

# Planning to Become Pregnant?

This leaflet offers some advice if you are planning to become pregnant, or have just become pregnant. The aim is to reduce the risk of harm to the baby, and to reduce the risk of pregnancy complications. There is a summary checklist at the end of the leaflet.

## Folic acid supplements

You should take folic acid tablets (supplements). Ideally, do this from before you get pregnant, and continue taking them until at least the end of the 12th week of pregnancy - even if you are healthy and have a good diet. Folic acid is a vitamin which occurs naturally in certain foods. However, you need a good supply of folic acid when you are pregnant to help with the development of the baby. If you take folic acid tablets in early pregnancy you reduce the risk of having a baby born with a spinal cord problem such as spina bifida. There is also evidence that folic acid also reduces the risk of having a baby born with a cleft lip and palate, a heart defect (congenital heart disease), and the risk of a premature (preterm or early) labour.

You can buy folic acid tablets from pharmacies. Also, the NHS Healthy Start scheme provides vitamin supplements that contain folic acid. These are free to many women who are on certain benefits - see: [www.healthystart.nhs.uk](http://www.healthystart.nhs.uk)

- For most women the dose is 400 micrograms (0.4mg) a day.
- If you have an increased risk of having a child with a spinal cord problem then the dose is 5mg a day - you need a prescription for this higher dose. That is, if:
  - you have had a previously affected pregnancy.
  - you or your partner have a spinal cord defect.
  - you are taking medication for epilepsy.
  - you have coeliac disease, diabetes, sickle cell anaemia, or thalassaemia.

### When is the best time to start taking folic acid tablets?

Ideally, start taking folic acid tablets before becoming pregnant. The common advice is to start from the time you plan to become pregnant. If the pregnancy is unplanned then start taking folic acid tablets as soon as you know that you are pregnant. However, a recent study looked at the effect of taking folic acid for a year prior to becoming pregnant. This study looked at the effect folic acid had on reducing preterm labour and delivery of the baby (that is, of having a 'prem' baby). The study found a significant decrease in the rate of preterm delivery for women who took folic acid for one year prior to becoming pregnant. So, you may wish to consider taking folic acid tablets well before you plan to become pregnant.

Because of the substantial benefits of folic acid, some countries routinely fortify staple foods such as wheat, corn flour, or rice with folic acid. Currently there is debate as to whether the UK should follow suit and fortify certain common foods with folic acid. (See the references at the end for details of this debate.)

## Vitamin D supplements

Vitamin D is needed for growth. Vitamin D supplements are recommended for all pregnant women, breastfeeding women and breastfed babies. The dose if you are pregnant or breastfeeding is 400 units (10 micrograms) daily. This can be either as a calcium/vitamin D tablet, or as a multivitamin tablet labelled as suitable for use in pregnancy. Some experts think that women who get little or no sunshine on their skin need a higher dose such as 800 units (20 micrograms) daily. This is because although there is a small amount of vitamin D in some foods, most of the vitamin D that we get is made in the skin with the help of sunlight. Your doctor will advise. Pregnant women can get free prescriptions and vitamins.

## Alcohol

Advice from the Department of Health is that you should not drink at all if you are pregnant or trying to become pregnant. It is known that if you drink heavily you have an increased risk of miscarriage, and it can cause serious harm to the baby's growth and brain development. A condition called fetal alcohol syndrome develops in some babies born to mothers who drink heavily. A baby with this syndrome can have severe physical and mental problems.

However, the exact amount of alcohol that is safe during pregnancy is not known. This is why the advice is not to drink at all. If you do choose to drink when pregnant then limit it to one or two units, once or twice a week. And never binge drink or get drunk. If you find it difficult to cut down or stop drinking alcohol, then seek help from your GP.

## Smoking

If you smoke, you are strongly advised to stop smoking before getting pregnant. Tobacco smoke contains poisonous chemicals which pass into the baby's blood and can slow the baby's growth. The risk of having a miscarriage, premature birth, or stillbirth are higher if you smoke. Babies born to mothers who smoked when pregnant also have an increased risk of developing attention deficit hyperactivity disorder (ADHD) when they are older. Also, after the birth, children of smoking parents have an increased risk of developing chest infections, asthma, 'glue ear' and sudden infant death syndrome (cot death).

