

Vitamin B12

A Simple Solution

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A vegan diet rich in fruits, vegetables, whole grains, legumes, nuts, and seeds not only meets basic nutrition needs, but offers protection from a variety of chronic diseases and a way to achieve and maintain a healthful weight. When planning a plant-based diet, it is important to include a reliable source of vitamin B12, a unique vitamin absent from plant foods.¹ Although requirements for vitamin B12 are very low, it is necessary for maintaining good health.

Vitamin B12 is produced by bacteria and various organisms in the large intestines of humans and animals. In our own guts, the vitamin is not well absorbed and must therefore be consumed in the diet. While found nearly exclusively in animal products, small amounts of vitamin B12 may exist in plant products due to bacterial contamination or fermentation.² Most plant foods do not provide an active or reliable source of the vitamin, and a vegan diet that is not supplemented with B12 is associated with a high risk for deficiency.³

Fortunately, vitamin B12 needs can easily be met on a vegan diet with a supplement. Recommended supplementation to maintain healthy levels:

- 18-65 years old: 100 micrograms per day or 1,000 micrograms 2 times per week or 2,500 micrograms per week
- >65 years old: 500-1,000 micrograms per day
- On medication that interferes with B12 (e.g., metformin, PPIs): 500 micrograms per day
- Pregnancy and lactation: 250 micrograms per day

Fortified foods may also contain B12, but taking a supplement regularly is often a more reliable source. Examples of foods that are frequently fortified with vitamin B12 include breakfast cereals, plant-based milks, and meat substitutes.^{2,4} Certain brands of nutritional yeast, such as Bragg nutritional yeast or Bob's Red Mill nutritional yeast, may also contain B12. Always check the nutrition facts label or the ingredient list to ensure the product contains vitamin B12. Most common multivitamins will usually contain some form of B12 in small amounts.

The recommended dietary allowance (RDA) for adults is 2.4 micrograms per day, with increased requirements for women who are pregnant or breastfeeding.⁵ Deficiencies are common among elderly persons as B12 malabsorption from the diet becomes more common.⁶ Initial symptoms of vitamin B12 deficiency may include fatigue, numbness or tingling in the hands and feet, di-

gestive disturbances, and a sore tongue.⁶ Prolonged deficiency is serious and can lead to anemia and irreversible damage to the blood and nervous system.⁶ For these reasons, it is important that those who follow a plant-based diet have their vitamin B12 levels checked regularly during standard blood work or as part of an annual physical.

Listed below are common sources of vitamin B12 in the vegan diet. Be sure to check nutrition labels as products may vary.

Common Sources of B12 in a Vegan Diet		
	Serving	Amount (in micrograms)
Kellogg's Special K cereal	1 cup	6.1
General Mills Fiber One cereal	1/2 cup	3
Post Bran Flakes	1 cup	2
Silk soy milk	1 cup	2.99
Almond milk (original enriched)	1 cup	1.2
Oatly oat milk	1 cup	1.2
Nasoya TofuPlus firm tofu	3 ounces	1.22
Bragg nutritional yeast	2 tablespoons	15
U.S. Department of Agriculture, Agricultural Research Service. FoodData Central, 2019. U.S. Department of Agriculture. Available at: https://fdc.nal.usda.gov/ . Accessed November 5, 2021, and other individual product websites		

References

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