

## Peak Performance Supplements for Bodybuilding II

In February *New Living*, I discussed some of the latest bodybuilding nutritional supplements detailed in the new book, Earl Mindell's Peak Performance Bible. In the article I pointed out that if you want to gain lean muscle, it is important to increase your testosterone levels while keeping your estrogen levels in check. Most of the testosterone boosting supplements on the market like Andro, DHEA and Tribulus all claim to enhance the bodies production of testosterone, the hormone responsible for increasing muscle growth. The problem is that with the increases in testosterone also come increases in estrogen, the female hormone responsible for feminine qualities like breast tissue. It is recommended that if you do take a testosterone boosting supplement or anabolic steroid, you should counter the risk of increased estrogen production with estrogen blockers such as Chrysin, Diidolymethane (DIM), or Ipriflavone. All three of these estrogen blockers have phytoestrogen qualities and can inhibit the conversion of testosterone to estrogen, something everyone in search of a hard, chiseled physique would appreciate.

Another major player in the quest for a more muscular body is Human Growth Hormone or HGH. This master hormone has been touted as the Hormone of Youth, since it's production rapidly declines after the age of 30. It is secreted by the pituitary gland of the brain and is responsible for triggering the cascade of events involved in muscle growth and tissue repair. It is well documented that administration of HGH in slow developing and frail children increase muscle mass and bone growth, and the medical community has been using this hormone since the 1960's for growth hormone deficient children. Recently, a new application for HGH has been used in gyms across America to help bodybuilders recover and repair quicker after workouts and build muscle faster. HGH is available by a prescription and in the injectable form, but it is very expensive and associated with some nasty side effects including sore joints, swollen legs, and carpal tunnel syndrome. There are also some specific nutritional supplements that claim to help the body produce HGH on it's own, without the undesirable side effects. These include the amino acids arginine, ornithine, lysine and glutamine. In one controlled trial, weight lifters took either 500-mg arginine and 500 mg ornithine twice daily, or a placebo. Within five weeks, those taking the arginine/ornithine had a greater decrease in body fat than the placebo takers. The less fat, the more lean muscle! More good news is that the positive effects of these amino acids keep working into old age. A study at the University of Turin, Italy showed that even though people in their seventies had a lower response than either children or young adults to arginine, the nutrient still boosted their blood levels of HGH to triple the average for their age group. Arginine has been shown to not only increase HGH levels, but also boost sperm count and motility in some men. A study of the research reveals that the combination of these amino acids has a synergistic effect and helps produce more HGH than either one can do alone. In one study it was found that the combination of 1,200 mg of lysine and 1,200 mg of arginine was 10 times more effective in raising HGH levels than taking arginine alone. Glutamine is another HGH releaser that gained recognition in a 1995 study by Louisiana State University, which revealed that a 2-gram dose of glutamine raised growth hormone four times over that of a placebo. Another 1993 study showed that glutamine supplementation protects against muscle breakdown by preventing acidosis which occurs during strenuous exercise.

Amino acids in general are found in quality protein sources such as meat, fish, dairy, nuts, beans, and poultry. But if you feel the need to supplement, take up to 3000mg. of arginine two times a day as well as 1000mg of ornithine between meals or at bedtime. Recommended amounts for lysine include 1000 mg on an empty stomach and glutamine dosage should equal 2-grams taken at bedtime. This should give your body the boost it needs to produce adequate amounts of HGH. One word of caution-Too much HGH has been shown to not only stimulate muscle growth and tissue repair, but also stimulate growth of certain tumors. Diarrhea and other adverse gastrointestinal effects have been reported at high doses of amino acid supplementation. If this occurs, lower the dosage until you build up a tolerance for the supplements. It is recommended that if you are planning on starting a HGH stimulating program, you should get your hormone levels checked periodically and consult a physician who is versed in this subject.

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4/4/01- Free Lecture- KIDS THERAPY@ 7:30 PM- Special Guest Speaker Valerie A. Mace, PT. This presentation will highlight some of the latest research in the field of child development, and go through specific treatment methods that can help your child achieve his/her ultimate potential. Seating is limited so call Universal Health & Rehabilitation at 631-277-6767 to reserve your seat.