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## **The effect of multiple doses of Tribulus Terrestris on serum LH and testosterone levels in healthy males**

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### **Abstract**

*Introduction and aim:* Tribulus Terrestris is a herbal preparation freely available and marketed as a food supplement. Very little scientific data has been published on the effects of Tribulus Terrestris and most information is obtained from internet sources and on labels of supplement products. Advertisements state that the use of Tribulus Terrestris increases LH and therefore boosts the production of testosterone. The aim of this study was to measure the effect of Tribulus Terrestris on serum LH and testosterone levels in healthy young males.

*Methodology:* Tribulus Terrestris was administered to 6 healthy males at a dose of 400mg at 12hour intervals for 7 days. Blood samples were collected before administration (day 0) and then daily for 7 days. All samples were collected on 08h00 in the morning. The serum was used to measure LH and testosterone (free) concentrations with immuno assay methods (AXSYM, Abbott). Mean baseline values for testosterone and LH, respectively, were subtracted from mean values for subsequent days and the differences compared using paired t-tests. A  $p < 0.05$  for each difference was regarded as a significant difference from baseline values.

*Results:* All LH and testosterone levels were within normal range. Although there was considerable biological variation, no significant increase in serum LH or testosterone was found over the 7 day period when the measured concentrations were compared to baseline levels.

*Conclusion:* The claim that the use of Tribulus Terrestris will boosts the production of LH and testosterone could not be proven under the conditions used in this study. Athletes using this product should not expect to obtain an anabolic effect over a short period.

Full details will be published elsewhere.