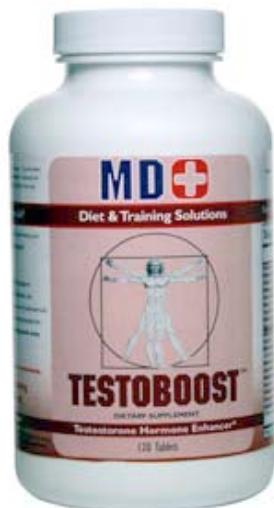


MD+ Testoboost v3.0

Natural Testosterone and Sex Drive Booster



A safe and effective way to dramatically increase your own natural testosterone production.

Testoboost is by far the most powerful natural testosterone booster, and libido and sex drive enhancer on the market today. Version 3 is the second reformulation of the original Testoboost, which came out in February of 2000. Each version has been improved by taking into account new research, my own clinical work, and feedback from those who used it.

<http://www.mdplusstore.com>

The original formula laid down the base for what I wanted to achieve for Testoboost and that was to naturally increase testosterone levels and sex drive in both men and women. The pathways that I targeted included stimulating all the relevant areas of the hypothalamic-pituitary-testicular axis (HPTA) through several independent mechanisms, and to decrease any potential side effects from increases in estrogen and dihydrotestosterone. Subsequent versions of Testoboost, while keeping the base intact, added several ingredients that I felt would further increase testosterone levels and sex drive, and further decrease any potential side effects.

The basis of the formula in Testoboost, and in all the MD+ formulations, is to involve all possible pathways that lead to the desired effects, and to use multiple ingredients that work together to produce superior results. In the case of Testoboost the desired effect was an increase in basal and elevated testosterone levels in the body, a decrease in counter productive elevations in cortisol, and a salutary effect on overall health, libido and sex drive.

All of this can be accomplished by using ingredients that are known or suspected to boost testicular steroidogenesis, increase sexual desire and performance.

For example, using a variety of ingredients to effectively act as a testosterone sink by trapping testosterone production is the most effective way to increase endogenous androgen production. In order to do this you have to consider all the possible pathways that are involved in maximizing testosterone production, including:

- Increasing luteinizing hormone (LH) production.
- Increasing the effect of LH.
- Increasing testicular steroidogenesis directly.
- Decreasing inhibitors of steroidogenesis.
- Providing vitamins and minerals that might be frankly or marginally deficient and thus not allowing the full production of testosterone - e.g. **magnesium, zinc, B6**.
- Increasing peripheral formation of testosterone.
- Decreasing peripheral formation of dihydrotestosterone and estrogens or blocking their effects.

As well, other compounds that have been shown to have effects on sexual desire and performance can be used in the mix. On top of this TestoBoost contains **biooperine**, which significantly enhances the bioavailability of supplemented nutrients through increased absorption.

The list of ingredients that could prove useful for increasing testosterone levels is long and includes various vitamins such as **vitamin A, B6 and E**, **minerals such as zinc, magnesium, manganese, and other ingredients such as arginine, beta ecdysone boron, calcium-d-glucarate, catuaba bark, chasteberry (vitex agnus-castus), chrysin, co-enzyme q10 (ubiquinone), forskohlin, damiana, 5-methyl methoxy isoflavone, deer antler extract, eurycoma longifolia, genistein, GLA, glutathione, prickly pear extract, indole-3-carbinol, ipriflavone, maca root, muira puama, quercetin dihydrate, saw palmetto, schisandra chinensis, stinging nettle extract and tribulus terrestris.**

Why TestoBoost is Better than the Prohormones or Replacement therapy with Testosterone or Anabolic Steroids

Prohormones

The big push today for those who want “anabolic steroid-like” effects is the prohormones. And there are all kinds on the market, from the original DHEA to androstenedione, to the more sophisticated ones that are supposed to be precursors to other anabolic steroids including nandrolone (Deca), boldenone, and even 1-testosterone compounds.

DHEA, while it may be useful for women, and for other purposes, is useless for increasing endogenous testosterone levels in men. Ditto for androstenedione and androstenediol. Norandrostenediol, norandrostenedione, the boldenone and 1-testosterone precursors, and in fact any precursor prohormones are also relatively useless at providing real androgenic-anabolic effects.

