

Pregnancy planning advice

Folic acid supplements

You should take folic acid tablets (supplements). Ideally, do this from at least one month 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 such as spinach, sprouts, broccoli, green beans, and potatoes. Some bread and breakfast cereals are fortified with folic acid. However, the intake for each individual can vary. When you are pregnant, you need a good supply of folic acid 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 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 ('prem', preterm, or early) labour.

Folic acid is a naturally occurring vitamin which your body needs. It is not a drug (medicine). You can buy folic acid tablets from pharmacies. Folic acid is available also in all the prenatal multivitamin combinations eg. Pregnacare.

- For most women, the dose is 400 micrograms (0.4 mg) a day.
- If you have an increased risk of having a child with a spinal cord problem then the dose is 5 mg 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 (or have a family with) a spinal cord defect.
 - You are taking medication for epilepsy.
 - You are obese - especially if your body mass index (BMI) is 30 or more.
 - You have coeliac disease, diabetes, sickle cell anaemia, or thalassaemia.

Vitamin D supplements

Vitamin D is needed for growth. Vitamin D supplements are recommended for all pregnant women, breast-feeding women and breast-fed babies. The ideal dose is 10mcg vitamin D3 and this is the dose in most prenatal vitamin combinations.

Alcohol

- Advice from the Department of Health states that pregnant women or women trying to conceive should not drink alcohol. If you do choose to drink then, in order to minimise the risk to your baby, you should not drink more than 1-2 units of alcohol once or twice a week, should not get drunk and should avoid binge drinking (drinking more than 6 units of alcohol in a day). This is because alcohol can cause damage to a developing baby. Alcohol gets to a baby through the placenta if a pregnant woman drinks alcohol. A baby cannot process alcohol very well. So, any alcohol in your baby stays in their body much longer than in you.

NB: one unit of alcohol is in about half a pint of beer, or two thirds of a small glass of wine, or one small pub measure of spirits.

If you are already dependent on alcohol you should be open and honest about the amount you drink, for the sake of your baby's health. If you are planning a pregnancy, go to see your doctor before you become pregnant so that professional help can be arranged. Once you are pregnant, many different people may offer you support, including doctors, midwives, social workers and counsellors.

Excess alcohol in both men and women can also affect fertility levels and should be minimized in a couple trying to conceive.

Smoking

If you smoke, you are strongly advised to stop 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 behavioural problems and attention deficit hyperactivity disorder (ADHD) when they are older. Also, after the birth, children of smoking parents have an increased risk of having chest infections, asthma, glue ear, and cot death (sudden infant death syndrome).

Of course, there are many other risks with smoking, such as the increased risk of developing chest and heart disorders. 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.

For many people it is not easy to stop. Below are some tips which may help:

- Write a list of all the reasons why you want to stop, and keep them with you. Refer to them when you are tempted to light up.
- Set a date for stopping, and stop completely.
- Tell everyone. Friends and family often give support and may help you.
- Get rid of ashtrays, lighters, and all cigarettes.
- Be prepared for some withdrawal symptoms. When you stop smoking, you are likely to get symptoms which may include: nausea (feeling sick), headaches, anxiety, irritability, craving, and just feeling awful. These symptoms are caused by the lack of nicotine that your body has been used to. They tend to peak after 12-24 hours, and then gradually ease over 2-4 weeks.
- Be aware of situations in which you are most likely to want to smoke (for example, with a coffee). Try changing your routine for the first few weeks.
- Take one day at a time. Mark off each successful day on a calendar. Look at it when you feel tempted to smoke, and tell yourself you don't want to start all over again.
- Be positive. You can tell people that you don't smoke. You will smell better. After a few weeks you should feel better, taste your food more, and cough less. *You will have more money*- keep a special money box to see how much you save when you give up and give yourself a treat eg. a spa day.

- Food. Some people worry about gaining weight when they give up smoking, as the appetite may improve. Anticipate an increase in appetite, and try not to increase fatty or sugary foods as snacks. Try sugar-free gum and fruit instead.
- Don't despair if you fail and have a cigarette. You don't have to start smoking again. Pick yourself up and try again. Examine the reasons why you felt it was more difficult at that particular time. It will make you stronger next time.
- Visit quit.ie or 1800 201 203

There are also medications that can help you quit.

Nicotine replacement therapy (NRT): this can help if withdrawal symptoms are troublesome. Nicotine gum, sprays, patches, tablets, lozenges, and inhalers are available to buy, and on prescription. Using one of these increases your chance of stopping smoking if you really want to stop. A pharmacist, GP, or practice nurse can advise about NRT. If you are not yet pregnant, but are planning a pregnancy, an option is to try a course of NRT before becoming pregnant. Even if you are pregnant, nicotine replacements are still safer than smoking in pregnancy.

Medicines called bupropion (trade name Zyban®) and varenicline (trade name Champix®) can also help. These are available on prescription but can only be used prior to getting pregnant. These medicines roughly double your chance of stopping smoking if you really want to stop. They help to reduce the symptoms of nicotine withdrawal.

