

9 Body Hacks to Naturally Increase Testosterone

July 27 2012 |

By Dr. Mercola

Testosterone, a hormone produced primarily by the testicles, is often associated with the epitome of "manhood" (although women have testosterone, too).

Indeed, it does play a large role in male sexuality and reproduction, impacting such factors as sexual and reproductive function, muscle mass, and hair growth, but also has some less "flashy," albeit equally important, roles like maintaining bone density, levels of red blood cells and a sense of well-being.

Beginning around age 30, a man's testosterone levels begin to decline, and continue to do so as he ages.

A wide range of chemical exposures including prescribed drugs like statins, adversely impact testosterone production in men. At the same time, estrogen levels typically increase due to widespread exposures to estrogen-mimicking compounds in food, water and environmental pollutants.

What are Your Options for Replacement?

If you're a man who's experiencing symptoms such as decreased sex drive, erectile dysfunction, depressed mood, and difficulties with concentration and memory, and you think low testosterone may be to blame, you can have your levels tested. Since testosterone levels fluctuate throughout the day, you'll probably need more than a blood test to get a true picture of your levels.

If your levels are indeed low, there are a number of synthetic and bioidentical testosterone products on the market, as well as DHEA, which is the most abundant androgen precursor prohormone in the human body, meaning that it is the largest raw material your body uses to produce other vital hormones, including testosterone in men and estrogen in women.

I only recommend using bioidentical hormones, and only then under the guidance of a holistic doctor who can monitor your hormone levels to ensure you need supplementation.

But, before you opt for this route, there are numerous strategies you can try to boost your testosterone levels naturally. These are appropriate for virtually anyone, as they carry only beneficial "side effects."

9 Ways to Naturally Increase Testosterone Levels

1. Lose Weight

If you're overweight, shedding the excess pounds may increase your testosterone levels, according to research presented at the Endocrine Society's 2012 meeting. Overweight men are more likely to have low testosterone levels to begin with, so this is an important trick to increase your body's testosterone production when you need it most.

If you are serious about losing weight, you have got to strictly limit the amount of processed sugar in your diet, as evidence is mounting that excess sugar, and fructose in particular, is the primary driving factor in the obesity epidemic. So cutting soda from your diet is essential, as is limiting fructose found in processed foods, fruit juice, excessive fruit and so-called "healthy" sweeteners like agave.

Ideally you should keep your total fructose consumption below 25 grams per day and this includes fruits. This is especially true if you have insulin resistance and are overweight, have high blood pressure, diabetes or high cholesterol.

In addition to eliminating or severely limiting fructose, it will be vital to eliminate all grains and milk (even raw) in your diet. Milk has a sugar called lactose, which has been shown to increase insulin resistance so it will be wise to avoid it if you are seeking to lose weight.

Refined carbohydrates like breakfast cereals, bagels, waffles, pretzels, and most other processed foods also quickly break down to sugar, increase your insulin levels, and cause insulin resistance, which is the number one underlying factor of nearly every chronic disease and condition known to man, including weight gain.

As you cut these dietary troublemakers from your meals, you need to replace them with healthy substitutes like vegetables and healthy fats (including natural saturated fats!). Your body prefers the carbohydrates in micronutrient-dense vegetables rather than grains and sugars because it slows the conversion to simple sugars like glucose, and decreases your insulin level. When you cut grains and sugar from your meals, you typically will need to radically increase the amount of vegetables you eat, as well as make sure you are also consuming protein and healthy fats regularly.

I've detailed a step-by-step guide to this type of healthy eating program in my comprehensive nutrition plan, and I urge you to consult this guide if you are trying to lose weight.

The foods you choose to eat will be the driving force behind successfully achieving your weight loss goals -- high-intensity, short-burst-type exercises, such as my Peak Fitness Program, two to three times per week, combined with a comprehensive fitness plan, is important too, and has an additional benefit as well (see below)!

2. High-Intensity Exercise like Peak Fitness (Especially Combined with Intermittent Fasting)

Both intermittent fasting and short intense exercise have been shown to boost testosterone. Short intense exercise has a proven positive effect on increasing testosterone levels and preventing its decline. That's unlike aerobics or prolonged moderate exercise, which have shown to have negative or no effect on testosterone levels.

Intermittent fasting boosts testosterone by increasing the expression of satiety hormones including insulin, leptin, adiponectin, glucagon-like peptide-1 (GLP-1), colecystokinin (CKK) and melanocortins, all of which are known to potentiate healthy testosterone actions, increase libido and prevent age-related testosterone decline.

