

Acute effects of a whole body vibration session on the vibration perception threshold in patients with type 2 diabetes mellitus

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Background: Type 2 Diabetes Mellitus (T2DM) is a chronic disease that affects millions of people, and according to the International Diabetes Federation, 46.5% of people have undiagnosed diabetes. One of the most common complications of diabetes mellitus is loss of peripheral sensation. Whole Body Vibration (WBV) is a therapy, and it would be interesting to know if it can be considered as a training method to improve the Vibration Perception Threshold (VPT). The aim of the study is to verify whether there are really acute effects on the VPT after a WBV training session in people with T2DM. **Methods:** Ninety people with T2DM (56 men and 34 women) were randomly allocated to two groups: the WBV group and the placebo group. The ninety subjects went through a VPT training test before receiving the assigned intervention, and they performed the VPT test using the Vibratron II device. **Results:** After one session of WBV, an increase of the VPT in the WBV group was found, with respect to the placebo group. **Conclusions:** Vibration perception threshold is increased after a WBV training session in people with T2DM, compared to a placebo group. © 2020 by the authors. Licensee MDPI, Basel, Switzerland.

Acute effects

Diabetes mellitus

Vibration perception threshold

Whole body vibration

placebo

diabetes

health impact

health risk

medical geography

physical activity

public health

adult

aged

Article

blood glucose monitoring

comparative study

controlled study

double blind procedure

female

glycemic control

human

intervention study

major clinical study

male

non insulin dependent diabetes mellitus

perceptive threshold

randomized controlled trial

sensory dysfunction

therapy effect

vibration sense

whole body vibration training