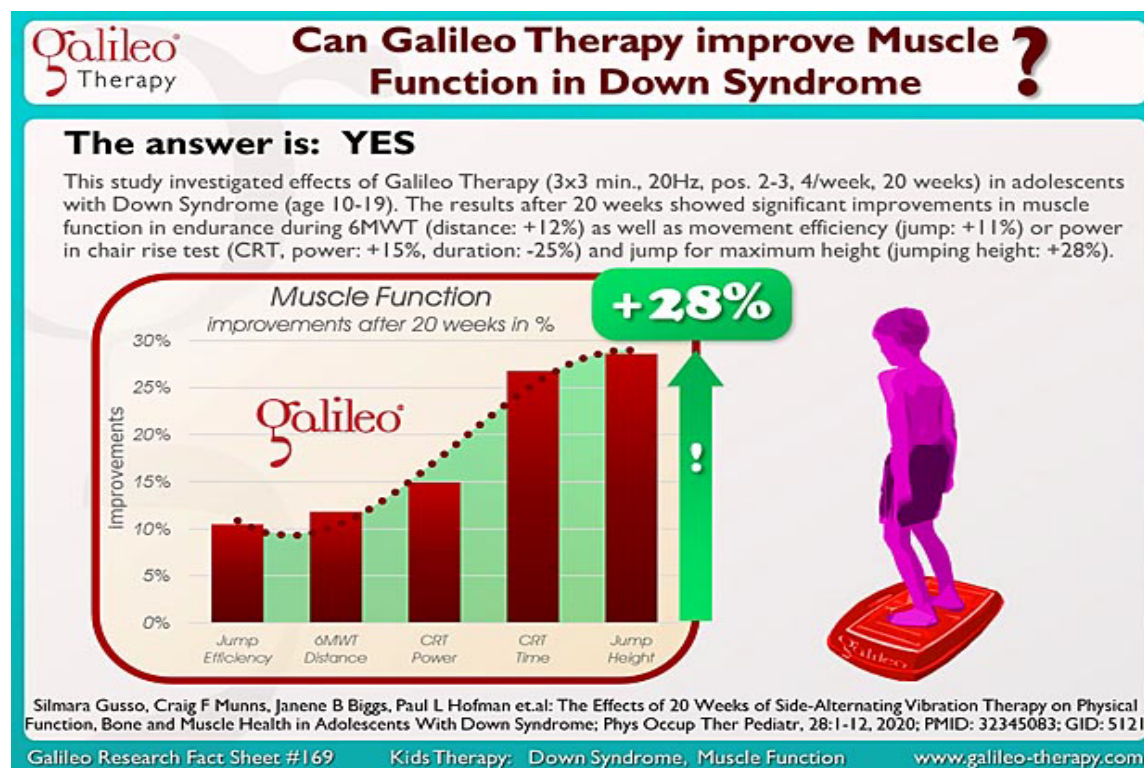


Galileo Research Fact Sheet #169: Can Galileo Therapy improve Muscle Function in Down Syndrome?



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 zo 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, in addition training duration could have been further decreased. Nevertheless, this study proves the high potential of Galileo Therapy especially in Down Syndrome.

Kids Therapy - Down Syndrome, Muscle Function
#GRFS169 #GRFS