

MANLY MEN



Jacobus Hollewijn*
GESUNDHEIT!
NUTRITION CENTER

TESTOSTERONE:

Misunderstood & Underappreciated!

For many, when seeing a tan, muscular and lean man, there is an association with good and healthy levels of testosterone. Others are not looking for the *outer* machismo but more for that confident, non-arrogant, decisive, gallant, romantic and protective, alpha-male energy in a man.

Testosterone, however, is *more* than all that. This major androgenic hormone plays an important role in heart health, prostate, cholesterol, sugar metabolism, immune health, and osteoporosis. Recent research has looked closer at low testosterone, symptoms and health risks of deficiency, and what we can do to increase levels if needed.

Life Extension Foundation (LEF)¹ published an article in their June 2012 magazine, entitled “*The Testosterone Controversy*,” based on a 2011 published study of 2,416 men aged 69 to 81 who were not on any kind of testosterone-affecting treatment. They were followed for an average of 5.1 years. This article piqued my interest, and I’ve used its information now for several months to educate others.

In this article, William Faloon points out that conventional doctors still question the value of testosterone replacement as men get older. Anti-aging has been the goal for millions of people throughout history, and it has become big business across different types of industries—from clothing, to fitness, cosmetics and supplementation; even plastic surgery is ballooning!

Scientists and lay-people alike have wondered if plummeting hormone levels in both men and women had something to do with all of this. As far as testosterone in men is concerned, the answer is an emphatic YES!

I therefore highly recommend that if you have any concern about the onset of degenerative diseases, you take a blood test for your hormone levels, taking a close look at your Total Testosterone, Free-Testosterone, Estradiol, and DHEA-S levels. (Each of these will be explained in detail coming up.) In Montana that test should cost you around \$200 when you visit a walk-in lab service office.²

HAPPY HORMONES

Following are guidelines to aim for. For optimum DHEA-S levels, I use the book by Stephen Cherniske, M.S., *The Metabolic Plan: Stay Younger Longer* [Ballantine Books, 2003]. The subtitle reads: *Slow the Aging Process, Increase Your Strength, Stamina and Immunity, Reduce Fat and Combat Cardiovascular Disease, Enhance Memory, and Restore Your Youthful Glow*—now that’s a manly mouthful!

The other hormone numbers are from the above-mentioned LEF article. Please use these values when looking at your blood-hormone test. The additional information emphasizes once again the importance of maintaining correct levels.

1) TOTAL TESTOSTERONE

This is the amount that men produce daily, primarily in their testes and a smaller amount in their adrenal glands. Testosterone is the most important male hormone that comes up at the onset of puberty. This causes men’s voices to get deeper and their muscles to grow. It starts the appearance of facial hair, and the development of sexual feelings and sperm production.

However, libido/sex drive is more related to another hormone called *Oxytocin*. I have seen plenty of men with low-testosterone levels who express their love for sex and whose eyes always wander at the sight of a beautiful woman. And there are men with excellent testosterone levels, who don’t care about sex that much.

Testosterone peaks at around 40 years old, after which it starts to decline. Some guidelines:

- Optimal levels should be between **700–900 ng/dl**.
- Men need at least **550 ng/dl**.
- If less than **550 ng/dl** (i.e., 549, 548, etc.): there is an immediate 30% increased risk for cardiovascular events, no matter how far you are below that magic number of 550 ng/dl.
- At **550 and over**, there’s a 24% reduced risk of **transient ischemic attack** (mini-stroke) or full-blown stroke.
- Several well-publicized studies have indicated that **testosterone does NOT cause prostate cancer**. (Otherwise, every young man in this country would have prostate cancer!) Actually, low testosterone increased both PSA levels and prostate cancer-positive biopsies.
- Men with increasing levels of testos-

Jacobus is not a doctor and does not intend to diagnose, treat or cure any disorder. The information is based on self-study, interviewing experts on his weekly 3-hour Saturday morning Radio Program “Gesundheit! With Jacobus,” which runs from 8–11 am, on AM 1450-KMMS and AM 1340 KPRK, and on feedback received from retail customers visiting his dietary supplements retail store Gesundheit! Nutrition Center at 2855 N. 19th Avenue, Suite N, in Bozeman. Call 585-4668. If in doubt please visit a professional of your own choice and/or educate yourself with available published materials.





terone also showed a decreased prevalence of diabetes, hypertension, muscle wasting, and body-fat mass.

