

## Pregnancy – introduction

This is a guide on what to expect, things to do and how the mother and baby grow.

### Important things to do when there's a positive pregnancy test.

1. Stop smoking and avoid exposure to substances that may harm the growing baby such as alcohol and drugs and chemicals.
2. Eat and drink the things that improve the health of the baby; there's lots of information out there, one on diet is at <http://www.food.gov>
3. Get enough sleep; there are big hormonal and physical changes for the mother and the baby is growing from a few cells in the first trimester (even though it doesn't put on lots of weight), so getting 8 hours of sleep a night is important.
4. This may seem a bit wishful, but reducing the physical or mental stress (especially heavy lifting) and getting cold and damp reduces pressure on the pregnancy.
5. Contact your MD/GP at least 2 weeks before the date of the usual first scheduled scan for where you live (in the UK this at 12 weeks) elsewhere a 7 week scan is the norm.

### Information needed for the first consultation

There are a number of things that will be asked at the initial consultation:

1. The start date of the last menstrual period and the usual length of the menstrual cycle
2. The date of the positive pregnancy test
3. If you've been pregnant before bring the details of the other pregnancies
4. The details of recent blood serum tests (particularly the hCG level)
5. Any pregnancy symptoms that have been experienced
6. Information of current or recent medication

### Early pregnancy ultrasound screening

A scan at 6 to 7 weeks is common practice in most European countries and in the USA. This has the advantage of being able to confirm the site of the pregnancy at an early date. In the UK the first pregnancy screening scan on the NHS is at 12 weeks.

### Spotting in pregnancy

About 50% of women get spotting in early pregnancy; don't be too alarmed if this happens as it's usually simply due to the uterus stretching which causes some of the old endometrium to shed. However if the bleeding is fresh and increasing and there is fixed pain that is increasing (and one-sided) it's best to contact your MD/GP or go to the early pregnancy unit (EPU) of the local hospital.

## THE FIRST TRIMESTER

During the first trimester (weeks 1 -12) the embryo grows from a few cells to a fully formed baby with all of its internal organs developed, a brain that's similar to how it will be at birth and with bones that are starting to harden. By the end of the first trimester the fetus has reached about 3 ½ inches (9 cm) long.

## THE FIRST MONTH

### Development:

- The ball of cells that implants in the fluffy, sticky nutrient-rich lining of the womb is called a 'blastocyst' and is tiny; measuring just 0.1-0.2 mm

- By the third week (from your last period) the placenta and the umbilical cord are beginning to form
- By the end of the first month the baby has grown from a few cells to ¼" (6-7 mm)

**Mom:**

- She will usually be feeling fatigued and sleepy a lot
- It's normal for her to find that she's going to the bathroom for a pee more often
- On the digestion front, nausea, vomiting, heartburn, indigestion, bloating, food aversions or cravings are not uncommon
- It's also normal for her to notice changes to her breasts and generally to feel pre-menstrual at this time
- This is an emotional time: it's common for her to be experiencing some unusually strong emotions which may see-saw from joy and elation to misgivings and fear

**Advice:**

- She should give up smoking, alcohol and coffee as soon as she gets a positive pregnancy test
- An early ultrasound scan at 6 to 7 weeks will confirm the baby is in the correct place, eliminate the possibility of an ectopic pregnancy and generally settle the emotions and make it all feel more real

## THE SECOND MONTH

**Development:**

- The baby develops very rapidly during the second month and by the end of the sixth week the baby has a head and body and limbs
- All of the baby's major organs and body systems; such as the brain, lungs, liver and stomach, have started to develop
- The baby's heart is beating by the sixth or seventh week and can be seen on ultrasound. Early on in the pregnancy the heart beats slowly
- By the seventh week the spinal cord is fully formed and the limbs have started to grow
- Your baby is now 8-11 mm long and is now called an embryo

**Mom:**

- It's normal for the mother to feel twinges and aches in her lower abdomen and about 1/3<sup>rd</sup> of women will have some vaginal spotting which is due to the uterus stretching and some old endometrium being shed
- This is a time when she will be feeling very tired, getting headaches and feeling faint or dizzy
- It's also normal for her to be visiting the bathroom frequently to pee, but she may also be constipated
- Having excessive saliva in her mouth, as well as getting nauseous and vomiting (at any time of the day) are common in this month
- Food aversions or cravings, heartburn, indigestion, flatulence or bloating are other digestion issues she may be experiencing
- Other changes often felt are her breasts feeling full and possibly sore

