

# Is Your Performance Enhancing Supplement Effective? Safe?

Whether you are a serious athlete or just work out regularly and whether you are male or female, how do you know what supplements are effective and safe? Consider this:

- ❖ According to federal law, the Food & Drug Administration (FDA) does not regulate supplements.
- ❖ Dietary supplements are not tested by the FDA for safety or effectiveness. It is up to the manufacturer to do voluntary testing. It is extremely important to buy these supplements from a reputable company and do research before taking them.

## Bottom Line:

- ❖ While some nutritional and pharmacological aids are effective for improving performance, a lot depends on mental, physical and nutritional aspects of training
- ❖ There are no guarantees for **SAFETY** or **EFFECTIVENESS**
- ❖ The best way to achieve top performance is through a rigorous training program, **SUFFICIENT SLEEP, REST** and **ADEQUATE FLUIDS** and **FOOD**

Information on supplements, multivitamins, minerals or other performance enhancing supplements is always changing. For the most current and accurate information, check out these reliable Web sites:

❖ <a href="http://www.consumerlab.com">www.consumerlab.com</a>	❖ <a href="http://www.supplementwatch.com">www.supplementwatch.com</a>
❖ <a href="http://www.drugfreesport.com">www.drugfreesport.com</a>	❖ <a href="http://www.NCAA.org">www.NCAA.org</a>
❖ <a href="http://www.quackwatch.com">www.quackwatch.com</a>	❖ <a href="http://www.ncahf.org">http://www.ncahf.org</a>

If you have any further questions concerning ergogenic aids or other nutrition related issues  
Call the Office of Health Education and Promotion (862-3823), UNH Health Services

*Created by Dietetic Intern, Shannon Kelly, May 2004*

[www.unh.edu/health-services/healthEd.htm](http://www.unh.edu/health-services/healthEd.htm)

<b>Supplement</b>	<b>Claimed Action</b>	<b>Research On Action</b>	<b>Side Effects</b>	<b>Legality</b>
<b>Anabolic steroids</b>	<b>Increase strength, lean muscle mass, and motivation</b>	<b>Supports</b>	<b>Significant, dangerous</b>	<b>Illegal</b>
<b>Caffeine</b>	<b>Increases muscle contractility and aerobic endurance, enhances fat metabolism</b>	<b>Supports</b>	<b>Mild</b>	<b>Legal to certain urine levels</b>
<b>Creatine</b>	<b>Increases muscle energy, short term endurance, strength, and lean muscle mass</b>	<b>Supports, insufficient data on long-term use</b>	<b>Generally mild; long term effects unknown</b>	<b>Legal</b>
<b>DHEA</b>	<b>Increases endogenous steroid production (legal alternative to anabolic steroids)</b>	<b>No benefit in healthy athlete</b>	<b>Potentially dangerous</b>	<b>Banned by Olympics</b>
<b>Ephedrine</b>	<b>Stimulates Central Nervous System, increases energy, delays fatigue, stimulates weight loss</b>	<b>No benefit</b>	<b>Potentially dangerous</b>	<b>Banned by Olympics and other organizations</b>
<b>Ginseng</b>	<b>Increases endurance, enhances muscle recovery</b>	<b>Limited proof, no real benefit</b>	<b>Mild</b>	<b>Legal</b>
<b>Glutamine</b>	<b>Boosts immunity and growth hormone levels</b>	<b>May boost immunity, no other benefits</b>	<b>None</b>	<b>Legal</b>
<b>HMB</b>	<b>Decreases muscle breakdown, enhances recovery</b>	<b>Limited, some strength benefits</b>	<b>None</b>	<b>Legal</b>
<b>Phosphates</b>	<b>Increase ATP production, energy and muscle endurance</b>	<b>Limited proof, No real benefit</b>	<b>Mild at high doses</b>	<b>Legal</b>
<b>Protein</b>	<b>Optimizes muscular growth and repair</b>	<b>Supports, needs increase in proportion to activity &amp; calories</b>	<b>None unless underlying medical condition; needs can be met with food</b>	<b>Legal</b>