For many women who smoke, planning to become pregnant is a good incentive to stop smoking. It is often a good time to persuade partners to give up too. If you find it difficult to stop smoking then seek advice and help from your practice nurse, GP, or pharmacist.

## Street ('illicit') drugs

If you take or inject street drugs, you are strongly advised to stop before getting pregnant. Their effects on pregnancy are not fully known. However, there is an increasing amount of evidence to suggest that they are likely to pose a risk of damage to the baby. If you cannot come off drugs easily, see your doctor for help. For example, an option if you inject heroin is to take prescribed methadone instead which is probably safer during pregnancy. A blood test for hepatitis C, hepatitis B, and HIV is advised if you take illicit drugs and plan to become pregnant, or are pregnant.

## Overweight and obesity

If you are obese or overweight, try to lose some weight before becoming pregnant. Women who are overweight or obese have a greater risk of pregnancy complications such as pre-eclampsia, stillbirth and the need for a caesarean section compared with women who are not overweight. Basically, the more obese you are, the greater the risk.

## Food and diet

### **Eat a healthy balanced diet**

Aim to eat a 'healthy diet' (which everyone should be eating, not just pregnant women). Briefly, the bulk of most meals should be starch-based foods (such as bread, cereals, potatoes, rice, and pasta), with fruit and vegetables. Eat protein foods such as meat, fish, pulses, chicken, etc, in moderation.

Don't 'eat for two' and over-eat when you become pregnant. Too much weight gain increases your risk of developing problems later in the pregnancy. Also, extra weight is difficult to lose after the birth. According to the World Health Organisation, for women with a normal pre-pregnancy weight, a weight gain of 10-14kg over the pregnancy is associated with the lowest risk of pregnancy complications.

### **Include foods with plenty of iron, calcium and folic acid**

A growing baby needs these nutrients right from the start of the pregnancy.

- **Iron** is mainly in red meat, pulses, dried fruit, green vegetables and fortified cereals.
- **Calcium** is mainly in dairy products such as milk, cheese, and yoghurt. (Low-fat milk, cheeses and yoghurts usually contain just as much calcium as the full-fat varieties.)
- **Folic acid** is mainly in green vegetables, brown rice, and fortified cereals.

### **What about supplements?**

As mentioned, folic acid and vitamin D supplements are recommended for all pregnant women. Otherwise, if you have a normal healthy diet, no other supplements are routinely advised. However, some women have low iron stores which puts them at risk of becoming anaemic during pregnancy. The routine blood tests that are done during pregnancy will detect anaemia and the need for iron supplements.

### **What about fish?**

You should avoid certain types of fish (listed below) and uncooked shellfish. But, most fish is a good source of protein and other nutrients. Aim to eat at least two portions of fish per week, with at least one portion being oily fish. The most commonly eaten oily fish are salmon, mackerel, pilchards and sardines. One study found that children of mothers who had eaten a reasonable amount of oily fish during pregnancy had, on average, better communication and social skills at age seven. Oily fish are rich in nutrients called omega-3 fatty acids. It is thought that omega-3 fatty acids are important to aid brain development and may be the reason for the results of this study.

This study has added to the debate as to exactly how much fish is to be recommended for pregnant women. There had been concern that eating large amounts of fish may not be so good. This was because of concern about traces of 'toxins' that are in some fish which may build up if you eat lots, and may be harmful. However, some people think that this new study suggests the previous cautious approach to fish during pregnancy is not warranted. It may be that eating plenty of oily fish during pregnancy may become more popular. Further research may help to clarify this.