The trend in the prohormones, as the manufactures get bolder and bolder, is to actually have weak versions of anabolic steroids on the supplement market. This is the case with 1-testosterone and the 17-alpha methylated 1-testosterone, which in fact are weak anabolic steroids, with lower androgenic and anabolic effects than the more potent

anabolic steroids that have been marketed over the years. Basically the ones being produced now and passed off as over the counter prohormones/steroids are the cast offs of the steroid producing drug industry.

The problem with all of these compounds on the market today is that while they have minimal androgenic and anabolic effects, they have significant side effects, both known and unknown. The prohormones that are being developed today as over the counter nutritional supplements (read that as drugs) haven't been investigated or studied for their potential short term or long term side effects.

This is where the real problem with these compounds lies. We don't know what effects they have on various parts of the body including the liver, cardiovascular system, prostate, kidney, and especially on the hypothalamic-pituitary-testicular axis (HPTA). These products would never be allowed as prescription drugs because of the lack of proper animal and more importantly human trials. However, they're blatantly dumped on the market as nutritional supplements, when in fact they're drugs, or more correctly low level, and usually ineffective, anabolic steroids – with less efficacy than the commercial anabolic steroids, but with unknown, and potentially very harmful side effects.

While most of the prohormones and hormones that are available as nutritional supplements are of no use or marginally useful for body composition purposes, they can have significant side effects. One of the side effects that is most troubling is the effect they have on the hypothalamic-pituitary-testicular axis (HPTA), the pathway that's involved in endogenous testosterone production and control.

The worst-case scenario, and one that is common with the use of most of the prohormones, is that there is very little anabolic effect from the compounds themselves, but significant side effects, especially with a dampening effect on the HPTA, which in turn shuts off the production of endogenous testosterone. This HPTA shutdown also occurs with the use of exogenous testosterone and anabolic steroids, and can result in permanent dysfunction of the normal HPTA, to the point where when these compounds are discontinued (as they invariably are) endogenous testosterone levels remain in the basement, and replacement therapy is sometimes the only solution to achieving normal systemic testosterone levels. In other words they become either temporarily, or sometimes permanently eunuchoid.

Thus, the overall effect is a negative one in that the level of effective anabolic androgens in the body is decreased and the person thus has less anabolic hormones in their body. On top of that there are several possible side effects including a refractory HPTA, estrogen side effects, hepatotoxicity, and adverse effects on cholesterol and the cardiovascular and immune system.

And if you're a drug-tested athlete, there is the very real possibility that you will test positive for the prohormones, especially with the norsteroid and boldenone precursor prohormones. A positive test, because of the difficulty of distinguishing the metabolites of the prohormones from the metabolites of the real anabolic steroids, leads to the same severe penalties, often a two to four year ban, as a positive for anabolic steroids.

Replacement Therapy with Testosterone and Anabolic Steroids

Using testosterone and/or anabolic steroids to increase your levels of androgens in your body is also the wrong way to approach the problem of low systemic testosterone levels. For example, use of exogenous testosterone shuts down the hypothalamic-pituitary-testicular axis (HPTA) that controls testosterone production on the body.

Instead of helping stimulate testosterone production, the use of testosterone and anabolic steroids decreases the natural production of testosterone and basically shuts down your internal machinery for making testosterone. Once you go off the replacement therapy, your testosterone levels often end up lower than before you started taking the exogenous androgens. In some cases testosterone levels never even come close to recovering the pre androgen use levels, and the only alternative, if the system can't be "kick started" to produce testosterone, is to go back on replacement therapy with testosterone or anabolic steroids.

On the other hand, endogenous (developed within the body) hormone production avoids many of the problems associated with exogenous hormone use. By promoting the natural production of the hormone within the body, the regular feedback mechanisms are not by-passed and do not lead to many of the side effects associated with exogenous hormone use.

In fact the use of TestoBoost and other methods to increase endogenous testosterone production ramps up your natural testosterone producing machinery so that even if you stop taking it, your natural levels will be at least as high as before you started, and sometime higher as the body recognizes the higher level as normal and maintains that level naturally.

The bottom line is that whatever your reasons for wanting physiologically increased levels of testosterone, TestoBoost is the best way to go. Besides being more effective in increasing testosterone levels and providing an anabolic drive, the use of TestoBoost won't result in a positive drug test, as is the case with the prohormones, especially the norsteroid ones, exogenous testosterone and anabolic steroids.

