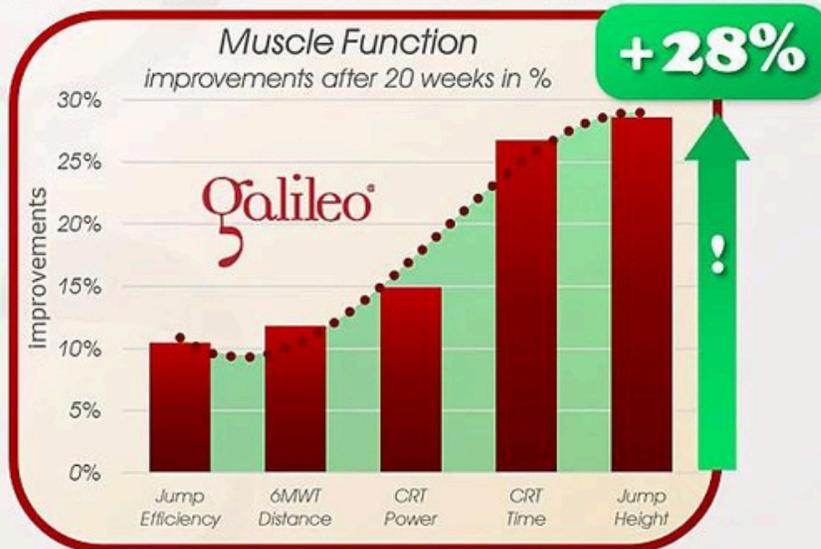


The answer is: YES

This study investigated effects of Galileo Therapy (3x3 min., 20Hz, pos. 2-3, 4/week, 20 weeks) in adolescents with Down Syndrome (age 10-19). The results after 20 weeks showed significant improvements in muscle function in endurance during 6MWT (distance: +12%) as well as movement efficiency (jump: +11%) or power in chair rise test (CRT, power: +15%, duration: -25%) and jump for maximum height (jumping height: +28%).



Silmara Gusso, Craig F Munns, Janene B Biggs, Paul L Hofman et.al: The Effects of 20 Weeks of Side-Alternating Vibration Therapy on Physical Function, Bone and Muscle Health in Adolescents With Down Syndrome; Phys Occup Ther Pediatr, 28:1-12, 2020; PMID: 32345083; GID: 5121

This Study investigates the effects of Galileo Therapy on muscle function in children and adolescents (Age 10-19) with Down Syndrome (Trisomy 21). Outcome parameters were 6 minutes walking distance (6MWT), chair rise test (CRT) as well as jumping tests. The selected parameters document physical performance, especially in down syndrome an import parameter since a lack of physical activity and the resulting tendency to over weight is a typical symptom – an effective and efficient (simple to apply & not time-consuming) is therefore an essential therapy component. The participants received over a period of 20 weeks 4 times per week 3 times 3 minutes Galileo Therapy with 20Hz at Position 2-3.

The results showed a significant increase of walking distance (+12%) as well as in chair rise performance (Power: +15%, Time: reduction by -25%) and a significant increase in jumping performance with increased jump height by 28% and at the same time an increase in movement efficiency (less force investment at higher outcome in power/jumping height) by +11%. These results are of special interest, since the used training frequency of 20Hz targets coordination, relaxation and stretching – for the aimed increase of muscle power much higher frequencies (26-33Hz) as well as a deeper squat would have been much more effective (#GRFS70), in addition training duration could have been further decreased. . Nevertheless, this study proves the high potential of Galileo Therapy especially in Down Syndrome.