











The Pregnancy Book

Your complete guide to:

A healthy pregnancy Labour and childbirth The first weeks with your new baby The Department of Health would like to thank all those involved in shaping the updated edition of *The Pregnancy Book*, including the mothers and fathers, medical and health professionals, and the many individuals and organisations. In particular, the Department extends thanks to:

Community Practitioners' and Health Visitors' Association Department for Children, Schools and Families Department for Work and Pensions Food Standards Agency NCT National Institute for Health and Clinical Excellence Royal College of Anaesthetists Royal College of General Practitioners Royal College of Midwives Royal College of Distetricians and Gynaecologists Royal College of Paediatrics and Child Health UK Medicines Information Sheena Byrom, Jill Cooper, Anne Edington, Dr David Elliman, Kathryn Gutteridge, Sue Henry, Dr Judy Shakespeare and Dr Helen Scholefield.

This book is given free to all expectant mothers.

Every effort has been made to make this book reflect the most up-to-date medical advice at the time of publication. Because developments can be very rapid, significant changes will always be notified to doctors and other health professionals at once. They will then be incorporated into the text for the next reprint. For the most up-to-date information and advice, visit the online version of the book (pregnancy planner) at www.nhs.uk/pregnancyplanner

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The Pregnancy Book

Your complete guide to:

A healthy pregnancy Labour and childbirth The first weeks with your new baby

your complete guide

pregnancy



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YOUR HEALTH

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introduction

find everything you need to know in this book



The information in this book is also available online from the NHS interactive pregnancy planner, which is available at www.nhs.uk/ pregnancyplanner

You can download an interactive widget at www.nhs.uk/ pregnancywidget that delivers weekly

information and tips tailored to you and your pregnancy. Having a baby is one of the most exciting things that can happen to you. But you might be feeling nervous as well. If it's your first baby, it's hard to know what to expect.

Your mum, colleagues, friends and relations might all be giving you advice. And then there is all the information on the internet as well as in magazines and books. At times it can feel overwhelming and it's hard to know who is right when people say different things.

This book brings together everything you need to know to have a healthy and happy pregnancy, and to make sure you get the care that is right for you. The guidance about pregnancy and babies does change.

So it's important to get up-to-date, trusted advice so that you can make the right decisions and choices.

If you have any questions or concerns – no matter how trivial they may seem – talk to your midwife or doctor. They are there to support you.

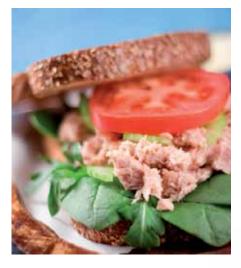


YOUR PREGNANCY AT A GLANCE

5	28 weeks
6	31 weeks
6	34 weeks
7	36 weeks
7	38 weeks
7	40 weeks
7	41 weeks



BEFORE YOU GET PREGNANT



- Think about the lifestyle factors that might affect your ability to get pregnant and have a healthy pregnancy (see Chapter 3). This applies to men too. You are more likely to get pregnant if you are both in good health.
 - If you smoke, get advice about stopping. You can talk to your doctor, visit www.nhs.uk/smokefree or call the free NHS smoking helpline on 0800 022 4 332.
 - Eat a balanced diet.
 - Maintain a healthy weight.

- You should avoid drinking alcohol if you are pregnant or trying to conceive. If you do choose to drink, then protect your baby by drinking no more than one to two units of alcohol once or twice a week and don't get drunk (see page 32).
- Take exercise.
- If you or your partner take any medication, talk to your doctor about whether it will affect your pregnancy.

• Take 400 micrograms of folic acid a day. You should continue to take this until you are 12 weeks pregnant (see page 27).



- If you have a health condition, for example mental health problems, diabetes or a family history of any inherited diseases, talk to your GP or a specialist before you try to get pregnant.
 - Talk to your GP or a healthcare professional if you have any concerns or need support.



0–8 WEEKS

- You can take a pregnancy test from the first day that you miss your period (see Finding out that you are pregnant on page 16).
- As soon as you know you are pregnant, get in touch with a midwife or your GP to organise your antenatal care (see Finding out that you are pregnant on page 16 and Antenatal care on page 40). Begin to think about where you want your baby to be born (see Choosing where to have your baby on page 70).
- Some pregnant women start to feel sick or tired or have other minor physical problems for a few weeks (see Common minor problems on page 58).
- Take 10 micrograms of vitamin D per day, which is in Healthy Start vitamin supplements or other supplements recommended by your midwife. You should continue to take vitamin D throughout your pregnancy and while you are breastfeeding.

8–12 WEEKS

- You will usually attend your first appointment by 10 weeks and your booking appointment by 12 weeks.
- At the booking appointment, your weight, height and body mass index will be measured. You will be asked about your health and family history as well as about your baby's father's family history. This is to find out if you are at risk of certain inherited conditions.
- Your hand-held notes and plan of care will be completed.
- Your midwife will discuss various tests you will be offered during your pregnancy, one of which is an ultrasound scan to check for abnormalities in your baby (see page 48). You will be offered information about what to expect during pregnancy and how to have a healthy pregnancy. Ask if you are unsure about anything.
- You can ask your midwife about your rights at work and the benefits available (see **Rights and benefits** on page 156).

- You will usually be offered an ultrasound scan between eight and 14 weeks. This will check the baby's measurements and give an accurate due date. The scan can also detect abnormalities and check if you are carrying more than one baby. Your partner can come along to the scan (see Antenatal care on page 40).
- If you get Income Support, income-based Jobseeker's Allowance or incomerelated Employment and Support Allowance or are on a low income and receive Child Tax Credit, you should complete a Healthy Start application form (see page 28). This is to claim vouchers to spend on milk, fruit and vegetables. Healthy Start vitamin supplements (containing vitamin D) are free without prescription for any pregnant woman, new mother or child who gets Healthy Start vouchers (see Rights and benefits on page 156).

- Make a dental appointment. NHS dental care is free during pregnancy and for a year after the birth of your baby.
- Just 12 weeks after conception, your baby is fully formed. It has all its organs, muscles, limbs and bones, and its sex organs are well developed.
- Your baby is already moving about but you cannot feel the movements yet.



growing and developing

YOUR PREGNANCY AT A GLANCE

12–16 WEEKS

- Find out about antenatal education (see **Antenatal care** on page 40).
- Start to think about how you want to feed your baby (see Feeding your baby on page 102).
- Make sure you are wearing a supportive bra. Your breasts will probably increase in size during pregnancy so you need to make sure you are wearing the right sized bra.
- If you have been feeling sick and tired, you will probably start to feel better around this time.
- At 14 weeks, your baby's heartbeat is strong and can be heard using an ultrasound detector.
- Your pregnancy may just be beginning to show. This varies a lot from woman to woman.



16-20 WEEKS

- You may start to feel your baby move (see How your baby develops on page 18).
- Your tummy will begin to get bigger and you will need looser clothes.
- You may feel a surge of energy.
- Try to do your pregnancy exercises regularly (see **Your health in pregnancy** on page 24).
- Your midwife or doctor should:
- review, discuss and record the results of any screening tests
- measure your blood pressure and test your urine for protein
- consider an iron supplement if you are anaemic.
- Your midwife or doctor should give you information about the anomaly scan you will be offered at 18–20 weeks and answer any questions you have.
- Your baby is now growing quickly. Their face becomes much more defined and their hair, eyebrows and eyelashes are beginning to grow.
- Ask your doctor or midwife to let you hear your baby's heartbeat.

20–25 WEEKS

- Your uterus will begin to get bigger more quickly and you will really begin to look pregnant.
- You may feel hungrier than before. Stick to a sensible balanced diet (see **Your health in pregnancy** on page 24).



- Ask your midwife about antenatal education (see Antenatal education on page 56).
- You will begin to feel your baby move.
- Get your maternity certificate (form MAT B1) from your doctor or midwife (see **Rights and benefits** on page 156).

25 WEEKS

- (if this is your first baby)
- Your baby is now moving around vigorously and responds to touch and sound.
- If this is your first baby, your midwife or doctor should:
 - check the size of your uterus
 - measure your blood pressure and test your urine for protein.
- If you are taking maternity leave, inform your employer in writing 15 weeks before the week your baby is due. You can claim for Statutory Maternity Pay (SMP) and the Health in Pregnancy Grant at the same time (see **Rights and benefits** on page 156).
- If you are entitled to Maternity Allowance, you can claim from when you are 26 weeks pregnant (see **Rights and benefits** on page 156).
- If your partner plans to take paternity leave, they will need to inform their employer.



28 WEEKS

- Your baby will be perfectly formed by now, but still quite small.
- You may find that you are getting more tired.
- Your midwife or doctor should:
 - use a tape to measure the size of your uterus
 - measure your blood pressure and test your urine for protein
 - offer more blood screening tests
 - offer your first anti-D treatment if your blood type is rhesus negative.
- If you are claiming Statutory Maternity Pay (SMP), you must inform your employer at least 28 days before you stop work (see **Rights and benefits** on page 156).
- You can claim a lump sum Sure Start Maternity Grant to help buy things for your new baby if you get one of the following:
 - Income Support
 - income-based Jobseeker's Allowance
 - income-related
 Employment and Support
 Allowance
 - Pension Credit
 - Working Tax Credit where the disability or severe disability element is included in the award
 - Child Tax Credit payable at a rate higher than the family element (see **Rights and benefits** on page 156).

- Think about what you need for the baby (see
 What you need for your baby on page 127).
- If you have young children, it's good to talk to them about the new baby.
- Make sure your shoes are comfortable. If you get tired, try to rest with your feet up.



31 WEEKS (if this is your first baby)

- If this is your first baby, your midwife or doctor should:
 - review, discuss and record the results of any screening tests from the last appointment
 - measure the size of your uterus and check which way up the baby is
 - measure your blood pressure and test your urine for protein.

excitement and apprehension



34 WEEKS

- Your midwife or doctor will give you information about preparing for labour and birth, including how to recognise active labour, ways of coping with pain in labour and developing your birth plan. They should also:
 - review, discuss and record the results of any screening tests from the last appointment
 - measure the size of your uterus
 - measure your blood pressure and test your urine for protein
 - offer your second anti-D treatment if your blood type is rhesus negative (see page 46).
- Make arrangements for the birth. You can give birth at home, in a midwifery unit or in hospital. If you have children already, you may want to make childcare arrangements for when you go into labour.
- You may want to ask about whether tours of maternity facilities for birth are available.



- Think about who you would like to have with you during labour.
- Get your bag ready if you are planning to give birth in hospital or in a midwifery unit.
- You will probably be attending antenatal classes now (see Antenatal care on page 40).
- You may be more aware of your uterus tightening from time to time. These are mild contractions known as Braxton Hicks contractions (see **Labour and birth** on page 85).
- You may feel quite tired. Make sure you get plenty of rest.





36 WEEKS

- Make sure you have all your important telephone numbers handy in case labour starts (see Labour and birth on page 85).
- Your midwife or doctor should give you information about:
 - feeding your baby
 - caring for your newborn baby
 - vitamin K and screening tests for your newborn baby
 - the 'baby blues' and postnatal depression.
- Your midwife or doctor should:
 - measure the size of your uterus
 - check the position of your baby
 - measure your blood pressure and test your urine for protein.
- Sleeping may be increasingly difficult.

38 WEEKS

- Most women will go into labour spontaneously between 38 and 42 weeks. Your midwife or doctor should give you information about your options if your pregnancy lasts longer than 41 weeks.
- Your midwife or doctor should:
 - measure the size of your uterus
 - measure your blood pressure and test your urine for protein.
- Call your hospital or midwife at any time if you have any worries about your baby or about labour and birth.

40 WEEKS (if this is your first baby)

- Your midwife or doctor should give you more information about what happens if your pregnancy lasts longer than 41 weeks.
- Your midwife or doctor should:
- measure the size of your uterus
- measure your blood pressure and test your urine for protein.

