YOUR HEALTH IN PREGNANCY

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

- 29 Alcohol
- 31 Smoking
- 31 Pills, medicines and
- 32 other drugs
 - Illegal drugs
- 33 X-rays



35	Keeping active	39
36	Infections	41
	Inherited conditions	43
38	Work hazards	44
38	Flying and travel	44
20		

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 31. 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

For useful information on what you should eat when you are pregnant or trying for a baby, go to www.nhs.uk/conditions/ pregnancy-and-baby/pages/ healthy-pregnancy-diet.aspx

nutritious and delicious

The Eatwell Guide

The Eatwell Guide 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

Potatoes, bread, rice, pasta and other starchy carbohydrates

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,

and sweet potatoes.

These foods should

be the main part

of every meal. Eat

wholegrain varieties when you can as these

add extra fibre to our

millet, yams, cornmeal

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.nhs.uk/ Livewell/5ADAY/Pages/ Whatcounts.aspx

Beans, pulses, fish, eggs, meat and other proteins

Good sources of protein include beans, pulses, fish, eggs and meat (for information on peanuts see page 111). These foods are also good sources of essential vitamins and minerals. Eat moderate amounts each day. Choose lean meat, remove the skin from poultry and cook using only a little fat. Make sure 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 31 for more information. Due to improved food safety controls in recent years it is unlikely to get food poisoning from raw or lightly cooked UK hen eggs from reputable suppliers which have been produced under the British Lion Code of Practice. Therefore it is safe to enjoy soft boiled eggs and foods containing raw or lightly cooked eggs.



Oils and spreads

This food group includes all unsaturated oils including vegetable oil, rapeseed oil, olive oil sunflower oil and soft spreads made from unsaturated oils. Butters are not included in this section as these are high in saturated fat and should be eaten less often and in small amounts. Although some fat in the diet is essential, generally we are eating too much saturated fat and need to reduce our consumption.

Unsaturated fats are healthier fats that are usually from plant sources and in liquid form as oil, for example vegetable oil, rapeseed oil and olive oil. Swapping to unsaturated fats will help to reduce cholesterol in the blood, therefore it is important to get most of our fat from unsaturated oils.

Choosing lower fat spreads, as opposed to butter, is a good way to reduce your saturated fat intake. Remember that all types of fat are high in energy and should be limited in the diet.

Dairy and alternatives

diet.

Dairy foods and alternatives like milk, cheese, fromage frais, sova drinks and vogurts (choose unsweetened calcium fortified milk alternatives) 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 vou can – for example, semiskimmed or skimmed milk. low-fat yoghurt and half-fat hard cheese. However, there are some cheeses that you should avoid - see 'Foods to avoid' on page 31 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.
- 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. Oilv fish includes fresh tuna (but not canned tuna), salmon, mackerel, sardines and trout.
- **Ravv 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.

This is different from previous advice on the consumption of peanuts during pregnancy.

• 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.

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 43).
- 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.

Your weight

It is recommended that if you are thinking of having a baby, your BMI* should be between 20 and 25 (a healthy weight). If you are overweight, ie BMI of over 25 you should aim to lose weight before becoming pregnant.

Being obese (having a BMI greater than 30) during pregnancy can put you at increased risk of pregnancy complications such as gestational diabetes and thromboembolism. It can be dangerous for your baby too, causing premature birth, birth defects, miscarriage and stillbirth.

If your BMI* is over 40 you will receive extra support throughout your pregnancy as part of The weigh to a healthy pregnancy programme to help ensure the best outcome for you and your baby.

*BMI is a calculation that health professionals use to work out whether a person is a healthy weight. It is calculated by weight in kilograms divided by height in meters squared. Use an online calculator which can be found at http://choosetolivebetter.com/ content/measuring#section-5

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, diabetes, are very obese or take antiepileptic medicines, ask your GP or midwife for more advice. You will need to take a bigger dose of folic acid that requires a prescription.