- Good testosterone levels enable High-Density Lipoprotein (HDL) to remove built-up cholesterol from the arterial wall, and send it back to the liver. (Both testosterone *and* HDL levels drop as we age.)
 - a. **HDL between 35 and 45 mg/dl** is dangerous for heart disease and immune health.
 - b. **HDL above 60 mg/dl** indicates you're in the "safe-zone."
 - c. **HDL above 85 mg/dl** is excellent for overall health.

The combination of low HDL and low testosterone results in problems removing debris from the arterial wall (i.e., *reverse cholesterol transport*). This may result in **atherosclerosis** (hardening of the arteries). Elevated testosterone may prevent expensive vascular-stents surgeries and the over-prescription of cardiovascular drugs.

- In the liver, testosterone elevates the hepatic lipase/fat-breakdown enzyme needed to safely *clear the body* of excess cholesterol.
- **Restoring testosterone** to ideal levels also helps with improved mood, more endurance, increased anabolic function, arterial function, and anti-inflammatory activities.

2) FREE TESTOSTERONE

This is the bioactive amount of Total Testosterone in the bloodstream, i.e., not bound to any other chemical. Ideally it should be 3 to 4% of total testosterone. This test gives a physician a good general indication of a man's testosterone status.³

- Optimal levels should be **20–25 ng/dl**.
- One study evaluated men under age 45 with levels lower than **17.3 pg/ml**, which resulted in a 3.3-fold greater risk of developing premature coronary artery disease compared to men with values above that level.⁴

3) ESTRADIOL

This is the female hormone that men do need, but we are supposed to produce only a relatively small amount. It is made from Total Testosterone through a process involving the enzyme aromatase. Aromatase "pulls" on testosterone and

converts that into estradiol. So if aromatase is very strong, it will pull harder on our testosterone and will result in a relatively high number on the estradiol (maybe too high), and a lower amount of testosterone. Some guidelines:

- Optimal levels for estradiol are **21.80–30.11 pg/ml**.
- **Above normal** levels increase the risk for **prostate cancer**, and **coronary artery disease**, while doubling the risk for **stroke**, as well as a death rate increased by 133% (when it is **above 37.40 pg/ml**).
- **Below-normal** values predispose a man to **osteoporosis and bone fractures**, as well as a 217% increased death rate (when **under 12.90 pg/ml**).
- **Normal-to-high** Total Testosterone, with too much aromatase, will produce excess estradiol.
- **Normal** testosterone with **low** aromatase will cause low levels of estradiol.
- **Low** testosterone with **normal** aromatase levels will convert into low levels of estradiol **AND**, of course, low levels of Free Testosterone (since both are now low).

Most western physicians will not test men for this hormone—they think it is absolutely unimportant. Thus **99% of men today do NOT know their estradiol numbers**. Because of that, I cannot really recommend a natural testosterone-boosting product to customers. If their testosterone is low (as they tell me), while their estradiol levels are in the higher-than-normal range (or above that), they would risk developing prostate cancer, heart disease and stroke. YES, testosterone needs to stay high but not by risking one's health in other areas!

4) DHEA

DHEA is a hormone produced in our adrenal glands, which lay on top of our kidneys. Our adrenals consist of the outer medulla (DHEA production), and the inner cortex (cortisol/stress-hormone production). DHEA metabolizes into both testosterone and the three different forms of estrogens: *estradiol*, *estrone* and *estriol*.

Imagine that the adrenals can only make 100% of its two hormones—50% DHEA and 50% cortisol. If our life becomes stressful (*and whose doesn't!*), or if we suffer from depression, anxiety or PTSD for decades of our lives, our adrenals end up making more cortisol for extended periods of time (up to 80%) just to allow us to keep functioning. This now reduces DHEA output (to as low as 20%) resulting in lower testosterone (especially affecting men but also women to some extent) and estrogens (especially affecting women but men to some extent).

As Cherniske explains, accelerated aging, as well as many age-related disorders are all resulting from lowering levels of DHEA. DHEA production peaks at around age 30–35, but levels off until about age 80, after which we have almost no more production.

So, when you test your DHEA levels, your doctor may say that all is normal. But that may be *normal* for someone your age—NOT someone at about 30 years old!

Because of the importance of this hormone, I will give both male and female numbers as published in Cherniske's book⁵.

- **Prime Peak Levels:**
MEN 450–600
WOMEN 280–380
- **Good Levels:**
MEN 300–450
WOMEN 150–280
- **Deficient Levels:**
MEN 125–300
WOMEN 45–150
- **Worrisome Levels:**
MEN Less than 125
WOMEN Less than 45

OPTIMIZING OPTIONS

Different over-the-counter products may help in regulating the above-mentioned hormones. Please research your imbalances and then look at the options that address your specific needs. Try these products and then **retest after three months** to observe progress and needed adjustments.

