

Could You Be at Risk for Vitamin B₁₂ Deficiency?

Evidence suggests that vitamin B₁₂ deficiency may affect young and old alike.

As a vitamin that is found in adequate amounts in meat, poultry, fish, eggs, milk and other foods of animal origin, deficiency of Vitamin B₁₂ has rarely been of concern in the American population – except among strict vegetarians and aging adults.

However, findings from research conducted at the Jean Mayer USDA Human Nutrition Research Center on Aging at Tufts University suggest that Vitamin B₁₂ deficiency may be more widespread than previously thought.

After looking at 3,000 men and women ranging from 26 to 83 years old from the Framingham Offspring Study, researchers found 39% had Vitamin B₁₂ blood levels in the “low normal” range (below 258 picomoles per liter.) While this low level does not indicate a frank deficiency status, it does draw attention to the increased risk of deficiency in young and old adults. And nearly 9% of the study population fell below the current deficiency level for Vitamin B₁₂.

Severe Vitamin B₁₂ deficiency can cause a type of anemia with fewer, but larger red blood cells and neurologic damage ranging from tingling to lack of balance, memory problems, confusion, disorientation, and in severe cases, dementia.

Vitamin B₁₂ is also called cobalamin and is important in the metabolism of DNA. It is essential to the formation of red blood cells that carry oxygen to the tissue and it is required in the production of the protective coating around the nerves. Therefore, Vitamin B₁₂ deficiency can cause serious nerve damage if it is not addressed.

Vitamin B₁₂ deficiency takes a long time to develop. The current Recommended Dietary Allowance (RDA) for the vitamin is 2.4 micrograms (mcg) which is easily met in a diet that includes meat, fish, poultry, eggs or fortified grains and cereals. For example, one cup of milk contains 1 mcg Vitamin B₁₂, 3.5 oz of most fish contains between 1 and 10 mcg, and beef contains 2 to 3 mcg per 3.5 oz serving. Supplements and foods fortified with the vitamin generally contain 100% of the RDA per serving.

While the risk of Vitamin B₁₂ has been previously identified in the older population due to factors leading to decreased absorption and dietary changes with age, the new findings released from this study indicate that risk of Vitamin B₁₂ may be *equally prevalent* in young adults in their 20s, 30s and 40s, as in seniors over 50 years.

Interestingly, individuals who got their Vitamin B₁₂ from dairy products, fortified cereals and supplements were better protected against deficiency than those who only got the vitamin from meat sources. This is because Vitamin B₁₂ is more easily absorbed from dairy and fortified foods that have the vitamin sprayed on during the manufacturing process than from meat.

The researchers confirm that while it is important to take measures to protect oneself from developing Vitamin B₁₂ deficiency, this deficiency takes years to develop and it is easy to meet the RDA through food sources.

References:

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