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Health Options

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Dietary B-12 may not be enough

A high-quality lifestyle after age 65 requires staying physically active and mentally sharp. In our Sept. 13 column we described a common cause of rapid mental decline in older people -- vitamin B-12 deficiency.

With a B-12 deficiency a host of nervous system problems can develop including depression and memory loss. Although these symptoms can be related to many other causes, the nearly 15 percent incidence of B-12 deficiency in people over 65 should encourage a pro-active approach toward B-12 health. When deficiency hits, it can be devastating to the individual and their family if it is diagnosed not and treated quickly.

Most Americans consume plenty of B-12 in meat, poultry, fish, eggs and milk products. B-12 deficiency commonly stems from a reduced ability to absorb it from food. B-12 in foods is tightly bound to protein. Normal stomach acid and enzyme levels are needed to make B-12 available for absorption.

Many older people experience a decline in the secretion of stomach acids. Also, many drugs or antacids taken for stomach problems interfere with the function of stomach acid, further impairing the release of B-12 from food.

BECAUSE 10 to 30 percent of older people do not absorb B-12 from foods, the Institute of Medicine recommends that people over 50 meet their B-12 needs by consuming foods fortified with the vitamin or by taking supplemental B-12. In these forms, the vitamin is not bound to protein, so its absorption is not impaired by low stomach acid production.

A small percentage of those with B-12 deficiency have a condition called pernicious anemia. With this condition, they can't absorb B-12 even from supplement sources. The usual treatment is monthly injections of B-12 for the remainder of the person's life.

Historically, pernicious anemia was diagnosed by the presence of enlarged red blood cells. Today, this test is not reliable because a high intake of folic acid prevents the cell enlargement and many food products are now being enriched and fortified with the vitamin.

Diagnosis of B-12 deficiency is not straightforward. Some people have low serum B-12 levels with no symptoms of deficiency. Others have normal B-12 values but have the symptoms of deficiency. Consequently, to confirm a diagnosis, blood tests may be run for other substances that change when B-12 function is limited. The two most commonly measured include serum methylmalonic acid and homocysteine.

When a person has too little B-12 in their diet, it can take years for serious problems to develop because significant amounts of B-12 are stored in the liver. So B-12 deficiency proceeds to erode nervous tissue until irreversible damage is done and the result can mimic Alzheimer's disease. Dr. Sally Stabler, a B-12 authority from the University of Colorado Health Sciences Center, recommends that everyone over 65 be screened regularly for B-12 status.

Typical multiple vitamin supplements containing 100 percent RDA levels of B-12 are not adequate in people destined for the problem. A few recent studies indicate taking 1,000 to 2,000 micrograms of oral supplement daily can restore normal vitamin status in some deficient people. Whether oral B-12 can work as effectively as monthly B-12 injections in those with pernicious anemia remains to be proved.

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