sweat glands are developing and joint flexibility increases.</p>	<p>Now almost 190 grams in weight and 14cm long, your baby is fully flexing her arms and legs. Genitals are almost completely formed and in position.</p> <p>Blood vessels can be seen through the skin, and the ears are now in their correct position. A protective covering of myelin is beginning to form around the nerves. This will continue to form for a year after birth.</p>	<p>Arms and legs are proportionate to the body and each other. Hair on the scalp is beginning to grow.</p> <p>Vernix caseosa, the white and creamy substance coating the skin of your baby, is forming to prevent her from 'pickling' in the amniotic fluid.</p> <p>Major developments take place in the brain: the sensory areas for touch, taste, sight, sound and smell are 'allocated' and stimulated.</p>	<p>Your baby weighs about 300 grams and is the size of a banana.</p> <p>She will be swallowing more fluid to aid the functioning of the digestive system.</p> <p>Meconium is being produced and will be stored in the bowels. This black substance is usually seen in the first few soiled nappies.</p>
Things that you should look out for	<p>Your baby is growing stronger and is energetic and kicking, which means you may start feeling little movements this week. Most women report the first foetal movements (also referred to as 'quickening') in their 20<sup>th</sup> week, so be patient if you don't feel any movement yet.</p> <p>Early signs of movement are less obvious and feel like flutters or popcorn popping.</p>	<p>You may develop rashes and new allergies. Don't hesitate to talk to your healthcare practitioner about a possible solution. Be careful of over the counter medications and ask your healthcare practitioner or pharmacist to advise you on which products may safely be used.</p> <p>If you're experiencing cramps or discomfort, try changing your sitting, standing or sleeping positions more often.</p>	<p>You will be having your second trimester ultrasound. This procedure helps to determine whether there may be any birth defects. It also checks the placenta, the umbilical cord and how your baby is growing. At this stage it is easier to reliably determine what your due date will be.</p>	<p>Your baby's hearing is much more developed. It's important to try to keep calm and your surroundings quiet, as loud noises could upset your baby.</p> <p>This is also a great time for you, your partner and other family members to familiarise the baby with your voices by starting to talk to her. Many people like to play soothing music (such as instrumental, jazz, or classical) to help keep their baby calm and happy.</p>	<p>Your baby is growing rapidly, which means you will need extra iron to keep up with both you and your baby's increased demand. The best source of iron is found in red meat, spinach, legumes, prune juice, raisins and soy-based products.</p> <p>This is the time for you and your partner to sign up for childbirth classes, to mentally and physically prepare for labour and delivery.</p>