

Boron Increases Testosterone 28%, Decreases Estrogen -39%

By **Robert Clark** - November 22, 2017



What is Boron?

Boron is a trace mineral and is crucial to human health and boosted testosterone levels but oddly enough, there is no set recommended daily allowance (RDA).

That said, 10 mg supplemented daily appears to be the sweet spot for your testosterone, according to a recent study.

Any less than 6 mg and you may not get much benefit from it with regards to

your testosterone levels. However, there is no evidence more than 10 mg is beneficial and in fact, trying to supplement with high dosages (20 mg daily or more) could be harmful. (1)

Boron Deficiency

Because there is no set daily recommendation it's hard to say when someone is deficient, however, boron is a bit hard to come by in food.

Avocados are one of the highest volume contributors of boron but you would have to eat an entire cup just to get 1.7 mg's of it. Therefore, if getting 10 mg's everyday is your goal, you would need to consume 5 cups of avocado's.

Personally, I love avocado's. They are a rich source of several key nutrients including [important fats](#) which can help boost your testosterone but to eat 5 cups a day is a bit much even for me.

Boron Increases Free Testosterone



The effect of supplementation on free levels of testosterone is pretty incredible.

Scientific Case Study 1

Males given a daily boron supplement of 10 mg, everyday for 7 days, realized an outstanding 28.3% increase in their free testosterone. Perhaps just as impressive, their estrogen levels dropped -39%. (2)

I would like to see more studies done with supplementation of 10 mgs over a longer period but when you see testosterone levels go up and estrogen levels go down that much, it's impressive!

Scientific Case Study 2

Scientists want to see if boron supplementation could increase vitamin D levels in people suffering with low vitamin D levels. (3)

[Vitamin D is also critical to testosterone](#) and the researchers also measured testosterone levels in the study.

Participants were given 6 mg of boron per day for 60 days from calcium fructoborate.

After the 60 days, researchers found that:

- Vitamin D levels Increased 19.5%
- DHEA increased 56%
- Free Testosterone Increased 29.5%

Boron is also one of the primary minerals recommended by Ali over at [Anabolic Men in his Testshock Program](#).

Boron and Sex Hormone Binding Globulin (SHBG)

While free testosterone shot through the roof, which is crucial to your ability to gain muscle, lose fat and increase strength; total testosterone did not get a significant increase.

If you're anything like me, you are probably wondering how on earth free testosterone could take such a big jump, while total T remained relatively unchanged.

That is because of the crucial interplay between boron and SHBG in the blood.

Sex Hormone Binding Globulin is a protein made by your liver. It's job is to bind to mission your sex hormones (estrogen; dihydrotestosterone (DHT), and testosterone) and carry them throughout your body via your bloodstream.

Overall this is a good thing as SHBG helps to keep your body regulated. However, as testosterone increases so does your SHBG levels.

Just because your testosterone levels are increasing, your bodies ability to use it for things like strength and muscle building could still be limited because it's being bound by SHBG instead of being "free".

This is where boron steps in as it appears to reduce the amount of SHBG in your blood, thereby increasing the amount of free testosterone available to your body. (2)

Boron Supplementation

I was unable to find a single human case study showing positive effects of supplementation with less than 3 mgs per day.

In the best human study on boron and testosterone, the dosage used was 10 mgs per day.

Given the difficulty in getting large quantities of boron in your diet, I recommend you supplement with 10 mgs every day to maximize your testosterone.



Force X7 by Alpha Wolf Nutrition is the only multi-ingredient, natural T booster we recommend and includes 10 mg of boron in its formulation.

Increase strength, stamina and muscle size.

Use coupon code "**itestosterone**" for 10% off your purchase! [Click here to learn more.](#)

Resources

1. Medlineplus.gov – [Link](#)
2. *Comparative effects of daily and weekly boron supplementation on plasma steroid hormones and proinflammatory cytokines.* Naghii, M.R. – [Link](#)
3. Natasha Miljkovic. Vitamin D/ Steroid Hormone Homeostasis and Calcium Fructoborate Supplementation. March 2002. Department of Orthopedic Medicine at the University of Novi Sad – [Link](#)

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Robert Clark aka "The Troglodyte" is a 39 year old father of 3, Author, Fitness Trainer, Nutritional Researcher, Obstacle Course Racer, Avid Trail Runner and CrossFit Warrior. He is dedicated to helping others achieve their fitness goals. His extensive work in the field of natural testosterone elevation, inspired the creation of Alpha Wolf Nutrition where he serves as the Lead Product Researcher.