### **Foods and drinks to avoid**

You should not eat the following if you are pregnant or trying to become pregnant:

- **Anything with a lot of vitamin A.** You need a small amount of vitamin A to keep healthy. However, large amounts can harm an unborn baby. So, avoid:
  - Liver and liver products such as liver paté and cod liver oil supplements.
  - Vitamin tablets or supplements which contain vitamin A.
- **Food which may have high levels of listeria.** This bacterium (germ) does not usually cause problems in people who are not pregnant. However, pregnant women are more likely to become infected with listeria, and it sometimes causes miscarriage, stillbirth, or infections in the baby after birth. Foods which are most at risk of carrying listeria are:
  - Undercooked meats and eggs. This may occur in some pre-cooked meats and pre-prepared meals. Make sure all meat foods are cooked until piping hot. Eggs should be cooked until the white and yolk are solid. Avoid foods that may contain raw eggs such as some types of mayonnaise and mousse.
  - Mould-ripened and soft cheeses such as brie, Camembert and blue-veined cheeses. (Hard cheeses and processed cottage cheese are safe.)
  - Patés - including vegetable patés.
  - Raw shellfish and raw fish.
  - Unpasteurised milk. Note: goat's milk is often unpasteurised, and goat's milk products such as cheeses are often made from unpasteurised milk.
- **Fish which may contain a lot of mercury.** A high level of mercury can damage the

developing nervous system of an unborn baby. So:

- Do not eat shark, marlin, or swordfish.
- Limit tuna. You should eat no more than four medium sized cans (drained weight = 140g per can), or two fresh tuna steaks per week (weighing about 140g cooked or 170g raw).
- **Limit the amount of caffeine** to no more than 200mg per day. Having a lot of caffeine increases your risk of having a miscarriage and a baby with low birth weight. The main sources of caffeine are coffee, tea, chocolate, cola. It is also added to some 'energy' drinks and to some cough and cold remedies. As a rough guide:
  - One mug of instant coffee has about 100mg caffeine.
  - One mug of brewed coffee has about 140mg caffeine.
  - One mug of tea has about 75mg caffeine.
  - One 50g plain chocolate bar has about 50mg caffeine. Milk chocolate has about half the caffeine as plain chocolate.
  - One can of cola, and half a can of an 'energy' drink has up to 40mg caffeine.

A note about peanuts: until recently the Food Standards Agency (FSA) advised that you may wish to avoid eating peanuts when you are pregnant if you have an atopic disease such as asthma, eczema, or hay fever, or if a close family member has one of these conditions. This was because there was a concern that children could develop a peanut allergy as a result of their mother eating peanuts during pregnancy. However, in light of new evidence this advice was changed in December 2008. The FSA now advise that there is no need for women who are pregnant or breastfeeding or who have children aged under three to change their diets to exclude peanuts.

## Animals

Avoid contact with sheep and lambs at lambing time. This is because some lambs are born carrying the germs that cause listeriosis, toxoplasmosis and chlamydia. These may be passed on to you and your unborn baby. See below about cats and kittens.

## Medication

The effects of some prescribed drugs have been well studied and it is known that certain drugs are safe in pregnancy. For example, paracetamol at normal dose is safe and useful for headaches, backache and other aches and pains that may occur during pregnancy. However, some drugs are not safe, and may be harmful to a developing baby. In particular, if you take them in the early weeks of pregnancy.

Therefore, always tell a doctor or dentist who prescribes you medication that you are pregnant, or intend to become pregnant. Also, don't take drugs that you can buy over the counter (including herbal remedies) unless they are known to be safe in pregnancy. The pharmacist will advise.

If you already take regular medication (for example, for epilepsy), it is important to discuss this with a doctor before becoming pregnant. If you have an unplanned pregnancy, discuss any medication that you take with your doctor as soon as possible.

## Infections

### Rubella (German Measles)

If you plan to become pregnant for the first time, you should check that you are immune to rubella before becoming pregnant. See your practice nurse for a 'pre-pregnancy' blood test. Most women are immune to rubella as they have been immunised as a child. However, childhood immunisation does not work in every child and you may not be immune. If you are not immune, you can be immunised.

Note: you should not become pregnant for one month after the injection, and ideally until your immunity has been confirmed by a further blood test.

