Vegetarian ? Vitamin B-12 deficient? [1]

Alice,

My friend recently got a blood test back from her doctor and she was told she was deficient in Vitamin B12. She is a vegetarian. What can she do to supplement this vitamin if she does not eat meat?

Animal lover

Answer

Dear Animal Lover,

Vitamin B₁₂ is important in the formation of nerve cells and red blood cells. Natural food sources of the vitamin are found primarily in meat and other animal products, which mean those who stick with a plant-based diet have to find their source elsewhere. Though there are some foods that your friend may want to add to her/his diet, vitamin supplements may also be something to consider. However, because of the serious symptoms and long-term risks involved with B₁₂ deficiency, consulting with a health care provider and/or a registered dietitian may help as well.

Contrary to popular belief that B₁₂ deficiency takes many years to develop, it actually may only take a matter of two to four years to become symptomatic. A recent meta-analysis found that the prevalence rate of B₁₂ deficiency among non-pregnant young adults who followed a vegetarian diet (lacto- or lacto-ovo) was at about 32 percent and among vegans, (those who eschew all animal products: meat, eggs, dairy, honey, leather, silk, etc.) prevalence was at 43 percent. Symptoms of B₁₂ deficiency include anemia, fatigue, weakness, constipation, loss of appetite, and weight loss. Long-term effects may be neurological changes such as numbness and tingling in the hands and feet. Additional signs of B₁₂ deficiency include difficulty in maintaining balance, depression, confusion, dementia, poor memory, and soreness of the mouth or tongue. But be advised that these can also be symptoms of many different ailments, so having a blood test from a doctor like your friend did can help with diagnosis.

The recommended daily allowance (RDA) of B₁₂ for adults is 2.4 micrograms (µg) and there are actually two forms of B₁₂, active (which the body can actually use) and inactive (a.k.a., pseudovitamin B₁₂). Now, for the good news: Both vegetarians and vegans have various options for obtaining sufficient amounts of vitamin B₁₂. Some varieties of mushrooms, green and purple nori (seaweed), and some fermented foods like sauerkraut and tempeh (fermented soy beans) are recognized as plant-based sources active B₁₂. Fortified foods like...
some cereals, soy products, or meat substitutes are options for both vegans and vegetarians. Milk, yogurt, and eggs are rich in vitamin B₁₂ and may also be added to a vegetarian diet. And while it is possible to get sufficient amounts of the vitamin from these sources, many vegans and vegetarians don’t seem to eat enough of these products. As such, it might be a good idea to look into vitamin supplements that contain B₁₂. Due to the low absorption rate of the vitamin through supplements, taking a 250 microgram (µg) dose is recommended. Seeking out the guidance of a registered dietitian may prove helpful for your friend to identify where B₁₂-rich sources can be added in her/his diet.

Happy healthy eating!

Alice!

Category:
- Nutrition & Physical Activity
- Optimal Nutrition
- Supplements & Ergogenic Aids
- Vegetarianism

Related questions
- Non-meat proteins
- Tingling fingers?
- Becoming a vegetarian? Columbia Health resources?
- Vegetarian? Can't wake up in the morning
- Okay to eat sushi and yogurt during pregnancy?

Resources
- Medical Services (Morningside)
- Medical Services (CUMC)

Published date: Sep 05, 1995
Last reviewed on: Aug 01, 2014
Go Ask Alice! is not an emergency or instant response service.

If you are in an urgent situation, please visit our Emergency page to view a list of 24 hour support services and hotlines.

Source URL: http://goaskalice.columbia.edu/answered-questions/vegetarian-%E2%80%94-vitamin-b-12-deficient

Links