# **Testosterone for Women...and Men**

Date: 05/08/2006 Posted By: Jon Barron

Every now and then I get a break in putting together a newsletter. I get to steal the entire newsletter from myself. In this case, I was able to take most of the material for this newsletter from the formulation information I put together for my new upgraded **Women's Formula** that Baseline Nutritionals released this month. And while this newsletter definitely serves as an introduction to that new formula, it more importantly provides an excuse for exploring a crucial topic for both men and women -- the value of maintaining an optimum testosterone balance.

However, before we get into the specifics of both the men's and women's formulas, let's explore what testosterone does in the body -- and why it's so important for both men and women.

# The 30,000 Mile Tune-Up: Hormonal Changes

As men and women enter their 30's, profound changes begin to take place in their bodies. If not addressed (that's the 30,000 mile tune-up thing), these changes can lead to, among other things:

- Decreased energy and zest for life
- Loss of muscle tone and increased fat
- Circulatory problems and decreased libido

But it doesn't have to be this way. Let me explain.

## **Hormonal Imbalance**

Hormones are the body's chemical messenger system. They tell the various cells of the body what to do - and when to do it -- by attaching to specific receptor sites on individual cells. Problems occur when the various hormones get out of balance. Estrogen dominance and low levels of progesterone are certainly major problems (for both men and women), but in this newsletter, we will focus our discussion on the need for men and women to reestablish the proper levels of both testosterone and the adrenal hormones.

### **The Testosterone Story**

The bottom line is that both men and women need and produce testosterone in their bodies -- although in differing amounts. It is testosterone (in both men and women) that is responsible for:

- **Pumping up** energy levels.
- **Driving** our desire to attack the day.
- **Firing** the need to succeed.
- **Bonding** us with our mates.

- Fueling our sexual desires.
- Elevating our levels of sexual satisfaction.
- Growing hair on our heads, while at the same time keeping us from going bald.
- Building muscle and burning off fat.
- Facilitating better circulation.

Unfortunately, once we reach our thirties, available testosterone levels for both men and women tend to begin diminishing with age. So what's going on? Interestingly enough, it's not actual testosterone production that decreases as we age; but rather, it's the amount of free circulating (or bio-available) testosterone that decreases -- as more and more of it gets bound to both <u>albumin</u> and a natural substance called <u>SHBG</u> (sex-hormone-binding-globulin).

An <u>article</u> in The Journal of Clinical Endocrinology & Metabolism explains that SHBG plays the biggest role in testosterone binding when testosterone levels are low, while albumin plays the dominant role at higher levels. The important point is that when "bound" (particularly to SHBG), testosterone becomes unavailable for use by the body. This means that although your total testosterone levels may remain essentially unchanged as you age, only a small fraction of that total is "free" and thus biologically active and able to enter a cell and activate its receptor. And considering that as we age the amount of SHBG steadily increases, it's easy to see that your level of bio-available testosterone will only continue to decrease over time.

Yet age isn't the only factor. Just recently a new risk for women has come to light.

# **Oral Contraceptives & Sexual Problems**

If you are like most women in modern society, you have probably, at some point in your life, taken birth control pills. But oral contraceptive's (OC) have been linked with sexual health problems -- even after discontinuing use! The January 2006 issue of <u>The Journal of Sexual Medicine</u> reported on a study that showed that OC use was associated with elevated SHBG levels and reduced bio-available testosterone -- **even after discontinuing use**. In fact, women that were currently taking OCs at the time of the study had SHBG levels four times higher than those seen in women with no OC exposure. Women who had stopped taking OCs for 6 months were still 2 times higher in SBHG than women with no OC exposure.

Earlier research had shown increases in sex hormone-binding globulin levels with oral contraceptive use to be associated with a concomitant 40% to 60% decrease in free testosterone levels. And lowered levels of free testosterone are believed to play a major role in women's sexual health and could place women at risk for decreased sexual desire, decreased arousal, decreased lubrication and increased sexual pain.

But cheer up; bound testosterone can easily be freed -- with a little help. Fortunately, the use of herbs such as Saw palmetto, Wild oats, and Nettles can reverse the binding process, **increasing free testosterone levels an astounding 105% on average!!** And the benefits for both men and women are enormous.

# Saw Palmetto, Wild Oats, and Nettles

#### Saw Palmetto

It's normal for men to have a lot of testosterone and for women to have some. In both men and women, testosterone is converted into a more potent hormone called DHT (dihydrotestosterone). DHT is the hormone that stimulates hirsutism, (loss of hair on the head and hair growing where you don't want it -- the back and ears for men, face and legs for women). If you can reduce DHT, you reduce hirsutism -- getting rid of hair from the less desirable places and restoring it on top of your head.

Saw palmetto appears to reduce DHT in three different ways:

- Inhibits DHT production.
- Inhibits the binding of DHT to its cell receptors.
- Promotes the breakdown of DHT.