For Testosterone Boosting:

Nature's Plus T-Male: 4 capsules, or two tablets, or 1 oz daily.

HerbalGem Gemmotherapy Oak: 5–15 drops daily.

Life-Flo Testosterone Cream: 1 pump, once or twice daily, applied to the inner thighs or lower abdomen.

Different products containing the herbs, *Tribulus Terrestris*, *Maca*, *Muira Puama*, and *Yohimbe* (preferably containing a standardized extract).

The mineral Zinc: 25–300 mg daily. (Many people are very low on zinc, but have your levels checked to make sure you are not overdoing it.)

The mineral Copper: 2 mg daily to balance with zinc. Men need more zinc, with some copper; women need more copper (i.e., 30–50 mg) plus some zinc.

Vigorous exercise—especially weight-bearing or resistance training.

A diet high in protein (see my NLND article of Jan/Feb 2013).

For Increasing Free-Testosterone & Decreasing Estradiol:

Life Extensions' Super Miraforte: 2 capsules twice daily. This product has shown in clinical testing to boost free-testosterone by 40% and decrease estradiol by 60% within two months.

For Improving DHEA Values:

Men may need more supplemental DHEA than women; however, *more* is not always better. The human body, even at age 25, produces only 40–60 mg of DHEA per day. I suggest 50 mg (for men) versus 10–25 mg (for women), once or twice daily. Once you reach your goal, find a low-maintenance dose. 7-Keto DHEA is a form that does not convert into testosterone or estrogens. This form also benefits greatly by improving anabolic metabolism (muscle and tissue building).

DHEA and 7-Keto are available in different milligrams and in varied forms ranging from capsules to sublingual tablets to topical creams. Try some, then test after three months and make adjustments as necessary.

DAINGEROUS DISRUPTORS

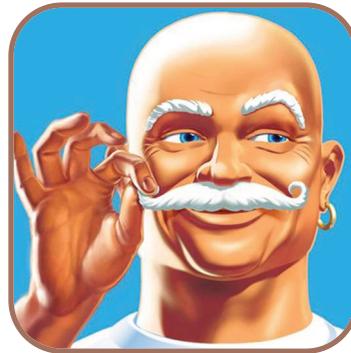
Men are exposed to a variety of toxic chemicals every day that compete with normal hormone metabo-

lism. Many of these exposures are out of our control, because the chemicals are in the air that we breathe and the water used to process our foods and drinks. And then there's exposure to unfermented soy products, plastics, gasoline fumes, chlorine, fluoride, heavy metals, etc. Many of these toxins have an estrogenic effect on our tissues and endocrine system, thereby disrupting natural hormone production and concurrent metabolism. This has created a wave of new and debilitating chronic diseases the world has never seen, and for which the medical establishments are not prepared to do battle with.

We owe it to ourselves to get our bodies functioning at optimal speed, efficiency and strength. Some will have more challenges than others to reach that goal. However, it can be a steady and positive journey, not a sprint. And the results will be

better health, longevity,

feeling younger—and having the energy of a manly man! ■



1. http://www.jef.org/magazine/mag2012/jun2012_Testosterone-Controversy_01.htm
2. **Montana is ONE of seven states that allow people to get their blood tested without a doctor's prescription first.** This is also wonderful for those who do not have insurance and/or a personal physician. However, not every clinic or blood service complies. In **Bozeman, Tri*Med Services (585-3301)** offers a list of blood tests that can be done immediately, and results will be sent to your address.
3. http://www.ehow.com/about_5554736_testosterone.html
4. Turhan S, Tulunay C, Gulec S, et al. The association between androgen levels and premature coronary artery disease in men. *Coron Artery Dis.* 2007 May;18(3):159-62.
5. The unit of measure mcg/dl is the same as mcg/100ml and g/dl. If your results are reported in ng/ml, simply divide your results by 10, and then look at the levels printed in this article to see where you fit in.

GESUNDHEIT! NutritionCenter

585-4668 • Mon–Sat 9–6

- Vitamins & Minerals
- Herbs & Homeopathics
- Athletic Supplements
- Essential Oils

Expert Supplementation Advice!
info@gwjstore.com

2855 No. 19th Ave., Ste. N • Bozeman



"Gesundheit-Nutrition-Center"

"Gesundheit! ...with Jacobus"

HEALTH TALK-RADIO SHOW

Saturday Mornings, 8–11 am
on **AM-1450 KMMS** Bozeman
& **AM-1340 KPRK** Livingston

**LIVE, with Health Experts
in Traditional Medicine and
Natural, Alternative Therapies!**

Listen Live at **KMMSAM.com**

