# Clinical Update

## Maternal folic acid may slash heart problems in children

Folic acid supplements during pregnancy may not only reduce the risk of birth defects but also protect the children from congenital heart defects, says a new study from the Netherlands.

***(European Heart Journal,* December 2009*)***

Children of women who took at least 400 micrograms per day during pregnancy were about 20% less likely to develop congenital heart defects (CHDs), compared to children of women who did not take additional folic acid, according to findings published in the *European Heart Journal*.

An overwhelming body of evidence links folate deficiency in early pregnancy to increased risk of neural tube defects (NTDs) - most commonly spina bifida and anencephaly - in infants. This connection led to the 1998 introduction of public health measures in the US and Canada, where all grain products are fortified with folic acid - the synthetic, bioavailable form of folate.

Preliminary evidence indicates that the measure is having an effect with a reported 15 to 50% reduction in NTD incidence. A total of 51 countries now have some degree of mandatory fortification of flour with folic acid. However, similar measures in other countries have been opposed by concerns that the folate/folic acid may mask vitamin B12 deficiency, which leads to a form of neurological problems.

The new study supports the benefits to the children of ensuring adequate folic acid/ folate during pregnancy. The Dutch researchers analysed data from over 3,000 mothers and infants for their case-control study.

Children of women who took additional folic acid, defined as a daily single supplement or as a multivitamin containing a folic acid dose of at least 400 micrograms, were found to have an 18% lower risk of CHDs.

In a subgroup analysis, additional folic acid was associated with a 38% reduction in isolated septal defects, said the researchers. With such obvious benefits for the child, the researchers said that their findings may have important implications for public health.

Source: www.nutraingredients.com