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## Medical Encyclopedia: Vitamin B-12

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### Definition

Vitamin B-12 is a water-soluble vitamin that is part of the vitamin B complex.

### Function

Vitamin B-12, like the other B vitamins, is important for metabolism. It helps in the formation of red blood cells and in the maintenance of the central nervous system.

### Food Sources

Vitamin B-12 is found in eggs, meat, poultry, shellfish, milk, and milk products.

### Side Effects

The human body stores several years' worth of vitamin B-12, so nutritional deficiency of this vitamin is extremely rare.

However, deficiency can result from being unable to use vitamin B-12. Inability to absorb vitamin B-12 from the intestinal tract can be caused by a disease known as pernicious anemia. Additionally, strict vegetarians or vegans who are not taking in proper amounts of B-12 by way of supplements are also prone to a deficiency state.

Low levels of B-12 can cause anemia as well as numbness or tingling in the extremities and other neurologic symptoms such as weakness and loss of balance.

### Recommendations

Recommended dietary allowances (RDAs) are defined as the levels of intake of essential nutrients that, on the basis of scientific knowledge, the Food and Nutrition Board judges to be adequate to meet the known nutrient needs of practically all healthy persons.

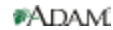
The best way to get the daily requirement of essential vitamins is to eat a balanced diet that contains a variety of foods from the food guide pyramid.

Because vitamin B-12 comes primarily from animal products, people who follow a strict vegetarian diet and do not consume eggs or dairy products may require vitamin B-12 supplements. (Non-animal sources of vitamin B-12 exist but are highly variable in their B-12 content, and are therefore unreliable sources.)

Specific recommendations for each vitamin depend on age, gender, and other factors (such as pregnancy). The U.S. Department of Agriculture offers a PDF file that lists these recommendations.

**Update Date: 10/27/2004**

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