

Athletic benefits of Immunocal & Immunocal Platinum

The following comments of Immunocal's benefits for athletes at all levels have been made by Dr. Nick Theodorou PHD Chemist, ND, Sport Supplement Expert, advisor & coach, founder of the 1st drug free power lifting association in the USA out of Easton PA

“With the superb bioavailability of Immunocal to human beings & the excellent amino acid profile of Immunocal, it should be obvious to any athlete & coach that supplementing with Immunocal will greatly aid recovery & reduce muscle soreness from workouts & help any athlete achieve their goals, safely, legally & effectively, while also reducing down time from illness as it raises ‘glutathione in every cell’, strengthening the immune system and helping the body heal. Here are some highlight points for Immunocal and Platinum”

- **“Immunocal is a highly bioactive whey protein nutraceutical, glutathione precursor, cysteine delivery system that supports the immune system, raises T cell levels and detoxifies the liver.**
- **It is rich in [cysteine-cysteine & glutamyl-cysteine dipeptides](#).**
- **It supplies [1.8 grams of L-glutamine/glutamate](#) per serving.**
- **It supplies almost [2.2 grams of the essential branched chain amino acids](#), including [1 gram of L-leucine](#), per serving of 10 grams**
- **It contains <1% fat & lactose.**
- **Immunocal has all the characteristics and benefits of human mother's breast milk.”**

More great news for athletes, the following published study: “THE EFFECT OF SUPPLEMENTATION WITH A CYSTEINE DONOR” (Immunocal)

Published in the Journal of Applied Physiology /Vol. 87 / 1381 – 1385, 1999

MUSCULAR PERFORMANCE

L.C. Lands, MD, PhD *, V. L. Grey, PhD & A. A. Smountas, BSc *

*Division of Respiratory Medicine, # Department of Pediatrics, + Department of Biochemistry, McGill University Health Centre – Montreal Children’s Hospital, Montreal, Quebec, Canada.

LC Lands is a clinical investigator with the Fonds de la Recherche en Sante du Québec.

This research was supported in part by the Canadian Cystic Fibrosis Foundation and Immunotec Research Ltd.

ABSTRACT

Oxidative stress contributes to muscular fatigue. Glutathione (GSH) is the major intracellular antioxidant, whose biosynthesis is dependent upon cysteine availability. Muscular performance was assessed by whole leg isokinetic cycle testing, measuring Peak Power and 30-second Work Capacity. Lymphocyte GSH was used as a marker of tissue GSH. There were no baseline differences (age, ht, wt, % ideal wt, Peak Power, 30-sec Work Capacity). Follow-up data on 18 subjects (9 Immunocal®, 9 placebo) were analyzed. **Both Peak Power (mean +- se: 13+- 3.5 %, p<0.02) and 30-second Work Capacity (13+- 3.7 %, p<0.03) increased significantly in the Immunocal® group,** with no change (2 +- 9.0 and 1 +- 9.3 %) in the placebo group. **Lymphocyte GSH also increased significantly in the Immunocal® group (35.5 +- 11.04 %, p<0.02)** with no change in the placebo group (-0.9 +- 9.6 %).

This is the first study to demonstrate that prolonged supplementation with Immunocal, a product designed to augment antioxidant defenses, **resulted in improved muscle performance**. These ‘young healthy athletes’ saw their Glutathione levels increased by 30% and their muscle performance (done with the leg muscles) showed an increase in muscle strength of 13%.