



Natural Testosterone Boost

"Some people have called testosterone the hormone of desire. So yes, low testosterone can cause decreased libido, but the bigger issue is **aging**."

Some people have called testosterone the hormone of desire. So yes, low testosterone can cause decreased libido, but the bigger issue is aging. The process of aging is largely a tissue breakdown or catabolic process.

Testosterone on the other hand is anabolic or tissue building. It promotes building body tissues like muscle, skin and bone for both men and women. Men with low testosterone double their risk of metabolic syndrome. Since testosterone protects brain cells; men with low levels of free testosterone are at an increased risk of developing Alzheimer's.

What are some of the reasons for low testosterone? Stress is a major factor. Long term chronic stresses caused by poor lifestyle, ongoing psychological stress, heavy metals, toxins, inflammation and infection will decrease testosterone. But short term stress as in exercise can increase testosterone.

Let's look at a simplified chart on how testosterone is made.



The starting point is cholesterol. Hmm; I wonder how many people taking statins to reduce cholesterol end up with low Testosterone? Cholesterol is converted to Pregnenolone. Some of the Pregnenolone is converted to progesterone and some to DHEA.

Let's follow the progesterone pathway. We need progesterone to make adrenal hormones. So if your patient is extremely stressed out the pregnenolone might be shunted or rerouted to make adrenal hormones, specifically cortisol. This is called the pregnenolone or cortisol steal, because the body steals

pregnenolone to make cortisol and the rest of the hormones suffer.

Now look at the other pathway for pregnenolone, DHEA. This is where things get interesting. DHEA is converted to androstanedione. Progesterone also converts to androstanedione. Androstanedione converts to testosterone or the female hormone estrone.

Testosterone can then be converted to DHT or estradiol. You can see from this chart that too much testosterone can enable the pathway to DHT. DHT is the dark side of testosterone. Increases of DHT are related to increases

in prostate cancer. Too much testosterone can also lead to excess estradiol another potential cancer causing agent. Excess insulin encourages androstenedione to convert to estrone as well as blocks the conversion to testosterone.

This is one more reason to make sure your patient is on an anti-inflammatory diet which addresses dysglycemia. You can see why patients taking exogenous testosterone or any other hormone should be evaluated on a regular basis.

Personally, I like adaptogenic compounds that feed the pathways needed to make hormones rather than give exogenous hormones.

Adaptogens are natural substances that provide precursors and cofactors the body needs to return itself to physiologic balance.

One such adaptogenic compound is b-VITAL. b-VITAL contains 750 mg of Peruvian Maca and 50 mg of velvet deer antler from living elk. Because Maca has been used as food in Peru for thousands of years we can be assured of its safety. As an adaptogen it has over 165 citations on Pub Med. It is a natural precursor to testosterone. Men and women have used Peruvian Maca to increase endurance, fertility and virility. Although we think of it for men, it is also used for women with menopause as well.

Velvet Deer antler has been used in traditional Chinese medicine for thousands of years as a tonic providing a revitalizing effect especially for those weakened by illness or other stress. A preliminary study of men, ages 45-55, found that supplementation with b-VITAL for 30 days increased salivary free testosterone in 100% of subjects.

My experience matches the preliminary study in both men and women; b-VITAL consistently increases saliva levels of free testosterone at 3 capsules bid. I generally suggest decreasing the dose to 1 bid after a few months. Don't forget high intensity interval training exercise also increases growth hormone and downstream hormones like testosterone and reduces insulin.

While we are talking about exercise you can see a link discussing Ashwagandha as in Bio-Ashwagandha and how men using resistance training taking ashwagandha had a fourfold increase in testosterone over controls who were also exercising.

Another consideration is Gammanol Forte. 10 out of 10 menopausal women taking Gammanol Forte, 2 tid for 5 weeks, had increases in growth hormone; 8 out of 10 had significant levels of increase.

All three of these products are adaptogens. Ashwagandha and the components in b-VITAL have been used and have shown therapeutic benefit for thousands of years. Gammanol Forte comes from a rice bran extract. By the way if you decide to do testing and find you need a DHEA product, Biotics makes two low dose DHEA products in 5 mg and 10 mg doses.

You can see the chart we discussed to the right with some additional considerations. More and more baby boomers are looking for ways to enhance their life quotient. In today's changing health care system I encourage you to become an expert in things people want. Thanks for watching, I look forward to being with you again next Tuesday.