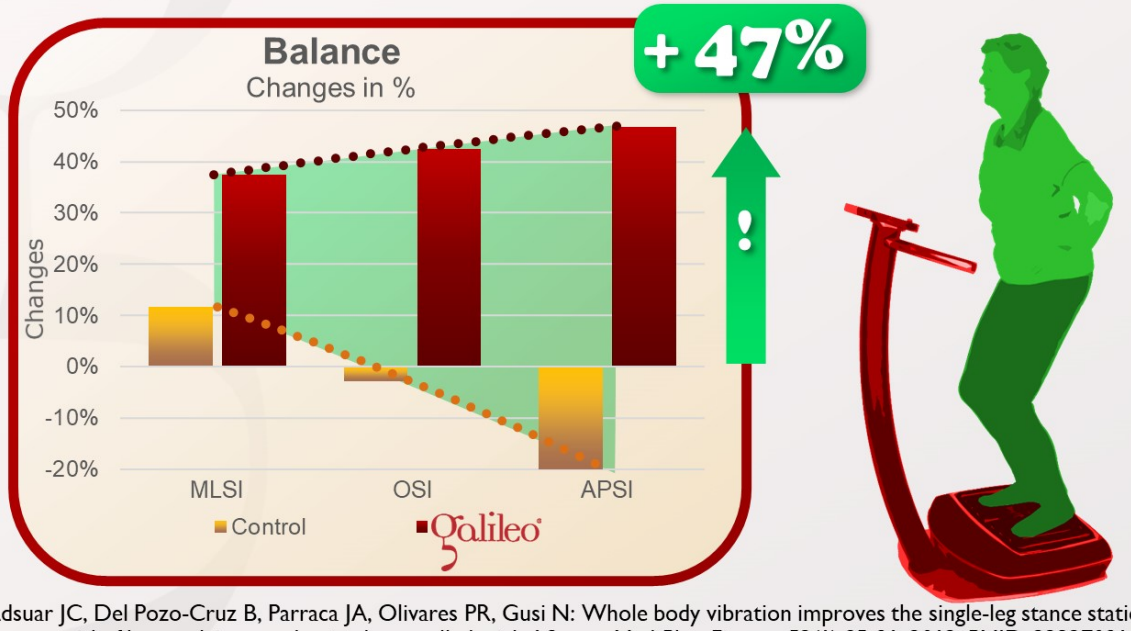
Can Galileo Training improve balance in Fibromyalgia patients ?

The answer is: YES

This study investigates the effects of Galileo Training on balance in Fibromyalgia patients (12,5Hz, 6* 30-60sec., 3/week, 12 weeks). Both groups received standard physiotherapy. The control group received no additional training. While the control group in most tested parameters of balance ability by up to 20% the Galileo group improved by up to 47%.



Adsuar JC, Del Pozo-Cruz B, Parraca JA, Olivares PR, Gusi N: Whole body vibration improves the single-leg stance static balance in women with fibromyalgia: a randomized controlled trial.; J Sports Med Phys Fitness, 52(1):85-91, 2012; PMID: 22327091; GID: 2960

Galileo Research Fact Sheet #102 Therapy: Fibromyalgia, Balance www.galileo-training.com

This study investigated the effects of Galileo Training on balance in Fibromyalgia patients (chronic muscle pain).

The Galileo group as well as the control group received standard therapy while the Galileo Group received additional Galileo Training 3 times per week over a period of 12 weeks.

The training was performed standing with 45° pent legs at 12.5Hz. The used exercise movement was quite interesting and inventive:

The individuals had to balance on their left forefoot and the right heel and had to change this every few seconds to the opposite.

While the control group decreased balance ability in most of the tests by up to 20% the Galileo improved in all tests by up to 47%.

The effects could have been even higher if frequencies below 10Hz where the stretch reflex is not dominant any more (#GIS1) and therefore balance and proprioceptive tasks are much harder.

Furthermore the Galileo Wobble mode (random/stochastic variation of the frequency) could have been used to further increase difficulty of the balance task – using the Wobble mode at low frequencies one legged (pos. 0) with exes closes is demanding even for well-trained individuals.

J Sports Med Phys Fitness. 2012 Feb;52(1):85-91.

Whole body vibration improves the single-leg stance static balance in women with fibromyalgia: a randomized controlled trial.

Adsuar JC[1], Del Pozo-Cruz B, Parraca JA, Olivares PR, Gusi N.

AIM:

Fibromyalgia (FM) is a chronic disorder characterized by widespread pain. Fibromyalgia is associated with balance problems and increased fall frequency. Whole-body vibration therapy had been used for improve balance in special populations but not in fibromyalgia. The main objective of this study was to analyze the effects of 12 weeks of tilting whole-body vibration therapy on static balance in fibromyalgia patients.

METHODS:

Women with FM were randomly and sequentially assigned to either the vibration group (N.=21) or the control group (N.=20) based on a randomly generated number table, and a code number was assigned to each participant. All participants received standard care that included medical care through the public health system (hospital and outpatient clinic, including primary care) and social support through the local fibromyalgia association. Participants in the exercise group received whole-body vibration therapy (12 weeks, 12.5 Hz frequency and 3 mm amplitude). Outcome measure was determined using postural stability indices (overall, anterior-posterior and medial-lateral) assessed by the Biodex Balance System in a single dominant limb stance.

RESULTS:

Treatment effect after 12-weeks of tilting whole body vibration therapy were 57.1% on overall stability and 66.6% on anterior-posterior stability.

CONCLUSION:

Tilting whole-body vibration therapy effectively improves static balance in patients with FM.

PMID:22327091