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Before You Get Pregnant

It is exciting to plan to have a baby. To improve your chance of having a problem-free pregnancy and a healthy baby, it is sensible to be ready ahead of the time. There is good evidence to show that it helps if both the mother and father are healthy before a pregnancy begins. Not all pregnancy problems are preventable, but you can increase your chances of having a healthy baby by identifying risks that you or your partner might have and modifying those risks as far as is possible.

Most GPs can provide basic pre conceptual counselling, or the information that you require before becoming pregnant but sometimes you may need to consult with an obstetric specialist, genetic counsellor or other medical specialist. *This is particularly important if you have a family history of an inheritable disorder or a medical problems such as diabetes, high blood pressure or epilepsy.*

Because it is possible that you may be pregnant for some days or even weeks before you recognise that it has occurred, it is prudent to be aware of the most vulnerable periods of development of a fetus. This varies with the type of threat and there is some controversy as well as incomplete information about certain problems. However, with respect to a process called teratogenesis, or the risk of major abnormalities arising from internal and external influences, it is known that the human fetus is most vulnerable over the period from 17 to 56 days after conception. Changing your lifestyle and certain habits such as alcohol use may therefore be important in that time when you might become pregnant. This may be cold comfort to any woman who finds herself pregnant at a time after an excess of alcoholic, for example. However, because the only real option in those circumstances is a termination of the pregnancy, it is sensible to plan in advance and be moderate in the use of alcohol, bearing in mind that abortion involves its own physical and psychological risks.

Weight: Diet, Vitamins and Exercise

Being at an ideal weight for your height is important for a number of reasons. Being overweight or underweight can impair fertility or the monthly probability of pregnancy – See the Information about Fertility Tests.

Excess weight has become a problem of epidemic proportions in our community. Some five women in every ten (50%) are overweight or obese. This is best assessed from your body mass index (BMI) which is calculating by dividing your weight in Kg by your height in metres squared.

Excessive weight in pregnancy increases the risk of pregnancy loss by miscarriage and stillbirth, diabetes, high blood pressure, slow and difficult labour, the need for Caesarean delivery as well as blood clot and other life threatening complications of pregnancy. It can also compromise tests of the unborn baby, monitoring of the baby's well being in labour, your options for pain relief in labour and breastfeeding



Pregnancy is not the time to try to lose weight. It's better to have good eating habits and be at the right weight before becoming pregnant. Join a group such as Weight Watchers or consult your doctor or a dietitian today because the best programs usually involve slow weight loss over a lengthy period of time.

There is very good evidence to suggest that all pregnant women should take a vitamin supplement of **Folic Acid** (or folate) for at least one month before they become pregnant and during the first 12 weeks of pregnancy. This will reduce the risk of a neural tube defect. This includes spina bifida and anencephaly, a serious abnormality that involves incomplete development of the brain and skull. There is also evidence that taking a folate supplement reduces the risk of miscarriage in the first 3 months of pregnancy and that taking folate throughout pregnancy may reduce a baby's risk of childhood cancers.

The usually recommended dose of folic acid is not less than 5 ug (micrograms) per day but a few women require significantly more. There are a few remote risks associated with taking large doses of folic acid so it is probably better to talk it over with your medical advisor before using large doses. The 5 ug supplements are readily available at chemists, supermarkets at from health food stores, Folic acid is a component of many fresh fruit and vegetables whose consumption is a sensible component of every pregnancy plan. Dieticians however advise that it is difficult to obtain sufficient doses of folate from dietary sources alone. That is why a supplement is routinely recommended.

The evidence for the use of a multivitamin supplement before and during pregnancy and lactation is less compelling than that for folate. In the UK, where exposure to sunlight is less common than Australia, pregnant women are advised to take a supplement of **Vitamin D** 10 ug daily. Supplements of Vitamin D are commonly recommended to pregnant women and it seems unlikely that taking supplements up to a rate of 25 ug/day is harmful. However it is possible to have toxic effects from too much Vitamin D.

A significant number of Australian women are **Iodine** deficient. This mineral is important for normal thyroid function during pregnancy which in turn is responsible for normal brain development of the fetus. Iodine fortification of food may be insufficient for pregnant women and those planning a pregnancy are advised to take a supplement of 150 ug daily. If you have had a thyroid disorder then you should consult a doctor before commencing an iodine supplement.

There is evidence that overuse of Vitamin A (>700 ug/day) can be harmful to the fetus. Most supplements that have been formulated for use in pregnancy and lactation are safe and they may provide some benefit. However, it is probably more sensible to eat a healthy and varied diet rather than rely upon the use of supplements.

The use of many other commonly (and not so commonly used) minerals, vitamins and supplements is often associated with an absence of good information about their risks and benefits so the best counsel is to discuss these with your health advisor.

Healthy sleep habits and exercise are important to your general health. There is no evidence that exercise programs of anyone, other than the extreme athlete, needs to be changed prior to and during the early weeks of a pregnancy. A very high body temperature is best avoided in the first 14 weeks of pregnancy, because they have been implicated in an increased chance of birth defects. You should avoid getting overheated when using a spa or sauna, for example.



