



## Folic Acid Plus

(400 mcg)

Stock #1585-8 (90 tablets)

Folic acid, which is crucial to the manufacturing of DNA, has been widely publicized as necessary for the prevention of birth defects and specific cancers. Folic acid is critical for pregnant women because it assists the enzyme responsible for DNA duplication, and is necessary for healthy development of the spinal cord. Folic acid deficiency will slow a baby's growth and can result in miscarriage or brain or neural tube defects, causing children to be born mentally retarded. Pregnant women, and even women considering pregnancy, should be sure they are getting 800mcg of folic acid in their diets daily. Lactating women should receive 600mcg daily.

Daily requirements for folic acid vary with individual metabolism; however, hemolytic anemia and hyperthyroidism increase the body's need, as do alcohol consumption, disease and stress. Although there are no known toxic effects of folic acid, excessive intake can mask a

B12 deficiency. Dietary sources include fresh leafy green vegetables, sprouts, brewer's yeast, wheat germ, eggs, yogurt, soybeans and liver.

A folic acid deficiency can be mistaken for megaloblastic anemia, with symptoms such as cramps, irritability, tiring easily, and an overall feeling of weakness. Often the result of poor diet and malabsorption, folic acid deficiencies are common in the elderly, pregnant women and those having a B12 deficiency. Also, certain drugs and blood conditions can deplete folic acid levels.

Researchers at Harvard Medical School have observed that folic acid, found in leafy vegetables, protects the body from colon polyps and colorectal disease. According to the *Journal of the National Cancer Institute*, folic acid supplements provide even greater protection.

Research done as early as the 1970's showed that large doses of folic acid destroyed precancerous cervical cells.

Folic acid is currently being studied for reducing the damaging effects of smoking on the lungs. In 1986, the National Cancer Institute found that smokers who developed certain cancer-prone bronchial cells also had suppressed folic acid levels. As a result, researchers at the University of Alabama, in 1988, successfully decreased this variety of precancerous cells in smokers by using a mixture of folic acid and vitamin B12. It is now accepted that insufficient folic acid intake increases a smoker's vulnerability to cancerous changes in lung tissue, while, as Dr. Hamburger of the University of Alabama observed, folic acid supplementation reduces the amount of injury to lung tissues as a result of smoking.

Studies at the University of Vermont indicate that a deficiency in folic acid may cause irreversible damage to cells, leading to a greater risk of malignancy in those cells. Since folic acid is a significant part of DNA formation, researchers surmise that the development of cancerous cells is caused by the fracture of chromosomes resulting from inadequate folic acid. To date, a minimum of 51 areas have been recognized along the chromosome where breakage is liable to happen. Twenty of these areas, when damaged, are linked with the development of cancer. Test tube research concludes that cells are prone to have fractures in the DNA chain when there is insufficient folic acid, thus folic acid supplementation may decrease the risk of cancer formation.

Folic acid has also been used to help arteriosclerosis. Dr. Kurt Oster gives individuals twice the RDA to prevent repeated heart attacks. He also reports that this dosage reduces angina and the need for the popular anti-angina drug, nitroglycerine.

An article in *Heart Alert* asserted that folic acid, B6 and choline (all part of the B-complex vitamin) can reduce homocysteine levels in 3 weeks. Homocysteine, commonly referred to as HCY, is a toxic amino acid obtained from pasteurized cow's milk and red meat. According to an article by Dr. McCully in *Atherosclerosis Review*, HCY is a principal cause of arterial lesions, a blood vessel disease.

Other experimental studies have found folic acid to be helpful to the elderly for relieving the symptoms of peripheral nerve disorders, and for improving vision and skin temperature in elderly diabetics. These studies imply that folic acid may help by dilating blood vessels and permitting improved auxiliary circulation.

Each tablet of Folic Acid Plus contains 400mcg of folic acid. Since folic acid functions as a coenzyme along with vitamin B12 and vitamin C, the following nutrients have been added:

**Vitamin C** (120mg per tablet), also known as ascorbic acid, is a water-soluble substance which must be obtained from dietary sources. Vitamin C helps form red blood cells, aids in the prevention of hemorrhaging, and enhances fine bone and tooth formation. Vitamin C is also necessary for the functioning of other essential nutrients in the body.

**Bee pollen** gathered from various flowers, is rich in protein and vitamin B12. It contains almost all of the nutrients necessary for humans. It is made up of approximately 30% protein and over 50% carbohydrates and is used by many as a concentrated source of energy. Bee pollen is often used to improve convalescence, fatigue, poor memory and sexual dysfunction. In Chinese medicine, bee pollen is considered an energy and nutritive tonic. In fact, bee pollen has been used for a variety of purposes in cultures throughout the world, including adding weight during convalescence, assisting recovery from chronic illness, building new blood, improving endurance and vitality, increasing longevity, inhibiting communicable diseases such as the common cold and flu, reducing cravings and addictions, regulating intestinal function, and even helping to overcome retardation and other developmental problems in children.