The rubella virus causes a mild illness, but can seriously damage an unborn baby, especially in the early stages of growth. So, until you know that you are immune (from the result of the blood test), you should avoid anyone who has rubella, especially in the first 16 weeks of pregnancy.

### **Toxoplasmosis**

This germ is commonly found in raw meat, and sheep, lamb and cat faeces. It can sometimes cause serious harm to an unborn baby. To avoid it:

- Wash your hands after handling raw meat.
- Do not eat raw or undercooked (rare) meat.
- Wash salads and vegetables as any dirt may have been contaminated by cat faeces.
- Wash your hands after handling pets or animals, especially cats and kittens.
- Get someone else to clean out any cat litter trays when you are pregnant.
- Always wear gloves when gardening.
- Avoid sheep, especially during the lambing season.

### **Food poisoning**

Various bacteria and other germs can cause food poisoning - that is, a gut infection caused by contamination of food with germs. Two germs that are of particular importance to avoid during pregnancy have already been mentioned - listeria and toxoplasmosis. It is possible that other food poisoning bacteria may also cause complications during pregnancy. For example, gut infection with bacteria called salmonella and campylobacter may be associated with an increased risk of pregnancy complications. So, it is wise to be extra vigilant about avoiding food poisoning.

Therefore, be strict about food hygiene, always cook eggs, meat and poultry thoroughly, wash fruit and vegetables, and wash hands after going to the toilet, before handling food, and after handling raw meat or animals.

### **Chickenpox**

Having chickenpox when pregnant can be a nasty illness, and there is some risk to the developing baby. A vaccine is offered to healthcare workers (doctors, nurses, etc) who have not previously had chickenpox and so are not immune and may catch chickenpox. (About 1 in 10 adults have not had chickenpox as a child.) Therefore, non-immune healthcare workers should consider having this vaccination before getting pregnant.

If you are not sure if you have had chickenpox, a blood test can check if you have previously had it.

### **Hepatitis B**

A mother who is infected with hepatitis B has a high risk of passing it on to her new-born baby. If you are at high risk of catching hepatitis B you should be immunised against this virus before becoming pregnant.

People at increased risk and who should be immunised include:

- Those whose job puts them at risk of contracting hepatitis B. For example, healthcare personnel and staff at daycare or residential centres.
- Those who inject street drugs.
- Those who change sexual partners frequently.
- Those who live in close contact with someone infected with hepatitis B.

### **Screening blood tests**

Ideally, you should have a blood test before you become pregnant to screen for hepatitis B, syphilis, and HIV. Ask your practice nurse for a 'pre-pregnancy' blood test.

## Consider your working environment

If you think that your job may pose a risk to a pregnancy, then ideally you should discuss this with your employer before becoming pregnant. For example, if you work with chemicals, fumes, solvents, etc, which may pose a risk, or if you work with animals such as cats or sheep which may be carrying germs (see above). You may wish to download information guides from the Health and Safety Executive website at [www.hse.gov.uk](http://www.hse.gov.uk)

You may not wish to discuss your intention to become pregnant with your employer, but have a health and safety concern at work. One option then is to contact the Health and Safety Executive for advice on their Infoline - Tel 0845 345 0055.

## Medical conditions

Women with certain medical conditions may benefit from advice before becoming pregnant. See your doctor if you have concerns about a medical condition which may affect pregnancy. For example:

- For some conditions, the medication or treatment may possibly affect the pregnancy or the unborn child. For example, epilepsy.
- For some conditions, the condition itself may require special attention during the pregnancy. For example, diabetes.
- If a hereditary condition runs in your family, you may benefit from genetic counselling.

If in doubt about any medical condition that you have or treatment that you take with regard to their effect on pregnancy, then see your doctor. Ideally, do this before you become pregnant. Or, if the pregnancy is unplanned, as soon as possible.

## Screening tests

From October 2008, all pregnant women in England have been offered a screening test for sickle cell disease and thalassaemia. This is part of routine antenatal care. This is done by a blood test, together with a questionnaire about your family origins. Sickle cell disease and thalassaemia are blood diseases. Some people are 'carriers' of the genes for these diseases but do not actually have the disease itself. If two carriers have a baby, then there is a risk that the baby will be born with the disease. Some women may wish to have the screening test before becoming pregnant, especially if their family origins make these diseases more likely. See your doctor to discuss this.

