



Multimarker Vitamin B₁₂ Levels

Your DNA Outcome



Your variants of *TCN1* and *FUT2* are associated with a decreased ability to absorb vitamin B₁₂.

You

Lower Levels

Higher Levels

Scientific Confidence Grade



Percentage of the Population with Your Variants

61%

Recommendation

Consider adding additional sources of vitamin B₁₂ to your diet to boost your intake above 2.4 mcg/day, the recommended daily vitamin B₁₂ intake for adults. This will help offset your compromised vitamin B₁₂ absorption.

- Athletes in training should consider boosting their intake to 20 mcg/day.
- One of the earliest indicators of low vitamin B₁₂ levels are sores in your mouth.
- Add vitamin B₁₂ rich foods to your diet, including fish, poultry, meat, eggs, dairy products.
- If you are vegetarian or vegan, talk with your dietitian to develop a personalized supplementation plan.
- Consider monitoring your vitamin B₁₂ levels as you age. Vitamin B₁₂ absorption decreases after 50.
- Medications used to treat acid reflux can inhibit your body's ability to absorb vitamin B₁₂.
- As always, consult with a medical or nutritional practitioner before making substantial changes to your diet.

About Vitamin B₁₂

Vitamin B₁₂ is a water-soluble micronutrient that plays an important role in many aspects of your health and athletic performance. These include the production of red blood cells, mitochondrial efficiency and cellular energy, DNA replication, maintaining the health of your nervous system as you age, and the metabolism of sugars, carbohydrates and fats. Your body is able to store large amounts of vitamin B₁₂ in your liver to use when dietary supplies are limited. Unfortunately, as you age your ability to absorb vitamin B₁₂ decreases, so your daily requirement increases. Athletes may require higher vitamin B₁₂ intake to offset the increased usage during recovery periods.

Vitamin B₁₂ is primarily found in animal products, including fish, meat, poultry and dairy. Vitamin B₁₂ is not present in plant foods, so vegans and vegetarians can only get their vitamin B₁₂ with supplements or fortified foods (depending on availability). This becomes increasingly important after the age of 50, when your Vitamin B₁₂ absorption becomes less efficient.

Gene Summary

Vitamin B₁₂ plays an important role in the health of the nervous system, and the growth and maintenance of your muscles. Genes that affect how well your body absorbs and stores vitamin B₁₂ can influence your levels.

- *TCN1* helps to transport vitamin B₁₂ from your small intestine into your blood.
- *FUT2* protects dietary vitamin B₁₂ from damaging bacteria as it travels through your stomach.