41 WEEKS

- If your pregnancy lasts longer than 41 weeks, you may be induced. Your midwife or doctor will explain what this means and what the risks are.
- Your midwife or doctor should:
 - measure the size of your uterus
 - measure your blood pressure and test your urine for protein
 - offer a membrane sweep (see page 96).
- Discuss options and choices for induction of labour.
- Call your hospital or midwife if you have any worries about your baby or about labour and birth.
- See www.nice.org.uk/ Guidance/CG70 for guidelines on induction of labour.



BECOMING PREGNANT

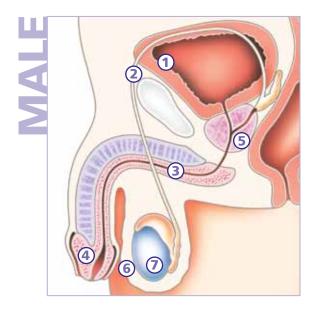
Male sex organs	
Female sex organs	
The female monthly cycle	
Conception	
Hormones	
Boy or girl?	
The best time to get pregnant	



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This chapter describes the physical process of getting pregnant and includes information about the male and female sex organs, the female monthly cycle and when you are most likely to conceive. It also explains what you should do when you find out you are pregnant and how you might feel when you first conceive.

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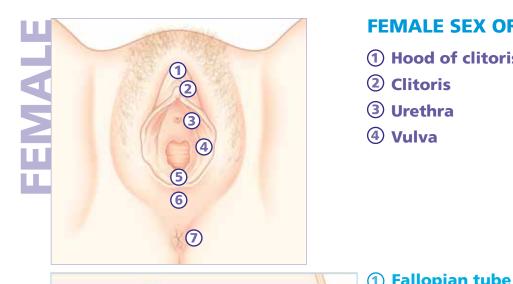
parts of the body

MALE SEX ORGANS

1 Bladder

- (2) Vas deferens The two tubes called the vas deferens carry sperm from the testes (testicles), where sperm are made, to the prostate and other glands. These glands add secretions that are ejaculated along with the sperm.
- ③ **Urethra** The urethra is a tube running down the length of the penis from the bladder, through the prostate gland, to an opening at the tip of the penis. Sperm travel down the urethra to be ejaculated.
- Penis The penis is made of erectile tissue, which acts like a sponge. When it becomes filled with blood, the penis becomes hard and erect.
- **(5) Prostate gland** This is a gland at the base of the penis.
- (6) Scrotum The testes are contained in a bag of skin called the scrotum, which hangs outside the body. The scrotum helps to keep the testes at a constant temperature, just below body temperature. This is necessary for sperm to be produced. When it is warm, the scrotum hangs down away from the body to keep the testes cool. When it is cold, the scrotum draws up closer to the body for warmth.
- **Testes** Men have two testes, which are glands where sperm are made and stored.

1



FEMALE SEX ORGANS

- (1) Hood of clitoris (5) Opening of vagina
 - **(6)** Perineum
 - 7 Anus

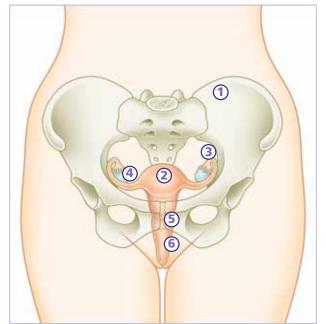
9 10

1) Fallopian tube	6 Vagina
② Ovary	7 Urethra
3 Womb or uterus	(8) Rectum

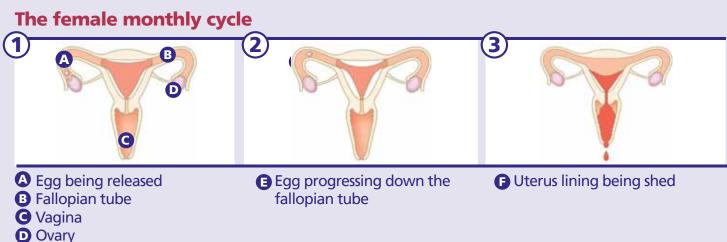
- (9) Anus
- (5) Cervix

4 Bladder

- thra
- tum
 - - 10 Perineum



- (1) **Pelvis** The pelvis is the bony structure that the baby will pass through when it is born.
- (2) Womb or uterus The uterus is about the size and shape of a small, upside down pear. It is made of muscle and increases in size as the baby grows.
- (3) Fallopian tubes The fallopian tubes lead from the ovaries to the uterus. Eggs are released from the ovaries into the fallopian tubes each month. This is where fertilisation takes place.
- (4) **Ovaries** There are two ovaries, each about the size of a walnut. They produce the eggs or ova.
- (5) **Cervix** The cervix is the neck of the uterus. It is normally almost closed, with just a small opening through which blood passes during monthly periods. During labour, the cervix will dilate to let the baby move from the uterus into the vagina.
- (6) Vagina Most babies are born through the vagina, which is a tube about 8cm (3 inches) long. It leads from the cervix down to the vulva, where it opens between the legs. The vagina is very elastic, so it can easily stretch around a man's penis during sex or around a baby during labour.



Ovulation occurs each month when an egg (ovum) is released from one of the ovaries. Occasionally, more than one egg is released, usually within 24 hours of the first egg. The 'fingers' at the end of the fallopian tubes help to direct the egg down into the tube. At the same time, the lining of the uterus begins to thicken and the mucus in the cervix becomes thinner so that sperm can swim through it more easily.

The egg begins to travel down

the fallopian tube. If a man and woman have recently had sex, the egg might be fertilised here by the man's sperm. The lining of the uterus is now thick enough for the fertilised egg to be implanted.

If the egg is not fertilised, it will pass out of the body during the woman's monthly period along with the lining of the uterus, which is also shed. The egg is so small that it cannot be seen.

Conception

Conception is the process that begins with the fertilisation of an egg and ends with the implantation of an egg into a woman's uterus.



A Egg B Sperm being ejaculated **C** Penis

Ovulation

A woman conceives around the time when she is ovulating; that is, when an egg has been released from one of her ovaries into one of her fallopian tubes.

D Egg being fertilised G Sperm

Fertilisation

During sex, sperm are ejaculated from a man's penis into a woman's vagina. In one ejaculation there may be more than 300 million sperm. Most of the sperm leak out of the vagina but some begin to swim up through the cervix. When a woman is ovulating, the mucus in the cervix is thinner than usual to let sperm pass through more easily. Sperm swim into the uterus and into the fallopian tubes. Fertilisation takes place if a sperm joins with an egg and fertilises it.

Attached embryo

Implantation

During the week after fertilisation, the fertilised egg (which is now an embryo) moves slowly down the fallopian tube and into the uterus. It is already growing. The embryo attaches itself firmly to the specially thickened uterus lining. This is called implantation. Hormones released by the embryonic tissue prevent the uterus lining from being shed. This is why women miss their periods when they are pregnant.

1

Sperm is about 1/25th of a millimetre long and has a head, neck and tail. The tail moves from side to side so that the sperm can swim up the vagina into the uterus and fallopian tubes.

One egg or ovum (occasionally two or more) is released from the woman's ovaries every month. It moves down into the fallopian tube where it may be fertilised by a man's sperm.

HORMONES

Both men and women have hormones, which are chemicals that circulate in the bloodstream. They carry messages to different parts of the body and result in certain changes taking place. Female hormones, which include oestrogen and progesterone, control many of the events of a woman's monthly cycle, such as the release of eggs from her ovaries and the thickening of her uterus lining.

During pregnancy, your hormone levels change. As soon as you have conceived, the amount of oestrogen and progesterone in your blood increases. This causes the uterus lining to build up, the blood supply to your uterus and breasts to increase and the muscles of your uterus to relax to make room for the growing baby.



The increase in hormone levels can affect how you feel. You may have mood swings, feel tearful or be easily irritated. For a while you may feel that you cannot control your emotions, but these symptoms should ease after the first three months of your pregnancy.



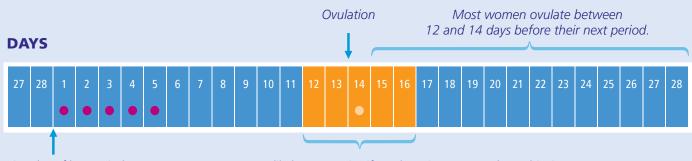
BOY OR GIRL?

Every normal human cell contains 46 chromosomes, except for male sperm and female eggs. These contain 23 chromosomes each. When a sperm fertilises an egg, the 23 chromosomes from the father pair with the 23 from the mother, making 46 in all.

Chromosomes are tiny, thread-like structures which each carry about 2,000 genes. Genes determine a baby's inherited characteristics, such as hair and eye colour, blood group, height and build. A fertilised egg contains one sex chromosome from its mother and one from its father. The sex chromosome from the mother's egg is always the same and is known as the X chromosome. But the sex chromosome from the father's sperm can be an X or a Y chromosome.

If the egg is fertilised by a sperm containing an X chromosome, the baby will be a girl (XX). If the sperm contains a Y chromosome, the baby will be a boy (XY).





This chart shows a 28-day cycle. Yours may be longer or shorter.

First day of last period

You are most likely to conceive if you have intercourse about this time.



THE BEST TIME TO GET PREGNANT

You are most likely to get pregnant if you have sex within a day or so of ovulation (see chart). This is usually about 14 days after the first day of your last period.

An egg lives for about 12–24 hours after it is released. For you to get pregnant, the egg must be fertilised by a sperm within this time. Sperm can live for up to seven days inside a woman's body. So if you have had sex in the seven days before ovulation, the sperm will have had time to travel up the fallopian tubes to 'wait' for the egg to be released.

TWINS, TRIPLETS OR MORE

Identical twins occur when one fertilised egg splits into two; each baby will have the same genes – and therefore they will be the same sex and look very alike. Non-identical twins are more common. They are the result of two eggs being fertilised by two sperm at the same time. The babies may be of the same sex or different sexes, and will probably look no more alike than any other brothers and sisters. A third of all twins will be identical and two-thirds non-identical.

Twins happen in about 1 in every 65 pregnancies. A couple is more likely to have twins if there are twins in the woman's family. Triplets occur naturally in 1 in 10,000 pregnancies and quads are even rarer. Nowadays, the use of drugs in the treatment of infertility has made multiple births more common.

Are you carrying twins?

You might suspect that you are carrying more than one baby if:

 you are very sick in early pregnancy

- you seem bigger than you should be for your 'dates'
- twins run in your family, or
- you have had fertility treatment.

It is usually possible to find out through your dating ultrasound scan, which happens between eight and 14 weeks (see page 48).

You should be told at this point whether the babies share a placenta (are identical) or if they have two separate placentas, in which case they can be either identical or non-identical. If this cannot be determined, you should be offered a further scan. A third of identical twins have two separate placentas. This happens when the fertilised egg splits in the first 3–4 days after conception and before it implants in the uterus.



1

What is different about being pregnant with twins or more?

All multiple pregnancies have a higher risk of complications - particularly premature birth. If your babies share a placenta (identical twins) it is recommended that you are scanned every two weeks from 16 weeks onwards, and every four weeks if your babies have separate placentas. You may be advised to have a caesarean section. You should discuss this with your doctor, but it is your choice. It is possible to breastfeed twins and triplets and there is more information about how you can do this in Chapter 9. You may find that a combination of breast and formula feeding is best for you – particularly if you have triplets or more.

Help and support



You might find it helpful to contact support groups like **Tamba** (Twins and Multiple Births Association) and the **Multiple Births Foundation** (see pages 188 and 183) before your babies are born.



THE SIGNS OF PREGNANCY

For women who have a regular monthly cycle, the earliest and most reliable sign of pregnancy is a missed period. Sometimes women who are pregnant have a very light period, losing only a little blood. Other signs of pregnancy are as follows:

- Feeling sick you may feel sick, or even be sick. This is commonly known as 'morning sickness' but it can happen at any time of the day. If you are being sick all the time and cannot keep anything down, contact your GP.
- Changes in your breasts your breasts may become larger and feel tender, like they might do before your period. They may also tingle. The veins may show up more and the nipples may darken and stand out.
- Needing to pass urine more often – you may find that you have to get up in the night.
- Being constipated.
- An increased vaginal discharge without any soreness or irritation.
- Feeling tired.
- Having a strange taste in your mouth – many women describe it as metallic.
- 'Going off' certain things, for example tea, coffee, tobacco smoke or fatty food.

