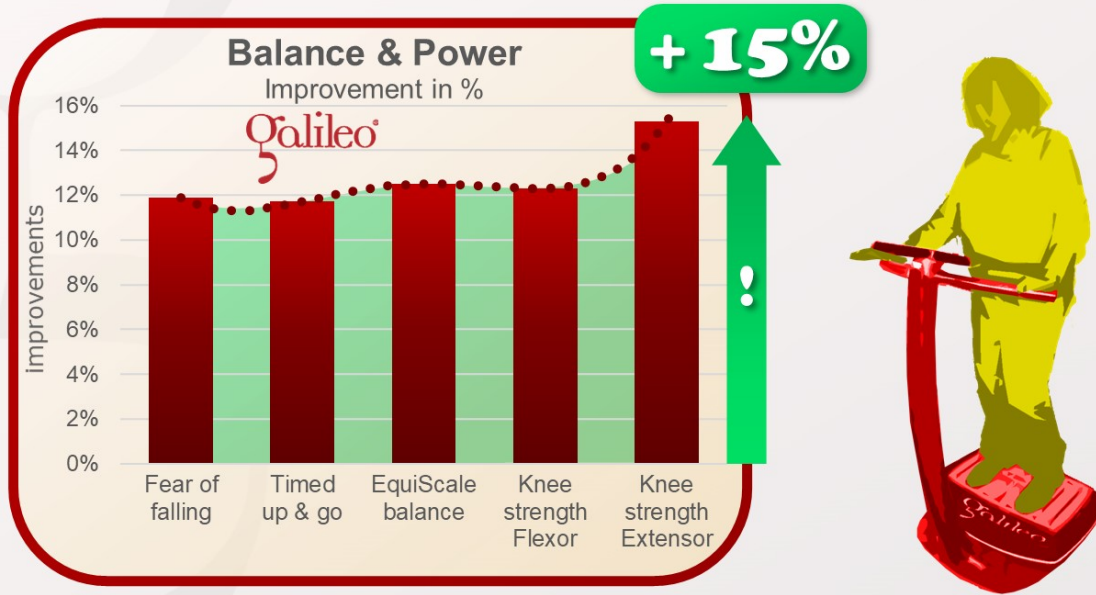




Can Galileo Therapy increase muscle power and decrease fall risk in MS patients ?

The answer is: YES

This pilot study reported the effects of Galileo Therapy on fall risk and muscle power in MS (multiple sclerosis) patients (20Hz, pos. 1.5, slightly flexed legs (20°), 5*1 min., 3/week, 8 weeks). Just 5 minutes Galileo Therapy 3 times per week showed decreased fall-risk and significantly improved balance (+12%), muscle function and muscle Power (+12%) as well as knee torque at flexor (+12) and extensor (15%).



Yang F, Finlayson M, Bethoux F, Su X, Dillon L, Maldonado HM: Effects of controlled whole-body vibration training in improving fall risk factors among individuals with multiple sclerosis: A pilot study.; Disabil Rehabil, 15:1-8, 2016; PMID: 27976932; GID: 4324

Galileo Research Fact Sheet #132

Therapy: MS (Multiple Sclerosis)

www.galileo-therapy.com

This pilot study investigated the effects of Galileo Therapy on fall-risk, muscle function and muscle power in patients with Multiple Sclerosis (MS) (25 patients, PDDS < 6.5).

Galileo Therapy was used only for 5 minutes 3 times per week over a period of 8 weeks.

Despite the short therapy duration and the very simple protocol (20Hz, position 1.5, upright standing, 20° knee flexion)

The Galileo Therapy showed a decreased fall-risk and significant improvements in balance (+12%), muscle function and muscle power (+12%) and torque at the knee (+12%..+15%).

These results are in line with other Galileo Studies like #GRFS112, #GRFS94 and #GRFS82 and they show how efficient Galileo Therapy can be used in MS patients –

Especially when considering that using different goal-specific exercises with could have optimized the used protocol intensities matched to the individual patient – which could be expected to result in even higher effects.



[Disabil Rehabil.](#) 2018 Mar;40(5):553-560. doi: 10.1080/09638288.2016.1262466. Epub 2016 Dec 15.

Effects of controlled whole-body vibration training in improving fall risk factors among individuals with multiple sclerosis: A pilot study.

[Yang F¹](#), [Finlayson M²](#), [Bethoux F³](#), [Su X⁴](#), [Dillon L⁵](#), [Maldonado HM⁶](#).

[Author information](#)

PURPOSE:

The purpose of this study was to systematically examine the effect of an 8-week controlled whole-body vibration training on improving fall risk factors and the bone mineral density among people with multiple sclerosis (PwMS).

METHODS:

This study adopted a single group pre-test-post-test design. Twenty-five PwMS (50.3 years SD 14.1) received vibration training on a side-alternating vibration platform. Each training session was repeated three times every week for 8 weeks.

Prior to and following the 8-week training course, a battery of fall risk factors were evaluated: the body balance, functional mobility, muscle strength, range of motion, and fear of falling. Bone density at both calcanei was also assessed.

RESULTS:

Twenty-two participants completed the study. Compared with pre-test, almost all fall risk factors and the bone density measurement were significantly improved at post-test, with moderate to large effect sizes varying between 0.571 and 1.007.

CONCLUSIONS:

The 8-week vibration training was well accepted by PwMS and improved their fall risk factors. The important findings of this study were that vibration training may increase the range of motion of ankle joints on the sagittal plane, lower the fear of falling, and improve bone density. **IMPLICATIONS FOR**

REHABILITATION An 8-week vibration training course could be well-accepted by people with multiple sclerosis (MS).

Vibration training improves the risk factors of falls in people living with MS. Vibration training could be a promising rehabilitation intervention in individuals with MS.