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# Vitamin use can prevent birth defects, MDs find

By Lisa Priest  
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Sixty per cent of spina bifida and similar birth defects could be prevented if women planning to conceive took a daily multivitamin or ate plenty of fruits and vegetables, a new study shows.

The key is to get 0.4 milligrams of folic acid every day, according to the study published in today's *Journal of the American Medical Association*.

The study, conducted between 1988 and 1991, included 1,000 Metro women and involved nine Metro hospitals.

"In my mind, this is the most important breakthrough that's happened in preventing birth defects in the past 100 years," said Dr.

Gideon Koren, the study's principal investigator at the Hospital for Sick Children.

"Here is nutritional advice that can prevent such a serious malformation"

The study of 1,000 Metro women and 2,000 others in Boston and Philadelphia who gave birth found that ingesting .4 milligrams of folic acid around the time of conception reduced neural tube defects in babies by up to 60 per cent.

The most common of such defects are spina bifida, which occurs when the bony casing around the spinal cord fails to close, and anencephaly, a condition in which major parts of the brain and skull are missing.

"It supports very strongly what studies in Europe have found", Koren said of earlier

research in Britain and Hungary. "This is particularly important for North American women, who have a different diet than they do in Europe."

About 400 to 800 babies in Canada are born with neural tube defects every year.

Folic acid is found in leafy greens, citrus fruits, yeast and fortified cereals, but Koren noted that only about half of all North American women get an average of 0.2 milligrams of the B vitamin each day.

And since spina bifida occurs when the fetus is only 4 weeks old, when many women don't even know they're pregnant, he recommended that those of child-bearing age make sure they get enough.

**REFERENCE:** Werler, M.M., Shapiro, S. and A.A. Mitchell: Periconceptional folic acid exposure and risk of occurrent neural tube defects. *JAMA* **269**(#10): 1257-1261 (1993). [DC Library call number: PER R15.A48]

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