

This fact sheet describes the importance of taking a vitamin called folate to prevent birth conditions called neural tube defects.

In summary

- **Folate (sometimes called folic acid) is a vitamin that can prevent birth conditions called neural tube defects**
- **Folate is found in leafy green vegetables, wholegrain breads, cereals such as wheat and corn, and legumes such as peas and lentils**
- **Folate is beneficial if taken very early in pregnancy so it should be taken at least 1 month before pregnancy and during the first 3 months of pregnancy**
- **Most women need to have 0.4 mg of folate each day.**

WHAT ARE NEURAL TUBE DEFECTS?

Spina bifida and anencephaly are neural tube defects that can occur during development of the spine and brain.

- Neural tube defects occur very early in pregnancy, often before a woman knows she is pregnant
- Many babies with these defects die or have problems with their bowels, bladder and walking
- They occur in about 1 in every 1000 pregnancies.

CAN WE PREVENT NEURAL TUBE DEFECTS?

Studies have shown that 4 to 7 out of 10 (40% to 70%) cases of neural tube defects can be prevented by increasing the mother's intake of folate before and during early pregnancy.

WHERE IS FOLATE FOUND?

Folate is a B group vitamin found in:

- Leafy green vegetables, such as broccoli, spinach and salad greens
- Wholegrain breads, pasta, noodles and breakfast cereals
- Cereals such as wheat, oats and corn
- Legumes such as peas, dried beans and lentils.

Certain foods in Australia have extra folate added to them. These foods include some breakfast cereals, most bread and some fruit juices. Food labels will let you check whether the food contains folate, labelling uses the words folate or folic acid so you do not need to know a numerical code to look for it.

WHO NEEDS FOLATE?

All women, especially women planning a pregnancy. Many pregnancies are unplanned, so all women should make sure that they have a folate-rich diet, or take a daily folate tablet.

A folate-rich diet with a wide variety of vegetables, fruits, legumes, whole grains and cereals is a healthy way of eating for everyone. Eating this group of foods can help prevent heart disease, some cancers, diabetes and other health problems. It can be difficult to obtain enough folate from your diet so many women choose to take a daily tablet.

HOW MUCH FOLATE IS NEEDED?

Most women need 0.4mg (milligrams) of folate every day. Sometimes tablets are labelled as 400 micrograms, 400 mcg or 400 ug.

Achieving this amount of folate can be through the food you eat. You may want to talk to your doctor or nutritionist to make sure you are getting enough folate through your food.

You can take a daily folate tablet that you can buy at your chemist, health food store or supermarket

Women who take a 0.4mg folate tablet each day and eat a folate rich diet are not likely to exceed a safe dose of folate. Too much folate can mask vitamin B12 deficiency but this is rare and can be checked by your doctor.

Should all women have 0.4 mg folate each day?

In general, yes. However some women are at higher risk than others of having a baby with a neural tube defect. These women should have more folate in their system and therefore may need to take 5 mg of folic acid every day.

Women are at increased risk of having a baby with a neural tube defect if:

- They have had a baby with spina bifida, anencephaly or another neural tube defect
- They or their partner were born with a neural tube defect
- They or their partner have a close relative who was born with a neural tube defect
- They take certain anti-epileptic and other medications (which may affect absorption or metabolism of folate)
- They have insulin-dependent diabetes
- They are obese (BMI>30).

Women in this increased risk group should talk to their doctor or genetic counsellor before pregnancy for advice about the amount of folate they should take.

A note of caution about taking folate

Women who take medicines to control epilepsy, seizures or psychiatric disorders should take folate only as advised by their doctors. Folate can interfere with the anti-seizure activity of some medications.

Folate is included in most multi-vitamin and mineral tablets but often at a lower dose than 0.4mg. Multi-vitamin and mineral tablets should not be taken in high doses to get the right amount of folate because high doses of some vitamins, such as vitamin A, can cause other problems with a developing baby.

IS THERE A TEST FOR NEURAL TUBE DEFECTS DURING PREGNANCY?

Yes, there are tests for neural tube defects during a pregnancy. You may want to discuss testing options with your doctor, midwife or genetic counsellor.