New Version of TestoBoost

Research in nutrient metabolism and its effects on the body's hormonal and other systems is accumulating on a daily basis. The advancements made in the scientific and medical fields far outstrips the advancements made in computer chip technologies. However, although Intel puts out a new improved chip on a regular basis, most nutritional supplement products are rarely updated.

In the nutritional supplement field, changes made to formulations are usually to remove a substance that has been either banned or found harmful. Thus the new formulations aren't done for the sake of improving the formula but simply to stay compliant and thus to avoid any legal problems. Examples of this are the new formulations of weight loss products that have removed ephedra and tried to fill the gap by introducing one or two

other substances to make it look like they've actually improved the product rather than lessened it. These reworked products are a far cry from products, such as MD+ LipoFlush that are built from the ground up without even giving a thought to the use of ephedra.

My reasons for reformulating include:

- 1. The use of new scientific information.**
- 2. The use of information from athletes who found certain ingredients useful.**
- 3. The use of information from personal clinical studies on the effectiveness of adding certain ingredients to the present formulation.**
- 4. Feedback from colleagues and others who have used the product, including their subjective results and blood work.**

TestoBoost V3.0 contains a unique formulation that will:

- **Increase testosterone**
- **Block excessive estrogen production**
- **Block excessive production of dihydrotestosterone**
- **Enhances prostate health in men**
- **Increase libido and sex drive in both men and women**
- **Provide a potent anabolic effect**
- **Decrease body fat**

TestoBoost is useful for anyone who wants to naturally increase their testosterone levels in order to increase muscle mass and strength and boost sex drive. It's also useful for those who have lower than normal endogenous testosterone levels whether due to age, overtraining, stress, sickness, or even while on or after the use of anabolic steroids and prohormones.

Changes in TestoBoost v3.0

A number of ingredients have been added to the TestoBoost formula. TestoBoost was already a very popular and effective supplement and very few of the original ingredients have been altered. The only changes that have been made to the original ingredients is that the amount of vitamin A was dropped to 2,000 IU from 5,000 IU. On the other hand, several new ingredients have been added, as outlined below.

Vitamin A (as palmitate) was decreased from 5,000IU to 2000 IU. There are several reasons for this. The main one, however, is that while vitamin A is important for the maximal production of testosterone, overdoing it can have negative and sometimes toxic effects. I take into consideration the impact of all the ingredients in my MD+ line so that if someone were to use all of them they would not overdose on any one ingredient. Vitamin A is one of those ingredients and since it's in several of the MD+ supplements, the amount in TestoBoost was decreased.

Beta Carotene 5,000 IU was added to the formula, both because of its antioxidant properties, but also because the body can manufacture vitamin A from it. Thus is there is a deficiency of vitamin A to the point where the 2000 IU in TestoBoost isn't enough, the body can make what it needs.

Vitamin B12 (as methylcobalamin) was increased from 50mcg to 100 mcg. As well, methylcobalamin is used in the new formula as against cyanacobalamin in the former one. Methylcobalamin is the biologically active form of B12, whereas cyanacobalamin is the synthetic form. The body has to change the cyanacobalamin into methylcobalamin. This process may be compromised in some people so using the metabolically active form is more efficient and improves bioavailability and function. B12 helps to optimize macronutrient metabolism, maximize muscle mass and decrease body fat. As well, it helps to decrease serum levels of homocysteine, cholesterol and C-Reactive proteins, markers of heart disease and inflammation in the body. Decreasing inflammation helps to decrease cortisol levels and thus increase the anabolic effects of TestoBoost.

Magnesium

A combination of magnesium salts (aspartate, oxide and octadecanoate) were incorporated to take the place of the magnesium oxide. While most of the magnesium is in the form of the aspartate (the form that has been shown influence testosterone levels and is the ingredient that is ZMA, along with zinc monomethione and B6, which are also in TestoBoost). Magnesium in the form of oxide and octadecanoate are also included as both sources of magnesium and to make the tablets more cohesive and less susceptible to breaking in transport.

Arginine alpha-ketoglutarate

This compound has several important effects. First of all it moderately increases nitric oxide (NO), which in turn facilitates vasodilation and improves sexual functioning, and secondly it increases growth hormone secretion.

Aspartate

Some extra aspartate was added to increase the aspartate content of TestoBoost for two reasons. First of all aspartate has been shown to increase testosterone production in murine models.¹ Also as this compound has significant metabolic effects, including AMP production, improving the salvage of ATP from in muscle cells, and also acts as an anaplerotic precursor and thus increases TCA flux and ATP formation. This aids in the synthesis of hormones, including testosterone.

