

QUIVERING QUADS

Vibration applied to the thighs can increase muscle performance



Original Research

Mileva, K.N., et al. Acute effects of a vibration-like stimulus during knee extension exercise. *Medicine and Science in Sports and Exercise* 38:1317-1328, 2006.

IN THIS STUDY VIBRATIONS INCREASED STRENGTH, BUT HOW COULD YOU POSSIBLY USE THIS IN COMPETITION?

As mentioned in [VERTICAL VIBRATIONS](#), vibration training is increasing in popularity. It involves either standing on a platform that vibrates at a low frequency (with an exercise, like a squat, performed on the platform) or directly applying vibration to the working muscle itself. The jury is still out on this type of training. There is some evidence of transient increases in strength or power but overall results are mixed. The mixed results might be due to differences in the vibration stimulus, such as the method, frequency, intensity, and duration of application. Another study just recently published in *Medicine and Science in Sports and Exercise* looks at the effects of vibration on strength and power; the results showed a positive effect of vibration on performance, but there are some catches.

Power Key: vibration, electromyography, maximal voluntary contraction, torque