

The Effects of Testosterone Boosters on Testosterone, Strength, and Body Composition in Young Trained Males

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Athletes frequently use nutritional supplementation to improve physical performance. Herbal testosterone boosters claim to increase testosterone and maximize strength gains and lean body mass. **PURPOSE:** To investigate if testosterone, strength and lean body mass are increased in young trained males taking an herbal testosterone supplement compared to a placebo during a 6-week resistance training period. **METHODS:** Participants were randomly assigned to the placebo (pl) group (n = 6) or the experimental (exp) group (n = 5). Participants and researchers were blinded to group assignments. Blood and saliva samples were collected in the fasted state prior to the intervention (pre), 3 weeks (mid) and 6 weeks (post) to measure testosterone. 1RM squat and bench press and body composition were measured at all three time points. Participants supplemented with the herbal testosterone booster or 500mg of oregano in capsule form twice daily. **RESULTS:** No significant difference was detected between groups for % change in squat (p = 0.792) or bench press (p = 0.429). There was no significant difference between groups for unbound serum testosterone % change from pre to post (p = 1.000) as well as between groups for unbound serum testosterone concentrations (pre p = 0.429, 3w p = 0.622, post p = 0.537). No significant difference occurred between groups for total saliva testosterone % change from pre to post (exp = 16.69 ± 21.22%, pl = 40.48 ± 38.17%; p = 0.329). A significant difference was detected between groups post -test saliva testosterone concentration (exp 728.82 ± 199.37 ng·dl⁻¹, pl 1153.54 ± 357.11 ng·dl⁻¹; p = 0.030) as well as for % weight change (WT%) for the exp group compared to the pl group from pre to mid (p = 0.004, exp mean WT % change -1.44 ± 0.288%, pl mean WT % change 1.76 ± 1.39 %; p = 0.004). **CONCLUSION:** It appears that supplementation with a testosterone booster during a resistance training intervention does not increase testosterone, strength or lean body mass when compared to a placebo.

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