5-Methyl Methoxy Isoflavone

Methoxy Isoflavone has been shown to increase protein synthesis in animal models, including livestock, with no significant side effects. Anecdotal evidence over the past year has shown that it may exhibit some mild anabolic and anti cortisol effects. Similarly **ecdysone**, also known as **beta ecdysterone** and **20 beta hydroxyecdysterone**, has shown to have some anabolic effects.

Ecdysone (beta ecdysterone, ecditen, 20 beta hydroxyecdysterone)

Ecdysone was popular with Olympic lifters and other athletes in the East and several quasi scientific studies, 2 which were never published, showed that it might have significant anabolic effects.² Real world use has not shown dramatic effects and most of the information is available through nutritional companies that vastly overstate the anabolic properties of ecdysone. Nevertheless it makes a useful synergistic ingredient for TestoBoost even though on its own its effects are minimal.

Deer Antler Extract

Velvet deer antler extract has been used in the Orient as an aphrodisiac and a treatment for male impotence, and in Russia as an anabolic agent for athletes. Anecdotal evidence again shows that it may have some effect on increasing serum luteinizing hormone and testosterone levels and increasing sexual drive, with no significant side effects. As such, it works synergistically with other ingredients in TestoBoost that work in similar ways, especially **tribulus terrestris**,

Eurycoma Longifolia (Longjack)

Longjack has been used in the Orient to increase libido and male performance. While formal studies have not been done in humans, recent informal ones on murine models have shown that Longjack may increase free serum testosterone levels and sexual drive and performance.³⁴ As such, it works synergistically with other ingredients in TestoBoost that work in similar ways, including **acetyl-L-carnitine, catuaba bark, maca root, coleus forskohlii (forskolin), muira puama, chasteberry (vitex agnus-castus - ecdysteroids), suma root (beta ecdysone – also known as beta ecdysterone and 20 beta hydroxyecdysterone), schisandra chinensis, and avena sativa.**

For example, a recent study found that carnitines including **acetyl-L-carnitine (ALCAR)** worked as well as replacement testosterone therapy in improving sexual dysfunction, depressed mood, and fatigue in aging men.⁵

As well, ALCAR seems to have an effect on the hypothalamic-pituitary-testicular axis. Studies have shown that ALC prevented the decrease in plasma testosterone levels after chronic swimming⁶, and that ALC stimulates testosterone production⁷.

Genistein

Genistein (4',5,7-trihydroxyisoflavone), a major isoflavone in soybeans and a specific inhibitor of protein tyrosine kinase, acts to decrease estrogen in the body. A recent study has shown that there is a synergistic anti-estrogenic effect of **indole-3-carbinol** and genistein.⁸ As well as these two ingredients, TestoBoost also contains other anti-estrogenic compounds including **calcium-d-glucarate**,⁹ **chrysin** and **ipriflavone**.¹⁰¹¹ The addition of **bioperine** increases the absorption of these and other ingredients

(http://www.sabinsa.com/products/bioperin_bro.htm) increasing the biological synergistic effects of the combination of ingredients on lowering estrogen effects.

Prickly Pear Extract *

This extract is felt to have neuroprotective and antioxidant effects. Also has insulin like effects and has been shown to have a favorable effect on cholesterol in the body. There is some anecdotal evidence that the use of prickly pear acts as an adaptogen, boosting recovery via an anti-cortisol action. As such it works with other ingredients in TestoBoost to boost recovery and decrease counter productive cortisol levels.

Schisandra Chinensis

Schizandra is a woody vine with clusters of red berries that is found in northern and northeastern China and adjacent regions in Russia and Korea. It is used to treat a variety of medical conditions and is widely known as a longevity herb and aphrodisiac. Athletes have used schisandra in the belief that it will increase endurance and combat fatigue under physical stress.¹² It is also felt to have liver protective effects.

Health Benefits and Protective Effects of TestoBoost

Although TestoBoost is formulated to increase testosterone levels and enhance anabolism, it's also formulated to provide substantial health benefits. For example it has several ingredients, including **saw palmetto (serenoa repens), zinc, quercetin, GLA (in borage oil)** and **stinging nettle** that enhance prostate health in males, and provide anti-inflammatory effects in both males and females.

