FOLIC ACID FOR PRECONCEPTION AND PREGNANCY





You are having a baby or planning a pregnancy. Learn what you need to know about folic acid.

What is folic acid?

Folic acid (also known as folate or vitamin B9) is a vitamin which helps grow and protect cells in your body. It is found in some foods and in multivitamin supplements.

Why is folic acid important during preconception and pregnancy?

Your body needs folic acid when cells are growing and dividing very quickly. This happens during pregnancy as your uterus (womb) expands, the placenta develops, your body circulates more blood, and the fetus grows. Because of this, folic acid is important for a healthy pregnancy.

As your body grows, your baby is also growing very quickly. Maintaining healthy eating habits and proper levels of vitamins and minerals (such as folic acid) before conception and during pregnancy helps decrease the risk of some birth defects. Folic acid lowers the risk of birth defects such as neural tube defects (NTDs), heart and limb defects, urinary tract anomalies, narrowing of the lower stomach valve, and oral facial clefts (like cleft lip and cleft palate).

How can I get enough folic acid?

Folic acid is found in dark green, leafy vegetables, citrus fruit, whole grains, and other foods. In Canada, since 1998, enriched white flour, pasta, and cornmeal have been fortified with folic acid. Since then, there has been a decline in the rate of neural tube defects in Canada.

Here is a list of some foods that are recommended sources of folic acid:

fortified grains	broccoli
spinach	peas
lentils	brussels sprouts
chickpeas	corn
asparagus	oranges

Making sure you get enough folic acid every day from food is a challenge. That's why Canadian experts recommend you take a multivitamin with folic acid to ensure you get the amount you and your baby need.

When should I take folic acid supplements?

Since folic acid is so important in the early stages of pregnancy, start taking a multivitamin with folic acid if you are trying to conceive. It's important to get your daily dose of folic acid even before you become pregnant. Continue through pregnancy and for at least four to six weeks after birth and as long as you are breastfeeding.

How do I choose a multivitamin?

Talk it over with your health-care professional. If you are at a low risk for neural tube defects (NTDs), choose a multivitamin with 0.4-1.0 milligrams (mg) of folic acid. However, if you are at a higher risk for NTDs, your health-care professional may suggest a higher daily dose of folic acid. You might have a higher risk if:

- you had a previous pregnancy affected by NTDs
- you have a family history of NTDs
- you belong to an ethnic group that research shows is at a higher risk for NTDs (such as Sikh or Celtic)
- you have insulin-dependent diabetes
- you are obese
- · you take certain medications to treat a seizure disorder
- you have a hard time remembering to take medications
- · you have an addiction to alcohol or drugs*

If you are at increased risk, your health-care provider may recommend you take up to 5.0 milligrams of folic acid daily, for at least three months before conception. After 10-12 weeks of pregnancy, switch to the lower dose (0.4-1.0 mg) for the rest of the pregnancy and continue while breastfeeding.

^{*}Use of drugs and alcohol during pregnancy can result in serious side effects for your baby, including low birth weight and birth defects.

Neural tube defects (NTDs)

In the beginning of pregnancy, even before the time most women find out they are pregnant, folic acid plays an important role in the early development of the part of the fetus called the neural tube. The neural tube forms in weeks three and four of pregnancy and grows into the brain and spinal cord. When the tube doesn't close properly, this is called a neural tube defect (NTD). Some examples of NTDs are spina bifida (the spine or its covering stick out of the back), anencephaly (absence of part of the brain), and encephalocele (part of the brain grows outside the skull).

Can I have too much folic acid or vitamins?

If you take a multivitamin with folic acid and eat a balanced diet by following Canada's Food Guide, you won't have too much folic acid. If you do end up with any extra in your body, it will usually just pass in your urine. If you need a higher than normal amount of folic acid, talk to your health-care provider about taking an additional folic acid supplement with your multivitamin to get the correct amount.

Taking more than the recommended dose of vitamins can be harmful. Make sure you do not take more than the recommended dose of your multivitamin per day. Read the label on any vitamins when you buy outside the pharmacy. Choose a multivitamin with vitamin A as beta-carotene instead of as retinol since too much retinol may cause birth defects.

To learn more about folic acid and pregnancy

- "Healthy Beginnings: Giving your baby the best start from preconception to birth": www.sogc.org/healthybeginnings
- Eating Well with Canada's Food Guide: www.hc-sc.gc.ca/fn-an/food-guide-aliment
- The Society of Obstetricians and Gynaecologists of Canada (SOGC) and Motherisk's Joint Guideline on "Pre-conceptional Vitamin/Folic Acid Supplementation 2007":

www.sogc.org/guidelines

 Public Health Agency of Canada: www.phac-aspc.gc.ca/fa-af