• Vitamin D. All pregnant women should take a supplement of vitamin D. You need vitamin D to keep your bones healthy and to provide your baby with enough vitamin D for the first few months of their life. Vitamin D regulates the amount of calcium and phosphate in the body, and these are needed to help keep bones and teeth healthy. 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. Deficiency of vitamin D can cause children's bones to soften and can lead to rickets. Breastfed babies from birth to one year of age should be given a daily supplement of vitamin D throughout the year to make sure they get enough, as their bones are growing and developing very rapidly in these early years. Babies fed infant formula will only need a vitamin D supplement if they are receiving less than 500ml (about a pint) of infant formula a day, because infant formula has vitamin D added during processing. Children aged 1 to 4 years require a daily supplement of vitamin D throughout the year.

Everyone over the age of five years should consider taking a supplement of 10 micrograms of Vitamin D every day. Between late March/April to the end of September majority of people aged five years and above will probably obtain sufficient vitamin D from sunlight when they are outdoors. So you might choose not to take a vitamin D supplement during these months. Only a few

More information

For more information about folic acid, read Folic acid: one of life's essentials at www.publichealth.hscni.net

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



foods contain vitamin D, including oily fish like sardines, fortified margarines, some breakfast cereals and eggs.

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 33.)

- 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 31 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.



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. During the summer months most people will usually get enough vitamin D from sunlight, so you may choose not to take a supplement over the summer months (late March/April to the end of September).
- 400 micrograms of folic acid ideally this should be taken from before you get pregnant until you are 12 weeks pregnant.
 If you already have a baby with spina bifida, or if you have coeliac disease, diabetes, are very obese or take antiepileptic medicines, ask your GP or midwife for more advice. You will need to take a bigger dose of folic acid that requires a prescription.

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 HSC 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).



Healthy Start

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

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

- Income Support, or
- Income-based Jobseeker's Allowance, or
- Income-related
 Employment and Support Allowance, or
- Child Tax Credit (but not Working Tax Credit unless your family is receiving Working Tax Credit run-on only*) and have an annual family income of £16,190 or less (2018/19).
- Universal Credit (with a family take home pay of £408 or less per month)

*Working Tax Credit run-on is the Working Tax Credit you receive in the 4 weeks immediately after you have stopped working for 16 hours or more per week (single adults) or 24 hours per week (couples).

You also qualify if you are under 18 and pregnant, even if you don't get any of the above benefits or tax credits.

Pregnant women and children over one and under four years old can get one £3.10 voucher per week. Children under one year old can get two £3.10 vouchers (£6.20) per week.

For further information:

- ask your health visitor for more information or visit
- www.healthystart.nhs.uk.
- Which supplements?
- Healthy Start vitamins tablets for women contain the correct amount of folic acid and vitamin D for pregnant women (who are at least 10 weeks pregnant) and are available to pregnant women receiving Healthy Start vouchers.
- Ask your GP or pharmacist for advice on vitamins if you are unsure.

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 special dietary requirement (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

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.
- 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.



3.75-4.5 units

1.5 units

3 units

5

ALCOHOL

Can I drink alcohol when I'm pregnant?

The safest approach in pregnancy is to choose not to drink at all. The risk of damage to your baby's physical and mental development increases the more you drink which is why binge drinking is especially harmful. This risk relates to a range of conditions including Foetal Alcohol Syndrome (FAS) and Foetal Alcohol Spectrum Disorder (FASD).

The Chief Medical Officers' guideline is that:

If you are pregnant or planning a pregnancy, the safest approach is not to drink alcohol at all, to keep risks to your baby to a minimum.

Drinking in pregnancy can lead to long-term harm to your baby, with the more you drink the greater the risk.

Therefore, it is important to be aware that:

- Drinking heavily or 'binge' drinking (over 6 units in one session) in early pregnancy can be harmful to the baby and there is an increased risk of early miscarriage.
- Some women may be unaware of their pregnancy for several weeks or months. If there is any chance you may be pregnant, avoid drinking alcohol until you are sure you are not pregnant.
- Pregnant mums should always consult with a health professional if they have any concerns about their alcohol intake.

How does alcohol affect the unborn baby?

Alcohol is a toxic substance. It takes a woman's liver 1 $\frac{1}{2}$ hours (approx.) to break down 1 unit of alcohol.

