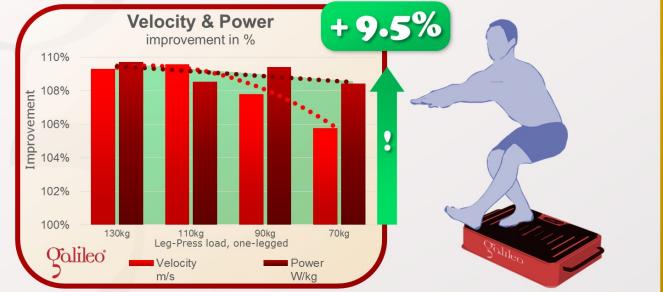
Can Galileo Training improve Straining Short-term leg-press performance

The answer is: YES

This study tested the immediate effect of Galileo Training on one-legged leg-press performance (10x1 min., 1. min. rest, 26Hz, pos. 4, one-legged on toes, knee angle 100°-110°). Comparison between trained and untrained leg immediately before and after the training. The Galileo Training leg improved velocity and power in the leg-press exercise almost independent of extra loads by almost 10%.



Bosco C, Colli R, Introini E, Cardinale M, Tsarpela O, Madella A, Tihanyi J, Viru A: Adaptive responses of human skeletal muscle to vibration exposure; Clin Physiol., 19(2):183-7, 1999; PMID: 10200901; GID: 203

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Clin Physiol. 1999 Mar;19(2):183-7.

Adaptive responses of human skeletal muscle to vibration exposure.

Bosco C1, Colli R, Introini E, Cardinale M, Tsarpela O, Madella A, Tihanyi J, Viru A.

Abstract

AIM

The aim of this study was to investigate the effects of whole-body vibrations (WBV) on the mechanical behaviour of human skeletal muscle.

PURPOSE

For this purpose, six female volleyball players at national level were recruited voluntarily. They were tested with maximal dynamic leg press exercise on a slide machine with extra loads of 70, 90, 110 and 130 kg. After the testing, one leg was randomly assigned to the control treatment (C) and the other to the experimental treatment (E) consisting of vibrations.

SUBJECTS

The subjects were then retested at the end of the treatment using the leg press.

RESULTS

Results showed remarkable and statistically significant enhancement of the experimental treatment in average velocity (AV), average force (AF) and average power (AP) (P < 0.05-0.005). Consequently, the velocity-force and power-force relationship shifted to the right after the treatment.

CONCLUSION

In conclusion, it was affirmed that the enhancement could be caused by neural factors, as athletes were well accustomed to the leg press exercise and the learning effect was minimized.

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