PREGNANCY TESTS

Pregnancy tests can be carried out on a sample of urine from the first day of a missed period, which means that, if you are pregnant, you are about two weeks after conception. Some very sensitive tests can be used even before you miss a period.

You can collect urine at any time of the day. Use a clean, soap-free, well-rinsed container to collect it. You can get pregnancy tests free of charge from your GP or family planning clinic. Pregnancy tests are also available at NHS walk-in centres.

Many pharmacists and most pregnancy advisory services also offer tests, usually for a small fee. You can buy do-it-yourself pregnancy testing kits from pharmacists. They can give you a quick result and you can do the test in private. There are a range of tests that are available. How they work varies, so check the instructions.

Results of the test

A positive test result is almost certainly correct. A negative result is less reliable. If you still think you are pregnant, wait a week and try again or go and see a midwife or GP.

See your midwife or doctor as soon as possible if you are currently being treated for a long-term disease such as diabetes or epilepsy, or you have serious mental health problems.



FINDING OUT THAT YOU ARE PREGNANT

When you find out that you are pregnant, you may feel happy and excited or even shocked, confused and upset. Everybody is different and you should not worry if you are not feeling as happy as you might have expected. Even if you have been trying to get pregnant, your feelings may take you by surprise. Some of these feelings may be caused by changes in your hormone levels, which can make you feel more emotional.

Even if you feel anxious and uncertain now, your feelings may change. Talk to your midwife, GP or family planning clinic, who will try to help you to adjust or will give you advice if you don't want to continue with your pregnancy.

Men may also have mixed feelings when they find out that their partner is pregnant. They may find it hard to talk about these feelings because they don't want to upset their partner. Both partners should encourage each other to talk about their feelings and any worries or concerns that they have at this stage.

However you are feeling, you should contact an NHS professional (see Chapter 4) so that you can start to receive antenatal care. This is the care that you will receive leading up to the birth of your baby.

Telling people

You may want to tell your family and friends immediately or wait a while until you have sorted out how you feel. Many women wait until they have had their first scan before they tell people that they are pregnant.

Members of your family/extended family may have mixed feelings or react in unexpected ways to your news. You may wish to discuss this with your midwife.



ACCESSING ANTENATAL CARE

When you find out that you are pregnant, it's important to contact an NHS professional as soon as possible.

You can book an appointment directly with a midwife. Your GP surgery will be able to put you in touch with your nearest midwife service.

If you have special health needs, your midwife, GP or other doctors may take shared responsibility for your maternity care.

Your first or second meeting with your midwife is the booking appointment. This will last for up to two hours and could take place at a hospital, in a clinic or a Children's Centre, in a GP surgery or at home. Your midwife will ask you many questions about your health, the health of your family and your preferences in order to develop your own plan of care. Your midwife will order a number of blood tests and scans, which will be done throughout your pregnancy. The results of these tests may affect your choices later in pregnancy, so it's important not to miss them. Your midwife will also ask about any other help or social care support you may have or need – for example support from social workers or family liaison officers. For more information about

your the booking appointment, see pages 42 and 44–45.

HELP FOR YOUNG MUMS

If you are a young mum, there are a wide range of services to support you when you are pregnant and after you have had your baby. Your midwife or health visitor will be able to give you details of local services.



If you are on your own

If you are pregnant and on your own, it is even more important that there are people with whom you can share your feelings and who

Help and support

The following national organisations can also give you help and advice:

Sexwise helpline

If you think you may be pregnant, you can get confidential advice from the Sexwise helpline on **0800 282930** or get further information from **www.ruthinking.co.uk**

Brook centres

If you are under 25, you can visit a Brook centre for free, confidential advice. To find your nearest centre, go to **www.brook.org.uk** or call the national Ask Brook helpline on **0808 802 1234**.

can offer you support. Sorting out problems, whether personal or medical, is often difficult when you are by yourself, and it is better to find someone to talk to rather than let things get you down. For more information on coping on your own, see page 79.

Carrying on with your education

Becoming a mother certainly does not have to mean the end of your education. If you are still of compulsory school age, your school should not exclude you on grounds of pregnancy or health and safety issues connected with your pregnancy. However, they may talk to you about making alternative arrangements for your education. You will be allowed up to 18 calendar weeks off school before and after the birth.

After your return to education, you can get help with childcare costs through the Care to Learn scheme. Care to Learn also provides support with childcare costs for teenage parents above the compulsory schooling age who want to study. You may also be eligible for the



Education Maintenance Allowance (EMA), which is available for young people between 16 and 18. EMA provides up to £30 a week. For more information about EMA and Care to Learn, phone 0800 121 8989 or visit http:// moneytolearn.direct.gov.uk

Somewhere to live

Many young mothers want to carry on living with their own family until they are ready to move on. If you are unable to live with your family, your local authority may be able to help you with housing. Some local authorities provide specialised accommodation where young mothers can live independently while getting support and advice from trained workers. For more information about housing, contact your local authority.

Connexions

Teenagers in England can get help and advice from the Connexions service. You have the offer of support from a personal adviser to help deal with a variety of issues so that you can make the best choices for your future. You can find Connexions advisers in a variety of places, including schools, colleges and one-stop shops and through youth and community projects.

For confidential personal advice, practical help or details of your local Connexions service, phone Connexions Direct, on **080 800 13219**, text 07766 4 13219 or go to www.connexions-direct.com

The young woman's guide to pregnancy

The young woman's guide to pregnancy is written specifically for women under the age of 20 and includes the real pregnancy experiences of young mums. It is produced by Tommy's and is available free to teenagers from the Tommy's website at www.tommys.org/publications

For information on sex and contraception, see page 122.

HOW YOUR BABY DEVELOPS

Measuring your pregnancy	18
Week 3	19
Weeks 4–5	19
Weeks 6–7	19
Weeks 8–9	19
Weeks 10–14	20

Weeks 15–22 Weeks 23–30 Weeks 31–40



21 22 23

This chapter describes how your baby develops from the day you conceive until you give birth.

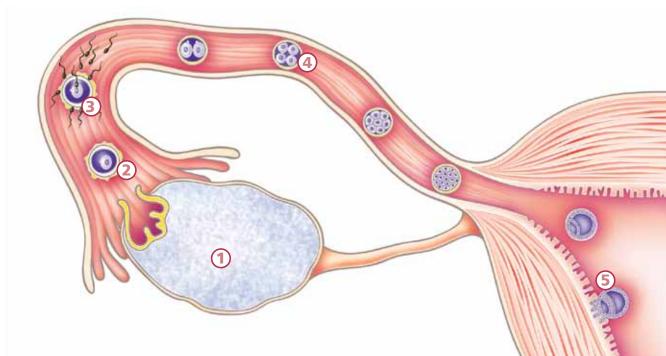
Week 3

- 1 Ovary
- 2 Egg is released from the ovary
- 3 Egg is fertilised
- Fertilised egg divides and travels down fallopian tube
- (5) Embryo implants itself in uterus lining

MEASURING YOUR PREGNANCY

Doctors and midwives in the UK measure the duration of pregnancy from the first day of your last menstrual period, not from the day you conceive. So when you are 'four weeks pregnant', it is actually about two weeks after you conceived. Pregnancy normally lasts for 37–42 weeks from the first day of your last period. The average is 40 weeks. If you are not sure about the date of your last period, then your early scan (see page 48) will give a good indication of when your baby will be due.

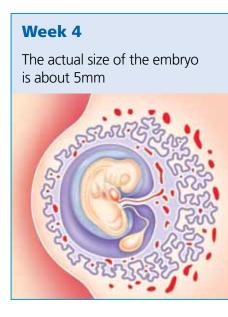
In the very early weeks, the developing baby is called an embryo. From about eight weeks, it is called a fetus.



WEEK 3

This is three weeks from the first day of your last period. The fertilised egg moves slowly along your fallopian tube towards your uterus. It begins as one single cell, which divides again and again. By the time the fertilised egg reaches your uterus, it has become a mass of over 100 cells, called an embryo. It is still growing. Once in your uterus, the embryo attaches itself into your uterus lining. This is called implantation.

WEEKS 4–5



The embryo now settles into your uterus lining. The outer cells reach out like roots to link with your blood supply. The inner cells form two – and then later three – layers. Each of these layers will grow to be different parts of your baby's body. One layer becomes their brain and nervous system, skin, eyes and ears. Another layer becomes their lungs, stomach and gut. The third layer becomes their heart, blood, muscles and bones.

The fifth week is when you will miss your period. At this time, most women are only just beginning to think they may be pregnant. Already your baby's nervous system is starting to develop. A groove forms in the top layer of cells. The cells fold up and round to make a hollow tube called the neural tube. This will become your baby's brain and spinal cord, so the tube has a 'head end' and a 'tail end'. Defects in this tube are the cause of spina bifida (see page 49). The heart is also forming and your baby already has some blood vessels. A string of these blood vessels connects your baby to you – this will become the umbilical cord.

WEEKS 6–7

There is now a large bulge where your baby's heart is and a bump for the head because the brain is developing. The heart begins to beat and can be seen beating on an ultrasound scan. Dimples on the side of the head will become the ears and there are thickenings where the eyes will be. On the body, bumps are forming that will become muscles and bones. And small swellings (called 'limb buds') show where the arms and legs are growing. At seven weeks, the embryo has grown to about 10mm long from head to bottom. This measurement is called the 'crown-rump length'.

Week 6

The actual size from head to bottom is about 8mm





Week 7

The actual size from head to bottom is about 10mm



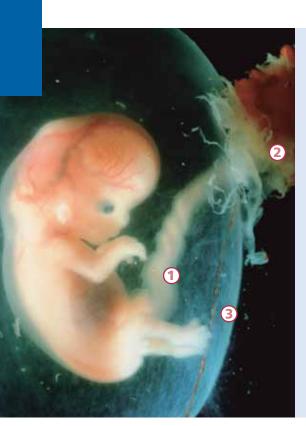
WEEKS 8–9

Your baby's face is slowly forming. The eyes are more obvious and have some colour in them. The fetus has a mouth with a tongue. There are the beginnings of hands and feet, with ridges where the fingers and toes will be. The major internal organs – the heart, brain, lungs, kidneys, liver and gut – are all developing. At nine weeks, the baby has grown to about 22mm long from head to bottom.

Week 9

The actual size from head to bottom is about 22mm





1 The umbilical cord

The umbilical cord is a baby's lifeline. It is the link between you and your baby. Blood circulates through the cord, carrying oxygen and food to the baby and carrying waste away again.

2 The placenta

The placenta is attached to the lining of the uterus and separates your baby's circulation from your circulation. In the placenta, oxygen and food from your bloodstream pass into your baby's bloodstream and are carried to your baby along the umbilical cord. Antibodies that give resistance to infection pass to your baby in the same way. Alcohol, nicotine and other drugs can also pass to your baby this way.

3 The amniotic sac

Inside the uterus, the baby floats in a bag of fluid called the amniotic sac. Before or during labour the sac, or 'membranes', break and the fluid drains out. This is known as the 'waters breaking'.



WEEKS 10-14

Just 12 weeks after conception, the fetus is fully formed. Your baby has all of their organs, muscles, limbs and bones, and their sex organs are developed. From now on your baby will grow and mature. Your baby is already moving about, but you will not be able to feel movements yet. By about 14 weeks, your baby's heartbeat is strong and can be heard by an ultrasound scanner. The heartbeat is very fast – about twice as fast as a normal adult's heartbeat. At 14 weeks, the baby is about 85mm long from head to bottom. Your pregnancy may start to show, but this varies a lot from woman to woman.