However, in pregnancy, the alcohol passes from the mum's blood stream through the placenta and into the baby's blood stream. The placenta is not a filter. The unborn baby does not have a developed liver to process alcohol.

Drinking alcohol during pregnancy can affect:

- The way the baby develops in the womb
- The baby's health at birth and increases the risks of Foetal Alcohol Syndrome (FAS) or Foetal Alcohol Spectrum Disorder (FASD)
- The baby's long term physical and mental health
- The child's ability to learn (learning difficulties).

What does FAS/FASD mean?

Most women are aware of **Foetal** Alcohol Syndrome (FAS). Children born with FAS can have growth problems, facial defects, and lifelong learning and behaviour problems. Foetal Alcohol Spectrum Disorder (FASD) describes the range of less obvious effects ('sleeping symptoms') that can be mild to severe and relate to one or more of the following range of symptoms of FASD:

- Low birth size
- Problems eating and sleeping
- Problems seeing and hearing
- Trouble following directions and learning to do simple things
- Trouble paying attention and learning in school
- Trouble getting along with others and controlling their behaviour.

Children born with FASD may need medical care all their lives, and/or may need special educational support.

Examples of units in drinks

- can of extra strong lager: • 4 units
- bottle of lager: 1.5 units •
- pint of standard lager: 2.5 units
- pint of premium larger: 3 units •
- small pub bottle of wine: 2.25 units
- 70cl bottle of wine: 7–10 units 1.5-1.75 units
- standard 275ml of alcopops:
- 70cl bottle of alcopops:
- pub measure of spirits:
- pint of cider:

Remember that FAS and FASD are 100% preventable by not drinking alcohol during your pregnancy.

If you are concerned about your drinking or any aspects of your pregnancy it is important that you speak to any of the following health professionals:

- Your midwife
- Your obstetrician
- Your GP
- Your health visitor.

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. Visit www.knowyourlimits.info for more information.

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.knowyourlimits.info

A directory of services is available at www.publichealth.hscni.net/ publications/drug-and-alcoholdirectories-services

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. You will be offered carbon monoxide testing at your

Help and support

Getting help with stopping smoking

Support and advice on stopping smoking is available at www. want2stop.info or by texting QUIT to 70004 for SMS support (standard network charges apply).

You can also ask your midwife, health visitor, practice nurse or pharmacist for advice and for

the details of your local stop smoking service.



These free stop smoking services offer one-to-one or group sessions, provide NRT and are run by specially trained staff who can advise you on the best way to manage your cravings and become smoke free. They can offer advice about dealing with stress, weight gain and provide information on stop smoking medications such as nicotine replacement therapy, champix and Zyban, to help you manage your cravings.

If you smoke, get advice about stopping. You are up to four times more likely to stop smoking successfully with support and stop smoking medication.

booking appointment to assess the level of carbon monoxide to assist with the decision to guit smoking.

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.

If you stop smoking:

- You will have fewer complications in pregnancy.
- You are more likely to have a healthier pregnancy and a healthier baby.

- You will reduce the risk of stillbirth.
- 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 15).
- 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.

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.

4

2 3

For more information on NRT, ask yout midwife for a copy of the Pregnancy and NRT leaflet

• 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.

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.

Advice on e-cigarettes

E-cigarettes are designed to look and feel like cigarettes. Devices currently on the market do not meet appropriate standards of safety and quality. The level of risk associated with their use is not known.

The Public Health Agency

recommends if you wish to stop smoking and are ready to do so you should use one of the free stop smoking services available across Northern Ireland, for information on these services visit the PHA'S stop smoking website www.want2stop.info Find out more on e-cigarettes at

www.publichealth.hscni.net

2 Get help

Take advantage of the free support that is available to you. You are four times more likely to quit successfully using specialist support and licensed stop smoking medication. See the 'Help and support' box on page 36 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.



PILLS, MEDICINES AND OTHER DRUGS

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

- Keep taking your medication until you check with your doctor
- 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 the National Drugs Helpline, (FRANK) 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.

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.		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.

