### **BREAKTHROUGH UNIVERSITY STUDY REVEALS**

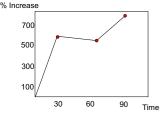
A study of growth hormone release in man after oral administration of amino acids. A. Isidori M.D. A. Lo Monaco M.D. M. Cappa M.D. Medical Clinic V.University of Rome, Rome, Italy

Increase growth hormone by 701% ....naturally Visit www.ironpower.biz to view the complete university study, where you can buy the amino acids and how you can apply them to your training.

#### Summary

A study was carried out in 15 male volunteers to evaluate qualitatively the secretion of growth factors following stimulation by oral amino acids. The results showed that oral administration of a combination of two amino acids (1200 mg l-lysine plus 1200 mg l-arginine 2-pyrrolidone 5 carboxylate) provoked a release of pituitary somatotrophin(Human growth hormone), somatomedin(IGF-1) and insulin. This phenomenon was reproducible and the growth hormone secreted in response to this stimulation had biological activity (as demonstrated by radio recepter assay and somatomedin induction). The effect was specific to the combination of the two amino acids; neither of the amino acids demonstrated appreciable stimulating activity when administered alone, even at the same doses.

#### Subjects and methods



Growth Hormone (HGH) increased by 701% after only 90 minutes. Fifteen healthy male volunteers, aged 15 to 20 years, free of all endocrine or metabolic abnormalities and who were not receiving any kind of medical treatment, were kept under observation for 2 days. After initial blood samples had been obtained, each subject received a single oral dose of 2400 mg amino acids (1200mg l-arginine-2-pyrrolidone-5-carboxylate plus 1200 mg l-lysine hydrochloride) on an empty stomach. Blood samples were again drawn at intervals of 30, 60, 90 and 120 minutes after amino acid administration. The experiment was repeated after intervals of 10 and 20 days. Blood samples were tested for growth hormone by: (a) a radio immunoassay (RIA) method, and (b) a radioreceptor assay (RRA).

# <u>Summary key points of uni. Study</u>

"From the results it would appear the joint administration of the two amino acids I arginine 2-pyrrolidone 5 carboxylate and I lysine hydrochloride on an empty stomach brought about a marked biological response which was reproducible and did not reduce with time."



"A significant secretion of insulin, another very important growth factor, was also induced"

 $\checkmark$ 

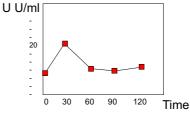
"Insulin is an equally important factor in cell growth. There is no doubt the the amino acids stimulated this as well as HGH: Hence, both of the physiologically important growth factors are affected. Hypoglycemia which follows the insulin peak is a further stimulus to HGH secretion"



"far more important, we could demonstrate that the association of the two amino acids does result in the release of biological-active hormone able to affect peripheral cellular receptors and thus growth in general."

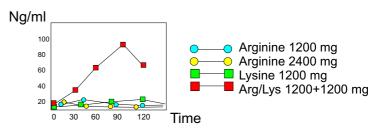


Ironpower's proprietary Ghstack contains the same form and amount of Arginine & Lysine as used in the University study, which demonsrated a 701% increase in growth hormone, 275% increase in insulin, and a 300% increase in IGF-1... All very important hormones for muscle growth. PHONE (03) 96900878 or visit www.ironpower.biz for your nearest ironpower retailer.



A significant secretion of insulin, another very important growth factor, was also induced.

# 275% increase in insulin 701% increase in growth hormone 300% increase in IGF-1(somatomedin)



## Plasma levels of HGH (RIA) after oral administration of arginine and lysine alone and in combination:

The association of the two amino acids provoked a much greater HGH response than either of them demonstrated alone. Individually, their influence on HGH was practically non-existent, even when administered in doses equal to the total amino acid dosage of the combination.



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pictured here. Learn how a simple technique can increase your fat burning by 107%(ie more than double it!) within 3 hours, increase growth hormone by 701%, IGF-1 by 300% and insulin by 275% (without any carbohydrates!). Read what other supplement companies don't want you to know...all this plus much,

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