Street (illicit) drugs

If you take or inject street drugs, you are strongly advised to stop before getting pregnant. There is an increasing amount of evidence to suggest that they are likely to pose a risk of damage to the baby. If you intend to become pregnant you should aim to stop taking or using street drugs. It is best to postpone the pregnancy until you are off drugs. If you have an unplanned pregnancy you should aim to stop the drugs as soon as possible.

Some people can stop drugs without any help, but many people will require help. If you cannot come off drugs easily, see your doctor for help. Your doctor will be able to refer you to a local community drug team (eg. Arbour house) for help or NA.

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.

Being overweight or underweight/over-exercising both decrease your fertility and can even halt periods altogether. You should aim for a BMI of between 19-25 when becoming pregnant. (BMI calculators available online)

Food and diet

Eat a healthy balanced diet

Aim to eat a healthy diet (which everyone should be eating, not just pregnant women). Briefly, a third 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. 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, apart from possibly iodine, no other supplements are routinely advised if you have a normal diet. 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. *Iodine* - a research study published in 2011 concluded that it is likely that many young women in the UK do not get enough iodine in their diet and are lacking in iodine. Iodine mainly comes from milk, yogurt, eggs and fish. Because iodine intake can be variable, some countries routinely fortify cereals and bread with iodine - but not the UK. Iodine is essential for the brain development of a baby in the womb. The research author's concern is that many pregnant women will be lacking in iodine. This may cause their baby to have reduced brain development and be less intelligent than they would otherwise have been. Further research is needed in this area. But, in the meantime, you may wish to consider whether your diet has enough iodine.

What about fish?

In general, 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. However, there are some important exceptions. Some types of fish contain a high level of mercury which can damage the developing nervous system of an unborn baby. Because of this, the Food Standards Agency (FSA) advises:

- You should not eat any shark, marlin, or swordfish.
- Limit tuna - eat no more than four medium-sized cans (drained weight = 140 g per can), or two fresh tuna steaks per week (weighing about 140 g cooked or 170 g raw).

Also, do not eat raw fish or uncooked shellfish (which may contain bacteria, viruses or parasites).

Also, some types of fish may contain a small amount of chemicals from pollution, including dioxins and polychlorinated biphenyls (PCBs). If you eat a lot of these fish, these chemicals may build up in your body over time, which may be harmful. Because of this, the FSA advises that you should have no more than two portions a week of any of the following fish:

- Oily fish, including mackerel, sardines, salmon, trout and fresh tuna. (Tinned tuna doesn't count as oily fish.)
- Sea bream, sea bass, turbot, halibut, rock salmon (also known as dogfish, flake, huss, rig or rock eel).
- Brown crabmeat.

However, the advice above (from the FSA) is controversial. Some experts think the advice to eat no more than two portions of oily fish per week during pregnancy is too restrictive, and may even be harmful to a developing baby. 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.

Therefore, some experts argue that the concern over toxic chemicals in fish is over-cautious and that the benefits of eating three or more portions of oily fish per week outweigh other risks. 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 pâté and cod liver oil supplements.
 - Vitamin tablets or supplements which contain vitamin A.
- Food which may have high levels of listeria. This germ (bacterium) 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.)
 - Pâtés - including vegetable pâtés.
 - 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.

- Certain fish (as described earlier).
- Caffeine should be limited to no more than 200-400 mg per day. Caffeine is a substance that occurs naturally in foods such as tea, coffee and chocolate; is added to some drinks such as cola, and some energy drinks; and is an ingredient of some cough and cold remedies, and some painkillers which you can buy at pharmacies. Having a lot of caffeine increases your risk of having a miscarriage and a baby with low birth weight. The increased risk is small. But, it is best to play safe. The main sources of caffeine are coffee, tea, chocolate, and 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 100 mg of caffeine.
 - One mug of brewed coffee has about 140 mg of caffeine.
 - One mug of tea has about 75 mg of caffeine.
 - One 50 g plain chocolate bar has about 50 mg of caffeine. Milk chocolate has about half the caffeine that plain chocolate has.
 - One can of cola or half a can of an energy drink has up to 40 mg of caffeine.

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. Toxoplasma is also found in cat poo (faeces). Always wash your hands after handling cats and ask someone else to wash out cat litter trays. Use gloves when working in the garden.

Medication

The effects of some prescribed medicines have been well studied and it is known that certain medicines 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 medicines 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 medication for you that you intend to become pregnant. Also, don't take medicines that you can buy over the counter (including herbal remedies) unless they are known to be safe in pregnancy. The pharmacist will advise you about this.

- Paracetamol at normal dose is safe and useful for headaches, backache, and other aches and pains that may occur during pregnancy.
- Anti-inflammatory painkillers such as ibuprofen. You should not normally take these during pregnancy. Regular use during pregnancy may affect the large blood vessels of the developing baby.
- Laxatives. Constipation is common in pregnancy and you may need a laxative. At first it is best to try increasing the fibre in your diet and increasing the amount of non-alcoholic fluids that you drink. If this fails then fibre supplements such as bran, ispaghula (Fybogel) and sterculia are safe. If you need something stronger then it is best to discuss this with a doctor. Some

laxatives such as docusate and lactulose may be prescribed safely for a short time.

