



Vitamin B-12 deficiency impairs brain

Vitamin B-12 deficiency and the early stages of Alzheimer's disease have much in common. People with either condition can experience impaired memory, decreased intellectual capacity and emotional instability. Consequently, researchers suggest that B-12 deficiency could be misdiagnosed as Alzheimer's disease.

Question: How common is vitamin B-12 deficiency?

Answer: Studies typically find that about 15 percent of those older than 65 have poor B-12 status. This percentage increases with age and is typically greater in institutionalized older people.

Vitamin B-12 deficiency increases with age due to stomach changes that reduce the ability to absorb the vitamin. Thus, the B-12 deficiency develops despite normal amounts of B-12 in the diet.

Vegetarians are another group prone to B-12 deficiency. Since only animal foods contain significant amounts of vitamin B-12, people consuming vegan

and macrobiotic diets are also at high risk for deficiency. Studies on these groups have reported poor B-12 status in as many as 90 percent of the study participants.

Q: What are the signs and consequences of B-12 deficiency?

A: The classic sign of B-12 deficiency is anemia. However, it is now well known that B-12 deficiency can gradually cause severe nerve damage without anemia.

The symptoms of this nerve damage can range from minor sensory problems in the hands and feet to serious degeneration of the spinal cord, resulting in the inability to walk.

Short-term memory problems are typical, along with other changes in brain function. Virtually any nerves can be affected, and even vision and hearing can be impaired.

Unfortunately, this nerve damage is irreversible unless the deficiency is corrected within months after symptoms begin.

Q: How is B-12 deficiency di-

agnosed?

A: Typically, the blood level of B-12 is used, but this is not considered reliable. When B-12 is not adequate, blood levels of methylmalonic acid and homocysteine rise. Blood levels of these compounds are considered to be important for a full assessment of B-12 status.

Q: How is B-12 deficiency treated?

A: The traditional medical approach is to give the deficient person B-12 injections. For older people with permanent absorption problems, this could continue on a monthly basis for the rest of their lives. Some physicians have reported successful treatment with high doses of oral B-12 supplements. The Institute of Medicine recommends that people older than 50 meet their B-12 needs with supplements or fortified foods.

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