

# Power Plate® Research for Sports Performance



## Effects of Adding Whole Body Vibration to Squat Training on Isometric Force/Time Characteristics

Journal of Strength and Conditioning Research. Vol. 24(1), 171-183, 2009.  
H. Lamont, J. Cramer, D. A. Bemben, S. L. Randa, M. Anderson and M. Bemben

This study suggests that whole body vibration using Power Plate may elicit an acute post-activation potentiation response, leading to acute improvements in power and force development. Potentially, the use of vibration between sets of resistance training rather than during training itself may lead to increased recruitment and synchronization of high threshold motor units, minimize fatigue potential, and facilitate the chronic adaptation to resistance exercise.

**Conclusion:** The data suggests there was a significant benefit afforded by adding whole body low frequency vibration to short-term resistance training protocol with regard to explosive strength expression. The addition of vibration prior to and between sets of resistance may be a viable alternative to vibration applied during resistance exercise when trying to improve explosive isometric strength.

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## Effects of Different Half-Time Strategies on Second Half Soccer-Specific Speed, Power and Dynamic Strength

Scandinavian Journal of Medicine & Science in Sports. Vol. 23(1), 105-113, 2013.  
R. Lovell, A. Midgley, S. Barrett, D. Carter and K. Small

This study, conducted by the University of Hull, compared the effects of whole body vibration, using Power Plate, and field-based re-warm-up during half-time during a simulated soccer game. The results of the study suggest that using Power Plate during half-time prevented a decrease in performance (sprint time and jump performance) at the start of the second half. As a result of a second study conducted by the same group, soccer players who used Power Plate at half-time decreased fatigue in their hamstring muscles and improved lower limb stability at the start of the second half of the match.

**Conclusion:** The data suggests there was a significant benefit to adding whole body vibration to a re-warm-up protocol to help soccer players maintain performance.

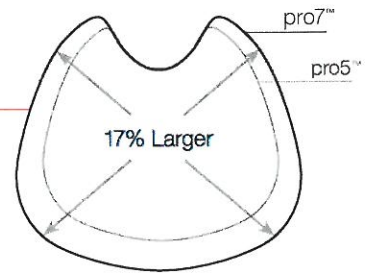
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## Effects of Whole Body Vibration After Arthroscopic Reconstruction of the ACL

German Magazine for Sports Medicine. Vol. 56(7/8), 228, 2004.  
J.D. Bastian and W. Franz

This study, conducted by the Lutrina Klinik Department of Knee Surgery, observed the effects of whole body vibration, using Power Plate, and physiotherapy in patient recovery after ACL reconstruction surgery. Six weeks after the operation the group that performed whole body vibration did not show significant reduction of muscle thickness of the area above the patella. Twelve weeks after surgery, the whole body vibration group was more satisfied with the results of the operation than the control group. The results of the study suggest that using Power Plate in conjunction with physiotherapy decreases muscle atrophy and reduces the pain associated with recovery.

**Conclusion:** The results of the study suggest that using Power Plate in conjunction with physiotherapy decreases muscle atrophy and reduces the pain associated with recovery.



Largest Power Plate platform ever

Seven-position proMOTION™ tension adjustment with modular attachment option

STAX™ Advanced Stabilisation and Compensation System

Standard Colour\*



Silver

\*Colour shown is an approximate representation. Custom colours available upon request for an additional fee

**Technical Specifications:**

Frequency	25–50Hz
Amplitude	Low or High
G-Factor™ Settings	0–8
Time Selections	0–9 minutes (15 second increments)
DualSync™ Twin Motor System	Maintains precise balance at any frequency and amplitude level, allowing perfect synchronization of vibration for maximum muscle response and efficiency
Dimensions (W x D x H)	96cm x 116cm x 152cm / 38in x 46in x 60in
Weight	445lb / 202kg
Power Supply	100–240V, 50/60Hz, Nominal Power: 160-265W, Universal Voltage
Maximum Load	500lb / 227kg
Embedded proMOTION™ Technology	Upper-body cable resistance training system with seven-position tension adjustment
STAX™	Advanced stabilization and compensation system
Operating System	Windows CE 6.0 Professional
Upper Display	10.1in LCD Display (800 x 480 pixel)
USB Port	External USB
Net Access	10/100M Ethernet / Wireless connectivity
Audio	2 recessed speakers with headphone option and volume control
PrecisionWave™ Technology	High-fidelity harmonic vibration system that provides uncompromising performance for unsurpassed results
Certifications	MDD, CE and EMC (TUV certified); RoHS / WEEE compliant; FDA Listed as Class 1 device, 510k exempt

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