

## **Super Slow Versus Traditional Resistance Training: The Effects on Muscle Size and Strength**

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The purpose of this study was to compare the effects of Super Slow Training (SST) and Traditional Speed Training (TST) on muscle size and strength. Twenty-one experienced weight trainers were recruited for this 10-week study. The subjects were split into 2 groups: a SST group and a TST group. Both groups completed 1 upper-body workout per week. Each workout consisted of 4 exercises, with 6 repetitions per exercise. The SST group performed each repetition to a 10-second count, whereas the TST group performed each repetition to a 3-second count. Upper-arm circumference, biceps and triceps skinfolds, 5 repetition maximum (RM) bench press, and 5RM lat pull-down were measured before and after the training intervention. The TST group displayed a significant increase in upper-arm circumference (3.31%), upper body strength in bench press (13.6%) and lat pull-down (13.6%). The SST group showed no significant improvements in either muscle size or strength. Inspection of the training logs revealed that the SST group increased in the training 6RM loads but not in the 5RM test performed at normal speed. On the basis of these findings, it is suggested that SST is not effective for further enhancing muscular size or strength in already resistance trained subjects. Further, specificity of velocity in the training movement already demonstrated by previous research is strongly supported by the results of this study. It is important for coaches to realize that any possible strength gains resulting from SST will not transfer to increased strength in sport performance because of the discrepancy between the slow speed of training and the faster speed of play of any given sport. It would follow that SST is not recommended as an appropriate training protocol for enhancing high velocity dynamic performance of athletes.