Week 14

The actual size from head to bottom is about 85mm



HOW YOUR BABY DEVELOPS

2

WEEKS 15-22

Your baby is growing faster than at any other time in their life. Their body grows bigger so that their head and body are more in proportion, and they don't look so 'top heavy'. The face becomes much more defined and the hair, eyebrows and eyelashes are beginning to grow. Their eyelids stay closed over their eyes. Your baby already has their own individual fingerprints, as the lines on the skin of their fingers are now formed. Their fingernails and toenails are growing and their hands can grip.

At about 22 weeks, your baby becomes covered in a very fine, soft hair called lanugo. We don't know what this hair is for, but it is thought that it may keep the baby at the right temperature. The lanugo disappears before birth or soon after.

Between 16 and 22 weeks, you will usually feel your baby move for the first time. If this is your second baby, you may feel it earlier – at about 16–18 weeks. At first, you feel a fluttering or bubbling, or a very slight shifting movement. This can feel a bit like indigestion. Later, you will be able to tell that it is the baby's movements and you may even see the baby kicking about. Sometimes you will see a bump that is clearly a hand or a foot.











WEEKS 23-30

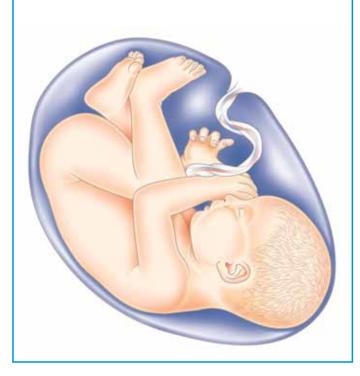
Your baby is now moving about vigorously, and responds to touch and sound. A very loud noise close by may make them jump and kick. They are also swallowing small amounts of the amniotic fluid in which they are floating, and are passing tiny amounts of urine back into the fluid. Sometimes your baby may get hiccups, and you can feel the jerk of each hiccup. Your baby may also begin to follow a pattern for waking and sleeping. Very often this is a different pattern from yours. So when you go to bed at night, your baby may wake up and start kicking.

Your baby's heartbeat can be heard through a stethoscope. Later, your partner may be able to hear the heartbeat by putting their ear to your abdomen, but it can be difficult to find the right place. Your baby is now covered in a white, greasy substance called vernix. It is thought that this may be to protect its skin as it floats in the amniotic fluid. The vernix mostly disappears before the birth.

From 24 weeks, your baby has a chance of survival if it is born. Most babies born before this time cannot live because their lungs and other vital organs are not developed well enough. The care that can now be given in neonatal units means that more and more babies born this early do survive. Babies born at around this time have increased risks of disability.

Week 30

The actual size from head to bottom is about 33cm



2

At around 26 weeks your baby's eyelids open for the first time. Babies' eyes are almost always blue or dark blue, although some babies do have brown eyes at birth. It is not until some weeks after they are born that your baby's eyes will become the colour that they will stay. The head-to-bottom length at 30 weeks is about 33cm.

WEEKS 31-40

Your baby continues to grow. Their skin, which was quite wrinkled before, becomes smoother, and both the vernix and the lanugo begin to disappear.

By about 32 weeks, the baby is usually lying with its head pointing downwards, ready for birth. The baby's head can 'engage', or move down into the pelvis, before birth. Sometimes the head doesn't engage until labour has started.

bonding with your bump

Helpful tips

Regularly talking, reading and singing to your bump while you are pregnant will help you to bond with your baby before birth.

YOUR HEALTH IN PREGNANCY

What should you eat? Foods to avoid Preparing food Vitamins and minerals Vegetarian, vegan and special diets

- 24 Smoking
- 26 Alcohol
- 26 Pills, medicines and
- 27 other drugs
 - Illegal drugs
- 28 X-rays



- 30Keeping active3432Infections36Inherited conditions3833Work hazards3933Flying and travel39
- 34

A healthy diet and lifestyle can help you to keep well during pregnancy and give your baby the best possible start in life. This chapter explains some of the things you can do to stay healthy.

WHAT SHOULD YOU EAT?

A healthy diet is very important if you are pregnant or trying to get pregnant. Eating healthily during pregnancy will help your baby to develop and grow and will help to keep you fit and well. You don't need to go on a special diet, but make sure that you eat a variety of different foods every day in order to get the right balance of nutrients that you and your baby need. You should also avoid certain foods – see 'Foods to avoid' on page 26. You will probably find that you are more hungry than normal, but you don't need to 'eat for two' – even if you are expecting twins or triplets. Have breakfast every day – this will help you to avoid snacking on foods that are high in fat and sugar. You may have to change the amounts of different foods that you eat, rather than cutting out all your favourites.

More information

Visit **www.eatwell.gov.uk** for useful information on what you should eat when you are pregnant or trying for a baby. The leaflets *Eating while you are pregnant* and *Thinking of having a baby?* are also available in several languages.

Both leaflets are available online at www.food.gov.uk or can be ordered on 0845 606 0667.

nutritious and delicious

The eatwell plate

The 'eatwell plate' below shows how much of each type of food you need to have a healthy and well balanced diet.

Fruit and vegetables

As well as vitamins and minerals, fruit and vegetables provide fibre, which helps digestion and prevents constipation. Eat at least five portions of fresh, frozen, canned, dried or juiced fruit and vegetables each day. Always wash them carefully. To get the most out of vegetables, eat them raw

or lightly cooked. For more information and portion sizes, visit www.5aday.nhs.uk

Meat, fish, eggs, beans and other non-dairy sources of protein

Protein includes meat (except liver), fish, poultry, eggs, beans, pulses and nuts (for information on peanuts see page 112). These foods are all good sources of nutrients. Eat moderate amounts each day. Choose lean meat, remove the skin from poultry and cook using only a little fat. Make sure eggs, poultry, pork, burgers and sausages are cooked all the way through. Check that there is no pink meat and that juices have no pink or red in them. Try to eat two portions of fish a week, one of which should be oily fish. There are some fish that you should avoid - see 'Foods to avoid' on page 26 for more information.

Foods and drinks that are high in fat and/or sugar

This food group includes all spreading fats, oils, salad dressings, cream, chocolate, crisps, biscuits, pastries, ice cream, cake, puddings and fizzy drinks. You should only eat a small amount of these foods. Sugar contains calories without providing any other nutrients that the body needs. Having sugary foods and drinks too often can cause tooth decay, especially if you have them between meals. If we eat more than we need, this can lead to weight gain. Eating more fatty foods is likely to make you put on weight. Having too much saturated fat can increase the amount of cholesterol in the blood, which increases the chance of developing heart disease. Try to cut down on food that is high in saturated fat and have foods rich in unsaturated fat instead.

Bread, rice, potatoes, pasta and other starchy foods

Carbohydrates are satisfying without containing too many calories, and are an important source of vitamins and fibre. They include bread, potatoes, breakfast cereals, pasta, rice, oats, noodles, maize, millet, yams, cornmeal and sweet potatoes. These foods should be the main part of every meal. Eat wholegrain varieties when you can.



Milk and dairy foods

Dairy foods like milk, cheese, yoghurt and fromage frais are important because they contain calcium and other nutrients that your baby needs. Eat two or three portions a day, using low-fat varieties whenever you can – for example, semi-skimmed or skimmed milk, low-fat voghurt and half-fat hard cheese. However, there are some cheeses that you should avoid – see 'Foods to avoid' on page 26 for more information.

FOODS TO AVOID

There are some foods that you should not eat when you are pregnant because they may make you ill or harm your baby.

You should avoid:

- Some types of cheese. Don't eat mould-ripened soft cheese, like Brie, Camembert and others with a similar rind. You should also avoid soft blue-veined cheese. like Danish blue. These are made with mould and they can contain listeria, a type of bacteria that can harm your unborn baby. Although listeriosis is a very rare infection, it is important to take special precautions during pregnancy because even the mild form of the illness in the mother can lead to miscarriage, stillbirth or severe illness in a newborn baby. You can eat hard cheeses such as cheddar and parmesan, and processed cheeses made from pasteurised milk such as cottage cheese, mozzarella and cheese spreads.
- **Pâté.** Avoid all types of pâté, including vegetable pâtés, as they can contain listeria.

PREPARING FOOD

- Wash fruit, vegetables and salads to remove all traces of soil, which may contain toxoplasma. This can cause toxoplasmosis, which can harm your baby (see page 37).
- Heat ready-meals until they are piping hot all the way through. This is especially important for meals containing poultry.
- Keep leftovers covered in the fridge and use within two days.
- Wash all surfaces and utensils, and your hands, after preparing raw meat. This will help to avoid infection with toxoplasma.

- Raw or partially cooked eggs. Make sure that eggs are thoroughly cooked until the whites and yolks are solid. This prevents the risk of salmonella food poisoning. Avoid foods that contain raw and undercooked eggs, such as homemade mayonnaise.
- Raw or undercooked meat. Cook all meat and poultry thoroughly so that there is no trace of pink or blood. Take particular care with sausages and minced meat. It is fine to eat steaks and other whole cuts of beef and lamb rare, as long as the outside has been properly cooked or sealed.
- Liver products. Don't eat liver, or liver products like liver pâté or liver sausage, as they may contain a lot of vitamin A. Too much vitamin A can harm your baby.
- Supplements containing vitamin A. Don't take highdose multivitamin supplements, fish liver oil supplements or any supplements containing vitamin A.
- Some types of fish. Don't eat shark, marlin and swordfish, and limit the amount of tuna you eat to no more than two tuna steaks a week (about 140g cooked or 170g raw each) or four mediumsized cans of tuna a week (about 140g when drained). These types of fish contain high levels of mercury, which can damage your baby's developing nervous system. Don't eat more than two portions of oily fish per week. Oily fish includes fresh tuna (but not canned tuna), salmon, mackerel, sardines and trout.
- **Raw shellfish.** Eat cooked rather than raw shellfish as they can contain harmful bacteria and viruses that can cause food poisoning.
- **Peanuts.** If you would like to eat peanuts or foods containing peanuts (such as peanut butter) during pregnancy, you can choose to do so as part of a healthy

balanced diet, unless you are allergic to them or your health professional advises you not to.

You may have heard that some women have, in the past, chosen not to eat peanuts when they were pregnant. This is because the government previously advised women that they may wish to avoid eating peanuts during pregnancy if there was a history of allergy in their child's immediate family (such as asthma, eczema, hayfever, food allergy or other types of allergy). But this advice has now been changed because the latest research has shown that there is no clear evidence to say if eating or not eating peanuts during pregnancy affects the chances of your baby developing a peanut allergy.

• Unpasteurised milk. Drink only pasteurised or UHT milk which has been pasteurised. If only raw or green-top milk is available, boil it first. Don't drink unpasteurised goats' or sheep's milk or eat certain food that is made out of them, e.g. soft goats' cheese.

Your weight

Most women gain between 10kg and 12.5kg (22–28lb) while pregnant. Weight gain varies a great deal and depends on your weight before pregnancy.

Much of the extra weight is due to the baby growing. Putting on too much weight can affect your health and increase your blood pressure. Equally, it is important that you do not diet, but eat healthily. Try and stay active by keeping up your normal daily activity or exercise. If you are concerned, talk to your midwife or GP. They may give you advice if you weigh more than 100kg (about 15½ stone) or less than 50kg (about 8 stone).



VITAMINS AND MINERALS

Eating a healthy, varied diet will help you to get all the vitamins and minerals you need while you are pregnant. There are some vitamins and minerals that are especially important:

• Folic acid. Folic acid is important for pregnancy as it can reduce the risk of neural tube defects such as spina bifida. If you are thinking about getting pregnant, you should take a 400 microgram folic acid tablet every day until you are 12 weeks pregnant. If you did not take folic acid before you conceived, you should start as soon as you find out that you are pregnant. You should also eat foods that contain folic acid, such as green leafy vegetables, fortified breakfast cereals and brown rice. Some breakfast cereals, breads and margarines have folic acid added to them. If you already have a baby with spina bifida, or if you have coeliac disease or diabetes or take anti-epileptic medicines, ask your GP or midwife for more advice. You will need to take a bigger dose of folic acid.

