Effects of a Three-week Core Training Program on Different Unstable Platforms

The untested InertiaCore Balance Trainer (ICT) is designed to improve core function. Users engage the core musculature to maintain balance on the unstable device; its stability is adjusted by adding weight. This flexibility makes the ICT appropriate for all fitness levels. PURPOSE: To compare the effects of a 3 wk core training program completed on the ICT or a stability ball (SB). METHODS: Thirty two active college age students (19.4 ± 1.4 yrs and 65.2 ± 11.0 kg) were divided into the ICT and SB groups, each of which completed various medicine ball throws, crunches, and Russian twists. Subjects trained 3 d·wk⁻¹ for 3 wk; medicine ball weight and repetitions increased during the program’s midpoint. Changes in core power and strength were measured across time with the Front Abdominal Power Throw (FAPT) and a Cybex dynamometer. Data were analyzed using repeated measures ANOVA. Dependent t-tests were used to examine changes across time within groups. RESULTS: The ANOVAs revealed no significant main effects between the time points or groups for any dependent variable. A significant interaction was found for flexion power (p=0.036), indicating opposing trends between the two groups across time. A similar relationship was found for flexion work, but the interaction only approached significance (p=0.059). The dependent t-tests revealed significant increases in flexion (p=0.047) and extension (p=0.018) power only for the SB group. CONCLUSION: The ICT did not improve core function relative to the SB. This study focused on unstable training, but using more weight on the device, thereby increasing stability and resistance, may alter outcomes.