

FOLIC ACID

FACTSHEET

Folic acid is a type of B vitamin. It is water-soluble, which means it cannot be stored in the body. Water-soluble vitamins dissolve in water. Leftover amounts of the vitamin leave the body through the urine.

Folate and folic acid are forms of a water-soluble B vitamin. Folate occurs naturally in food and folic acid is the synthetic form of this vitamin. Folic acid is well-tolerated in amounts found in fortified foods and supplements. Sources include cereals, baked goods, leafy vegetables (spinach, broccoli, lettuce), okra, asparagus, fruits (bananas, melons, lemons), legumes, yeast, mushrooms, organ meat (beef liver, kidney), orange juice, and tomato juice. Folic acid is frequently used in combination with other B vitamins in vitamin B complex formulations.

Function

- Folic acid works along with vitamin B12 and vitamin C to help the body break down, use, and create new proteins. The vitamin helps form red blood cells and helps produce DNA, the building block of the human body, which carries genetic information.
- Tissues grow and cells work. Taking the right amount of folic acid before and during pregnancy helps prevent certain birth defects, including spina bifida.

The Recommended Dietary Allowance

Dietary Folate Equivalents (DFE)

- 1 microgram (mcg) of food folate provides 1 mcg of DFE
- 1 mcg of folic acid taken with meals or as fortified food provides 1.7 mcg of DFE
- 1 mcg of folic acid (supplement) taken on an empty stomach provides 2 mcg of DFE

Recommended Dietary Allowance for Folate in Dietary Folate Equivalents (DFE)			
Life Stage	Age	Males (mcg/day)	Females (mcg/day)
Infants	0-6 months	65 (AI)	65 (AI)
Infants	7-12 months	80 (AI)	80 (AI)
Children	1-3 years	150	150
Children	4-8 years	200	200
Children	9-13 years	300	300
Adolescents	14-18 years	400	400
Adults	19-years and older	400	400
Pregnancy	all ages	-	600
Breast-feeding	all ages	-	500

Food Sources of Folic Acid:

- Beans and lentils
- Peas (black-eyed peas, chickpeas, green peas)
- Juices (orange, tomato, grapefruit, pineapple)
- Fruits (oranges, cantaloupe, honeydew melon, avocado, papaya, raspberries)
- Soymilk
- Vegetables (green leafy vegetables such as spinach, lettuce, turnip greens, mustard greens, collard greens, and Chinese cabbage; broccoli; Brussels sprouts; asparagus; artichokes; okra; corn; cauliflower; potato; beets; green onions; sweet red peppers)

- Nuts
- Sunflower seeds
- Peanuts and peanut butter
- Liver
- Giblets

You can also eat foods that have had folic acid added to them, such as:

- Breakfast cereals (Some have 100% of the Daily Value of folic acid in each serving)
- Breads
- Flours
- Pastas
- Cornmeals
- White rice

References:

American Dietetic Association, (2010). Retrieved June 1, 2010, from <http://eatright.org>

Zieve, D. (2010). In Folic acid in diet: MedlinePlus Medical Encyclopedia. Retrieved June 1, 2010, from <http://www.nlm.nih.gov/medlineplus/ency/article/002408.htm>

Mayo Clinic Staff, (2010). In Folate (folic acid). Retrieved June 1, 2010, from, http://www.mayoclinic.com/health/folate/NS_patient-folate