In fact, it appears that one of the primary mechanisms through which Saw palmetto works in the body is that it inhibits 5-alpha-reductase, the enzyme that converts testosterone into DHT. The bottom line is that supplementation with Saw palmetto lowers DHT, thereby reducing hirsutism and increasing available testosterone.

### **Nettles and Wild Oats**

As already mentioned, extracts of Wild oats and Nettles can safely help increase testosterone levels in the body. In fact, German researchers have identified a constituent of nettle root known as (-)-3,4-divanillyltetrahydrofuran that has a high binding affinity to SHBG. They described it as "remarkable." These researchers suggest that the beneficial effects of plant lignans (such as found in flaxseed oil) on hormone-dependent cancers may be linked to their binding affinity to SHBG. The most potent known lignans in this respect are constituents of nettle root. In addition to inhibiting SHBG binding, at least six constituents of nettle root inhibit aromatase, reducing conversion of androgens to estrogens.

As for Wild oats, there are no formal studies testing its effect on humans. Yet significant amounts of anecdotal clinical observations, particularly with men in their 20s and 30s who had low testosterone levels for their age, have shown that supplementation with Avena sativa results in dramatically increased testosterone levels. The key to the effectiveness of wild oat supplements lies in the quality of the extract. Most extracts tested show little to no presence of the active avenacosides, which provide all of the potency. If you're going to use a supplement that contains Wild oats, you'll want to make sure it comes from a supplier you trust.

## **Specific Benefits for Women**

Surprisingly, women are far more vulnerable to testosterone level changes than men. The reason is simple: they have so much less to work with (and even less if on The Pill) that when even a small amount of their available testosterone gets bound to SHBG, the results are profoundly disruptive:

- Loss of energy.
- Loss of will to do anything.

- Loss of motivation.
- Loss of interest in spouse and loss of libido.
- Loss of fulfillment from sex.
- Loss of muscle and significant increase in body fat -- the prime reason women start to gain so much weight as they move into their 40's.
- Hirsutism.
- A significant increase in the risk of breast cancer -- since bound SHBG is no longer available to lock up excessive estrogens.

Regular use of a women's testosterone balancing formula can help to significantly reverse and/or prevent all of the above conditions.

# **Specific Benefits for Men**

SHBG binds not only testosterone, but to all of the sex hormones including estradiol (one of the "active" estrogens found in both men and women). Normally, this binding serves as a storage system for excess hormones, but in men there is an additional problem.

SHBG also has an affinity for prostate tissue. In effect, SHBG can serve to bind estrogen to cell membranes in the prostate. This causes an increase in PSA secretion -- a prime factor in future prostate problems, including cancer. The Wild oats and Nettles found in most men's testosterone balancing formulas work together to reverse this binding process, thereby reducing the likelihood of prostate problems.

And finally, as we discussed earlier, Saw palmetto has been proven to inhibit the 5-alpha-reductase enzyme, the enzyme that causes testosterone to be converted into DHT, stimulating the growth of prostate tissue. The bottom line is that regular use of Saw palmetto can:

- Reduce enlargement of the prostate.
- Tone the bladder.
- Improve urinary flow and relieve strain.
- Decrease urinary frequency, especially during the night (by allowing the bladder to empty completely).
- Reduce inflammation of the bladder and enlarged prostate.

### Yes, There Are Sexual Benefits

The ingredients found in testosterone balancing formulas work naturally in both men and women to enhance sexual desire, sensation, and performance. The effect on human sexual appetite can be powerful. Both men and women can feel a boost in sexual desire - sometimes after only a few hours. Both men and women experience an increase in frequency of orgasms while taking quality extracts of

Wild oats & Nettles, while many women experience a dramatic 68% increase in multiple orgasms. Men also reported multiple orgasms while taking the Wild oats and Nettles combination.

# And Don't Forget the Adrenal Hormones

Although not directly related, adrenal exhaustion and low testosterone levels share some key similarities.

- For most people, their impact is felt starting around the same time in life -- the 30's.
- Many of their symptoms are similar -- exhaustion, reduced sexual vitality, and loss of zest for life.

Fortunately, there is a class of herbs known as adaptogens that work well with the testosterone unbinding herbs so that it's possible to easily create formulas that do double duty, while at the same time mutually reinforcing the other half of the formula. Adaptogens naturally help to rebuild adrenal function and restore hormonal balance. Foremost among the adaptogens is **Ginseng** that has been shown to:

- Increase stamina.
- Revitalize the body.
- Increase life span.
- Counteract chronic fatigue.
- Improve resistance to stress.
- Improve sexual function in both men and women.
- Enhance immune function.

For these reasons, you will find that most testosterone balancing formulas contain different forms of Ginseng.

## **Ingredients**

So far we have talked in generic terms about testosterone balancing formulas, but as I mentioned at the top of the newsletter, Baseline Nutritionals is releasing the upgraded version of my Women's Formula. With that in mind, let's spend the rest of the newsletter focusing in on my versions of men's and women's testosterone formulas -- with special emphasis on the Women's Formula.

