


# Joint SOGC-Motherisk Clinical Practice Guideline

## The Use of Folic Acid in Combination With a Multivitamin Supplement for the Prevention of Neural Tube Defects (NTDs) and Other Congenital Anomalies

Patient Assessment	Healthy women with low risk of NTDs <sup>1</sup>	Women at high-risk of NTDs or other congenital anomalies <sup>1</sup>
	<ul style="list-style-type: none"> <li>• Patients with no personal health risks</li> <li>• Planned pregnancy</li> <li>• Good diet of folate-rich foods</li> <li>• Good compliance with medications</li> </ul>	<ul style="list-style-type: none"> <li>• Women with family history of NTDs</li> <li>• Epilepsy</li> <li>• Insulin dependent diabetes</li> <li>• Obesity with BMI &gt; 35 kg/m<sup>2</sup></li> <li>• High risk ethnic groups, ie. Sikh, Celtic and Northern Chinese</li> <li>• Use of folic acid antagonist</li> <li>• History of poor compliance with medications</li> <li>• Variable diet</li> <li>• No consistent birth control</li> <li>• Possible teratogenic substance use (alcohol, tobacco, recreational non-prescription drugs)</li> </ul>
<b>Stages of Pregnancy</b> <b>Preconception</b> (at least 3 months prior to conception) <b>through 1st Trimester<sup>1</sup></b>	Daily Multivitamin with 0.4 to 1.0 mg of folic acid <sup>1</sup> such as <b>Centrum Materna</b>	Daily Multivitamin with 5 mg of folic acid <sup>1</sup> such as <b>Centrum Materna PLUS</b> 4 mg of folic acid supplementation (total 5 mg of folic acid)
<b>2nd Trimester through Postpartum (4-6 weeks) or as long as Breastfeeding<sup>1</sup></b>	Daily Multivitamin with 0.4 to 1.0 mg of folic acid <sup>1</sup> such as <b>Centrum Materna</b>	Daily Multivitamin with 0.4 to 1.0 mg of folic acid <sup>1</sup> such as <b>Centrum Materna</b>

### Centrum<sup>®</sup> Materna<sup>®</sup> Benefits



- Offers a complete prenatal vitamin formula.
- One tablet daily dose ensures better patient adherence.
- Has led formulation efforts to reflect the latest in nutritional science.
- Safe – provides the latest vitamin and mineral recommendations for pregnancy and does not exceed the Tolerable Upper Intake Levels (UL) set by the Institutes of Medicine and Health Canada.
- Has earned the trust of Canadian physicians for over 25 years.

### Folic Acid Facts

- UL of folic acid during pregnancy and lactation is 1.0 mg per day.<sup>2</sup>
- Women should eat a healthy, well-balanced diet that includes good sources of folic acid such as dark green vegetables, corn, dried peas, beans, lentils and oranges.<sup>3</sup>
- Since the folic acid fortification of grains in 1998, there has been a 46% reduction in NTDs.<sup>4</sup>
- In addition to fortification and dietary in-take of folic acid, Health Canada recommends women who could become pregnant and those who are pregnant or breastfeeding **need a multivitamin containing folic acid everyday.**<sup>3</sup>

<sup>1</sup> Adapted from: Joint SOGC-Motherisk Clinical Practice Guideline, Pre-conception Vitamin/Folic Acid Supplementation 2007: The Use of Folic Acid in Combination with a Multivitamin Supplement for the Prevention of Neural Tube Defects and Other Congenital Anomalies. J Obstet Gynaecol Can 2007; 29(12): 1003-1013.

<sup>2</sup> Food and Nutrition Board, Institute of Medicine (1988). Dietary Reference Intakes for thiamin, riboflavin, niacin, vitamin B6, folate, vitamin B12, pantothenic acid, biotin, and choline. Washington DC, National Academy Press.

<sup>3</sup> Adapted from Eating Well with Canada's Food Guide. Women of Childbearing Age. Health Canada, 2007.

<sup>4</sup> Reduction in Neural-Tube Defects after folic acid fortification in Canada. DeWals P, et al. N Engl J Med 2007; 357: 135-142.