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Health Options
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Riboflavin works with other vitamins

Almost a century after the discovery of riboflavin (vitamin B-2), we are still learning about its complex functions and role in health. Yet, despite growing scientific awareness of riboflavin's importance to health, many people may be unwittingly cutting out good food sources of the nutrient.

Question: What are the effects of consuming too little vitamin B-2?

Answer: The classic signs of deficiency include tongue and mouth inflammation, cracks at the corner of the mouth, eye and nervous system problems, confusion, headaches and depression.

In fact, the normal function of at least four other vitamins (niacin, B-6, folic acid and vitamin K) is dependent on riboflavin. In addition, the absorption and regulation of iron in the body depends on normal levels of B-2. Due to all of these interactions, inadequate intake of vitamin B-2 can affect many body functions and increase the risk of a variety of diseases.

Q: What health problems are related to low B-2 intake?

A: Riboflavin is linked to a reduced risk of cardiovascular disease, partly because B-2 reduces oxidative damage by helping the body handle iron safely. Secondly, riboflavin plays a role in lowering blood homocysteine, a cardiovascular disease risk factor. Vitamin B-6, B-12, and folic acid get most of the attention for lowering homocysteine, however, folic acid's role depends on adequate levels of B-2.

Eyes age better with plenty of riboflavin. Eye lens changes that can lead to cataracts are slower in people who consume greater amounts of vitamin B-2.

Q: Who consumes inadequate riboflavin?

A: Riboflavin deficiency does exist today and is most common in adolescent girls, elderly, and some vegetarians. This is related to limited consumption of milk products, a major source of B-2.

Q: What foods are good sources of riboflavin?

A: The Recommended Dietary Allowance for B-2 is 1.1 milligrams (mg) per day for a woman and 1.3 mg for a man. Many breakfast cereals and some brands of soy milk have added B-2. These fortified sources typically provide 1.7 mg of B-2 per serving.

Among the natural sources of B-2, a cup of milk or yogurt contains 0.4 to 0.5 mg of B-2. A large portobello mushroom has about 0.4 mg. A half-cup of cooked spinach or soybeans, one ounce of almonds, and 3 to 5 ounces of most meats and dark meat poultry each deliver about 0.2 mg of B-2. A typical serving of foods such as asparagus, bananas, broccoli, peas, sweet potato, or tofu contains about 0.1 mg per serving.

The toxicity of B-2 is very low. No U.S. upper limit has been established.

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