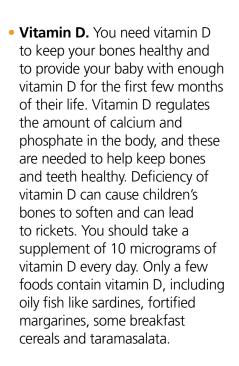
More information



information about folic acid, read Folic acid: An essential guide for making babies at www.breastfeeding.nhs.uk/en/ materialforclients/dl 13.asp

For more

Foods carrying the mark on the right have added folic acid.



The best source of vitamin D is summer sunlight. The amount of time you need in the sun to make enough vitamin D is different for every person and depends on things like skin type, time of day and time of the year. But you don't need to sunbathe: the amount of sun you need to make enough vitamin D is less than the amount that causes tanning or burning. If you have dark skin or always cover your skin, you may be at particular risk of vitamin D deficiency. Talk to your midwife or doctor if you are worried about this. (See also 'Vitamin supplements' on page 28.)

- Iron. If you are short of iron, you will probably get very tired and you can become anaemic. Lean meat, green, leafy vegetables, dried fruit and nuts (see page 26 about avoiding peanuts) all contain iron. Many breakfast cereals have iron added. If the iron level in your blood becomes low, your GP or midwife will advise you to take iron supplements. These are available as tablets or a liquid.
- Vitamin C. You need vitamin C as it may help you to absorb iron. Citrus fruits, tomatoes, broccoli, peppers, blackcurrants, potatoes and some pure fruit juices are good sources of vitamin C. If your iron levels are low, it may help to drink orange juice with an iron-rich meal.
- **Calcium.** Calcium is vital for making your baby's bones and teeth. Dairy products and fish with edible bones like sardines are rich in calcium. Breakfast cereals, dried fruit such as figs and apricots, bread, almonds, tofu (a vegetable protein made from soya beans) and green leafy vegetables like watercress, broccoli and curly kale are other good sources of calcium.

YOUR HEALTH IN PREGNANCY

Vitamin supplements

It is best to get vitamins and minerals from the food you eat, but when you are pregnant you will need to take some supplements as well:

- 10 micrograms of vitamin D throughout your pregnancy and if you breastfeed.
- 400 micrograms of folic acid

 ideally this should be taken from before you get pregnant until you are 12 weeks pregnant.

If you are vegetarian or vegan, you may need to take a vitamin B12 supplement as well as other supplements. Talk to your doctor or midwife about this.

If you have a special or restricted diet, you may need additional supplements. Talk to your doctor or midwife about this.

Do not take vitamin A supplements, or any supplements containing vitamin A, as too much could harm your baby.

Which supplements?

You can get supplements from pharmacies and supermarkets or your GP may be able to prescribe them for you. If you want to get your folic acid or vitamin D from a multivitamin tablet, make sure that the tablet does not contain vitamin A (or retinol).

Healthy Start vitamins for women contain the correct amount of folic acid and vitamin D and are free from the NHS without a prescription to pregnant women receiving Healthy Start vouchers. Ask your GP or pharmacist for advice if you are unsure (see 'Healthy Start' on this page). Your primary care trust and local pharmacies may sell this supplement to women who don't receive it free.



Healthy Start

Healthy Start is a scheme that provides vouchers that can be exchanged for milk, fresh fruit and vegetables and infant formula milk. You can also receive free vitamins.

You qualify for Healthy Start if you are pregnant or have a child under four years old, and you and your family receive one of the following:

- Income Support.
- Income-based Jobseeker's Allowance.
- Child Tax Credit and have an annual family income of £16,040 or less (2008/09).
- Working Tax Credit run-on (but not Working Tax Credit). Working Tax Credit run-on is the Working Tax Credit you receive in the four weeks immediately after you have stopped working for 16 hours or more per week.

Or you qualify if you are pregnant and under 18 years of age.

You can receive vouchers that are worth £3.10 per week or £6.20 per week for children under one year old.

For further information:

- Pick up the Healthy Start leaflet HS01, A Healthy Start for Pregnant Women and Young Children from your local health centre or call 0845 607 6823 to request a free copy.
- Ask your health visitor for more information.
- Visit www.healthystart.nhs.uk

VEGETARIAN, VEGAN AND SPECIAL DIETS

A varied and balanced vegetarian diet should give enough nutrients for you and your baby during pregnancy. However, you might find it hard to get enough iron and vitamin B12. Talk to your doctor or midwife about how you can make sure that you are getting enough of these important nutrients.

You should also talk to your doctor or midwife if you have a restricted diet because you have a food intolerance (such as coeliac disease) or for religious reasons. Ask to be referred to a dietician who can give you advice on how to get the nutrients you need for you and your baby.

More information

For further information, visit:

- the Vegetarian Society website at www.vegsoc.org
- the Vegan Society website at www.vegansociety.com

3

Healthy snacks

You may find that you get hungry between meals. Avoid snacks that are high in fat and/or sugar. Instead you could try the following:

- Fresh fruit.
- Sandwiches or pitta bread filled with grated cheese, lean ham, mashed tuna, salmon or sardines and salad.



- Salad vegetables.
- Low-fat yoghurt or fromage frais.
- Hummus and bread or vegetable sticks.
- Ready-to-eat apricots, figs or prunes.
- Vegetable and bean soups.
- Unsweetened breakfast cereals or porridge and milk.
- Milky drinks or unsweetened fruit juices.
- Baked beans on toast or a baked potato.

Caffeine

High levels of caffeine can result in babies having a low birth weight, which can increase the risk of health problems in later life.

Too much can also cause miscarriage. Caffeine is naturally found in lots of foods, such as coffee, tea and chocolate, and is added to some soft drinks

and energy drinks. It can also be found in certain cold and flu remedies. Talk to your midwife, pharmacist or another health professional before taking these remedies.

You don't need to cut caffeine out completely, but you should limit how much you have to no more than 200mg a day. Try decaffeinated tea and coffee, fruit juice or water and limit the amount of 'energy' drinks, which may be high in caffeine. Don't worry if you occasionally have more than this, because the risks are quite small.

Caffeine content in food and drink

- 1 mug of instant coffee: 100mg
- 1 mug of filter coffee: 140mg
- 1 mug of tea: 75mg
- 1 can of cola: 40mg
- 1 can of 'energy' drink: up to 80mg
- 1 x 50g bar of plain chocolate: up to 50mg
- 1 x 50g bar of milk chocolate: up to 25mg

So if you eat...

- one bar of plain chocolate and one mug of filter coffee
- two mugs of tea and one can of cola, or
- one mug of instant coffee and one can of energy drink

you have reached almost 200mg of caffeine.

healthy options

Help and support

Getting help with stopping smoking



The Smokefree Pregnancy Support DVD will show you all the free NHS support available to help you to stop and stay stopped. To order your free DVD, call the NHS Pregnancy Smoking Helpline on 0800 169 9 169, or visit www.nhs.uk/smokefree

The NHS Pregnancy Smoking Helpline on **0800 169 9 169** is open from 12pm to 9pm

every day and offers free help, support and advice on stopping smoking when you are pregnant.

You can also sign up to receive ongoing advice and support at a time that suits you.

You can also ask your midwife, health visitor, practice nurse or pharmacist for advice and for the details of your local NHS Stop Smoking Service. They offer one-to-one or group sessions with trained stop smoking advisers and may even have a pregnancy stop smoking specialist. They can offer advice about dealing with stress, weight gain and nicotine replacement therapy to help you manage your cravings.

SMOKING

Every cigarette you smoke harms your baby. Cigarettes restrict the essential oxygen supply to your baby. So their tiny heart has to beat harder every time you smoke. Cigarettes contain over 4,000 chemicals. Protecting your baby from tobacco smoke is one of the best things you can do to give your child a healthy start in life.

It's never too late to stop.

If you stop smoking now

Stopping smoking will benefit both you and your baby immediately. Carbon monoxide and chemicals will clear from the body and oxygen levels will return to normal.



Stopping smoking action plan

1 Think

Think about:

- what you and your baby will gain if you stop smoking (see above)
- how much smoking costs you.
- What else could you spend your money on? How can you treat yourself or your baby with the money you save?
- What is keeping you smoking?

List your top five reasons for going smokefree; e.g. protecting your health or the health of your baby.

2_____

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If you stop smoking:

- You will have less morning sickness and fewer complications in pregnancy.
- You are more likely to have a healthier pregnancy and a healthier baby.
- You will reduce the risk of stillbirth.
- You will cope better with the birth.
- Your baby will cope better with any birth complications.
- Your baby is less likely to be born too early and have to face the additional breathing, feeding and health problems which often go with being premature (see Chapter 14).
- Your baby is less likely to be born underweight and have a problem keeping warm. Babies of mothers who smoke are, on average, 200g (about 8oz) lighter than other babies. These babies may have problems during and after labour and are more prone to infection.
- You will reduce the risk of cot death (see page 129 for more information about how to reduce the risk of cot death).

It will also be better for your baby later in life. Children whose parents smoke are more likely to suffer from illnesses which need hospital treatment (such as asthma).

The sooner you stop, the better. But stopping even in the last few weeks of pregnancy will benefit you and your baby.

2 Get help

Take advantage of the free NHS support that is available to you. You are four times more likely to quit successfully with NHS support. See the 'Help and support' box on the left for more information.

Ask your friends and family to help and support you.

3 Prepare

If you understand why you smoke and what triggers your smoking, you will be able to prepare yourself so that you can cope when you quit. It can help to:

- give up with somebody else, so that you can support each other
- change the habits you associate with smoking, and
- plan how you will deal with difficult situations without the use of cigarettes.

Choose a day to stop. Will the first few days be easier during a working week or over a weekend? When you are busy or relaxed? Whatever you choose, stop completely on that day.

Review your plan and get rid of all of your cigarettes the day before your day for stopping.

My chosen day for stopping smoking is:

4 Stop smoking

Lots of people start smoking again because they feel they cannot cope with the withdrawal symptoms. The first few days may not be much fun but the symptoms are a sign that your body is starting to recover.

Take one day at a time and reward yourself for success.

Go through your list of reasons for going smokefree to remind yourself why you have given up.

If you have had a scan, use your scan images to keep you going through the times when you are finding it tough.

Secondhand smoke

If your partner or anyone else who lives with you smokes, it can affect you and your baby both before and after birth. You may also find it more difficult to quit.

Secondhand smoke can cause low birth weight and cot death. Infants of parents who smoke are more likely to be admitted to hospital for bronchitis and pneumonia during the first year of life, and more than 17,000 children under the age of five are admitted to hospital every year because of the effects of secondhand smoke.



What is a unit of alcohol?

One UK unit is 10ml, or 8g, of pure alcohol. A unit is:





or

¹/₂ pint of beer, lager or cider at 3.5% ABV

a single measure (25ml) of spirit (whisky, gin, bacardi, vodka, etc.) at 40% ABV



To find out more about units, visit the Know Your Limits website at www.nhs.uk/units



ALCOHOL

When you drink, alcohol reaches your baby through the placenta. Too much exposure to alcohol can seriously affect your baby's development.

Because of this risk, pregnant women or women trying to conceive should avoid drinking alcohol. If you do choose to drink, then protect your baby by not drinking more than 1 to 2 units of alcohol once or twice a week, and don't get drunk. Additional advice from the National Institute for Health and Clinical Excellence (NICE) advises women to avoid alcohol in the first three months in particular, because of the increased risk of miscarriage.

When you drink, alcohol passes from your blood, through the placenta, to your baby. A baby's liver is one of the last organs to develop fully and does not mature until the latter half of pregnancy. Your baby cannot process alcohol as well as you can.

at 11.5% ABV

Drinking is not just dangerous for the baby in the first three months: alcohol can affect your baby throughout pregnancy. And if you drink heavily during pregnancy, a particular group of problems could develop that are known as Fetal Alcohol Syndrome (FAS). Children with this syndrome have:

- restricted growth
- facial abnormalities
- learning and behavioural disorders.