**The Men's Formula contains:** Ginseng, Tribulus Terrestris, Muira puama, Wild oats, Nettles, Eleutherococcus, Saw palmetto, Sarsaparilla, Catuaba, Damiana, Kola nut, and Ginger.

The Women's Formula contains: Damiana, Muira puama, Mucuna pruriens (Kapikachu), Siberian ginseng, Saw palmetto, Wild oats, Nettles, Kola nut, Ginger, Wild yam, Licorice, Sarsaparilla, and Puncture Weed.

We have already discussed several of the shared ingredients in the above formulas (Wild oats, Nettles, and Saw palmetto). Let's now finish by discussing several of the other shared ingredients -- plus some that are unique to the Women's Formula.

#### **Damiana**

The British Herbal Pharmacopoeia lists specific indications for Damiana as anxiety neurosis associated with impotency, and includes other indications such as depression, nervous dyspepsia, atonic constipation and coital inadequacy. Also known as Turnera aphrodisiaca it is traditionally used as a:

- Stimulant.
- Aphrodisiac.
- Tonic.
- Diuretic.
- Nerve tonic
- Laxative.
- And in kidney, menstrual and pregnancy disorders.

### Muira puama

A bush native to the Brazilian Amazon rain forest, its bark and roots have been used traditionally for a variety of medicinal purposes, including:

- Impotence in men.
- Loss of libido in women.
- Nerve problems (including paralysis and tremor).
- Anxiety.
- Digestive problems.
- And arthritis.

### Licorice, Ginger, and Kola nut

Licorice has an ancient reputation as an aphrodisiac; the Kama Sutra and Ananga Ranga contain numerous recipes for increasing sexual vigor that include Licorice. But that is mostly the stuff of legends. Its value in this formula is that Licorice is one of a group of plants that have a marked effect upon the endocrine system. The glycosides present in Licorice have a structure that is similar to the natural steroids of the body. For this reason, Licorice has been used by herbalists for centuries in the treatment of adrenal exhaustion as it helps energize the body. Likewise, Ginger and Kola nut both historically have been used to naturally increase the body's energy levels.

## **Puncture Weed - Tribulus Terrestris**

As a testosterone booster, Tribulus terrestris does not work like DHEA and androstenedione, which are progenitors of testosterone. Instead, it enhances testosterone levels by increasing luteinizing hormone (LH) levels. LH is responsible for "telling" your body to produce testosterone.

#### Catuaba

Herbalists and health practitioners use catuaba in much the same way as the Tupi Indians of Brazil did hundreds of years ago; as an extremely powerful tonic for the libido as well as a central nervous system stimulant, for sexual impotence, general exhaustion and fatigue, for insomnia related to hypertension, agitation, and for poor memory.

## Kapikachu (Mucuna pruriens)

I mentioned at the top of the newsletter that the "new" version of the Women's Formula released by Baseline Nutritionals this month has been significantly enhanced over previous versions. After almost two years of experimentation, I have decided to add Kapikachu (Mucuna Pruriens) to the formula. Although heralded as an aphrodisiac in Ayurvedic medicine, Kapikachu offers a wide range of benefits that demanded its inclusion in the revised formula:

- Increases libido.
- Acts as a restorative nutrient for the nervous system.
- Increases blood circulation to the genitals.
- Decreases symptoms of stress and anxiety. Calms nerves.
- Reduces inflammation.
- Strengthens and tones the sexual glands.
- Supports the healthy production of the sex hormones.
- Increases stamina and sex drive.
- Releases bound up testosterone increasing level of bio-available testosterone.
- Reduces fat and improves muscle tone. (By supporting healthy testosterone levels Kapikachu supports anabolic metabolism, increasing your tendency to burn fat and to build muscle.)

Plus, Kapikachu offers a natural way to replenish your supply of L-dopa, the precursor to dopamine. Dopamine is often associated with pleasure yet it plays a critical role in muscle control. Full-blown dopamine deficiency is known as Parkinson's disease. And that's not all, research shows Mucuna extract is beneficial for **reducing cholesterol**, **lowering blood sugar levels and enhancing mental alertness** all without stimulating the central nervous system.

The addition of Kapikachu to the formula significantly enhances its ability to recharge the body, reduce the sense of aging, and energize the will. This formula was designed to be felt.

Note: For women, in addition to all of the other benefits that have been mentioned, some of the herbs in this formula have also been proven to help alleviate the symptoms of PMS and menopause and to inhibit the incidence of breast cancer.

# The Bottom Line: Hormonal Balancing Program

Every single man and women over 30 should seriously consider putting their bodies on an ongoing hormonal balancing program. In addition to using progesterone creme to help balance progesterone and estrogen levels, both men and women should use testosterone balancing/adrenal regenerating formulations for regular tune-ups once their bodies' odometers cross the "30,000 mile" mark. You do as much for your car as the miles build up. Why do less for your body?

In addition, researchers in Japan have discovered that catuaba is a powerful antiviral and antibacterial compound capable of resisting lethal doses of E. Coli and Staph infection. In fact, in animal studies it as been shown to even fight the HIV virus.