Genetic testing is a rapidly developing area of medicine. It may be possible that more tests will become available to detect carriers of various diseases. When they become available, these may be tests to consider before becoming pregnant.

## Summary and checklist

Most pregnancies go well and without any major problems. But, it is wise to reduce any risks as much as possible. So, a reminder of things to consider before becoming pregnant, and as soon as you realise that you are pregnant ...

- **Things you should do:**
  - Take folic acid tablets before you get pregnant until 12 weeks of pregnancy.
  - Take vitamin D supplements when you become pregnant.
  - Have a blood test to check if you are immune against rubella, and to screen for hepatitis B, syphilis, and HIV. Ask your practice nurse to do this.
  - Eat a healthy diet. Include foods rich in iron, calcium and folic acid. Also, some oily fish.
  - Have strict food hygiene. In particular, wash your hands after handling raw meat, or handling cats and kittens, and before you prepare food.
  - Wear gloves when you are gardening.

- **Things you should avoid:**

- Too much vitamin A - don't eat liver or liver products, or take vitamin A supplements.
- Listeriosis - don't eat undercooked meat or eggs, soft cheese, pâté, shellfish, raw fish, or unpasteurised milk.
- Fish which may contain a lot of mercury - shark, marlin, swordfish, or excess tuna.
- Sheep, lambs, cat faeces, cat litters, and raw meat which may carry certain infections.

- **Things you should stop or cut down:**

- Caffeine in tea, coffee, cola, etc, - have no more than 200mg per day. For example, this is in about two mugs of instant coffee, or one mug of brewed coffee and a 50g bar of plain chocolate, or two and a half mugs of tea.
- Alcohol - you are strongly advised not to drink at all.
- Smoking - you are strongly advised to stop completely.
- Street drugs - you are strongly advised to stop completely.

- **Other things to consider:**

- Immunisation against hepatitis B if you are at increased risk of getting this infection.
- Immunisation against chickenpox if you are a healthcare worker and have not previously had chickenpox and so are not immune.
- Your medication - including herbal and 'over the counter' medicines. Are they safe?
- Your work environment - is it safe?
- Medical conditions in yourself, or conditions which run in your family.
- Screening tests for sickle cell and thalassaemia.

## Further information

### Food Standards Agency - Advice for Pregnant Women

Web: [www.eatwell.gov.uk/agesandstages/pregnancy/](http://www.eatwell.gov.uk/agesandstages/pregnancy/)

and their revised advise on peanuts

Web: [www.food.gov.uk/news/newsarchive/2008/dec/peanut08](http://www.food.gov.uk/news/newsarchive/2008/dec/peanut08)

### National Childbirth Trust

Information on pre-pregnancy care and health of pregnant women

Tel: 0870 444 8709 Web: [www.nct.org.uk](http://www.nct.org.uk)

### The Pregnancy Book from the Department of Health

Go to their website - [www.dh.gov.uk](http://www.dh.gov.uk) - and search for 'Pregnancy Book'.

### Information from the Department of Health

Web:

[www.dh.gov.uk/en/Healthcare/Maternity/Maternalandinfantnutrition/Maternalnutrition/index.htm](http://www.dh.gov.uk/en/Healthcare/Maternity/Maternalandinfantnutrition/Maternalnutrition/index.htm)

### FPA

Have a leaflet called 'Planning a Pregnancy'

Web: [www.fpa.org.uk/Information/Readourinformationbooklets/Planningapregnancy](http://www.fpa.org.uk/Information/Readourinformationbooklets/Planningapregnancy)

### NHS Sickle Cell & Thalassaemia Screening Programme

Web: [www.sickleandthal.org.uk](http://www.sickleandthal.org.uk)

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Comprehensive patient resources are available at [www.patient.co.uk](http://www.patient.co.uk)

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