Folic acid is a B vitamin found in folate-rich foods such as orange juice, other citrus fruits and juices, leafy green vegetables, liver, peanuts, beans, broccoli, asparagus, peas, lentils and whole-grain products. Folic acid can help to prevent certain types of birth defects, called neural tube defects, when taken before pregnancy and during the first month of pregnancy.

Neural tube defects are specific birth defects that affect the brain and the spine. These defects occur when the tube enclosing the spinal cord does not close completely or form properly. In the very early stages of pregnancy, a long, narrow groove forms on the surface of the embryo and closes around itself to form a tube-like structure. It is from this neural tube that the spinal cord will develop, with the brain forming at one end of the cord. This usually occurs by the 29th day after conception. If the neural tube is not fully closed, the baby will be born with a neural tube defect or the pregnancy may end in miscarriage or stillbirth. The two major types of neural tube defects are anencephaly and spina bifida. Anencephaly is a condition in which the baby's brain and head are severely underdeveloped and results in stillbirth or death shortly after birth. Spina Bifida is the leading cause of childhood paralysis. It occurs when the lower part of the neural tube doesn’t close during early pregnancy, exposing the spinal cord and nerves. Spina bifida can result in mild to severe handicaps, usually involving many surgical procedures and physical therapy.

Folic acid should be taken by:
- women between the ages of 15 and 45 (child-bearing years)
- women capable of becoming pregnant (a large percentage of pregnancies are unplanned)
- women planning a pregnancy
- women in the early stages of pregnancy
- women who have had a pregnancy with a neural tube defect

The Centers for Disease Control and Prevention (CDC) report that approximately 4000 pregnancies are affected by neural tube defects each year and up to 70% of these developmental defects could be prevented with a daily intake of 400 micrograms of folic acid prior to getting pregnant. In addition to improving a possible nutritional deficiency, synthetic folic acid is believed to correct a genetic folate metabolism problem found in many women. Studies by the March of Dimes suggest that folic acid may help to prevent other birth defects such as cleft lip and palate, and certain heart defects. Folic acid is also important during pregnancy to support the growth of the placenta and fetus, and produce the additional blood cells a pregnant woman needs. In addition, new studies indicate that folic acid may play a role in helping to prevent heart disease and stroke in adults.

The U.S. Public Health Service and the March of Dimes Birth Defects Foundation recommend 400 micrograms (0.4 milligrams) per day for all women of childbearing age. In 1998, the U.S. Food and Drug Administration required the addition of folic acid to cereals, breads, pastas, and other foods labeled “enriched.” However, it is estimated that most women will not consume the recommended amount of folic acid through diet alone. Synthetic folic acid, in pill form, is absorbed best by the body. Be sure to discuss taking folic acid supplements with your physician.

This information is provided for educational purposes only and is not a substitute for sound medical judgment. If you have any questions or concerns, you should discuss them with your physician.

For more information, contact:
The March of Dimes Birth Defects Foundation
(888) 663-4637
www.modimes.org

Resources
March of Dimes Birth Defects Foundation
Centers for Disease Control and Prevention
American College of Obstetricians and Gynecologists

Related Healthy Living Links:
HealthyExtensions
Discounted programs, products, and services