



Home Policies Editorial Team Information Submissions

## **JHSE**

- Ourrent Issue
- Back Issues
- Most read articles
- Indexing
- Advanced search
- Contact
- Site Map
- About
- Links

## GOOGLE TRANSLATE



Home > Vol 6, No 1 (2011) > Cochrane

Shaking weight loss away - Can vibration exercise reduce body fat?

Darryl Cochrane

## **Abstract**

An exercise modality that requires little time and physical exertion whilst providing the benefits of increased force, power, balance, flexibility, and weight loss would appeal to most people that may be at risk from an imbalanced lifestyle. One such exercise modality that has received a lot of attention has been vibration exercise (VbX), which evokes muscular work and elevates metabolic rate could be a potential method for weight reduction. Popular press has purported that VbX is quick, convenient, and 10 minutes of VbX is equivalent to one hour of traditional exercise, where it has been



FONT SIZE















marketed as the new weight-loss and body toning workout. However, research studies have shown that muscle activation is elicited but the energy demand in response to VbX is quite low.

Exhaustive VbX has been reported to produce a metabolic demand of 23 ml/kg/min compared to 44 ml/kg/min from an exhaustive cycle test. Different

vibration frequencies have been tested with varying amplitudes and loads, but only small increases in metabolic rate have been reported. Based on these findings it has been indirectly calculated that a VbX session of 26Hz for 3 continuous minutes would only incur a loss of ~ 10.7g fat/hr. Following a 24week programme of VbX, no observed differences were found in body composition and following 12 months of VbX the time to reach peak O2 was significantly higher in conventional exercise compared to VbX. However, one study has reported that percentage body fat decreased by 3.2% after eight months after VbX in comparison to resistance and control groups that performed no aerobic conditioning. The evidence to date, suggests that VbX can increase whole and local oxygen uptake; however, with additional load, high vibration frequency and/or amplitude it cannot match the demands of conventional aerobic exercise. Therefore, caution is required when VbX programmes are solely used for the purpose of reducing body fat without considering dietary and aerobic conditioning guidelines.

Key words: Weight loss; muscle metabolism; oxygen consumption; body composition

doi: 10.4100/jhse.2011.61.04

USER
Username
Password
€ Remember me
Log In
♦ Announcements

Full Text: PDF (249 KB) STATISTICS

## Cited-By

1. Vibration training and body fat: a comment

on Artero et al. (2011)

James A. J. Heathers

European Journal of Applied

Physiology vol: 112 issue: 6 first

page: 2381 year: 2012

doi: 10.1007/s00421-011-2179-6



This work is licensed under a <u>Creative Commons Attribution-NonCommercial-NoDerivs 3.0 Unported License</u>.

J. Hum. Sport Exerc. ISSN 1988-5202. doi:10.4100/jhse. Faculty of Education. University of Alicante. C/ San Vicente del Raspeig s/n - 03690 San Vicente del Raspeig - Alicante - Spain jhse@ua.es