**Advice:**

- At this time it's important to avoid drugs, pesticides, chemicals and radiation if at all possible, as well as bacteria and viruses, as some of these (such as *Rubella*) are known to cause birth defects
- It is important to make sure that Mom is resting as much as possible
- Eating and drinking nourishing foods and taking supplements is a good idea at this stage of the baby's development

- An ultrasound scan at 6-7 weeks is considered a good idea by many physicians

### THE THIRD MONTH

#### Development:

- By the end of the third month the baby is completely formed and the bones are starting to harden
- Your baby is starting to move around spontaneously
- The baby's head is about half the size of the rest of the body; its eyes are large and open (eyelids take a while longer to form) and the brain structure is similar to how it will be at birth
- The baby's kidneys are fully functional and are draining urine into the bladder
- The baby's intestines have formed but are outside of the baby on the umbilical cord; this is because they can't fit inside the baby at this point
- Your baby is no longer an embryo but is now called a fetus; weighing about 14 grams (½ an ounce) and is about 9 cm long (3 ½ inches)!

#### Mom:

- Most women begin to experience a welcome sense of calmness around this time
- For most mothers the worst of digestion issues of nausea, sickness and heartburn stop by week 14
- For many mothers the sense of tiredness starts to lift at the end of the first trimester

#### Advice:

- You need to have contacted your MD by the 10<sup>th</sup> week: this is to register with a hospital or midwife in advance of the 12-week antenatal appointment
- At the **12-week antenatal appointment** they'll check a number of things:
  - Your weight and blood pressure
  - Your urine will be tested for sugar and protein
  - A blood test will establish your blood group and rhesus status as well as measure the risk of diabetes
  - An ultrasound will be performed which will assess your baby's growth and predict the expected date of delivery
  - This ultrasound will also assess the development of the baby
- If you wish to do so, this is the right time to test for chromosomal abnormalities: chorionic villus sampling (CVS) can be done at 11-13 weeks, and amniocentesis can be done at 15-20 weeks

### THE SECOND TRIMESTER

During the second trimester (weeks 13 – 26) the baby grows rapidly; reaching 11 to 14 inches in length (27 to 36 cm) and weighing about 1½ lbs (700g). The baby's brain continues to develop and the baby wakes and sleeps at regular intervals; it will notice loud noises and move about freely.

### THE FOURTH MONTH

#### Development:

- The baby now moves, sleeps, wakes, swallows and even passes urine every 45 minutes or so; it needs to do this as it 'drinks' the amniotic fluid as it's important for the formation of the lungs and kidneys
- The hormones that are required for the pregnancy are now being made by the placenta rather

than in the ovaries

- All of the baby's teeth have formed and there's even a hair pattern on the scalp!
- The baby has now grown to about 18cm (6.3 inches) and weighs about 85g (3 ounces)

**Mom:**

- She may start to feel a slight fluttering sensation in her lower abdomen: this is an awareness of the baby moving, but it's not usually felt before the end of the month. The attachment site of the placenta makes a big difference as far as awareness of the baby is concerned; so don't be concerned if no flutter is felt by then
- She may still be feeling fatigued and may experience occasional headaches and dizziness
- If she has morning sickness this is usually getting less of a problem
- She may well still feel constipated, have indigestion, heartburn, flatulence or bloating
- Additional new symptoms that mothers experience at this time include:
  - Nasal congestion
  - Occasional nosebleeds
  - Stuffiness in the ears
  - Bleeding gums and bad breath
  - An increase in appetite
  - Mild swelling of the face, hands and feet
  - Varicose veins
  - A slight whitish vaginal discharge
  - Clumsiness and a lack of focus and concentration
- Many mothers feel frustrated and self-conscious about their bodies at this time as they don't fit into their regular clothes, but are still too small for maternity clothes