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 181). 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.

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.



- 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.



INFECTIONS

Influenza

While flu is a mild illness for most people, it can be very serious for pregnant women. Pregnant women are more likely to develop serious complications as a result of flu, and rarely even death, compared to women who are not pregnant. There are also risks for the baby, including miscarriage and premature labour.

Receiving the flu vaccine during pregnancy is the best way to protect you and your unborn baby from getting serious complication of flu, including death.

The flu vaccine is licensed for use by the European Medicines Agency. It is regularly used for pregnant women across the United Kingdom, Ireland and other countries. Millions of pregnant women have received the flu vaccine and the safety of the vaccine has been carefully monitored. This has shown that it is extremely safe to give in pregnancy, both for the mother and the unborn baby.

The flu vaccine becomes available every year from late September onwards, at the start of the winter flu season. If you are pregnant during flu season you will be offered the flu vaccine by your GP or midwife. You can have the vaccine at any stage in pregnancy. You should get it as early in the season as possible in order to receive the best protection for you and your baby. If you become pregnant later in the winter you should get the vaccine as soon as you know you are pregnant. Even if you received the flu vaccine in the past, you still need to get the vaccine as flu protection only lasts for one flu season.

Pregnant women can suffer the same minor side effects as anyone else, including soreness where the vaccine was injected and, less often, a slight temperature and aching muscles for a couple of days after being vaccinated. Other reactions are very rare. Flu vaccine does not contain live virus and so it cannot give you flu. It will only protect you against flu. There are many other viruses around every winter which cause flu-like symptoms, but these are not usually as serious as flu.

For more information about the flu vaccine talk to your GP, practice nurse, district nurse or pharmacist.

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 Health and Social Care Trust.

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.

Whooping cough

Whooping cough (pertussis) is an infection which can affect people of all ages but is particularly serious for babies. Most babies who get it will have to be admitted to hospital, some

More information

For more information, read the information on screening tests in Chapter 4.

will end up in intensive care and it can even result in death. Very young babies (under three months) are at most risk of serious disease.

All babies are vaccinated against whooping cough at two, three and four months of age. This means they can be vulnerable to the infection in the first two to three months of life before they get their vaccines. The best way to protect babies during this time is to give the mother the vaccine during pregnancy, at any stage after 16 weeks. She will make antibodies that are passed onto the unborn baby, which then protect the baby after it is born until he or she gets their own vaccines. The vaccine needs to be repeated during each pregnancy.

All pregnant women are offered the whooping cough vaccine between 16 and 32 weeks of pregnancy. This is the recommended time to receive it so that the unborn baby receives the highest level of protection. Recent studies have shown that when the vaccine is given to pregnant women at this time, over 90% of newborn babies do not get whooping cough. Studies also show that giving the vaccine to pregnant women is very safe for both the woman and unborn baby.

For more information about the whooping cough vaccine talk to your GP, practice nurse, district nurse or pharmacist.

Rubella

Rubella (or German measles) generally causes a mild illness with a range of symptoms including slight temperature, coughing, sneezing, rash, swollen glands or sore throat. If you catch rubella in the first four months of pregnancy it can seriously





affect your baby's sight and hearing and may cause brain and heart defects. If you are more than four months pregnant, it is unlikely that rubella will affect your baby.

Rubella infection can be prevented by measles, mumps and rubella (MMR) vaccine. All children are offered two MMR vaccines, at 13 months and three years. Most women in Northern Ireland are therefore protected against rubella, either from having had the infection previously or having received MMR vaccine as a child. If you are protected against rubella you cannot pass it on to your unborn baby.

As part of your antenatal care you will be offered a number of blood tests (see page 52), one of which will check if you are immune (protected) for

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.)

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.

rubella. If you are not immune you will be offered to MMR vaccines after your baby is born as it is not recommended in pregnancy. If you are not immune and you come into contact with someone who has rubella or if you develop a rash you should tell your midwife or GP at once. A blood test will then be carried out to show if you have been infected.

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 52).

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 183 for advice and counselling.

