


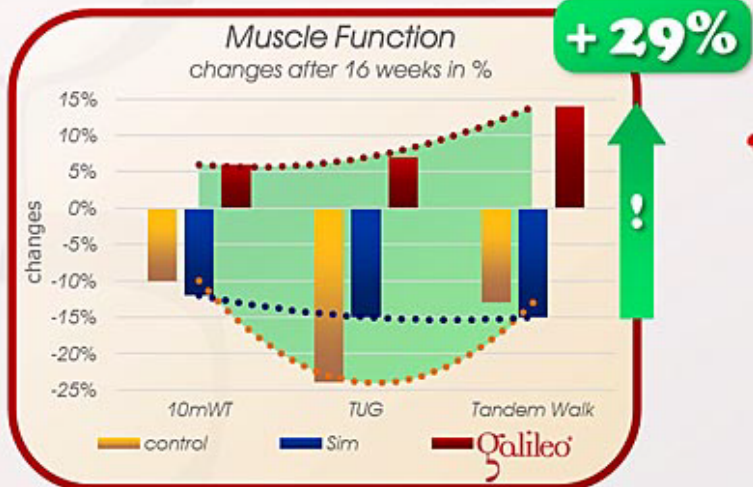
Galileo Research Fact Sheet #170: Can Galileo Therapy increase balance and muscle function also in frail elderly?




Can Galileo Therapy increase balance and muscle function also in frail elderly ?

The answer is: Yes

This study investigated the effects of Galileo Therapy on muscle function and balance in frail elderly (age 74-90). Three groups: Control without intervention, Simulation (identical exercises without Galileo), Galileo group (26Hz, pos. 1-2, 20° squat, 5-10x 1min., 12 weeks, 3/week). The Galileo group showed significant functional improvements of up to +14% while the other groups showed decrease in all parameters of up to -24%.



Test	Control	Sim	Galileo
10mWT	-10%	-12%	+6%
TUG	-22%	-18%	+7%
Tandem Walk	-18%	-15%	+14%



Wadsworth D, Lark S: Effects of Whole Body Vibration Training on the Physical Function of the Frail Elderly: an open, randomised control trial. Arch Phys Med Rehabil, 101(7):1111-1119, 2020; PMID: 32145279, DOI: 10.1016/j.apmr.2020.05.005

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Therapy: Balance, Geriatrics, Frailty
www.galileo-therapy.com

This study investigated the effects of Galileo Therapy on muscle function and balance in frail elderly (age: 74-90). Three different groups were compared: a control group without any intervention, the Galileo group and a simulation group receiving identical exercises as the Galileo group but without vibration. The Galileo group received over a period of 16 weeks, 3 times per week, 5 to 10 times 1 minute Galileo Therapy with 1 minute breaks (20° slight squat, position 1-2, 26Hz).

The results showed only for the Galileo Group a significant increase in the tested muscle function parameters like +6% walking distance (10 minutes walking test, 10mWT), +7% performance in the timed up and go test (TUG) and +14% in tandem walk test (dynamic balance). Considering that all parameters significantly decreased at least the same or even multiples of this amount in both control groups - which means that in the observation period both control groups massively lost muscle function - this shows how effective Galileo Therapy can be used especially also in the frail elderly.

These results are in line with other Galileo studies for example targeting improving bone mass (#GRFS48, #GRFS156, #GRFS76), muscle power/performance (#GRFS26, #GRFS55), decrease fall risk (#GRFS53) or balance & gate parameter (#GRFS49). All these studies showed the effectiveness and at the same time the safety of Galileo Therapy especially in the elderly – after all that was the original age-group the Galileo inventor Hans Schiebel developed the Galileo in 1996.

Therapy - Balance, Geriatrics, Frailty
 #GRFS34 #GRFS