

# Everything You Need To Know About Vitamin B12

## Vitamin B12 Benefits

There are several benefits associated with B12, whether through diet or supplementation. They include:

- **Red blood cell formation:** Red blood cells are vital for carrying oxygen throughout the body, so getting enough vitamin B12 can ensure this process runs smoothly.
- **Healthy during pregnancy:** Getting enough B12 during pregnancy can help lower the risk of significant congenital disabilities.
- **Bone health:** Your bones use vitamin B12 to help maintain bone mineral density, and a deficiency over time can lead to weaker bones and an increased risk of fractures.
- **Keeps eyes healthy:** B12 deficiencies may lead to eye disease, including macular degeneration, so getting enough is crucial.
- **Mental health:** Studies have shown that vitamin B12 plays a role in mood regulation and disorders, such as depression. Getting enough vitamin B12 can help improve mood and reduce symptoms of depression because of how it helps to synthesize and metabolize serotonin.
- **Brain health:** B12 vitamins also help to maintain brain health by preventing the loss of neurons.
- **Energy and metabolism:** Your energy levels and metabolism are vital to your overall health, and getting enough vitamin B12 helps to maintain the proper metabolic functioning so that your energy levels are at optimal levels.
- **Heart health:** Several amino acids in the body play a role in heart health, including homocysteine. Homocysteine has been shown to increase the risk of heart disease if levels are too high. Vitamin B12 can keep levels of the amino acids where they need to be, mitigating that risk.
- **Skin, hair, and nail health:** B12 promotes healthy cells within the body, including skin, hair, and nails.

## How Much B12 Should You Be Getting Each Day?

To reap the benefits of B12 within the body, you'll have to get enough of the essential nutrient. The amount of B12 a person needs depends on their age or pregnancy status and can be broken down as follows:

- **Children 1–3:** 0.9 microgram (mcg)/day
- **Children 4–8:** 1.2 mcg/day
- **Children 9–13:** 1.8 mcg/day
- **Teens 14–18:** 2.4 mcg/day
- **Adults:** 2.4 mcg/day
- **Pregnant people:** 2.6 mcg/day
- **People who are breastfeeding:** 2.8 mcg/day

## How Much B12 Is Too Much?

When looking at vitamin B12 levels, it's hard to say how much is too much. The vitamin is water-soluble, meaning it's generally safe at high levels because the body flushes out what it doesn't use with water.

While there is a general recommendation, some people may need more than others based on several factors, including:

- Diet
- Certain medications
- Difficulty absorbing B12 into the body
- Age (**older adults may need more**)
- People with certain health disorders, such as gastrointestinal disorders, autoimmune diseases or anemia
- People who have had stomach or intestinal surgery

People in the above-mentioned groups **may need more than the daily recommended** allowance, but those in the general population do not, and taking more vitamin B12 than you need is **unnecessary**.

Many studies have investigated high doses of B12 to see how it affects the body, and none has determined a specific amount that could lead to an overdose.

### Taking B12 in Excess

While no known adverse health effects are associated with taking too much B12, you're wasting money if you supplement with the vitamin when you don't need to. **Your body will use what it needs and then expel the rest.**

### Can Too Much B12 Cause Side Effects?

Since taking B12 in high doses has not been seen to negatively affect people in any way, there are **no known symptoms associated with too-high levels of the vitamin**. As mentioned above, the water-soluble vitamin is expelled from the body before it has the chance to cause any issues.

### Can People Have High Vitamin B12 Blood Levels?

Excess levels of vitamin B12 in the blood are highly uncommon as it leaves the body through urine when it is not needed. That said, people can see an increase in their B12 levels in the blood if they have certain conditions, such as:

- Cirrhosis of the liver (scarring of the liver)
- Hepatitis (inflammation of the liver)
- Myeloproliferative disorders (diseases of the bone marrow and blood)

These conditions often present with elevated B12, but the levels don't seem to be so high that they cause toxicity to occur.

### What If You Have Low B12 Levels?

**Vitamin B12 deficiencies** can be detrimental to one's overall health. Some of the effects of low levels of vitamin B12 include:

- Weak muscles
- Numbness or tingling in the hands or feet
- Difficulty walking
- Nausea
- Decreased appetite
- Weight loss
- Irritability
- Fatigue
- Diarrhea
- A quickened heart rate

Over time, vitamin B12 deficiencies can increase the risk of various health disorders, including:

#### Depression

- Paranoia
- Delusions
- Memory loss
- Incontinence
- Loss of taste and smell
- Anemia
- Heart failure
- Vision problems
- Loss of physical coordination

- Nervous system damage
- Infertility
- Certain cancers
- Neural tube defects

Because of the ill effects that can develop from not getting enough vitamin B12, it's essential to have your levels tested by a healthcare provider, eat more foods with the nutrient, or take supplements if you find you are low in the vitamin.

### **Foods With Vitamin B12**

To increase the amount of B12 in your diet, you can add in foods such as:

- Beef liver
- Clams
- Nutritional yeast
- Salmon
- Tuna
- Beef
- Milk
- Plain fat-free yogurt
- Fortified breakfast cereals
- Eggs
- Cheddar cheese
- Tempeh