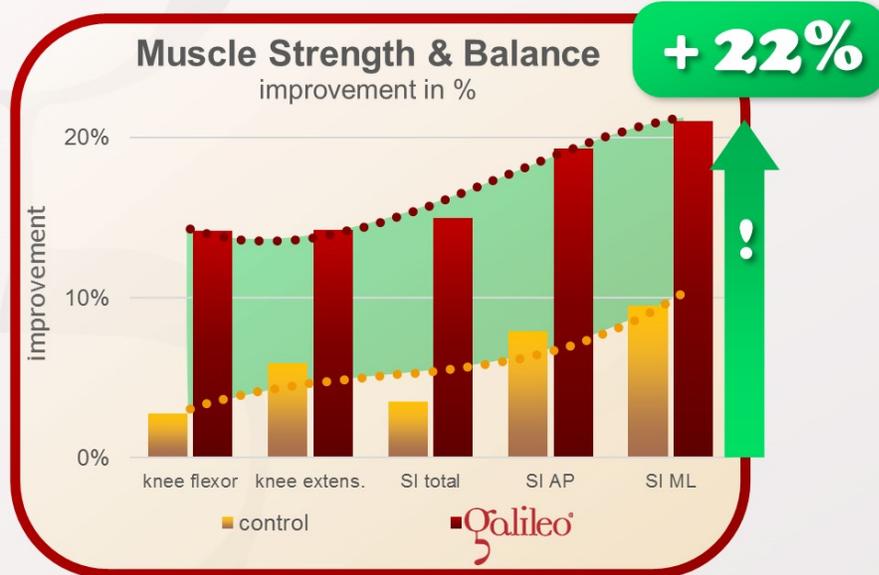


Can Galileo Training improve muscle strength and balance in Down Syndrome ?

The answer is: YES

This study investigated the effects of 6 months of Galileo Training in Patients with down syndrome (age 8-9) on muscle strength and balance (25-30Hz, 10x30-60 sec., pos. 2, 3/week, knees slightly flexed). Both groups received 3/week 60 minutes physio therapy (stretching, strength training, balance). The Galileo group showed highly significantly higher effects on muscle strength of +14% and balance of up to +22%.



Eid MA: Effect of Whole-Body Vibration Training on Standing Balance and Muscle Strength in Children with Down Syndrome.; Am J Phys Med Rehabil, 94(8):633-43, 2015; PMID: 25299536; GID: 3642

This study as many others showed the efficiency and effectiveness of Galileo Training. In this case we study children with Down Syndrome.

Both groups of this study received over a period of 6 months 3 times per week 60 minutes of physio therapy targeting muscle strength, flexibility and balance,

The Galileo group received additional 5 to 10 minutes Galileo Training (25-30Hz, position 2, legs slightly flexed).

Even though the Galileo group only received about 25% more therapy their results were highly significantly higher with 2.5 to 4 times higher effects (muscle strength +14%, balance up to +22%).

This is another example of the efficiency and effectiveness of Galileo Training.



[Am J Phys Med Rehabil](#). 2015 Aug;94(8):633-43. doi: 10.1097/PHM.0000000000000224.

Effect of Whole-Body Vibration Training on Standing Balance and Muscle Strength in Children with Down Syndrome.

[Eid MA](#)¹.

Abstract

OBJECTIVE:

The purpose of this study was to determine whether whole-body vibration training could improve standing balance and muscle strength in children with Down syndrome.

DESIGN:

This study was a randomized controlled trial studying 30 children (8-10 yrs old) with Down syndrome. They were assigned randomly using sealed envelopes, with 15 children allocated to the control group (9 boys, 6 girls) and another 15 children allocated to the study group (8 boys, 7 girls). The control group received a designed physical therapy program, whereas the study group received the same program given to the control group in addition to whole-body vibration training. Both groups received the treatment sessions three times per week for 6 successive months. Measurement of stability indices by using the Biodex Stability System as well as muscle strength of the knee flexors and extensors by using a handheld dynamometer was done before and after the 6 mos of the treatment program.

RESULTS:

Each group demonstrated significant improvements in stability indices and muscle strength after treatment ($P < 0.05$), with significantly greater improvements seen in the study group when compared with the control group ($P < 0.05$).

CONCLUSIONS:

Whole-body vibration may be a useful intervention modality to improve balance and muscle strength in children with Down syndrome.

PMID:25299536