Drinking more than 1 to 2 units once or twice a week, as well as binge drinking, may be associated with lesser forms of FAS. The risk is likely to be greater the more you drink.

If you are drinking with friends:

- find a non-alcoholic drink that vou enjov
- sip any alcohol you do drink slowly to make it last
- don't let people pressure you into drinking, and
- avoid getting drunk.

Help and support

Getting help with drinking

If you have difficulty cutting down what you drink, talk to your doctor, midwife, pharmacist or other healthcare professional. Confidential help and support is available from local counselling services (look in the telephone directory or contact Drinkline on 0800 917 8282).

You should talk to your midwife if you have any concerns you have about your drinking around the time of conception and early pregnancy. You can get more advice from www.nhs.uk/units



PILLS, MEDICINES AND OTHER DRUGS

Some medicines, including some common painkillers, can harm your baby's health but some are safe, for example medication to treat longterm conditions such as asthma, thyroid disease, diabetes and epilepsy. To be on the safe side, you should:

- always check with your doctor, midwife or pharmacist before taking any medicine
- make sure that your doctor, dentist or other health professional knows you are pregnant before

they prescribe you anything or give you treatment

- talk to your doctor if you take regular medication – ideally before you start trying for a baby or as soon as you find out you are pregnant, and
- use as few over the counter medicines as possible.

Medicines and treatments that are usually safe include paracetamol, most antibiotics, dental treatments (including local anaesthetics), some immunisations (including tetanus and flu injections) and nicotine replacement therapy. But you should always check with your GP, pharmacist or midwife first.

ILLEGAL DRUGS

Illegal drugs like cannabis, ecstasy, cocaine and heroin can harm your baby. If you use any of these drugs, it is important to talk to your doctor or midwife so that they can provide you with advice and support to help you stop. They can also refer you for additional support. Some dependent drug users initially need drug treatment to stabilise or come off drugs to keep the baby safe. For more information, contact Narcotics Anonymous (see page 183) or talk to FRANK, the drugs information line, on 0800 77 66 00.

Medicines for minor ailments when pregnant

- Make sure the medicine is safe to take when pregnant.
- For further information, speak to your pharmacist or NHS Direct on 0845 4647.

Minor ailment	First choice	Second choice	Do not use
Constipation	Eat more fibre. Bulk laxatives that contain ispaghula.	On your doctor's advice: bisacodyl or lactulose.	
Cough	Honey and lemon in hot water. Simple linctus.		Medicines that contain codeine, unless advised by your doctor.
Diarrhoea	Oral rehydration sachets.		Loperamide.
Haemorrhoids (piles)	Soothing creams, ointments or suppositories.	lce pack.	
Hayfever, house dust mite and animal hair allergy	Antihistamine nasal sprays and eye drops. Steroid nasal sprays.	On your doctor's advice: occasional doses of the antihistamines loratadine or chlorphenamine.	Other antihistamines.
Head lice	Wet combing. Dimeticone lotion.	If ineffective, head lice treatments containing malathion in water (aqueous lotion).	
Indigestion	Antacids (indigestion mixtures).	On your doctor's advice: medicines that reduce acid production, e.g. omeprazole.	
Nasal congestion (stuffy or runny nose)	Steam inhalation (e.g. over a bowl of hot water) or a hot shower.	If severe, occasional doses of oxymetazoline or xylometazoline nasal spray.	Phenylephrine or pseudoephedrine, especially in the 1st trimester.
Pain (e.g. headache, toothache)	Paracetamol.	Ibuprofen may be taken in the 2nd trimester (weeks 14 to 27) but avoid taking it in the 1st or 3rd trimesters unless advised by your doctor.	Medicines that contain codeine (e.g. co-codamol, co-dydramol, dihydrocodeine), unless advised by your doctor.
Threadworms	Pharmacists cannot supply threadworm medicines to pregnant women without a prescription.	On your doctor's advice: mebendazole, but preferably not in the 1st trimester.	
Vaginal thrush	Pharmacists cannot supply medicines for vaginal thrush to pregnant women without a prescription.	On your doctor's advice: clotrimazole pessaries or cream. Do not use the pessary applicator if you are near term (at the end of your pregnancy).	Fluconazole.

3



Exercise tips

- Exercise doesn't have to be strenuous to be beneficial.
- Make sure that you warm up and cool down.
- Try to keep active on a daily basis. Half an hour of walking each day can be enough. If you cannot manage that, any amount is better than nothing.
- Avoid any strenuous exercise in hot weather.
- Drink plenty of water and other fluids.
- If you go to exercise classes, make sure that your teacher is properly qualified and knows that you are pregnant and how far your pregnancy has progressed.
- You might like to try swimming, because the water will support your increased weight. Some local swimming pools provide aquanatal classes with qualified instructors.

Exercises to avoid

- Lying flat on your back particularly after 16 weeks. The 'bump' presses on the big blood vessels and can make you feel faint.
- Contact sports where there is a risk of being hit, such as kickboxing, judo or squash.
- Horse riding, downhill skiing, ice hockey, gymnastics and cycling, because there is a risk of falling.
- Scuba diving, because the baby has no protection against decompression sickness and gas embolism.
- Exercising at heights over 2,500 metres until you have acclimatised. This is because you and your baby are at risk of acute mountain sickness (decrease in oxygen).

Exercises for a fitter pregnancy

Try to fit these exercises into your daily routine. They will strengthen your muscles so that you can carry extra weight, make your joints stronger, improve your circulation, ease backache and generally make you feel well.

Stomach-strengthening exercises

These strengthen your stomach (abdominal) muscles and ease backache, which can be a problem in pregnancy. As your baby gets bigger you may find that the hollow in your lower back becomes more pronounced, which can lead to backache.

 Start in a box position (on all fours), with your knees under your hips, your hands under your shoulders, your fingers facing forward and your stomach muscles lifted so that your back is straight.



 Pull in your stomach muscles and raise your back up towards the ceiling, curling your trunk and allowing your head to relax gently forward. Don't let your elbows lock.



Herbal and homeopathic remedies and aromatherapy

Not all 'natural' remedies are safe in pregnancy. Contact the Institute for Complementary and Natural Medicine to make sure that your practitioner is qualified (see page 183). Tell your practitioner that you are pregnant, and tell your midwife or doctor and pharmacist which remedies you are using.

X-RAYS

X-rays should be avoided in pregnancy if possible. Make sure that your dentist knows you are pregnant.

KEEPING ACTIVE

The more active and fit you are during pregnancy, the easier it will be for you to adapt to your changing shape and weight gain. It will also help you to cope with labour and to get back into shape after the birth.

Keep up your normal daily physical activity or exercise (sport, dancing or just walking to the shops and back) for as long as you feel comfortable. Don't exhaust yourself, and remember that you may need to slow down as your pregnancy progresses or if your doctor advises you to. As a general rule, you should be able to hold a conversation as you exercise. If you become breathless as you talk, then you are probably exercising too strenuously.

If you were inactive before you were pregnant, don't suddenly take up strenuous exercise. If you start an aerobic exercise programme, begin with no more than 15 minutes' continuous exercise, three times per week. Increase this gradually to a maximum of 30-minute sessions, four times a week. Inform the instructor that you are pregnant.

- Hold for a few seconds then slowly return to the box position.
- Take care not to hollow your back – it should always return to a straight or neutral position.
- Do this slowly and rhythmically 10 times, making your muscles work hard and moving your back carefully. Only move your back as far as you can comfortably.

Pelvic tilt exercises

Stand with your shoulders and bottom against a wall. Keep your knees soft. Pull your belly button towards your spine, so that your back flattens against the wall. Hold for four seconds and release. Repeat up to 10 times.

Pelvic floor exercises

Pelvic floor exercises help to strengthen the muscles of the pelvic floor, which are placed under great strain in pregnancy and childbirth.

The pelvic floor consists of layers of muscles which stretch like a supportive hammock from the pubic bone (in front) to the base of the backbone. During pregnancy you may find that you leak urine when you cough or strain. This is known as stress incontinence of urine and it can continue after pregnancy. By performing pelvic floor exercises, you strengthen the pelvic floor muscles and this helps to reduce or avoid this problem after pregnancy. It is important to do them even if you are young and not suffering from stress incontinence now.

- Close up your back passage as if trying to prevent a bowel movement.
- At the same time, draw in your vagina as if you are gripping a tampon, and your urethra as if to stop the flow of urine.
- First do this exercise quickly tightening and releasing the muscles straight away.
- Then do it slowly, holding the contractions for as long as you can before you relax. Try to count to 10.
- Try to do three sets of eight squeezes every day. To help you remember, you could do them once at each meal.

As well as these exercises, you will also need to practise tightening up the pelvic floor before and during coughing and sneezing.

Ask your midwife or doctor about these exercises. Your local maternity unit should run classes where a specialist physiotherapist attends. They can instruct you in groups or individually. Feel free to ask them for advice and help.

Foot exercises

Foot exercises can be done sitting or standing. They improve blood circulation, reduce swelling in the ankles and prevent cramp in the calf muscles.

- Bend and stretch your foot vigorously up and down 30 times.
- Rotate your foot eight times one way and eight times the other way.
- Repeat with the other foot.



To protect your back

- Sit up straight with your bottom against the back of your chair. Tuck a small cushion behind your waist if you wish.
- When you pick something up, bend your knees, not your back.
- Try to stand tall.

gentle exercise

INFECTIONS

Rubella

If you catch rubella (or German measles) in the first four months of pregnancy it can seriously affect your baby's sight and hearing and cause brain and heart defects. All children are now offered a vaccine against rubella through the MMR immunisation at 13 months and a second immunisation before they start school.

If you are not immune and you do come into contact with rubella, tell your doctor at once. Blood tests will show whether you have been infected.

More information

For more information, read the information on screening tests in Chapter 4 or go to www.screening.nhs.uk

Sexually transmitted infections

Sexually transmitted infections (STIs) are on the increase. The most common is chlamydia. Up to 70% of women and 50% of men who have an STI show no symptoms, so you may not know if you have one. However, many STIs can affect your baby's health during pregnancy and after birth. If you have any reason to believe that you or your partner has an STI, you should go for a check-up as soon as you can. You can ask your GP or midwife, or go to a genitourinary medicine (GUM) or sexual health clinic. You will be guaranteed strict confidentiality. You can find your nearest GUM clinic or sexual health clinic in your phone book listed under the name of your primary care trust or at www.nhsdirect.nhs.uk or you can call the Sexual Health Helpline free on 0800 567 123.

If you are under 25, you can visit a Brook centre to get free, confidential advice. To find your nearest centre, visit www.brook.org. uk or call the Ask Brook national helpline on 0808 802 1234.

You can contact the National Chlamydia Screening Programme for a free, confidential test. Visit www.chlamydiascreening.nhs.uk

HIV and AIDS

You will be offered a confidential HIV test as part of your routine antenatal care (see page 47). Your doctor or midwife will discuss, the test with you, and counselling will be available if the result is positive. You can also go to a GUM clinic for an HIV test and advice.

Current evidence suggests that an HIV positive mother in good health and without symptoms of the infection is unlikely to be adversely affected by pregnancy. HIV positive mothers can pass on the virus through breastmilk. However, it is possible to reduce the risk of transmitting HIV to your baby during pregnancy and after birth (see box on page 47).

If you are HIV positive, talk to your doctor about your own health and the options open to you, or contact the organisations listed on page 185 for advice and counselling.

seek medical advice



Hepatitis B

Hepatitis B is a virus that infects the liver. Many people with hepatitis B, will have no signs of illness, but they might infect others. If you have hepatitis B, or are infected during pregnancy, you can pass the infection to your baby at birth. You will be offered a blood test for hepatitis B as part of your antenatal care (see page 47). Babies who are at risk should be immunised at birth. This is 90–95% effective in preventing them from getting hepatitis B and developing longterm infection. The first dose is given within 24 hours of birth and two more doses are given at one and two months, with a booster dose at 12 months. A few babies may also need an injection of hepatitis B immunoglobulin soon after birth. Your baby will be tested for hepatitis B infection at 12 months. Any babies who have become infected should be referred for specialist assessment and follow-up.

