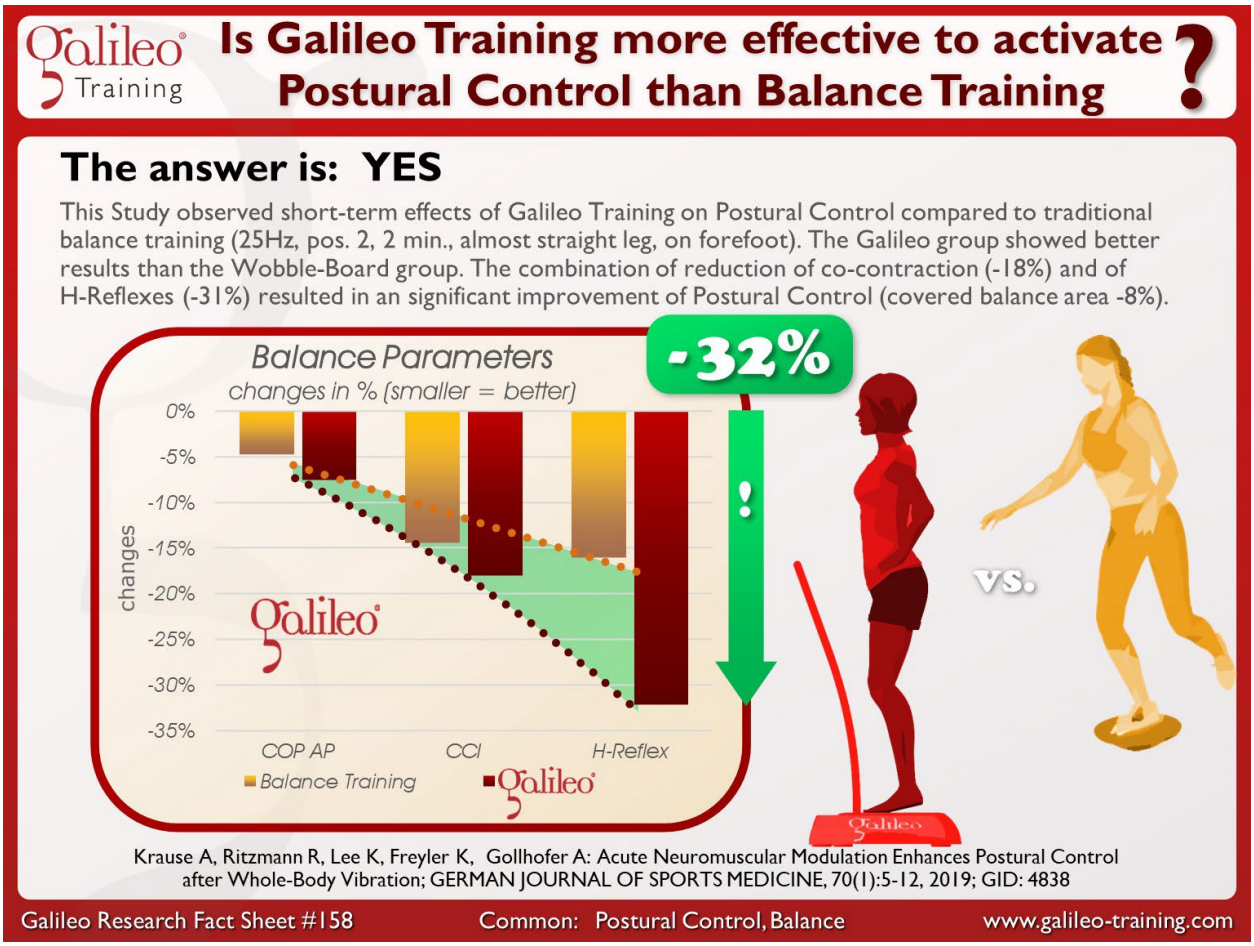
Galileo Research Fact Sheet #158: Is Galileo Training more effective to activate Postural Control than Balance Training?



This study investigated immediate effects of Galileo Training on the Postural system. The study compared effects of 2 minutes balance training on a wobble-board and 2 minutes Galileo Training (25Hz, straight standing on force foot without heel contact). The results in the Galileo showed a significant decrease of H-Reflex (-31%) and co-contraction in the lower leg (-18%) – both effects well known in sports science which indicate an increase postural control since less muscle activation (more relaxed muscles and less muscles) are needed to fulfill the given balance task. Therefore, the objective measure for the given balance task improved since the covered area during the balance decreased by 8%.

The Galileo group showed larger effects than the traditional balance training group. This is astonishing considering that the used exercise regime (posture and frequency range) is not a typical balance exercise on Galileo. This would have been for example one-legged exercises (balance on one foot at position 0) , additionally using the Wobble mode (W2) at either mid frequencies (14-18Hz, coordinative) or even at very low frequencies (5Hz + wobble 2 (W2) to focus on voluntary muscle activation and Proprioception) – both most effective to increase the demand of the balance task.

The reduction of the H-Reflex (spinal sensitivity) has been shown in various other studies in Galileo Training (#GRFS105) as well as Galileo Therapy (#GRFS37, #GRFS74) – the effect can be utilized for many different application goals.

Basics - Postural Control, Balance
#GRFS158 #GRFS