Smoking, Drug and Alcohol Use

Smoking, illicit drug use and alcohol use are never safe during pregnancy. Treatment programs to help you to stop using these substances before pregnancy are important. These substances increase your risk of having a miscarriage, a baby with birth defects or a premature baby. Women should not drink to the point of even mild intoxication during pregnancy because alcohol is toxic to a developing brain. - See the Information about Alcohol in Pregnancy.

Smoking impairs fertility in both males and females. Smoking during pregnancy increases the risk of miscarriage, stillbirth as well as impairing the birth weight and brain size of a baby. Smoking after pregnancy increases the risk of lactation failure and sudden infant death syndrome (SIDS or cot death). Planning for a pregnancy is another good reason to quit smoking – See the Information about Smoking in Pregnancy.

Risks Due to Age, Family and Ethnic Origin

Women over the age of 35 years have an increased risk of Down Syndrome and related chromosomal problems. Women over the age of 40 years have an increased risk of miscarriage – See the Information about Age and Fertility. These risks may not be as high as you think and your medical advisor can talk to you about the tests that can be performed in the early weeks of pregnancy to detect such problems – See the Information about Options for Prenatal Diagnosis.

Cystic Fibrosis is the most common genetic disorder that affects a baby for couples of Caucasian ethnicity. The majority of Australian and New Zealanders are Caucasian and one in every 25 of the mothers or fathers carries a gene that is responsible for this serious disorder. If two people with the same cystic fibrosis gene make a baby then there is a one in four chance that this child will suffer from cystic fibrosis. It is for this reason that many genetic specialists recommend that all couples planning a family have a screening test for the carrier state of cystic fibrosis. This can be as simple as a blood test or mouth swab sampling of inner cheek cells.

Some other ethnic groups may have special risks. Genetic screening may be recommended for the blood disorders called Thalassaemia in people of Mediterranean or Asian descent or for sickle cell disease in people of black and southeast Asian descent. Couples with Jewish ancestry may benefit from tests for the Tay Sachs disorder.

If you, your baby's father or a close relative has a genetic disorder such as muscular dystrophy, X-linked mental retardation, cystic fibrosis, Down syndrome or spina bifida, talk to your doctor about genetic counselling before you get pregnant.

If you have a close relative that has been affected by blood clots (usually involving the deep veins of the legs and sometimes “travelling” or embolising to the lungs) it may be necessary to have your blood tested to see if you have an inherited form of blood clotting abnormality. This becomes even more important if you have experienced this type of problem yourself when consultation with an obstetrician and haematologist may be desirable before you get pregnant.



Immunisations and Infections

There are a few infectious diseases that can affect an unborn baby. It is helpful to get a Rubella (German measles) and a Varicella (Chicken pox) immunity test before becoming pregnant. If you get rubella during your pregnancy, your baby might have birth defects. You can protect yourself by having a rubella vaccination at least three months before you become pregnant. In general, pregnant women, especially in the early months of pregnancy, should avoid close contact with children who are sick with rashes and fevers that might be rubella.

Toxoplasmosis is an infection that also causes birth defects. You can avoid exposure to toxoplasmosis by having someone else clean the cat's litter box, by avoiding contact with kittens or garden soil, and by not eating raw or undercooked meat.

Influenza vaccinations are a good idea for pregnant women and there is evidence to suggest that, if given during pregnancy, they can provide a measure of protection to the newborn baby as well.

Medical Conditions

Problems such as diabetes,, high blood pressure, epilepsy, heart problems, depression (and other mental disorders), thyroid disease, rheumatoid arthritis, kidney disease and thrombosis should be discussed with your doctor before becoming pregnant. The reasons are twofold. First there may be certain medications that are being used to control these diseases that are not suitable in pregnancy. In a few instances you may need to switch them before you become pregnant. Secondly, it can be important to have optimal control of a disease in order for the best outcome for a pregnancy. For example, it is known that insulin-dependent diabetes increases the risk of miscarriage and abnormalities in a fetus but there is good evidence that these risks can be substantially reduced by tight control of blood sugars in the early weeks of a pregnancy.

If you can guarantee that neither partner has engaged in sexual activities with any other partner then sexually transmitted diseases (STDs) need not be an issue. However, in the event of no such guarantee then it would be wise to discuss the need for a check for STD's with your doctor. This includes a check for chlamydia, syphilis and HIV. All women should have a Pap test before they become pregnant. Pre cancer of the cervix associated with Human Papilloma Virus (HPV) is a very common condition that may require further evaluation and treatment.

Workplace and Home Exposures

Ask your boss about exposures at your workplace to chemicals or inhaled substances. Your workplace may have information on all chemicals that are used at that location, and this information can be given to your doctor. Don't forget that some hobbies carry a risk to your unborn baby - for example, the lead used in making stained glass.

Other Concerns

You and your partner should talk about your readiness for parenting, to see if you have problem areas that could be improved before you get pregnant. Some couples might benefit from relationship counselling. Domestic violence often increases during pregnancy. Such violence should always be confronted and dealt with before commencing a pregnancy. Most communities offer parenting classes and or counseling, particularly for young parents with conflicting issues that require resolution for the optimal health of a new family..

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