

Facts about Vitamin B₁₂¹

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Why do we need vitamin B₁₂?

Vitamin B₁₂ works with the B vitamin folate to make DNA, our body's genetic material. B₁₂ is needed to protect nerve cells from damage. It also helps keep blood levels of the amino acid homocysteine low. This may help to decrease heart disease risk in some people.



Everyone needs vitamin B₁₂. Older adults and strict vegetarians (vegans) need to be sure to get enough B₁₂ by using fortified foods or supplements.

What happens if we don't get enough vitamin B₁₂?

Vitamin B₁₂ deficiency causes *pernicious anemia*. This affects blood and nerves. With pernicious anemia, the body can't make normal red blood cells to carry oxygen in the blood. Lack of oxygen makes people weak and tired. Nerve damage can lead to paralysis and death.

How much vitamin B₁₂ do we need?

The following table lists recommended daily intakes of vitamin B₁₂.

Life Stage	Vitamin B ₁₂ (µg/day)
Men, ages 19+	2.4
Women, ages 19+	2.4
Pregnancy	2.6
Breastfeeding	2.8
µg = micrograms	

How can we get enough vitamin B₁₂?

Vitamin B₁₂ is found naturally only in foods of animal origin like meats, fish, poultry, eggs, and dairy foods. Older persons often can not absorb vitamin B₁₂ from these foods.



Fortified breads and cereals contain vitamin B₁₂ in a form that is easily absorbed.

You can check the ingredient list on food labels to see if vitamin B₁₂ has been added.

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Here is a sample ingredient list from a fortified cereal:

INGREDIENTS: Wheat bran with other parts of wheat, sugar, raisins, whole wheat, partially hydrogenated soybean oil, corn syrup, brown sugar syrup, nonfat milk, salt, honey, vitamin C (sodium ascorbate), vitamin B₂ (riboflavin), vitamin B₁, (thiamin mononitrate), folic acid, **vitamin B₁₂...**

Here are some foods and the amount of vitamin B₁₂ they contain:

Food	Vitamin B ₁₂ (µg/serving)
Oysters, cooked, 3 oz	30
Beef, ground, extra lean, cooked, 3 oz	1.8
Tuna, canned, 2 oz	1.6
Fortified cereal, 1 serving	1.5
Yogurt, plain, 8 oz	1.3
Chicken, roasted, 3 oz	0.3
µg = micrograms oz = ounces	

How should foods be prepared to retain vitamin B₁₂?

Vitamin B₁₂ is not easily destroyed by cooking. This is good to know since the main food sources of vitamin B₁₂, including meat, fish, and poultry, need to be well cooked. Other sources, like fortified cereals, may not need cooking.

What about supplements?

If you don't get enough vitamin B₁₂ from foods, you can take a multivitamin supplement. Strict vegetarians who do not eat fortified cereals or fortified soy foods need to take vitamin B₁₂ in a supplement. Also older adults often do not absorb vitamin B₁₂ very well. If they don't get adequate B₁₂ from fortified foods, they need a supplement as well.

Where can I get more information?

The Family and Consumer Sciences (FCS) agent at your county Extension office may have more written information and nutrition classes for you to attend. Also, a registered dietitian (RD) can provide reliable information to you.

Reliable nutrition information may be found on the Internet at the following sites:

<http://fyics.ifas.ufl.edu>

<http://www.eatright.org>

<http://www.nutrition.gov>