You can get infected with HIV, hepatitis B, or hepatitis C if you:

- have sex with someone who is infected without using a condom
- use injectable drugs and share equipment with an infected person.

You may have already been infected with hepatitis B if you were born or spent your childhood outside the UK in a country where hepatitis B is common. (You may have acquired the infection at birth.)

Hepatitis C

Hepatitis C is a virus that infects the liver. Many people with hepatitis C may have no symptoms and be unaware that they are infected. If you have hepatitis C, you might pass the infection to your baby, although the risk is much lower than with hepatitis B or HIV. This cannot be prevented at present. Your baby can be tested for hepatitis C. If they are infected, they can be referred for specialist assessment.

Herpes

Genital herpes infection can be caught through genital contact with an infected person or from oral sex with someone who has oral herpes (cold sores) and can be dangerous for a newborn baby. Initial infection causes very painful blisters or ulcers on the genitals. Less severe attacks usually occur for some years afterwards. If you or your partner are infected, use condoms or avoid sex during an attack. Avoid oral sex if either of you have cold sores or active genital herpes. Tell your doctor or midwife if either you or your partner have recurring herpes or develop the symptoms described above. If your first infection occurs in pregnancy, there is treatment available. If your first infection occurs towards the end of your pregnancy or during

You may have been infected with hepatitis C if you:

- received a blood transfusion in the UK prior to September 1991, or blood products prior to 1986
- received medical or dental treatment in countries where hepatitis C is common and the infection is not controlled properly.

labour, a caesarean section may be recommended to reduce the risk of transmission to your baby.

Chickenpox

Around 95% of women are immune to chickenpox. If you have not had it and you come into contact with someone who has it, speak to your GP, midwife or obstetrician at once. A blood test will establish whether you are immune. Chickenpox infection in pregnancy can be dangerous for both mother and baby, so seek advice as soon as possible.

Toxoplasmosis

This infection can damage your baby if you catch it during pregnancy, so take precautions (see page 38). Most women have already had the infection before pregnancy and will be immune. If you feel you may have been at risk, talk to your GP, midwife or obstetrician. If you do catch toxoplasmosis while you are pregnant, you can get treatment.

Parvovirus B19 (slapped cheek disease)

Parvovirus B19 infection is common in children and causes a characteristic red rash on the face, so it is often called 'slapped cheek disease'.

60% of women are immune to this infection. However, parvovirus B19 is very infectious and can be harmful to your baby. If you come into contact with someone who is infected you should talk to your doctor, who can check whether you are immune through a blood test. In most cases, the baby is not affected when a pregnant woman is infected with parvovirus.

Group B streptococcus

Group B streptococcus (GBS) is a bacterium carried by up to 30% of people which causes no harm or symptoms. In women it is found in the intestine and vagina and causes no problem in most pregnancies. In a very small number it infects the baby, usually just before or during labour, leading to serious illness.

If you have already had a baby who had group B streptococcal infection, you should be offered antibiotics during labour to reduce the chances of your new baby getting the infection. If you have had a group B streptococcal urinary tract infection with GBS (cystitis) during the pregnancy, you should also be offered antibiotics in labour. Group B streptococcal infection of the baby is more likely if your labour is premature, your waters break early, you have a fever during labour or you currently carry GBS. Your midwife or doctor will assess whether you need antibiotics during labour to protect your baby from being infected.

It is possible to be tested for GBS late in pregnancy if you have concerns. Talk to your doctor or midwife.



Infections transmitted by animals

Cats

Cats' faeces can contain an organism which causes toxoplasmosis. Avoid emptying cat litter trays while you are pregnant. If no one else can do it, use disposable rubber gloves. Trays should be cleaned daily and filled with boiling water for five minutes.

Avoid close contact with sick cats and wear gloves when gardening – even if you don't have a cat – in case the soil is contaminated with faeces. Wash your hands and gloves after gardening. If you do come into contact with cat faeces, make sure that you wash your hands thoroughly. Follow the general hygiene rules under 'Preparing food' (page 26).



Sheep

Lambs and sheep can be a source of an organism called *Chlamydia psittaci*, which is known to cause miscarriage in ewes. They also carry toxoplasma. Avoid lambing or milking ewes and all contact with newborn lambs. If you experience flu-like symptoms after coming into contact with sheep, tell your doctor.

Pigs

Research is going on to see if pigs can be a source of hepatitis E infection. This infection is dangerous in pregnant women, so avoid contact with pigs and pig faeces. There is no risk of hepatitis E from eating cooked pork products.

INHERITED CONDITIONS

Some diseases or conditions are inherited from one or both parents. These include cystic fibrosis, haemophilia, muscular dystrophy, sickle cell disorders and thalassaemia. If you, your baby's father or any of your relatives has an inherited condition or if you already have a baby with a disability, talk to your doctor. You may be able to have tests early in pregnancy to check whether your baby is at risk or affected (see page 49). Ask your GP or midwife to refer you to a genetic counsellor (a specialist in inherited diseases) for advice. Ideally, you should do this before you get pregnant or in the early weeks of pregnancy.

WORK HAZARDS

If you work with chemicals, lead or X-rays, or in a job with a lot of lifting, you may be risking your health and the health of your baby. If you have any worries about this, you should talk to your doctor, midwife, occupational health nurse, union representative or personnel department.

If it is a known and recognised risk, it may be illegal for you to continue, and your employer must offer you suitable alternative work on the same terms and conditions as your original job. If no safe alternative is available, your employer should suspend you on full pay (give you paid leave) for as long as necessary to avoid the risk. If your employer fails to pay you during your suspension, you can bring a claim in an employment tribunal (within three months). This will not affect your maternity pay and leave. See also pages 168–169.

Coping at work

You might get extremely tired – particularly in the first few and last few weeks of your pregnancy. Try to use your lunch break to eat and rest, not to do the shopping. If travelling in rush hour is exhausting, ask your employer if you can work slightly different hours for a while.

Don't rush home and start another job cleaning and cooking. If you have a partner, ask them to take over. If you are on your own, keep housework to a minimum, and go to bed early if you can.

Your rights to antenatal care, leave and benefits are set out in Chapter 17.

Computer screens

The most recent research shows no evidence of a risk from visual display units on computer terminals and word processors.

FLYING AND TRAVEL

Flying is not harmful for you or your baby, but some airlines will not let you fly towards the end of your pregnancy, and you should check conditions with them.



Long distance travel (longer than five hours) carries a small risk of thrombosis (blood clots) in pregnant women. If you fly, drink plenty of water to stay hydrated and do the recommended calf exercises. You can buy a pair of support stockings in the pharmacy over the counter, which will reduce leg swelling.

Before you travel, think about your destination. Could you get medical help if you needed it? Are any immunisations needed which might be harmful to the pregnancy?

If you are travelling to Europe, make sure that you have a European Health Insurance Card (formerly known as E111), which entitles you to free treatment while abroad. You can get this from:

- a post office
- by calling 0845 606 2030, or
- from www.ehic.org



Safety on the move

Road accidents are among the most common causes of injury in pregnant women. To protect yourself and your baby, always wear your seatbelt with the diagonal strap across your body between your breasts and with the lap belt over your upper thighs. The straps should lie above and below your bump, not over it.

ANTENATAL CARE

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Antenatal care is the care that you receive from healthcare professionals during your pregnancy. You will be offered a series of appointments with a midwife, or sometimes with a doctor (an obstetrician). They will check that you and your baby are well, give you useful information about being pregnant and what to expect as well as answering any questions you may have.

41 44

45

48 49

As soon as you know you are pregnant, you should get in touch with a midwife or your GP to organise your antenatal care. It's best to see them as early as possible. Let your midwife know if you have a disability that means you have special requirements for your antenatal appointments or labour. If you don't speak English, let your midwife know and arrangements will be made for an interpreter.

It is important to tell your midwife or doctor if:

- there were any complications or infections in a previous pregnancy or delivery, such as pre-eclampsia or premature birth
- you are being treated for a chronic disease such as diabetes or high blood pressure
- you or anyone in your family has previously had a baby with an abnormality, for example spina bifida
- there is a family history of an inherited disease, for example sickle cell or cystic fibrosis.



If you are working, you have the right to paid time off for your antenatal care (see page 170).

Information

An important part of antenatal care is getting information that will help you to make informed choices about your pregnancy. Your midwife or doctor should give you information in writing or some other form that you can easily use and understand. Your midwife or doctor should provide you with information in an appropriate format if you:

- have a physical, learning or sensory disability
- do not speak or read English.

You may have lots of things you want to ask the midwife. It's a good idea to write your questions down, so you don't forget.



ANTENATAL APPOINTMENTS

If you are expecting your first child, you are likely to have up to 10 appointments. If you have had a baby before, you should have around seven appointments. In certain circumstances, for example if you have or develop a medical condition, you may have more appointments.

Your appointments may take place at your home, in a Children's Centre, in your GP's surgery or in hospital. You may be asked to go to hospital for your scans.

Your antenatal appointments should take place in a setting where you feel able to discuss sensitive problems that may affect you (such as domestic violence, sexual abuse, mental illness or recreational drug use).

Early in your pregnancy your midwife or doctor should give you information about how many appointments you are likely to have and when they will happen. You should have a chance to discuss the schedule with them. The table on pages 42–43 gives a brief guide to what usually happens at each antenatal appointment.



If you cannot keep an antenatal appointment, please let the clinic or midwife know and make another appointment.

What should happen at the appointments

The aim is to check on you and your baby's progress and to provide clear information and explanations about your care. At each appointment you should have the chance to ask questions and discuss any concerns or issues with your midwife or doctor.

Each appointment should have a specific purpose. You will need longer appointments early in pregnancy to allow plenty of time for your midwife or doctor to assess you, discuss your care and give you information. Wherever possible, the appointments should include any routine tests.

Help and support

If you have any questions or worries, talk to your midwife or doctor. Talking is as much a part of antenatal care as tests and examinations.





Antenatal appointments schedule

Appointment	What should happen
First contact with your midwife or doctor	 This is the appointment when you tell your midwife or doctor that you are pregnant. They should give you information about: folic acid and vitamin D supplements nutrition, diet and food hygiene lifestyle factors, such as smoking, drinking and recreational drug use antenatal screening tests. It is important to tell your midwife or doctor if: there were any complications or infections in a previous pregnancy or delivery, such as pre-eclampsia or premature birth you are being treated for a chronic disease such as diabetes or high blood pressure you or anyone in your family has previously had a baby with an abnormality, for example spina bifida there is a family history of an inherited disease, for example sickle cell or cystic fibrosis.
Booking appointment (8–12 weeks)	 Your midwife or doctor should: Your midwife or doctor should: give you your hand-held notes and plan of care give you your hand-held notes and plan of care see if you may need additional care or support plan the care you will get throughout your pregnancy nutrition and diet exercise and pelvic floor exercises antenatal screening tests your antenatal care breastfeeding, including workshops antenatal education maternity benefits planning your labour your options for where to have your baby. Your midwife or doctor should: Give you your hand-held notes and plan of care give you your hand-held notes and plan of care give you your potential risks associated with any work you may do measure your height and weight and calculate your body mass index measure your blood pressure and test your urine for protein find out whether you are at increased risk of gestational diabetes or pre-eclampsia offer you an ultrasound scan at eight to 14 weeks to estimate when your baby is due offer you an ultrasound scan at 18 to 20 weeks to check the physical development of your baby and screen for possible abnormalities.
8–14 weeks (dating scan)	Ultrasound scan to estimate when your baby is due, check the physical development of your baby and screen for possible abnormalities.
16 weeks	Your midwife or doctor should give you information about the ultrasound scan you will be offered at 18 to 20 weeks and help with any concerns or questions you have. Your midwife or doctor should: • review, discuss and record the results of any screening tests • measure your blood pressure and test your urine for protein • consider an iron supplement if you are anaemic.
18–20 weeks (anomaly scan)	Ultrasound scan to check the physical development of your baby. (Remember, the main purpose of this scan is to check that there are no structural abnormalities.)



