



## NEWS RELEASE

### For Immediate Release:

July 28, 2008

**Contact:** Julie Montzka  
866.907.0400 651.407.0400  
[jmontzka@cheminutra.com](mailto:jmontzka@cheminutra.com)

### Study Proves Beneficial Effects of Phosphatidylserine (PS) on Stress Management

**White Bear Lake, MN** – A study published today in the Journal of the International Society of Sports Nutrition indicates that the consumption of a phosphatidylserine (PS) can help to effectively manage exercise induced stress and promote healthy free testosterone levels.

An excessive cortisol response to exercise-induced stress has been linked to a negative training state, which could lead to overreaching or overtraining. Chronic overtraining often creates a disturbance in the anabolic-catabolic balance, which may express itself in decreased performance, injury, depressed immunity, and psychological depression. PS has been reported to be an effective supplement for combating exercise-induced stress and preventing the physiological deterioration that accompanies too much exercise. Previously, 800 mg of soy-derived PS has been reported to reduce the cortisol response to intensive resistance training by 20%.

This gold standard (randomized, placebo-controlled, double-blind, crossover) clinical trial investigated the influence of short-term supplementation with a moderate dose of PS (600 mg per day) on endocrine response to moderate intensity exercise on a cycle ergometer. The PS group was able to decrease mean peak cortisol concentrations by 39% when compared to the placebo group. In addition, PS promoted healthy free testosterone levels and consequently significantly improved the “testosterone to cortisol” ratio by 184% when compared to placebo. Neither PS nor placebo supplementation had an effect on lactate or growth hormone levels.

Previous findings suggested that the effect of PS on cortisol might be dose dependent. “For the first time, short-term supplementation with a moderate dose of PS showed significant results”, said Dr. Martin Purpura, Managing Member of Increnovo LLC and co-author of the study. “Preventing the negative effect of cortisol and increasing the testosterone to cortisol ratio will allow athletes to train and compete at their highest levels”. Additionally, Scott Hagerman, president of Chemi Nutra, sponsor of the study’s publication and leader in the production of PS said, “Chemi Nutra has filed a patent for PS’s effects to promote healthy testosterone levels. These exciting findings will open new markets for PS-based sports nutrition and anti-aging nutritional supplements, and we intend to pursue several very promising applications with selected customers”.

Chemi Nutra is the US business unit of parent company Chemi S.p.A., a privately held pharmaceutical and nutraceutical company based in Milan, Italy. Chemi, with cGMP certified manufacturing facilities in Italy and Brazil, is best known in the US nutritional arena for its introduction of phosphatidylserine (PS), the popular dietary supplement which has been granted two health claims by the FDA, and is used to enhance learning, memory, and concentration.

Chemi Nutra

4463 White Bear Parkway • Suite 105 • White Bear Lake, MN 55110  
Phone: 651.407.0400 • Fax: 651.407.0509