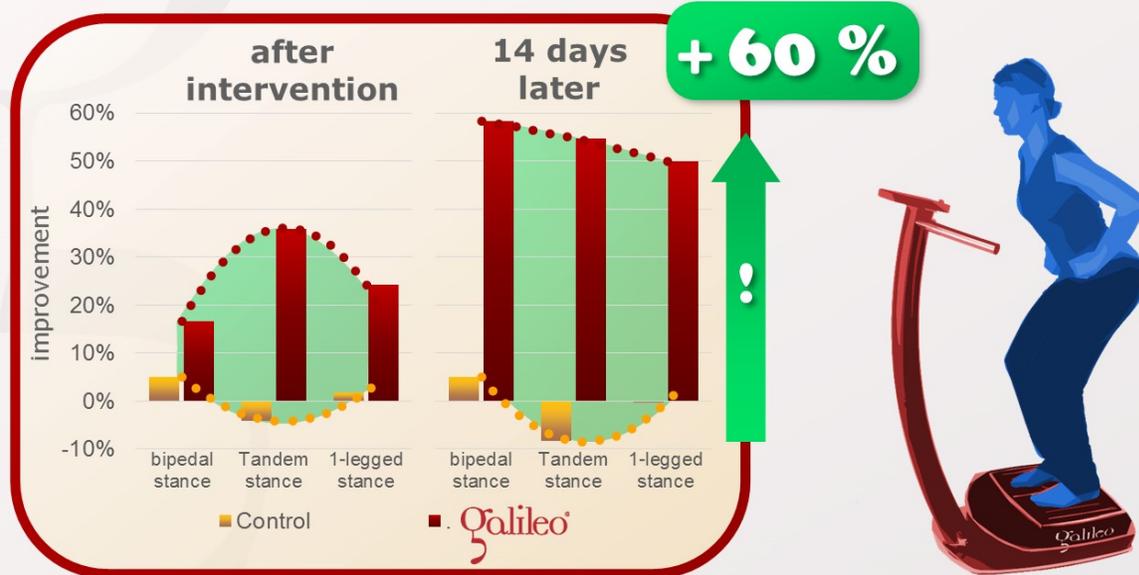


**The answer is: YES**

This study examined the effect of Galileo Training on balance in women between 39 and 48 (15-25Hz, pos. 1-3, deep squat, 15 min., 3/week, 9 weeks, increasing intensity). The control group did not perform any specific training. After the 9 weeks of intervention Galileo Training showed a significant increase in balance which improved about another 100% 14 days after the end of the intervention.



Spiliopoulou SI, Amiridis IG, Tsigganos G, Hatzitaki V: Side-alternating vibration training for balance and ankle muscle strength in untrained women.; J Athl Train, 48(5):590-600, 2013; PMID: 23914911; GID: 3372

A result which many studies have shown:

**Galileo Training has a strong influence on balance - interestingly this is true not only for low frequency where Proprioception is targeted but also for mid and high frequencies.**

Basically: whenever you training on Galileo (at least when standing) you are also doing balance training.

In this study a quite intensive training over a period of 9 weeks was used – this high intensity probably explains why the effects on balance was twice as high 14 days after the end of the intervention compared to directly after the 9 weeks of intervention.

Probably the body needs some rest for repair before the full effect became visible.



[J Athl Train.](#) 2013 Sep-Oct;48(5):590-600. doi: 10.4085/1062-6050-48.4.03. Epub 2013 Aug 5.

## Side-alternating vibration training for balance and ankle muscle strength in untrained women.

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### Abstract

**CONTEXT:** Side-alternating vibration (SAV) may help reduce the risk of falling by improving body balance control. Such training has been promoted as a strength-training intervention because it can increase muscle activation through an augmented excitatory input from the muscle spindles.

**OBJECTIVE:** To determine the effect of SAV training on static balance during 3 postural tasks of increasing difficulty and lower limb strength.

**PATIENTS OR OTHER PARTICIPANTS:** A total of 21 healthy women were divided into training ( $n = 11$ ; age =  $43.35 \pm 4.12$  years, height =  $169 \pm 6.60$  cm, mass =  $68.33 \pm 11.90$  kg) and control ( $n = 10$ ; age =  $42.31 \pm 3.73$  years, height =  $167 \pm 4.32$  cm, mass =  $66.29 \pm 10.74$  kg) groups.

**INTERVENTION(S):** The training group completed a 9-week program during which participants performed 3 sessions per week of ten 15-second isometric contractions with a 30-second active rest of 3 exercises (half-squat, wide-stance squat, 1-legged half-squat) on an SAV plate (acceleration = 0.91-16.3g). The control group did not participate in any form of exercise over the 9-week period.

**MAIN OUTCOME MEASURE(S):** We evaluated isokinetic and isometric strength of the knee extensors and flexors and ankle plantar flexors, dorsiflexors, and evertors. Static balance was assessed using 3 tasks of increasing difficulty (quiet bipedal stance, tandem stance, 1-legged stance). The electromyographic activity of the vastus lateralis, semitendinosus, medial gastrocnemius, tibialis anterior, and peroneus longus was recorded during postural task performance, baseline and pre-training, immediately post-training, and 15 days post-training.

**RESULTS:** After training in the training group, ankle muscle strength improved ( $P = .03$ ), whereas knee muscle strength remained unaltered ( $P = .13$ ). Improved ankle-evertor strength was observed at all angular velocities ( $P = .001$ ). Postural sway decreased in both directions but was greater in the mediolateral ( $P < .001$ ) than anteroposterior ( $P = .02$ ) direction. The electromyographic activity of the peroneus longus increased during the sharpened tandem ( $P = .001$ ) and 1-legged tasks ( $P = .007$ ). No changes were seen in the control group for any measures.

**CONCLUSIONS:** The SAV training could enhance ankle muscle strength and reduce postural sway during static balance performance. The reduction in mediolateral sway could be associated with the greater use of ankle evertors due to their strength improvement.