25 weeks*	Your midwife or doctor should:check the size of your uterusmeasure your blood pressure and test your urine for protein.
28 weeks	 Your midwife or doctor should: use a tape to measure the size of your uterus measure your blood pressure and test your urine for protein offer more screening tests offer your first anti-D treatment if you are rhesus negative.
31 weeks*	 Your midwife or doctor should: review, discuss and record the results of any screening tests from the last appointment use a tape to measure the size of your uterus measure your blood pressure and test your urine for protein.
34 weeks	 Your midwife or doctor should give you information about preparing for labour and birth, including how to recognise active labour, ways of coping with pain in labour and your birth plan. Your midwife or doctor should: review, discuss and record the results of any screening tests from the last appointment use a tape to measure the size of your uterus measure your blood pressure and test your urine for protein offer your second anti-D treatment if you are rhesus negative.
36 weeks	 Your midwife or doctor should give you information about: feeding your baby caring for your newborn baby vitamin K and screening tests for your newborn baby your own health after your baby is born the 'baby blues' and postnatal depression. Your midwife or doctor should: use a tape to measure the size of your uterus check the position of your baby measure your blood pressure and test your urine for protein.
38 weeks	Your midwife or doctor will discuss the options and choices about what happens if your pregnancy lasts longer than 41 weeks. Your midwife or doctor should: • use a tape to measure the size of your uterus • measure your blood pressure and test your urine for protein.
40 weeks*	Your midwife or doctor should give you more information about what happens if your pregnancy lasts longer than 41 weeks. Your midwife or doctor should: • use a tape to measure the size of your uterus • measure your blood pressure and test your urine for protein.
41 weeks	 Your midwife or doctor should: use a tape to measure the size of your uterus measure your blood pressure and test your urine for protein offer a membrane sweep discuss the options and choices for induction of labour.

EARLY ANTENATAL APPOINTMENTS

In early pregnancy (up until 20–24 weeks), your antenatal appointments will take longer than those in midpregnancy. This is because your midwife or doctor will need time to assess you and your baby, discuss your care and give you information. At each appointment you should have the chance to ask questions and discuss any concerns or issues.

Your first appointment with your midwife or GP

As soon as you think you are pregnant, you should make an appointment to see your midwife

or GP. The earlier you do this, the better. At this appointment you will be given information about:

> • folic acid and vitamin D supplements

• nutrition and diet

food hygiene

• lifestyle factors that may affect your health or the health of your baby, such as smoking, recreational drug use and alcohol consumption

 antenatal screening tests (see page 49 for more about these tests).

Your booking appointment

Most women have their 'booking appointment' between the 8th and 12th week of pregnancy. This can take a couple of hours. You will see a midwife and sometimes a doctor. You should also be offered an ultrasound scan.



You should be given information about:

- how the baby develops during pregnancy
- nutrition and diet
- exercise and pelvic floor exercises
- antenatal screening tests
- your antenatal care





- breastfeeding, including workshops
- antenatal education
- maternity benefits
- planning your labour
- your options for where to have your baby.

More information

See the NHS Choices pregnancy planner at www.nhs.uk/pregnancyplanner

Weight and height

You will be weighed at the booking appointment, but you probably will not be weighed regularly during your pregnancy. Your height will be measured along with your weight so that your midwife can calculate your BMI (body mass index). Most women put on between 10 and 12.5kg (22–28lbs) in pregnancy, most of it after the 20th week. Much of the extra weight is due to the baby growing, but your body will also be storing fat ready to make breastmilk after the birth. Eating sensibly and taking regular exercise can help. See Chapter 3 for what you should eat and for advice about exercise.

In some areas, height, weight and BMI are used to produce a personalised growth chart for your baby's development. However, other areas will use an average growth chart instead.

Questions at the booking appointment

You will be asked a lot of questions to build up a picture of you and your pregnancy. This is so that you are given the support you need and any risks are spotted early. You will probably want to ask a lot of questions yourself.

You may be asked about:

- the date of the first day of your last period, to help work out when your baby is due
- your health
- any previous illnesses and operations
- any previous pregnancies or miscarriages
- your and your baby's father's origins. This is to find out if your baby is at risk of certain inherited conditions, or if there are other factors, such as a history of twins
- your work or your partner's work and what kind of accommodation you live in, to see if there is anything about your circumstances that might affect your pregnancy
- how you are feeling and if you have been feeling depressed.

At the end of your booking appointment, you should understand the plan of care for your pregnancy and have your hand-held notes to carry with you at all times.

Your booking appointment is an opportunity to tell your midwife or doctor if you are in a vulnerable situation or if you need extra support. This could be because of domestic violence, sexual abuse or female genital mutilation.

If you are going to have your baby with midwifery care in a midwifery unit, in hospital or at home

You will probably see your own midwife for most of your antenatal care. You may be offered a visit at the hospital for an initial assessment and perhaps for an ultrasound scan or for special tests. Sometimes your midwife may visit you at home.

If you are going to have your baby in hospital

Antenatal care varies around the country. In some areas, the booking appointment is at the hospital, then all or most of the remaining appointments are with a midwife or GP. However, if there are complications, all appointments will be at the hospital. In other areas, all care is given by a midwife or GP unless there are complications, which mean a referral to the hospital antenatal clinic.

REGULAR CHECKS AT EVERY ANTENATAL APPOINTMENT

Your urine and blood pressure will be checked at every antenatal appointment.

Urine

Your urine is checked for a number of things, including protein or 'albumin'. If this is in your urine, it may mean that you have an infection that needs to be treated. It may also be a sign of preeclampsia (see 'High blood pressure and pre-eclampsia' on page 67).

Blood pressure



A rise in blood pressure later in pregnancy could be a sign of preeclampsia (see page 67). It is very common for your blood pressure to be lower in the middle of your pregnancy than at other times. This is not a problem, but may make you feel light-headed if you get up quickly. Talk to your midwife if you are concerned.



APPOINTMENTS IN LATER PREGNANCY

From 20–24 weeks, your antenatal appointments will become more frequent. If your pregnancy is uncomplicated and you are well, you may not be seen as often.

Your later appointments are usually quite short. Your midwife or doctor will:

- check your urine, blood pressure, and sometimes your weight
- feel your uterus to check your baby's position
- measure your uterus to check your baby's growth
- listen to your baby's heartbeat if you want them to.

You can also ask questions or talk about anything that is worrying you. You should be given information about:

- your plan of birth
- how to prepare for labour and birth
- how to tell if you are in active labour
- induction of labour if your baby is late
- the 'baby blues' and postnatal depression
- feeding your baby
- screening tests for newborn babies
- looking after yourself and your new baby.

Checking your baby's development and well-being

At each antenatal appointment from 24 weeks, your midwife or doctor should check your baby's growth. To do this, they will measure the distance from the top of your uterus to your pubic bone. The measurement will be recorded in your notes.

In the last weeks of pregnancy, you may also be asked to keep track of your baby's movements. If your baby's movements become less frequent, slow down or stop, contact your midwife or doctor immediately.

You will be offered an ultrasound scan if your midwife or doctor has any concerns about your baby's growth.



BLOOD TESTS

As part of your antenatal care, you will be offered a number of blood tests. Some are offered to all women and some are only offered if it is thought that you are at risk of a particular infection or inherited condition. All of the tests are done to help make your pregnancy safer or to check that your baby is healthy. Talk to your midwife or doctor so that you understand why the blood tests are being offered and so that you can make an informed choice about whether or not you want them. Your midwife or doctor should also give you information about the tests. Below is an outline of all the tests that can be offered.

Your blood group and rhesus factor

Your blood will be tested to check your blood group and to see whether you are rhesus negative or positive. Some women are rhesus negative. This is usually not a worry for a first pregnancy but it may affect the next child.

People who are rhesus positive have a substance known as D antigen on the surface of their red blood cells. Rhesus negative people do not. A woman who is rhesus negative can carry a baby who is rhesus positive if the baby's father is rhesus positive. During pregnancy or birth, small amounts of the baby's blood can enter the mother's bloodstream. This can cause the mother to produce antibodies. This usually doesn't affect the existing pregnancy, but the woman becomes 'sensitised'. This means that if she gets pregnant with another rhesus positive baby, the immune response will be quicker and much greater. The antibodies produced by the

mother can cross the placenta and attach to the D antigen on her baby's red blood cells. This can be harmful to the baby as it may result in a condition called haemolytic disease of the newborn, which can lead to anaemia and jaundice.

Prevention of rhesus disease

Anti-D injections prevent rhesus negative women producing antibodies against the baby and reduce the risk of a rhesus negative woman becoming sensitised.

Rhesus negative mothers who are not sensitised are offered anti-D injections at 28 and 34 weeks as well as after the birth of their baby. This is quite safe for both the mother and her baby.

Anaemia

Anaemia makes you tired and



less able to cope with any loss of blood when you give birth. If tests show you are anaemic, you will probably be given iron and folic acid.

Immunity to rubella (German measles)

If you get rubella in early pregnancy, it can seriously damage your unborn baby. Your midwife or doctor will talk to you about what happens if your test results show low or no immunity. You will be offered a rubella immunisation after your baby is born. For more information about rubella, visit www.immunisation.nhs.uk

Syphilis

You will be tested for this sexually transmitted infection because if left untreated, it can lead to miscarriage and stillbirth.

Hepatitis B

This is a virus that can cause serious liver disease. If you have the virus or are infected during pregnancy, it may infect your baby (see page 37). Your baby will not usually be ill but has a high chance of developing long-term infection and serious liver disease later in life. Your baby can start a course of immunisation at birth to help prevent infection. If you have hepatitis B, you will be referred to a specialist.

Hepatitis C

This virus can cause serious liver disease and there is a small risk that it may be passed to your baby if you are infected. This cannot be prevented at present. Tests for hepatitis C are not usually offered routinely as part of antenatal care. If you think you may be at risk (see page 37), talk to your midwife or GP. They can arrange a test. If you are infected, your baby can be tested within a few days of birth. If you have hepatitis C, you will be referred to a specialist.

HIV

This is the virus that causes AIDS. If you are infected you can pass the infection to your baby during pregnancy, at delivery, or after birth by breastfeeding. As part of your routine antenatal care, you will be offered a confidential test for HIV infection. If you are HIV positive, both you and your baby can have treatment and care that reduce the risk of your baby becoming infected. If your test result is negative, the fact that you had the test as part of your antenatal care should not affect your ability to get insurance.

If you are HIV positive

If you are HIV positive, your doctor will need to discuss the management of your pregnancy and delivery with you.

- There is a one in four chance of your baby being infected if you and your baby don't have treatment.
- Treatment can significantly reduce the risk of transmitting HIV from you to your baby. 20% of HIV-infected babies develop AIDS or die within the first year of life, so it's important to reduce the risk of transmission.
- Your labour will be managed to reduce the risk of infection to your baby. This may include an elective caesarean delivery (see page 98).
- Your baby will be tested for HIV at birth and at intervals for up to two years. If your baby is found to be infected with HIV, paediatricians will be able to anticipate certain illnesses that occur in infected babies, and treat them early. All babies born to HIV positive mothers will appear to be HIV positive at birth, because they have antibodies from their mother's infection. If the baby is not affected, the test will later become negative because the antibodies will disappear.
- You will be advised not to breastfeed because HIV can be transmitted to your baby in this way.

Help and support

If you think that you are at risk of getting HIV or know you are HIV positive, talk to your midwife or doctor about HIV testing and counselling. You can also get free confidential advice from the National AIDS Helpline on 0800 567 123 or you can talk in confidence to someone at Positively Women (see page 185).