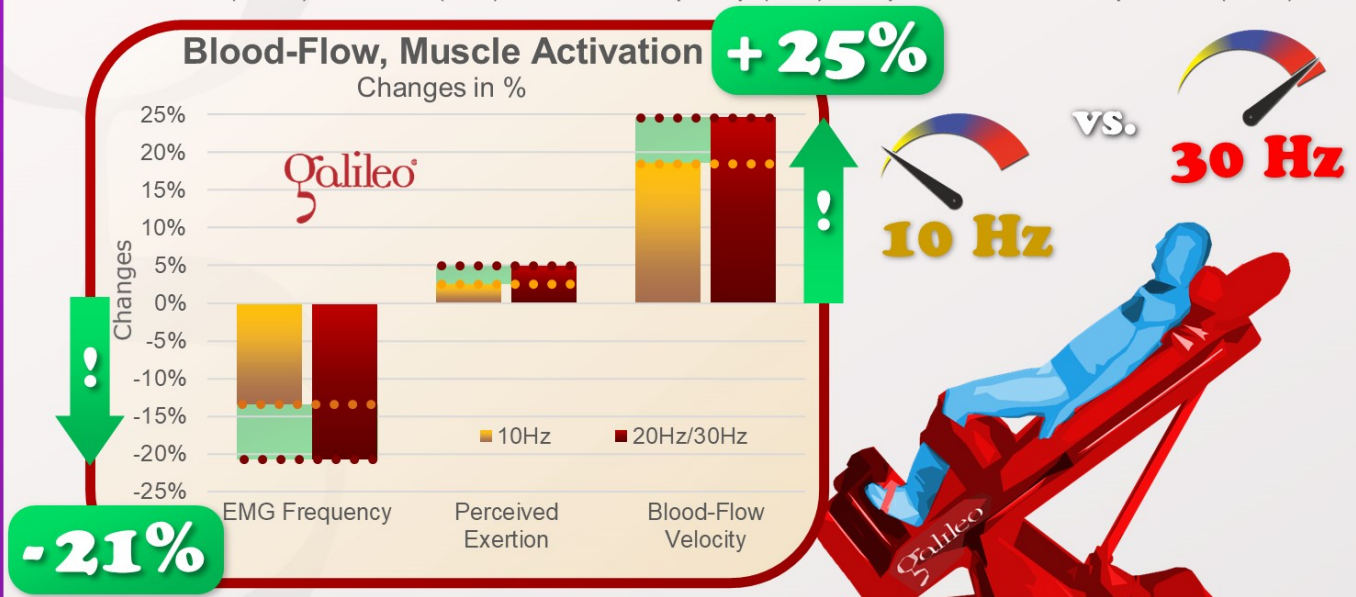


The answer is: YES

This study investigated the immediate effects of Galileo Therapy with different frequencies and durations on muscle activation (EMG) and blood-flow (Galileo Delta, 45° tilt, 60° knee flexion, pos. 2.5, 10, 20, 30Hz, 1*3 vs. 3*1 min., 6 session/2 weeks). High frequencies (30Hz) during Galileo Delta Therapy showed higher effects on blood-flow (+33%), exertion (96%) and EMG Frequency (55%) compared to lower frequencies (10Hz).



Herrero AJ, Martin J, Martin T, Garcia-Lopez D, Garatachea N, Jimenez B, Marin PJ: Whole-body vibration alters blood flow velocity and neuromuscular activity in Friedreich's ataxia.; Clin Physiol Funct Imaging, 31(2):139-44, 2011; PMID: 21078065; GID: 2735

This study investigated the immediate effects of Galileo Therapy using the Galileo Delta tilt-table on blood-flow and muscle activation (EMG) in patients with Friedrich's Ataxia.

The study was set-up as a randomized crossover study investigating the influences of frequency (10Hz, 20Hz, 30Hz) and duration (3*1minute with 1 minute rest in-between vs. 1*3 minutes) (45° tilt angle, 60° knee flexion, position 2.5).

As in other Galileo studies for example in spinal cord injury (#GRFS116, #GRFS63) this study shows also an increase of blood-flow with increasing frequency.

While the EMG amplitude was increasing with frequency for healthy subjects standing on a Galileo device (#GRFS3), this study only showed a frequency dependency in EMG frequency (the observed decrease in EMG frequency is usually linked to stronger exhaustion or to more intense exercise which activates larger motoric units).

(but a reason for the lack of increase observed EMG amplitude might have been the used analysis approach #GRFS101, #GRFS95 which is missing out a major frequency spectrum of the signal).

The observed effects were larger for a longer application (3 minutes) compared to 3 short sets (3*1 minute).



Considering the effects of Galileo Delta tilt-table therapy on cortical activity in chronic stroke patients as reported by #GRFS67, therapy on the Galileo Delta offers a very versatile application especially for neuromuscular conditions.

[Clin Physiol Funct Imaging](#). 2011 Mar;31(2):139-44. doi: 10.1111/j.1475-097X.2010.00992.x. Epub 2010 Nov 15.

Whole-body vibration alters blood flow velocity and neuromuscular activity in Friedreich's ataxia.

[Herrero AJ](#)¹, [Martín J](#), [Martín T](#), [García-López D](#), [Garatachea N](#), [Jiménez B](#), [Marín PJ](#).

The purpose of this study was to investigate the effects of whole-body vibration (WBV) on blood flow velocity and muscular activity after different vibration protocols in Friedreich's ataxia (FA) patients.

After two familiarization sessions ten patients received six 3 min WBV treatments depending on a combination of frequency (10, 20 or 30 Hz) and protocol (constant or fragmented).

Femoral artery blood flow velocity, vastus lateralis (VL) and vastus medialis (VM) electromyography (EMG), and rate of perceived exertion were registered. Peak blood velocity was increased with respect to basal values after 1, 2 and 3 min of WBV (14.8%, 18.8% and 19.7%, respectively, $P < 0.001$).

Likewise, mean blood velocity was increased with respect to basal values after 1, 2 and 3 min of WBV (17.3%, 19.4% and 16.6%, respectively, $P < 0.001$).

EMG amplitude of VL and VM was increased (39% and 23%, respectively, $P < 0.05$) and EMG frequencies decreased during the application of WBV.

The results of this study suggest that higher frequencies (30 Hz) produce a greater increase in blood flow velocity and rate of perceived exertion.

WBV is an effective method to increase blood flow and to activate muscle mass in patients with Friedreich's ataxia, and could therefore be considered to be incorporated in rehabilitation programs of this collective.

PMID: 21078065 DOI: [10.1111/j.1475-097X.2010.00992.x](https://doi.org/10.1111/j.1475-097X.2010.00992.x)