

Folic Acid and Pregnancy

Folic acid and your pregnancy

Every year in Australia, about 50 babies are born with spina bifida.

Neural tube defects (NTDs) occur in the early stages of pregnancy during the initial development of the brain and spinal cord. Most NTDs can be detected by routine antenatal testing, including blood tests and ultrasound scans.

Types of NTDs include spina bifida, encephalocele and anencephaly. NTDs result from the spinal cord or bones of the skull not closing properly during development.

The good news is that up to about two-thirds of NTDs can be prevented if expectant mothers consume enough folate (also referred to as folic acid) in their diets, before and during the first 3 months of their pregnancy. Spina bifida

Spina bifida means 'split or divided spine', and causes a baby to be born with exposed nerves and damage to the vertebrae. Spina bifida is one of the Western world's most common birth defects. The effects of the condition are permanent, and may include incontinence, paralysis, and loss of sensation and mobility.

What is folate?

Folate is the naturally-occurring form of a water-soluble B group vitamin.

It is referred to as folic acid when it is in its man-made form, which is used in supplements (tablets) or added to food.

Folate is used within the body for cell regeneration and growth and is needed in increased levels by pregnant women.

Evidence suggests that adequate folate has more benefits to pregnant women than preventing NTDs: it may also reduce the risk of early deliveries and low birth weight babies.

When do I stop taking folate (folic acid) supplements?

Recent studies suggest that you should discontinue use of folate supplements after the initial 12 week of your pregnancy, due to an increased risk of you baby having asthma (up to 30% increased risk).

How much folate is enough?

The National Health and Medical Research Council recommends that pregnant women increase their intake of dietary folate to 0.6 mg per day, to cover their own needs and those of the baby (before and during the first trimester of pregnancy).

In addition to consuming food folate from a varied diet, it is also recommended that women begin taking a folic acid supplement of 0.4 mg per day for one month before conceiving and during the first 3 months of pregnancy to reduce the risk of having a baby with a NTD.

If you are having trouble eating during the early stages of pregnancy due to morning sickness your doctor may advise you to take a supplement containing 0.6 mg of folic acid.

Also, if you have a family history of neural tube defects, you may need to take a higher dose of folic acid. Your doctor can advise you on this.

How do I increase my folate intake?

There are 3 ways to increase your folate intake:

- include folate-rich foods in your diet;
- include foods fortified with folic acid in your diet; and
- take daily folic acid supplements that contain at least 0.4 mg of folic acid.

It is important to remember that multivitamin supplements may not be an adequate source of maternal folic acid: they may contain only very small amounts of the vitamin.

Which foods are rich in folate?

- Green, leafy vegetables, such as spinach, and other vegetables, such as broccoli and Brussels sprouts.
- Oranges, bananas, avocado and grapefruit.
- Berries.
- Eggs.
- Yeast extract, for example, Vegemite or Marmite.
- Fortified foods such as breads and cereals.

Folic acid fortification of foods has been permitted in Australia since June 1995, and is undertaken by many Australian companies.

Folic acid fortification of wheat flour used for bread making was introduced in Australia in 2007, and was made mandatory in September 2009.

Mandatory folic acid fortification requires Australian millers to add folic acid to wheat flour for bread-making purposes, which means that most bread in Australia contains folic acid. (Organic bread and bread made from cereal grains other than wheat flour do not have to contain folic acid.)

Many breakfast cereals have additional folic acid. Also, many other foods are either supplemented with folic acid or naturally contain high levels of folate. These foods can generally be identified through a health claim on the package initiated by Food Standards Australia New Zealand. Food products that have good levels of folate include some tinned vegetables; legumes; nuts; juices; and soy products.

While liver and liver products such as pate are high in folate content, they are not recommended for pregnant women due to the risk of developing listeriosis, a disease which can be fatal to an unborn baby.

Talk to your doctor

If you are planning to get pregnant, or are concerned about your folate intake, talk to your doctor or health professional. All women of reproductive age are encouraged to increase their folate levels, particularly if they are planning a pregnancy.