

## TEXAS AMERICAN COLLEGE OF SPORTS MEDICINE 2009 CONFERENCE

**Fenugreek Extract Supplementation Has No effect on the Hormonal Profile of Resistance-Trained Males**

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*Int J Exerc Sci* 2(1): S13, 2009. Fenugreek is herb that has several purported uses in animal models. Despite no substantiated claims in human research models, fenugreek has been marketed in dietary products as having anabolic potential for resistance trained athletes. **PURPOSE:** The purpose of this study was to investigate the potential anabolic effects of fenugreek extract supplementation in conjunction with a controlled resistance training program. **METHODS:** Forty-five resistance trained males were matched by fat free mass and randomly assigned to ingest in a double blind manner capsules containing 500mg of a placebo (PL) (N = 24, 20.1 ± 2.6 yr, 85.5 ± 13.4 kg, 177.00 ± 6.1 cm) or fenugreek extract (FE) (N = 21, 21.4 ± 2.95 yr, 89.9 ± 18.8 kg, 178.00 ± 6.27 cm). Subjects participated in a supervised 4-day per week periodized resistance-training program for 8 weeks in conjunction with supplementation. Venous blood samples were obtained using standard procedures at baseline (PRE), 4 weeks, and 8-weeks (POST). Serum analyses included cortisol, insulin, leptin, free testosterone, estrogen, and DHT. Statistical analyses utilized a two-way ANOVA with repeated measures for serum hormone responses (p<0.05). **RESULTS:** A significant interaction (p<0.05) between groups for DHT was observed for PL (PRE: 1187±482; POST: 1258±493 pg/ml) and FE (PRE: 1263±496; POST: 1144±447 pg/ml) indicating that supplementation resulted in significant decrease in DHT levels. Significant differences in DHT responses from supplementation showed a -9.42% change for the FE group accompanied with a 5.98% increase in the PL group. No significant effects for groups or interactions were observed for the anabolic hormones free testosterone and estrogen (p<0.05). Additionally, no significant main effects for groups or time were observed for the metabolic hormones insulin, cortisol, and leptin (p<0.05). **CONCLUSIONS:** Supplementation of fenugreek extract resulted in a decrease in serum DHT levels in comparison to placebo. However, other anabolic and metabolic hormone analyses were not affected by supplementation. We conclude that in conjunction with structured resistance training, supplementation of fenugreek extract does not appear to affect hormonal status in resistance trained males and shows no anabolic potential as has been purported. This study was supported by INDUS BIOTECH

