

## Galileo Research Fact Sheet #140: Can Galileo Therapy increase muscle force and decrease fall-risk in young obese?

**Galileo**  
Therapy

### Can Galileo Therapy increase muscle force and decrease fall-risk in young obese ?

**The answer is: YES**

This study investigated the effects of Galileo Therapy on muscle force and fall-risk in young obese patients (26Hz, pos. 2, 20° squat, 5x60s., 3/week, 6 weeks). The control group performed identical exercises without Galileo. The Galileo group showed significantly higher effects than the control group for example on muscle strength (extensor torque increase by +6%) as well as reduction of fall-risk and fall-rate by -68%

Measure	Control	Galileo
Extensor Torque	-5%	+6%
Fall Rate	-30%	-68%
Trunk Angle	-25%	-87%

Yang F, Munoz J, Han LZ, Yang F: Effects of vibration training in reducing risk of slip-related falls among young adults with obesity; J Biomech, 57:87-93; PMID: 28431747; GID: 4433

Galileo Research Fact Sheet #140      Therapy: Obesity, Fall-Risk      www.galileo-therapy.com

This study compared the effects of Galileo Therapy on muscle force and fall-risk in young obese (age 23 to 33).

Both groups receive a short training session (only 5 sets of 60 seconds at 26Hz, 20° static squat at position 2) 3 times per week over a period of 6 weeks. The control group performed identical exercises but without side-alternating Galileo vibration.

Fall-risk was assessed by a special treadmill which can stop immediately to provoke falls.

The Galileo group showed significant improvements in muscle force (muscle torque) by +6% and a significant reduction of fall-risk and fall rate by -68%.

These results show once more that Galileo Therapy can be used very effectively to increase the compromised muscle function and power in obese in a short time and reduce fall risk at the same time.

Therapy - Obesity, Fall-Risk  
#GRFS140