Acute Effect of Whole-Body Vibration on Knee Extensor Strength

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INTRODUCTION: The purpose of this study was to investigate the effects of whole body vibration on knee extensor muscle strength. METHODS: Male college students (n=7) were recruited for the research study. Subjects performed baseline measurements on the isokinetic dynamometer (BIODEX®; System 4 Pro, New York, NY, USA) to test for peak torque output of the knee extensor muscles. The subjects then were exposed to three 60-second bouts of whole-body vibration (WBV) with 60-second rest periods between. Immediately after WBV exposure the subjects were then placed back in isokinetic dynamometer to test peak torque of the knee extensor muscles two minutes after treatment. The highest peak torque value of the baseline testing will be compared to the highest post-WBV peak torque value. RESULTS: Test results are still pending. Data collection is expected to be complete by the end of Fall 2011 with anticipated outcomes of no significant difference between baseline and post-WBV values.