



## FOLIC ACID AND BIRTH DEFECTS

### The Issue

If you are a woman who may become pregnant, taking folic acid on a daily basis before pregnancy can help prevent serious birth defects in your unborn baby.

### Background

All women who could become pregnant are at risk of having babies with neural tube defects. These are serious birth defects that consist of abnormalities in the baby's brain, skull or spine.

Women can work with their health professionals to reduce this risk significantly by seeking their advice on how to take folic acid.

### Neural Tube Defects (NTDs)

The neural tube is the part of the developing baby that eventually becomes the brain and spinal cord. Neural tube defects (NTDs) occur when the neural tube fails to close completely during the early weeks of pregnancy. At this early stage, many women do not even know that they are pregnant. About 260 babies are born each year in Canada with an NTD.

Spina bifida is the most common NTD. The effects of spina bifida are quite varied. These effects can range from severe physical disabilities and developmental delay, to problems that can be corrected by surgery. The most common effects are limited use of the lower limbs, and bowel and bladder limitations.

Another NTD is anencephaly, a condition in which the brain either fails to develop completely, or does not develop at all. Pregnancies affected by this condition often end in miscarriage. Babies born with anencephaly die very soon after birth.

### Folic Acid Reduces the Risk of NTDs

Folic acid, or folate, one of the B vitamins is essential to the normal development of a baby's spine, brain, and skull, especially during the first weeks of pregnancy.

Research has shown that women who take a daily vitamin supplement containing folic acid before conception and in the early weeks of pregnancy can reduce the risk of having a baby with an NTD.

## Women at Higher Risk

If you have a personal or family history of NTDs, you should consult your doctor. You may be advised to take a higher daily dosage of folic acid. If you have diabetes, epilepsy, or if you are obese, you may be at higher risk of having a baby with an NTD. You should discuss these risk factors with your doctor before planning your pregnancy.

## Health Canada's Actions to Help Prevent NTDs

Health Canada launched a national awareness campaign in March 2002, about the importance of folic acid in the prevention of birth defects. With this campaign, Health Canada is working in partnership with stakeholders, other governments and health care professionals to ensure that Canadian women of childbearing years are aware that they can reduce the risk of NTDs, by taking folic acid before pregnancy.

As part of its overall mission to help the people of Canada maintain and improve their health, Health Canada also conducts research on the health benefits of nutrition, and establishes national guidelines, including Canada's Food Guide to Healthy Eating, and Nutrition for a Healthy Pregnancy: National Guidelines for the Childbearing Years.

## To Reduce Your Risk of NTDs

If you are a woman who may become pregnant, you should:

- Ask your health care professional about the benefits of folic acid – if you are at higher risk, your doctor will need to know your health history in order to recommend the right supplement and dosage for you
- Maintain a healthy nutritional diet – taking a vitamin supplement does not reduce or replace the need for a healthy diet as recommended in Canada's Food Guide to Healthy Eating. Good sources of folic acid include dark green vegetables such as broccoli, spinach, peas, and brussel sprouts. Other good sources include corn, dried peas, beans, lentils, oranges, and orange juice
- Seek advice from a health professional about how to take folic acid – in large doses, some of the ingredients in multivitamins can do more harm than good

Remember it's never too early to ask your health care professional about folic acid.

## Need More Info?

For more information about Health Canada's Folic Acid Campaign visit [www.healthcanada.ca/folicacid](http://www.healthcanada.ca/folicacid). This site also features useful links to other sources of important information.

For general information about nutrition, see [www.hc-sc.ca/hppb/nutrition](http://www.hc-sc.ca/hppb/nutrition).

For copies of folic acid pamphlet:

Canada's Food Guide to Healthy Eating, and

Nutrition for a Healthy Pregnancy: National Guidelines for the Childbearing Years, call (613) 954-5995,

or write to:

Health Canada Publications  
Ottawa, Ontario  
K1A 0K9