While for this special application the Galileo Mano Dumbbell was designed, nevertheless this research group from Korea showed even a Galileo Delta tilt-table can be used effectively to reduce spasticity and improve function in hand and shoulder of a Stroke patients.

And this study is also a nice example how Galileo Training should be integrated in a therapy concept: The combination of Galileo Training and additional functional training showed the best results. Why?

The answer is quite obvious: Galileo Training is very effective in (re-)establishing neuromuscular functions and in reducing and controlling spasticity. Additionally, the high repetition training provides many more muscle contractions in a short period of time increasing plasticity and neural communication.

However, these new functions need to be incorporated into every-day living and this can be done by functional training after Galileo-Training.

As mentioned in #GRFS30 and #GRFS15 only if the neuromuscular functions established by Galileo are used in everyday movements they will become long-term functional changes.
Short-Term Effects of Whole-Body Vibration Combined with Task-Related Training on Upper Extremity Function, Spasticity, and Grip Strength in Subjects with Poststroke Hemiplegia: A Pilot Randomized Controlled Trial.
Lee JS¹, Kim CY, Kim HD.

Abstract

OBJECTIVE:
The aim of this study was to determine the effect of whole-body vibration training combined with task-related training on arm function, spasticity, and grip strength in subjects with poststroke hemiplegia.

DESIGN:
Forty-five subjects with post-stroke were randomly allocated to 3 groups, each with 15 subjects as follows: control group, whole-body vibration group, and whole-body vibration plus task-related training group. Outcome was evaluated by clinical evaluation and measurements of the grip strength before and 4 weeks after intervention.

RESULTS:
Our results show that there was a significantly greater increase in the Fugl-Meyer scale, maximal grip strength of the affected hand, and grip strength normalized to the less affected hand in subjects undergoing the whole-body vibration training compared with the control group after the test. Furthermore, there was a significantly greater increase in the Wolf motor function test and a decrease in the modified Ashworth spasticity total scores in subjects who underwent whole-body vibration plus task-related training compared with those in the other 2 groups after the test.

CONCLUSIONS:
The findings indicate that the use of whole-body vibration training combined with task-related training has more benefits on the improvement of arm function, spasticity, and maximal grip strength than conventional upper limb training alone or with whole-body vibration in people with post-stroke hemiplegia.

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