Some of these ingredients also decrease the formation of dihydrotestosterone from testosterone,¹³ thus maximizing testosterone levels while at the same time decreasing the adverse effects of higher systemic and tissue levels of dihydrotestosterone, which includes adverse effects on the prostate and hair loss.¹⁴

TestoBoost also contains several potent antioxidants, such as **alpha lipoic acid, beta carotene, vitamin C, vitamin E, Coenzyme Q10, and turmeric**, which act to improve pituitary and testicular/ovarian function, and decrease the adverse effects of free radicals on the hypothalamic-pituitary-testicular/ovarian axis, and the associated pathways that are responsible for maximizing endogenous testosterone production.

For example, a recent study has found that vitamin E and vitamin C protect the testes from damage secondary to oxidant damage.¹⁵ Alpha lipoic acid (ALA), because it is a sulphur compound, can bind and help eliminate heavy metals such as copper, iron, mercury and cadmium, all of which can cause oxidant damage to the gonads (testes and ovaries).

Alpha lipoic acid (ALA) has a double antioxidant effect as it has significant antioxidant properties on its own, but also regenerates glutathione, the most important endogenous

antioxidant. ALA and glutathione have been shown to have significant effects in decreasing mercury toxicity in the body.¹⁶

The combination of forskohlin and antioxidants in TestoBoost may also impact on Leydig cell function (these are the testicular cells that make testosterone) and result in combating the normal decrease in testosterone seen with aging and stress.¹⁷

TestoBoost also contains several other vitamins, minerals and nutrients that are important for optimizing testosterone levels. These include **vitamin A, vitamin B6, vitamin B12, niacin, calcium, magnesium, manganese, boron, zinc, ginger** and **Coenzyme Q10**.

The bottom line is that TestoBoost v3.0 is the most effective testosterone booster on the market today. And although it doesn't contain any prohormones, which can have significant side effects, it surpasses any prohormone formulation in increasing testosterone levels and in providing potent anticatabolic and fat burning effects.

If increasing your anabolic drive, and maximizing muscle mass while minimizing body fat is important to you, check out [NitAbol](#), the nighttime anabolic, fat burning combo that combines TestoBoost with [GHboost](#) and [Myosin Protein](#).

NitAbol is also perfect for those who want to lose weight, but would prefer to maintain the muscle they have and strictly lose body fat. In this case I'd also recommend that you use [LipoFlush](#) as the ultimate fat loss supplement.

Supplement Facts:		Serving Size: 4 Tablets	
		Servings Per Container: 30	
	Amount Per Serving	% Daily Value	Amount Per Serving
			% Daily Value
Vitamin A (as palmitate)	2,000 IU	40%	TestoBoost™ Proprietary Formula 5333 mg 5-Methyl Methoxy Isoflavone, Acetyl L-Carnitine, Alpha Lipoic Acid, Arginine Alpha-Ketoglutarate, Aspartate, Avena Sativa, Borage Oil (GLA), Calcium-D-Glucarate, Calcium Phosphate, Catuaba Bark, Cellulose Fiber & Gum, Chasteberry (Vitex Agnus-Castus), Chrysin, Coleus Forskohlii (Forskohlin), Damiana, Deer Antler, Eurycoma Longifolia, Genistein, Ginger Root, Indole-3-Carbinol, Ipriflavone, Maca, Magnesium Octadecanoate, Muira Puama, Passion Flower, Prickly Pear Extract, Quercetin Dihydrate, Saw Palmetto, Schisandra Chinensis, Stinging Nettle, Suma (Beta Ecdysone), Turmeric
Beta Carotene	5,000 IU	100%	
Vitamin C (as ascorbic acid)	100 mg	167%	
Vitamin E (d-alpha tocopherol succinate)	100 IU	333%	
Vitamin B6 (as pyridoxine HCL)	25 mg	1,250%	
Vitamin B12 (as methylcobalamin)	100 mcg	1667%	
Niacin	10 mg	50%	
Magnesium (aspartate and oxide)	150 mg	38%	
Manganese	2 mg	100%	
Zinc (as L-OPTIZINC Monomethionine)	10 mg	67%	
Bioperine (piperine)	5 mg	*	
Coenzyme Q10 (ubiquinone)	10 mg	*	
Boron	3 mg	*	
Tribulus Terrestris Extract	450 mg	*	
Steroidal Saponins	180 mg	*	
Other Ingredients: Stearic Acid			
*Daily Value Not Established			

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