

## Peak Performance Supplements for Muscle Building

Everyone would like to have a great body, one that is strong, muscular and full of energy. The new book by Earl Mindell, Ph.D. titled Peak Performance Bible promises to help you look great, feel great and perform better by using specific nutritional supplements and herbs. Although the book touches upon some of the widespread health benefits of the top 100 supplements on the market, its focus is on what supplements help to build muscle and increase physical performance.

Every bodybuilder knows that the main ingredient in building a rock hard physique is good old-fashioned weight training exercises. However, new research points towards some promising nutritional supplements that can help maximize your muscular gains without jeopardizing your health. The role that these supplements play in muscular gains varies, but most are directly associated with the production of the hormones testosterone and estrogen. For decades it has been discovered that increased testosterone levels in men and women are responsible for increased muscular gains and athletic performance. The problem is that taking testosterone and anabolic steroids can also increase your risk of undesirable side effects such as acne, gynecomastia, mood swings, liver disease, testicular atrophy, blood clots, prostate cancer and even death. The potential answer is to not inject testosterone into your system, but to help your system produce its own testosterone while at the same time lowering your levels of active estrogens. You see, both men and women produce testosterone and estrogen, both of which are vital to human function. Realize that when too much testosterone is present in the blood stream, it can be converted to estrogen. So although increased testosterone is necessary for increased muscle growth, you must also find a way to prevent the excess testosterone from being converted to estrogen. A proper balance must be achieved between the male and female hormones in order for maximum muscle development.

First and foremost, if you are looking to gain muscle, you want to naturally increase your production of free testosterone in the blood. Certain testosterone boosting (T-Boosters) supplements have received a lot of press as of late for their claims to improve and enhance testosterone production. These include Androstenedione (Andro), DHEA and Tribulus. Andro is best known for the endorsement it received by Mark McGwire when he admitted to using the supplement during his record breaking 70 home run season. Andro is a hormone produced by the body as part of the production pathway for testosterone and estrogen. Although athletes and bodybuilders give testimony to the positive effects Andro has had on their performance, the actual research on its efficacy is scarce and inconsistent. DHEA is another hormone that is directly related to the production of sex hormones. It is estimated that DHEA production declines dramatically after the age of 30 leading to a decreased sex drive, loss of muscle mass and increases in bodyfat. Recent studies suggest that DHEA supplementation in humans leads to a sharp increase in sex drive, as well as athletic performance. DHEA breaks down into testosterone and estrogen, so it is important to regulate those hormone levels through blood tests if you are taking DHEA supplements. Tribulus is an herb long used in India and China as an aphrodisiac and a treatment for infertility. Studies reveal that Tribulus raises the levels of Luteinizing Hormone, which should increase testosterone production in men. As a matter of fact, Tribulus is often included in combination with Andro and DHEA for a strong testosterone enhancing formula.

As mentioned earlier, all the excess testosterone stimulated by T-Boosters can lead to increased estrogen production, something no self-respecting bodybuilder would appreciate. Luckily, certain estrogen blocking supplements can be taken in conjunction with the T-Boosters to limit female hormone production. These include Chrysin, Diidolymethane (DIM), and Ipriflavone. All three are phytonutrients that act on inhibiting estrogen production. Chrysin is an isoflavone with estrogen-like qualities that may inhibit aromatase, the enzyme that is responsible for the conversion of testosterone to estrogen. The estrogen-like qualities exhibited by this supplement may help to also control the amount of estrogen produced by the body. And its estrogen-like qualities are far less reactive than free estrogen that can circulate through the blood stimulating estrogen dependent tumors and cancers. DIM is a phytonutrient found in cruciferous vegetables, and has been shown to inactivate potent estrogens and increase the body's production of good estrogens. Ipriflavone is a synthetic compound made from isoflavones which may not only inhibit estrogen production but at the same time enhance testosterone output. Studies reveal that it may also help post-menopausal women stimulate bone formation in women.

As you can summarize, when it comes to increasing muscle mass and strength, raising testosterone and lowering estrogen levels seems to be the goal. T-boosters can help your body produce more testosterone while the phytonutrients and isoflavones can help regulate estrogen production. It is recommended that

both of these supplement groups be used to help balance hormone levels in the blood. It is also recommended that if you are on any hormone altering program, consult with your physician. Next month we will discuss some of the other hot nutritional supplements geared towards improving your physical performance.

Dr. Bernie Sengstock is a licensed Chiropractor in the State of New York with 300 hours of post-doctorate study in the field of rehabilitation. Clinical nutrition and exercise is a large part of his practice located at Universal Health & Rehabilitation, 152 Islip Ave., Suite 23, Islip, NY 11751. For more information or and appointment please call (631) 277-6767 or visit our website @ [www.universalhealthandrehab.com](http://www.universalhealthandrehab.com).