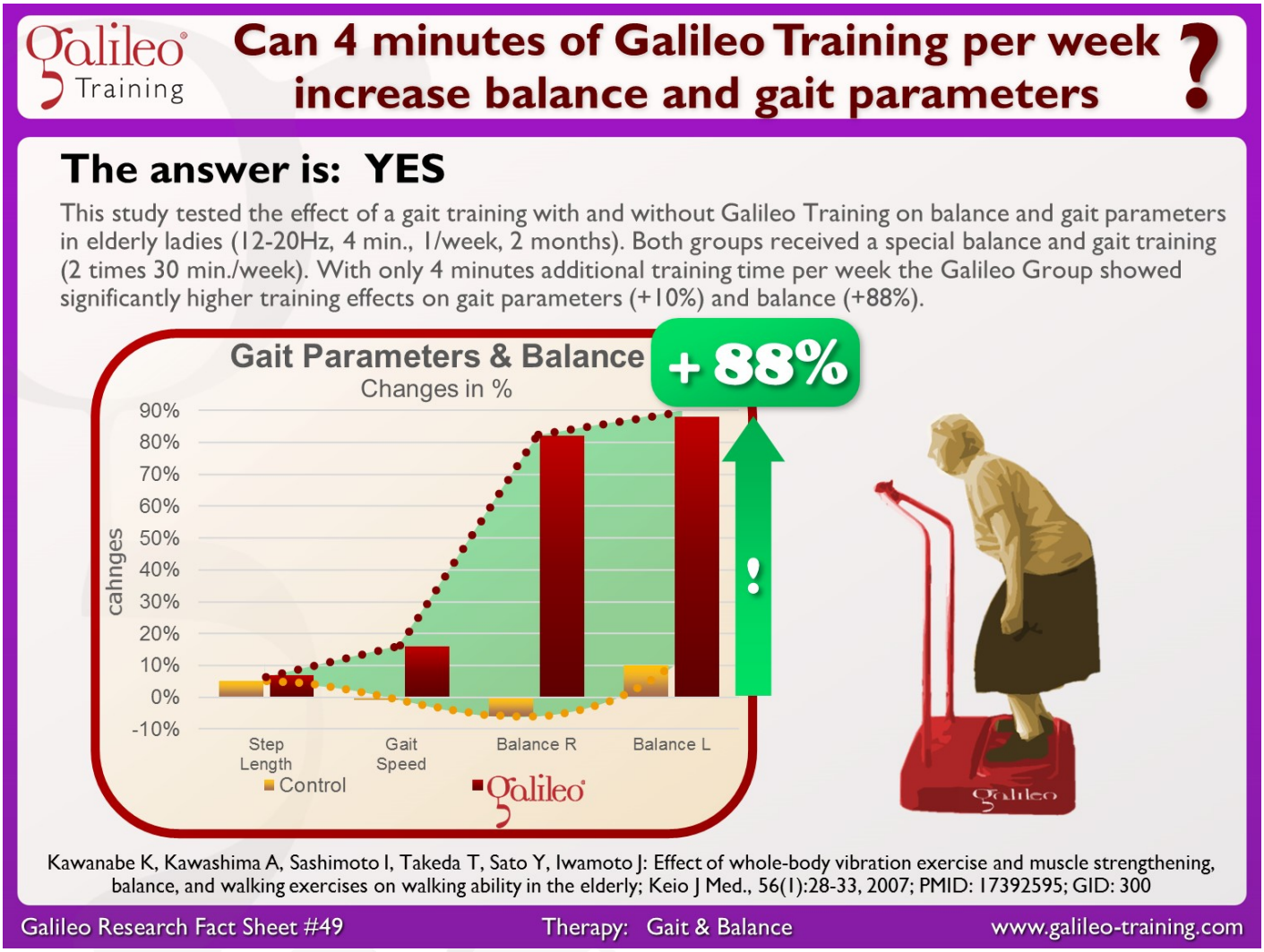

A result that many Galileo studies show (#GRFS48, #GRFS42, #GRFS26, #GRFS10): Galileo Training can massively increase muscle function, balance and gait parameters also in the elderly.

The original purpose of this study was to test weather Galileo Training was safe for elderly women.

Therefore, a standard balance and gait training program was used which took 2 times 30 minutes per week. In one group Galileo Training of just 4 minutes per week was added (12-20Hz. Bent knees, 4 minutes, position 2mm – 3mm).

While the control group without Galileo didn't show hardly any changes, the Galileo Group could significantly increase parameters: up to 10% in gait parameters (step length and gait speed) and up to 88% in balance (measured by the time they could stand on one foot).

The question is, how much more could have been achieved during the 2 months if an optimized Galileo Training program focused on improving functional outcomes would have been used?

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Effect of whole-body vibration exercise and muscle strengthening, balance, and walking exercises on walking ability in the elderly.

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Abstract

The present study was conducted to determine the beneficial effect of whole-body vibration (WBV) exercise in addition to muscle strengthening, balance, and walking exercises on the walking ability in the elderly.

Sixty-seven elderly participants were divided into two groups; the WBV exercise plus routine exercises group (n=40) and the routine exercises alone group (n=27). WBV exercise was performed on a Galileo machine (Novotec, Pforzheim, Germany) at an intensity of 12-20 Hz, for a duration of 4 minutes, once every week. All the participants in both the groups were similarly instructed to undergo routine exercises such as balance and muscle strengthening training, and take walking exercise twice a week.

The period of this study was 2 months to evaluate the acute effects of WBV exercise. The mean age of the participants was 72.0 years (range, 59-86 years). At baseline, there were significant negative correlations between age and the walking speed, step length, and maximum standing time on one leg.

After the 2-month exercise program, the walking speed, step length, and the maximum standing time on one leg were significantly improved in the WBV exercise plus routine exercises group, while no significant changes in these parameters were observed in the routine exercises alone group.

Thus, the present study showed the beneficial effect of WBV exercise in addition to muscle strengthening, balance, and walking exercises in improving the walking ability in the elderly. WBV exercise was safe and well tolerated in the elderly.