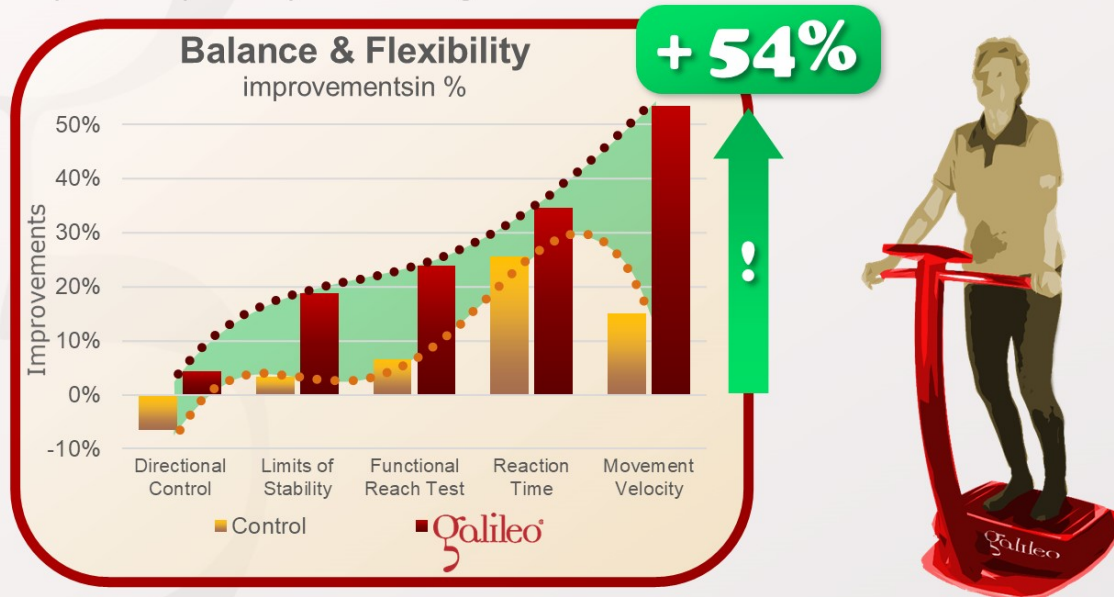


## The answer is: YES

This study showed the effects of Galileo Training on balance and flexibility in elderly women (66-78) with increased fall-risk (20Hz, pos. 2, standing, 3 min., 3/week, 3 months). The control group did not train at all. The control group showed significant improvements in balance (+20%), flexibility (+23%) and movement angular velocity which improved by 54% in average.



Cheung WH, Mok HW, Qin L, Sze PC, Lee KM, Leung KS: High-frequency whole-body vibration improves balancing ability in elderly women; Arch Phys Med Rehabil., 88(7):852-7, 2007; PMID: 17601464; GID: 346

This study documented the effects of 3 month of Galileo Training in elderly women (age 66 to 78) with higher fall-risk on balance and flexibility.

The control group did not receive any additional training.

The Galileo group received only 3 minutes at 20Hz (pos. 1) in a very simple upright standing position 3 times per week over 3 months. Even though the group was obviously in a deconditioned state this training intensity can be considered as not very demanding.

Despite the low training intensity the Galileo Groups showed a significant improvement in Balance (+20%), Flexibility (+23%) and angular movement velocity (+54%).

A little bit more intensive training using slightly higher frequencies (>25Hz) and a deeper squatting position would have focused the training on the hip surrounding muscles and therefore would have been favorable to decrease fall-risk.

Nevertheless this study shows a typical effect of Galileo training: at any of the three frequencies ranges (#GIS1) there is always also a training effect on Balance which becomes more effective when the user tries not to hold on to the handle bar.



[Arch Phys Med Rehabil.](#) 2007 Jul;88(7):852-7.

## High-frequency whole-body vibration improves balancing ability in elderly women.

Cheung WH<sup>1</sup>, Mok HW, Qin L, Sze PC, Lee KM, Leung KS.

### Abstract

*OBJECTIVE:* To investigate the efficacy of high-frequency whole-body vibration (WBV) on balancing ability in elderly women.

*DESIGN:* Randomized controlled trial. Subjects were randomized to either the WBV intervention or the no-treatment control group.

*SETTING:* Community-living elderly women.

*PARTICIPANTS:* Sixty-nine elderly women aged 60 or above without habitual exercise.

*INTERVENTION:* Side alternating WBV at 20Hz with 3 minutes a day and 3 days a week for 3 months in the WBV intervention group. Those in control group remained sedentary with normal daily life for the whole study period.

*MAIN OUTCOME MEASURES:* Limits of stability in terms of reaction time, movement velocity, directional control, endpoint excursion, maximum excursion, and the functional reach test were performed at baseline and endpoint.

*RESULTS:* Significant enhancement of stability was detected in movement velocity ( $P < .01$ ), maximum point excursion ( $P < .01$ ), in directional control ( $P < .05$ ).

*CONCLUSIONS:* WBV was effective in improving the balancing ability in elderly women. This also provides evidence to support our user-friendly WBV treatment protocol of 3 minutes a day for the elderly to maintain their balancing ability and reduce risks of fall.

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