## THE FIFTH MONTH

**Development:**

- This is a period of rapid growth for the baby with all of the organ structures already formed by this stage
- Finger and toe prints develop at this point and the buds of the permanent teeth form behind the baby teeth
- Fat is now being stored beneath the baby's skin and the baby is also growing muscle
- The baby sleeps and wakes at regular intervals and will notice loud noises and move about
- The baby is covered in a fine hair called 'lanugo' and its skin may be covered in a substance called 'vernix'
- At this point the baby has grown to about 25 cm (9.8 inches) and weighs up to 285g (10 ounces)

**Mom:**

- Energy levels are often pretty good now
- However she may well still be experiencing digestive issues such as constipation, heartburn, indigestion, flatulence or bloating
- She may also get some headaches, faintness or dizziness, nasal congestion, nosebleeds, ear stuffiness, bleeding gums, and big appetite
- Possible new symptoms are:
  - Aching in the abdomen
  - Backache
  - Swelling and cramps in the legs
  - Varicose veins

- Haemorrhoids
- Increased heart rate
- Changes in the skin pigmentation of her abdomen and face

**Advice:**

- This is the month the hospital or midwife will schedule your **anomaly ultrasound scan** (usually done at 20 weeks), which thoroughly checks your baby's development and measures growth

## THE SIXTH MONTH

**Development:**

- The baby's brain is developing rapidly and its bones are becoming more solid
- A special type of brown fat that keeps the baby warm at birth is forming and this will continue until birth
- Baby girls will develop around 3 million eggs in their ovaries during this month
- A lot more fetal activity is going on as the baby grows larger and stronger; babies can move around a lot still and any practice contractions will not trouble the baby
- The baby's eyebrows are developing and the 'lanugo' is getting darker
- By the end of the sixth month, the baby will be around 27 to 36 cm long (11 to 14 inches) and will weigh about 700g (1 ½ lbs)

**Mom:**

- She is likely to experience many of the same symptoms as in the fifth month and may also begin to have an itchy abdomen
- Emotionally she may be feeling absent-minded, bored and anxious; this is a really common experience during this period of the pregnancy. Things will change

**Advice:**

- Resting is important if you are tired, but exercise is also important as you'll need that muscle tone in a few months time!
- Avoid the temptation to 'eat for two' – you really don't need to; just focus on the quality of the food
- At this point many men feel left out, so it may be an idea to include them as much as possible – communicating is important in maintaining bonds, going to antenatal appointments, choosing names and preparing the nursery all help. Sex is highly unlikely to harm the baby
- For those women whose blood group is Rh-negative there's the possibility of their forming Rh-antibodies if they are carrying an Rh-positive baby. This is more likely during birth but occasionally happens in late pregnancy and has possible implications for babies in subsequent pregnancies. Giving the mother an anti-D injection after the birth reduces the problem but an anti-D during pregnancy is likely to help as well

## THE THIRD TRIMESTER

The third trimester (weeks 27 -40) is when the baby gets ready for birth. The baby grows rapidly, putting on up to ½ lb a week and much of this is fat to keep the baby warm when it's born. Eyes, ears and lungs become mature and fully functional and most babies start to turn head down at about the 28-week mark. Babies are usually about 18 to 22 inches in length (46-55 cm) and weigh about 6 to 10 lbs (3-4 kg) at birth.

## THE SEVENTH MONTH

**Development:**

- Baby's eyes now open and close and can sense changes in light, the eyelashes are growing
- He or she can now hear the outside world quite well over the sound of your heartbeat; in the same way that we can hear under water
- The baby exercises by kicking and stretching; these movements get smaller as the space gets taken up
- At about 28 weeks most babies start to turn head down
- If the baby is a boy his testes will probably start to descend at this point
- By the end of this month the baby will be approximately 40 cm (17 inches) long and weigh about 1 kg (2.2 lbs)
- Most babies born at the end of the sixth month survive with the help of specialist assistance

**Mom:**

- She still likely to be experiencing constipation, heartburn, indigestion, flatulence and bloating...
- Her lower abdomen may feel achy as well
- Her whitish vaginal discharge is probably getting increasingly heavy
- Other common physical symptoms include leg cramps, backaches, varicose veins, mild swelling, shortness of breath, difficulty sleeping and clumsiness
- She will probably also feel 'Braxton Hicks' contractions that are usually painless. During a Braxton Hicks contraction the uterus hardens for a minute and then returns to normal. Women often find themselves feeling bored and a bit tired about their pregnancy by now; it's quite normal

