



Pregnancy and Nutrition: Folate and Preventing Neural Tube Defects

What are folate and folic acid?

Folate is a B vitamin found naturally in many foods.

Folic acid is a form of folate. It's used in vitamin supplements and fortified foods. Fortified foods, also called enriched foods, are foods that have specific nutrients added to them.

Why is folate important?

Your body uses folate during your pregnancy to make red and white blood cells and to help your baby grow.

Folate also lowers the risk of your unborn baby having a neural tube defect (NTD). NTDs are a group of serious birth defects that affect a baby's spinal cord, brain and skull. Spina bifida and anencephaly are the most common NTDs. Some babies with severe NTDs are stillborn or do not survive long after birth.

NTDs happen when the tissues and bone around the brain and spine do not grow well. NTDs can happen in the third and fourth week after conception (the first or second week after your first missed period). This could be before you know that you are pregnant.

How can I reduce my baby's risk of being born with an NTD?

If you are planning on becoming pregnant, take a multivitamin with 400 mcg (0.4 mg) of folic acid and eat foods high in folate every day for 3 months before you become pregnant.

If you become pregnant, continue taking a multivitamin with folic acid every day during

your pregnancy and for 4 to 6 weeks after, or for as long as you are breastfeeding.

Since many pregnancies are unplanned, it is important for all women who could become pregnant to consider taking a daily multivitamin with folic acid. A multivitamin with folic acid also gives you other nutrients important for a healthy pregnancy. When you choose a multivitamin, pick one that also has vitamin B12. Vitamin B12 works with folate to make DNA.

Some multivitamins contain more than 400mcg (0.4mg) of folic acid. A slightly larger dose of folic acid is not dangerous, but too much folic acid can cause health problems. Do not take more than 1000 mcg (1 mg) of folic acid from fortified foods and supplements each day unless your health care provider has told you to.

How can I get more folate from my diet?

Food sources of folate include:

- dried beans, peas, lentils and edamame (green soybeans)
- dark green vegetables such as asparagus, avocado, spinach, broccoli, romaine lettuce, beets, Brussels sprouts, green peas, gai-lan, and bok choy
- oranges and papaya
- wheat germ, sunflower seeds and peanuts
- enriched grain products, such as enriched pasta and enriched cornmeal. Other foods that may contain added folic acid include breads, crackers and ready-to-eat cereals. The amount of folic acid in enriched foods varies

Check the nutrition label for more information.

Although liver and liver products (e.g. liverwurst spread and liver sausages) are high in folate, they are also very high in vitamin A. Too much vitamin A may cause birth defects, especially during the first trimester. The safest choice is to limit these foods during pregnancy. If you choose to eat liver or liver products, have no more than 75g (2 ½ ounces) per week.

What increases my risk of having a baby with a neural tube defect?

You are at higher risk of having a baby with an NTD when:

- You or your male partner already had a baby with an NTD or a pregnancy affected by an NTD
- You have a family member with an NTD
- You have diabetes, obesity, gastrointestinal conditions such as Crohn's or Celiac disease, gastric bypass surgery, advanced liver disease or receive kidney dialysis
- You struggle with drug or alcohol use
- You are taking anti-epilepsy medications or medications that interfere with your body's use of folic acid (e.g., anticonvulsants, methotrexate, sulfasalazine, triamterene or trimethoprim - as found in cotrimoxazole)

A health care provider might suggest a larger dose of folic acid if you are at higher risk of having a baby with an NTD. If you are at a higher risk, talk to your health care provider about what amount of folic acid is right for you.

For More Information

For more information about folate, eating a balanced diet or spina bifida, visit the following resources:

- [HealthLinkBC File #68g Folate and Your Health](#)
- Eating Well with Canada's Food Guide: <https://food-guide.canada.ca/en/>
- Spina Bifida and Hydrocephalus Association of British Columbia: www.sbhabc.org, or call 604-878-7000