Hepatitis B

Hepatitis B is an infection caused by the hepatitis B virus. The infection mainly affects the liver, but is present in blood and body fluids. Many people with hepatitis B infection have no symptoms and do not know they are infected. Most adults infected with hepatitis B fully recover, but in some cases the virus remains in the blood. If this happens, the people affected will develop lifelong hepatitis B infection and they can pass the infection on to others, most commonly from an infected mother to her baby. The virus can only be identified by a blood test. You will be offered a blood test for hepatitis B as part of your antenatal care. If the blood test shows that you have the infection, you will be referred for specialist assessment and follow-up. Even if you know you have hepatitis B and already attend a specialist, it is still important that you are seen again as early as possible during your pregnancy.

Your baby will also be offered a course of hepatitis B vaccine in the first year of life and be referred for specialist assessment and followup. Hepatitis B vaccine is 90-95% effective in preventing babies from getting hepatitis B and developing lifelong infection. The first vaccine is given within 24 hours of birth, with the other three vaccines given at one, two and twelve months of age by your GP. A small number of babies may also need an injection of hepatitis B antibodies at birth, at the same time as the first vaccine.

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

Chickenpox

Chickenpox (varicella) causes a blistering, itchy rash and mild temperature in most people, although it can be more serious in pregnant women and may adversely affect your baby.

Around 95% of women are immune to chickenpox from having had the infection as a child, although this may be lower in women who were born outside the UK and Ireland. Most women are therefore not at risk of catching chickenpox and passing it on to their unborn baby.

If you have never had chickenpox or received a varicella-containing vaccine, you may not be immune. If you develop a rash or come into contact with someone who has chickenpox or shingles, you should speak to your GP, midwife or obstetrician at once. A blood test will be carried out to see if you are immune, and you may receive if an injection of varicella antibodies if not.

Toxoplasmosis

This infection can damage your baby if you catch it during pregnancy, so take precautions (see page 44). 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 aged 6–10. It causes a temperature and a characteristic red rash on the face, so it is often called 'slapped cheek disease'.

50–70% 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 midwife or 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.

Rash in pregnancy

If you develop a rash or illness at any time in pregnancy you should contact your midwife, GP or obstetrician urgently for advice. You may need some investigations. You should avoid antenatal clinics or maternity settings until you have been assessed to avoid coming into contact with other pregnant women.

If you have been in contact with someone with a rash, or known infection such as chicken pox, shingles, slapped cheek syndrome or rubella, you should also contact your midwife, GP obstetrician for advice.

Group B streptococcus

Group B streptococcus (also called GBS or strep B) is a bacterium carried by up to 30% of people without causing 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, and can lead to serious illness. If you have had GBS in a previous pregnancy you will be offered either testing for GBS at 35-37 weeks or antibiotics in Labour.

Treatment for GBS

In some circumstances antibiotics can reduce the risk of a baby developing GBS. You should be offered antibiotics during labour if:

- you have previously had a baby with invasive GBS infection;
- GBS has been found in your • urine in your current pregnancy;
- GBS has been found on swabs from your vagina which have been taken for another reason during this pregnancy;
- You have a high temperature during labour;
- If you have an infection of the membranes around the baby (Chorioamnionitis).

Your obstetrician or midwife will assess whether you need to be given antibiotics during labour. If you need antibiotics, they will be given through a vein (intravenously).

Screening for GBS

In Northern Ireland, as in the rest of the UK, routine testing for GBS in pregnancy is not currently recommended because there is insufficient evidence to support it. This position is kept under regular review.

If you are concerned about GBS, discuss it with your doctor or midwife.

Useful links

Group B Strep Support (GBSS) www.gbss.org.uk

NI Direct – Group B Streptococcus and pregnancy www.nidirect.gov.uk/group-bstreptococcus-and-pregnancy

Royal College of Obstetricians and Gynaecologists (RCOG)

www.rcog.org.uk/en/patients/patientleaflets/group-b-streptococcus-gbsinfection-pregnancy-newborn-babies/

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 31).

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 medium chain acyl dehydrogenase deficiency (MCADD) 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

Computer screens

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

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 54). 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 18.

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.