- Antihistamines. The safest one to use in pregnancy is chlorphenamine (piriton). This is because it is the oldest, and so has a long-established safety record. However, it tends to make some people drowsy. If you require an alternative then it is best to see a doctor for advice.
- Decongestants such as pseudoephedrine, phenylephrine and xylometazoline are best avoided in the early stages of pregnancy. However, they are unlikely to be harmful if used just now and then.
- Canesten cream and pessaries are safe for thrush.

Always tell a doctor or dentist who prescribes your medication that you intend to become pregnant.

If you already take regular medication (for example, for epilepsy or diabetes), it is important that you discuss this with a doctor before becoming pregnant.

If you have an unplanned pregnancy, discuss with your doctor as early as possible any medication that you take. In some cases, the risk of taking the medicine has to be balanced against the risk of not taking the medicine, and your condition not being treated.

Infections

Rubella (German measles)

If you plan to become pregnant for the first time, you can check that you are immune to rubella (German measles) before becoming pregnant, especially if you work with small children. You can 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 (once usually if you've had previous MMR or twice 3 months apart if you never had MMR). Congenital rubella is now rare but is very unpleasant if it does happen. Some people choose not to be tested and have booster postnatal if needs be.

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 with a rash 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 poo (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 germs (bacteria, viruses or similar) can cause food poisoning. Food poisoning causes tummy (abdominal) pain, diarrhoea and vomiting. Two germs that are of particular importance to avoid during pregnancy have already been mentioned - listeria and toxoplasma. 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, and meat, including poultry, thoroughly; wash fruit and vegetables, and wash hands after going to the toilet, before handling food, before eating, 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 adult in 10 has 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 and have contact with chickenpox in pregnancy, your antenatal blood sample is held by the lab and can be tested within 24 hours to assess immunity.

Hepatitis B

A mother who is infected with hepatitis B has a high risk of passing it on to her newborn 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 (illicit) drugs.
- Those who change sexual partners frequently.
- Those who live in close contact with someone infected with hepatitis B.

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. Certain jobs and

workplaces may pose a risk to a pregnancy, in particular to the early stages of pregnancy. For example:

- Raw meat is sometimes contaminated with germs, such as listeria and toxoplasma. If these germs infect adults, they may cause listeriosis or toxoplasmosis, but may cause little harm. However, these germs can cause serious problems to your unborn child if you become infected when you are pregnant.
- If you work with certain animals. For example:
 - You should avoid contact with sheep and lambs at lambing time. This is because some lambs are born contaminated with germs such as listeria, toxoplasma and chlamydia which may affect you and your unborn baby.
 - Cats and kittens often carry toxoplasma germs. Especially cat poo (faeces). So, cleaning out cat litters and handling cats and kittens can be a risk.
- If your job puts you at risk of contracting hepatitis B, you should be immunised against this virus. For example, if you are a healthcare worker, or work at a daycare or residential centre. (Women with hepatitis B can pass on the infection to their child at childbirth.)
- If you work with chemicals, fumes, radiation, etc. Some may be toxic to an unborn baby.

The above are just examples. In short, if you think that your occupation may pose a risk to a pregnancy, then you should discuss this with your employer before becoming pregnant. A change in job, or working practice, may be necessary.

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.

Summary and checklist

Subfertility

About 1 in 7 couples can have some problems conceiving a baby. However, *over 8 in 10 couples* having regular sex (every two to three days) will conceive within one year

if the woman is aged under 40 years. In addition, of those couples who do not conceive in the first year, *about half* will do so in the second year. So don't worry if it takes you a little longer than you were expecting. If you are under 35, most of the time you do not need referred to a fertility clinic for 2 years.

There are various causes of infertility, both in men and in women. However, there will be *no reason* found for the infertility in about 3 in 10 cases. In around 4 out of 10 cases disorders are found in both the man and the woman.

Do we need any tests?

Your GP *may* suggest a few tests. This is usually when you have been trying for over a year if under 35 or over 6 months if aged over 35. For example:

- A sperm test sperm test (semen analysis) of the male partner.
- A blood test to check that ovulation occurs in the female partner. This measures the hormone progesterone which is high just after ovulation. The blood sample is taken on the 21st day of a regular 28-day cycle (counting day one as the first day of bleeding). If your cycle is longer, aim for approx 7 days before when you predict your period is (6-8 days is usually sufficient).
- They may also suggest some other tests, depending on any other symptoms that you may have. For example, whether the female partner has regular periods or not, etc. Day 3 (2-5 if can't get exact date) blood tests have check for a host of hormonal factors including ovarian and thyroid hormones.
- A specialised blood test called AMH might be worth considering especially if over 35. This test is over 100euro and needs a referral letter as can't often be sent from general practice.

Referral to a doctor who is a specialist is not usually suggested until you have been trying to conceive for 18 months:

- If the female partner is under the age of 36.
- If both partners are otherwise healthy.
- If your GP has not found any problems in the examination or tests that he or she has carried out.

If any of these conditions do not apply, you may be referred earlier to a doctor who is a specialist.