2002

Do You Have Information On The Benefits Of Folic Acid?

Nedra Christensen

Utah State University Extension electronic publishing

A weekly question/answer column

Do You Have Information On The Benefits Of Folic Acid?

Nedra Christensen answers:*

You may not think the crunchy blue fruity cereal wheels your children beg you to buy for breakfast will provide much nutritional value, but fortifying them and other foods with folic acid is now a reality. The guidelines are that cereal grain products are fortified at a level of 140 mcg/100g and breakfast cereals are fortified at 100 mg per serving.

Your children may not beg for all of these other sources of folic acid, but some of them include dark green vegetables (asparagus, broccoli, spinach, Brussels sprouts), legumes and liver, fruits (avocado, oranges, strawberries, melon) and yeast. Milk is also a moderate source of folate.

Folic acid deficiency is associated with several health problems. The following is a list of disorders that are caused by or associated with folic acid deficiency.

- Dementia and cognitive impairment have been associated with both folate and vitamin B12 deficiency. Elderly patients with low serum folate and vitamin B12 levels scored lower on memory tests. Alzheimer's dementia patients have lower serum folate levels.
- Depression may be worsened with a low folic acid intake. A high proportion of patients with depression, mania, schizophrenia and other personality disorders have low serum folate levels. It is hard to say if the low folate levels start the problem with the neurotransmitters or if the depression leads to a low intake of folic acid which leads to problems with the neurotransmitters. Folic acid supplementation has helped some patients with depression.
- Neural tube defects. Infants born to women that have had a low intake of folic acid during pregnancy have a much higher incidence of neural tube defects (spina-bifida).
- Me galoblastic anemia is the result of folate or Vitamin B12 deficiency. There is evidence of defective DNA synthesis when there is not sufficient folate or Vitamin B12 in the diet.
- Heart disease is increased when there are high homocysteine levels in the blood. Homocysteine levels increase with the lack of folate in the diet. The high homocysteine levels are thought to hasten plaque formation in the arteries.
- Subacute combined degeneration of the spinal cord is associated with both vitamin B12 and folate deficiency. This is a degeneration of the spinal cord. This disorder was once thought to be only due to vitamin B12 deficiency, but folate is now also implicated.

Choosing a diet high in folic acid is beneficial in many ways, and it is well worth your effort to plan menus high in this important vitamin. So go ahead and enjoy that big bowl of crunchy blue fruity wheels.

* Nedra Christensen is Utah State University Extension Nutrition Specialist