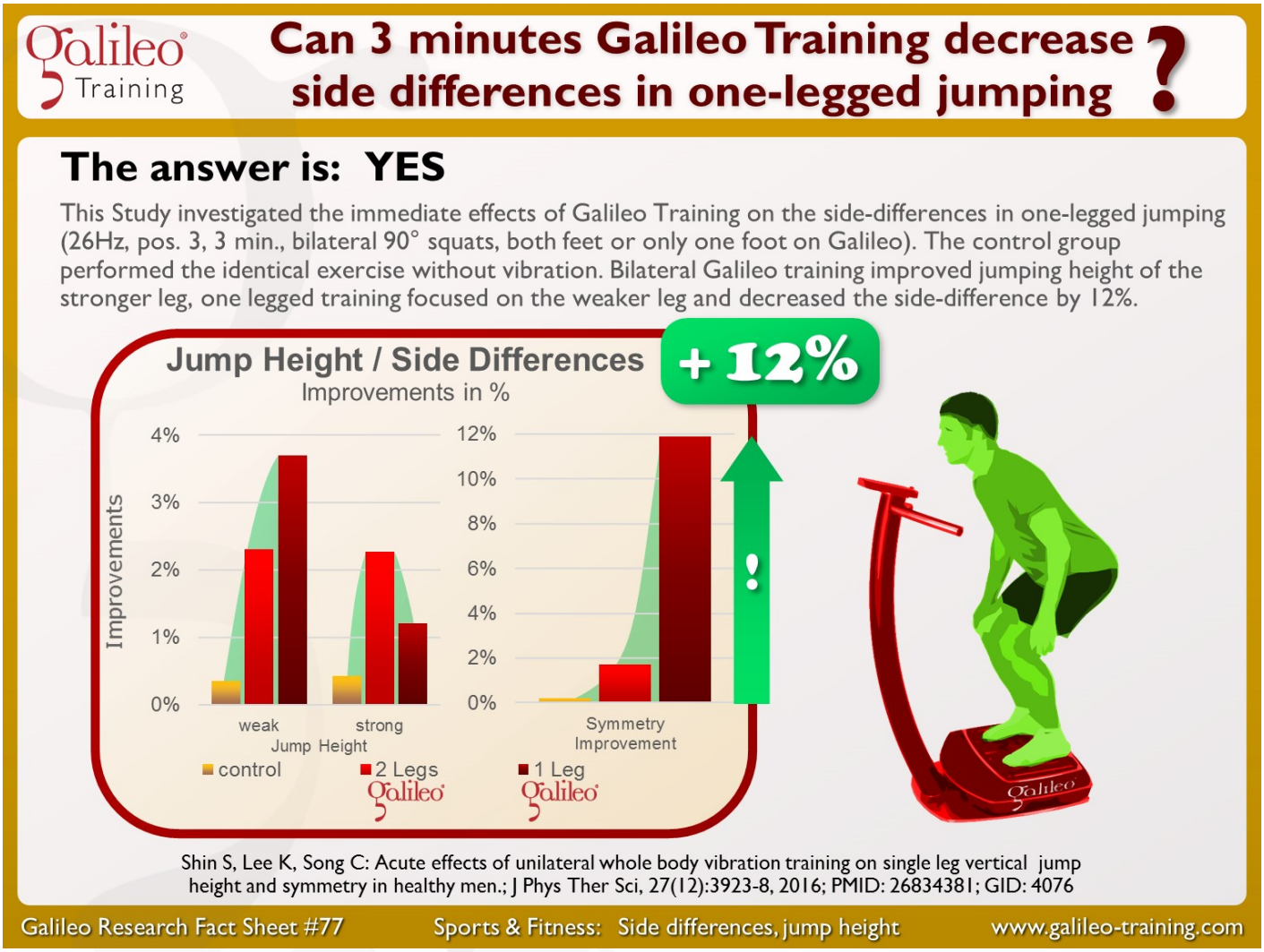

As in #GRFS19 this study examined the effects of one-legged Galileo Training. This time the immediate effects on one-legged jumping height and side-differences were examined.

The study used three groups which perfumed deep static squats (90°) at 26Hz (position 3) for 3 minutes (until exhaustion).

The control group performed the exercise without vibration, the two Galileo groups with symmetric and with one legged vibration.

They stood either symmetrically bi-lateral on the device or one foot on the device and the other on a stand next to the device.

Symmetric Galileo Training mainly increased jumping height on the stronger leg and therefore die decrease side-differences only by 2%, the one legged Galileo Training focused on the weaker leg and could reduce side-differences by 12%.

Therefore one-legged Galileo Training can be used as a warm-up exercise to minimize side-differences for the following exercises.

J Phys Ther Sci. 2015 Dec;27(12):3923-8. doi: 10.1589/jpts.27.3923. Epub 2015 Dec 28.

Acute effects of unilateral whole body vibration training on single leg vertical jump height and symmetry in healthy men.

Shin S[1], Lee K[2], Song C[1].

Abstract

[Purpose] The aim of the present study was to investigate the acute effects of unilateral whole body vibration training on height and symmetry of the single leg vertical jump in healthy men. [Subjects] Thirty males with no history of lower limb dysfunction participated in this study.

[Methods] The participants were randomly allocated to one of three groups: the unilateral vibratory stimulation group (n=10), bilateral vibratory stimulation group (n=10), and, no vibratory stimulation group (n=10). The subjects in the unilateral and bilateral stimulation groups participated in one session of whole body vibration training at 26 Hz for 3 min. The no vibratory stimulation group subjects underwent the same training for 3 min without whole body vibration. All participants performed the single leg vertical jump for each lower limb, to account for the strong and weak sides. The single leg vertical jump height and symmetry were measured before and after the intervention.

[Results] The single leg vertical jump height of the weak lower limb significantly improved in the unilateral vibratory stimulation group, but not in the other groups. The single leg vertical jump height of the strong lower limb significantly improved in the bilateral vibratory stimulation group, but not in the other groups. The single leg vertical jump symmetry significantly improved in the unilateral vibratory stimulation group, but not in the other groups.

[Conclusion] Therefore, the present study found that the effects of whole body vibration training were different depending on the type of application. To improve the single leg vertical jump height in the weak lower limbs as well as limb symmetry, unilateral vibratory stimulation might be more desirable.

PMID:26834381