**Advice:**

- Keep exercising regularly – there are special yoga classes that many mothers find useful and swimming is good for fitness and suppleness
- Keep the father involved and informed of what's going on; it's difficult to 'be' there for most men until the baby has arrived

## THE EIGHTH MONTH

**Development:**

- The baby's body continues to grow and is really getting ready to be born. They say at this point that every day spent in the uterus is two days less your baby would spend in the hospital
- Baby is now able to hiccup and cry and will respond to pain, light and sound
- The baby's taste buds are developing
- The baby is making red blood cells entirely from their own bone marrow
- The fingernails have reached the end of the fingers
- If the baby is a boy his testicles have dropped from his abdomen and will descend into his scrotum
- Babies grow a lot in this month and will now be about 40 to 45 cm (16 – 18 inches) long and weigh about 1.8 kg (4 lbs)

**Mom:**

- This is the month that she'll discover the baby's presentation with a physical examination or an ultrasound. If the baby's breech or transverse then moxa and acupuncture are gentle treatments to turn the baby into the correct presentation. An ultrasound is recommended before these treatments so that any possible risks involved in turning the baby can be ruled out
- This is the time for her to communicate and discuss birth plans with her midwife and partner, including pain management during labour and delivery

- She will be feeling regular, strong fetal activity
- Many of the discomforts that have been experienced in the last few months; such as constipation and shortness of breath are becoming more frequent. Braxton Hicks contractions will increase; these soften the cervix and prepare your body for delivery
- Eagerness to have the pregnancy over and concerns over the labour and delivery, as well as the baby's health are probably increasing

**Advice:**

- This is a time to take stock and prepare for the next two months or so. Make plans, prepare bags and communicate with the people who need to know
- Take exercise and also rest, spend time with girlfriends if that's possible and do all that you can to support your support group at this time

## THE NINTH MONTH

**Development:**

- The baby is now putting on about a 250g (½ lb) each week, but this slows down a bit from the 37<sup>th</sup> week
- He or she is getting ready for birth and is settling into the fetal position; its head is down against the birth canal and its legs are tucked up to its chest with its knees against its nose
- The rapid flow of blood through the umbilical cord keeps it taut, preventing it tangling
- The baby is starting to settle into sleeping patterns
- The bones of the baby's head are soft and flexible which eases the process of delivery through the birth canal; they'll spring back into shape after the journey
- The baby's lungs are now mature and the baby will be fine if born a little early
- The baby is usually about 46-55 cm (18 to 22 inches) long and weighs approximately 2.7 to 4 kg (6 to 10 lbs) at birth
- He or she can be born any time between the 36th and 43rd week of pregnancy without any problem

**Mom:**

- In addition to the by now familiar discomforts she may be getting aching in her buttocks and pelvic area, increased backache and heaviness
- Sleeping is difficult at this time for most mothers
- Braxton Hicks contractions will be getting more frequent and intense as her cervix prepares for delivery; it gets shorter, thinner and more open in a process called 'effacement'
- Due to the lower position of your baby it will be easier for her to breathe, but she'll need to urinate more often as her bladder will be feeling the pressure
- She will probably be feeling all of excited, anxious, apprehensive and relieved that it's almost over...

**Advice:**

- If the Braxton Hicks are a problem there are things you can do that may help:
  1. Drink more water – this can lessen them as dehydration causes muscle to spasm
  2. Practicing your breathing exercises is also known to stop them and reduce the pain
  3. Lying on your left side is known to ease the pain of contractions
  4. Go for a pee – a full bladder can start them off
- The due date is a guide; most births are in the two weeks before and after this time
- If you don't go into labour spontaneously you'll probably be offered a medical induction, usually with a drug called 'oxytocin'

- You may consider acupuncture to induce labour before you agree to the drug induction
- Remember to pack your bag(s) so that you'll be ready to get out the door when the time comes
- Have a baby seat for the car as most hospitals won't allow you to take the baby home if the car doesn't have an appropriate car seat

Good luck!!