Having a whey protein meal after exercise can further enhance the satiety/testosterone-boosting impact (hunger hormones cause the opposite effect on your testosterone and libido). Here's a summary of what a typical high-intensity Peak Fitness routine might look like:

- Warm up for three minutes
- Exercise as hard and fast as you can for 30 seconds. You should feel like you couldn't possibly go on another few seconds
- Recover at a slow to moderate pace for 90 seconds
- Repeat the high intensity exercise and recovery 7 more times

As you can see, the entire workout is only 20 minutes. Twenty minutes! That really is a beautiful thing. And within those 20 minutes, 75 percent of that time is warming up, recovering or cooling down. You're really only working out intensely for four minutes. It's hard to believe if you have never done this that you can actually get that much benefit from four minutes of exercise. That's all it is.

Keep in mind that you can use virtually any type of equipment you want for this – an elliptical machine, a treadmill, swimming, even sprinting outdoors (although you will need to do this very carefully to avoid injury) -- as long as you're pushing yourself as hard as you can for 30 seconds. But do be sure to stretch properly and start slowly to avoid injury. Start with two or three repetitions and work your way up, don't expect to do all eight repetitions the first time you try this, especially if you are out of shape.

You can find more information about this in an article previously written on intermittent fasting.

3. Consume Plenty of Zinc

The mineral zinc is important for testosterone production, and supplementing your diet for as little as six weeks has been shown to cause a marked improvement in testosterone among men with low levels.¹ Likewise, research has shown that restricting dietary sources of zinc leads to a significant decrease in testosterone, while zinc supplementation increases it² -- and even protects men from exercised-induced reductions in testosterone levels.³

It's estimated that up to 45 percent of adults over the age of 60 may have lower than recommended zinc intakes; even when dietary supplements were added in, an estimated 20-25 percent of older adults still had inadequate zinc intakes, according to a National Health and Nutrition Examination Survey.⁴

Your diet is the best source of zinc; along with protein-rich foods like meats and fish, other good dietary sources of zinc include raw milk, raw cheese, beans, and yogurt or kefir made from raw milk. It can be difficult to obtain enough dietary zinc if you're a vegetarian, and also for meat-eaters as well, largely because of conventional farming methods that rely heavily on chemical fertilizers and pesticides. These chemicals deplete the soil of nutrients ... nutrients like zinc that must be absorbed by plants in order to be passed on to you.

In many cases, you may further deplete the nutrients in your food by the way you prepare it. For most food, cooking it will drastically reduce its levels of nutrients like zinc ... particularly over-cooking, which many people do.

If you decide to use a zinc supplement, stick to a dosage of less than 40 mg a day, as this is the recommended adult upper limit. Taking too much zinc can interfere with your body's ability to absorb other minerals, especially copper, and may cause nausea as a side effect.

4. Strength Training

In addition to Peak Fitness, strength training is also known to boost testosterone levels, provided you are doing so intensely enough. When strength training to boost testosterone, you'll want to increase the weight and lower your number of reps, and then focus on exercises that work a large number of muscles, such as dead lifts or squats.

You can “turbo-charge” your weight training by going slower. By slowing down your movement, you're actually turning it into a high-intensity exercise. [Super Slow movement](#) allows your muscle, at the microscopic level, to access the maximum number of cross-bridges between the protein filaments that produce movement in the muscle.

5. Optimize Your Vitamin D Levels

Vitamin D, a steroid hormone, is essential for the healthy development of the nucleus of the sperm cell, and helps maintain semen quality and sperm count. Vitamin D also increases levels of testosterone, which may boost libido. In one study, overweight men who were given vitamin D supplements had a significant increase in testosterone levels after one year.⁵

[Vitamin D](#) deficiency is currently at epidemic proportions in the United States and many other regions around the world, largely because people do not spend enough time in the sun to facilitate this important process of vitamin D production.

So the first step to ensuring you are receiving all the benefits of vitamin D is to find out what your levels are using a 25(OH)D test, also called 25-hydroxyvitamin D.

A few years back, the recommended level was between 40 to 60 nanograms per milliliter (ng/ml), but more recently the optimal vitamin D level has been raised to 50-70 ng/ml.

To get your levels into the healthy range, sun exposure is the BEST way to optimize your vitamin D levels; exposing a large amount of your skin until it turns the lightest shade of pink, as near to solar noon as possible, is typically necessary to achieve adequate vitamin D production. If sun exposure is not an option, a safe tanning bed (with electronic ballasts rather than magnetic ballasts, to avoid unnecessary exposure to EMF fields) can be used.

As a last resort, a vitamin D3 supplement can be taken orally, but research suggests the average adult needs to take 8,000 IU's of vitamin D per day in order to elevate their levels above 40 ng/ml, which is the absolute *minimum* for disease prevention.

6. Reduce Stress

When you're under a lot of stress, your body releases high levels of the stress hormone cortisol. This hormone actually *blocks* the effects of testosterone,⁶ presumably because, from a biological standpoint, testosterone-associated behaviors (mating, competing, aggression) may have lowered your chances of survival in an emergency (hence, the “fight or flight” response is dominant, courtesy of cortisol).

In the modern world, [chronic stress](#), and subsequently elevated levels of cortisol, could mean that testosterone's effects are blocked in the long term, which is what you want to avoid.

My favorite overall tool to manage stress is [EFT \(Emotional Freedom Technique\)](#), which is like acupuncture without the needles. It's a handy, free tool for unloading emotional baggage quickly and painlessly, and so easy that even children can learn it. Other common stress-reduction tools with a high success rate include prayer, meditation, laughter and yoga, for example. Learning relaxation skills, such as deep breathing and positive visualization, which is the "language" of the subconscious.

When you create a visual image of how you'd like to feel, your subconscious will understand and begin to help you by making the needed biochemical and neurological changes.

7. Limit or Eliminate Sugar from Your Diet

Testosterone levels decrease after you eat sugar, which is likely because the sugar leads to a high insulin level, another factor leading to low testosterone.⁷

Based on USDA estimates, the average American consumes 12 teaspoons of sugar a day, which equates to about TWO TONS of sugar during a lifetime. *Why* we eat this much sugar is not difficult to understand -- it tastes good, and it gives us pleasure by triggering an innate process in your brain via dopamine and opioid signals.

What it is doing to us on both a physical and emotional level is another story entirely, and most people stand to reap major improvements in their health by cutting back on, or eliminating, sugar altogether from their diets. Remember foods that contain added sugar and fructose, as well as grains like bread and pasta, should all be limited.

If you're struggling with sugar addiction and having trouble dealing with cravings, I highly recommend trying an energy psychology technique called [Turbo Tapping](#), which has helped many "soda addicts" kick their sweet habit, and it should work for any type of sweet craving you may have.

8. Eat Healthy Fats

By healthy, this means not only mon- and polyunsaturated fats, like that found in avocados and nuts, but also *saturated*, as these are essential for building testosterone. Research shows that a diet with less than 40 percent of energy as fat (and that mainly from animal sources, i.e. saturated) lead to a decrease in testosterone levels.⁸

My personal diet is about 60-70 percent healthy fat, and other experts agree that the ideal diet includes somewhere between 50-70 percent fat.

It's important to understand that your body *requires* saturated fats from animal and vegetable sources (such as meat, dairy, certain oils, and tropical plants like coconut) for optimal functioning, and if you neglect this important food group in favor of sugar, grains and other starchy carbs, your health and weight are almost guaranteed to suffer. Examples of healthy fats you can eat more of to give your testosterone levels a boost include:

Olives and Olive oil	Coconuts and coconut oil	Butter made from raw grass-fed organic milk
----------------------	--------------------------	---

Raw nuts, such as, almonds or pecans	Organic pastured egg yolks	Avocados
Grass-fed meats	Palm oil	Unheated organic nut oils

9. Boost Your Intake of Branch Chain Amino Acids (BCAA) from Foods Like Whey Protein

Research suggests that BCAAs result in higher testosterone levels, particularly when taken along with resistance training.⁹ While BCAAs are available in supplement form, you'll find the highest concentrations of BCAAs like leucine in dairy products – especially quality cheeses and whey protein.

Even when getting leucine from your natural food supply, it's often wasted or used as a building block instead of an anabolic agent. So to create the correct anabolic environment, you need to boost leucine consumption way **beyond** mere maintenance levels.

That said, keep in mind that using leucine as a free form amino acid can be highly counterproductive as when free form amino acids are artificially administered, they rapidly enter your circulation while disrupting insulin function, and impairing your body's glycemic control. Food-based leucine is really the ideal form that can benefit your muscles without side effects.

References:

- ¹ Arch Androl. 1981 Aug;7(1):69-73.
- ² Nutrition. 1996 May;12(5):344-8.
- ³ Neuro Endocrinol Lett. 2007 Oct;28(5):681-5.
- ⁴ National Institutes of Health, Office of Dietary Supplements, Zinc
- ⁵ Horm Metab Res. 2011 Mar;43(3):223-5. Epub 2010 Dec 10.
- ⁶ Horm Behav. 2010 Nov;58(5):898-906. Epub 2010 Sep 15.
- ⁷ Study presented at The Endocrine Society's 91st Annual Meeting, June 13, 2009, Washington, D.C.
- ⁸ J Steroid Biochem. 1984 Jan;20(1):459-64.
- ⁹ J Strength Cond Res. 2010 Apr;24(4):1125-30.