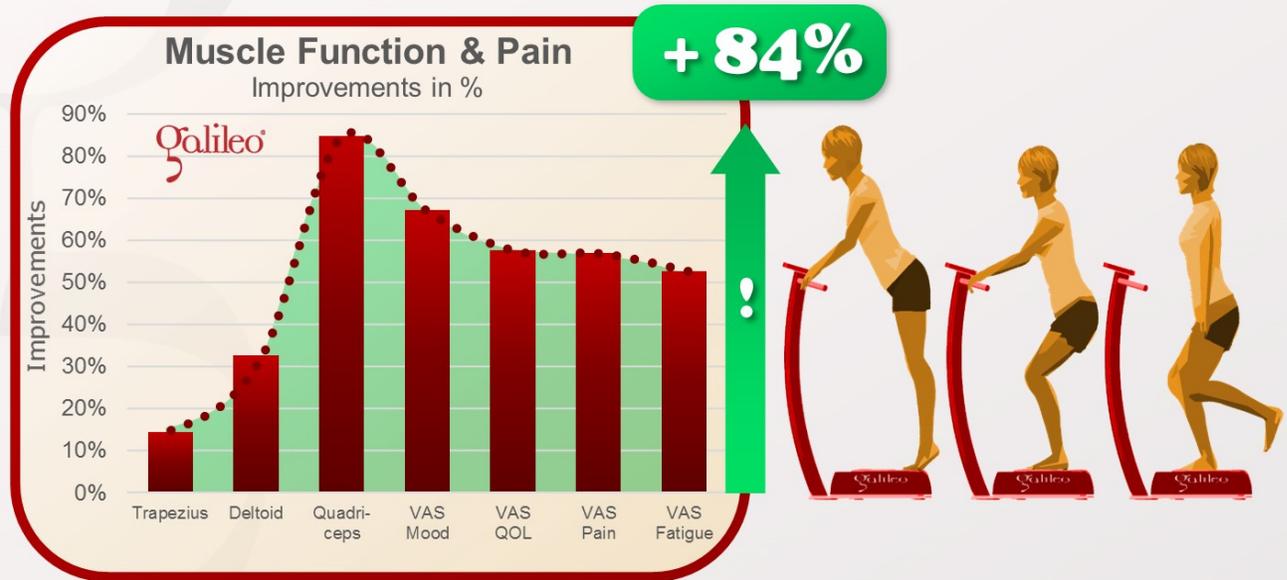




# Can Galileo Training improve muscle function and pain in chronic fatigue syndrome patients?

## The answer is: YES

This study investigated the effects of 6 months of Galileo Training in chronic fatigue syndrome (CFS) patients on muscle function and pain (8-22Hz, pos. 4, 4\*4 min., 3/week, 4 exercises: tip-toe, squat, 1-leg squat). Galileo Training showed significant improvement in muscle function of upper body and legs of up to 84% as well as in visual analog scale (VAS) score for mood, pain, fatigue and quality of life of up to 67%.



Saggini R, Vecchiet J, Iezzi S, Racciatti D, Affaitati G, Bellomo RG, Pizzigallo E: Submaximal aerobic exercise with mechanical vibrations improves the functional status of patients with chronic fatigue syndrome; *Eura Medicophys.*, 42(2):97-102, 2006; PMID: 16767057; PMID: 298

Galileo Research Fact Sheet #71

Therapy: CFS (Chronic Fatigue Syndrome)

www.galileo-training.com

This study investigates the effects of 6 months of intensive Galileo Training (18-22 Hz, pos. 4, 3/week, 4 exercises: tip-toe, half squat, one legged half squat) in patients with chronic fatigue syndrome (CFS).

Galileo Training showed significant improvements of the muscle functions of the legs (+84%) but also the upper body (+15-33%) and in subjective parameters (VAS-score) like mood, pain, endurance and quality of life (55-68%).

These typical effects of Galileo Training can also be observed e.g. in COPD or in Aging in General. The relevant effect of Galileo Training is the essential improvement of muscle power, because the muscle power is compromised by the simple fact of disease related disuse.

Even more effective would have been to use smaller amplitudes (Pos.2) but higher frequencies (26-30Hz) because frequency is more efficient in muscle activation [#GRFS3](#).



[Eura Medicophys.](#) 2006 Jun;42(2):97-102.

## **Submaximal aerobic exercise with mechanical vibrations improves the functional status of patients with chronic fatigue syndrome.**

Saggini R<sup>1</sup>, Vecchiet J, Iezzi S, Racciatti D, Affaitati G, Bellomo RG, Pizzigallo E.

### **Abstract**

#### **AIM:**

Chronic fatigue syndrome (CFS) is an illness characterised by disabling fatigue of uncertain aetiology and other nonspecific symptoms. Typically CFS patients complain of a severe fatigue made worse by exercise, with a consistent reduction of working activity. A physical deconditioning could explain CFS features as well as a neuromuscular dysfunction, of central or peripheric origin.

#### **METHODS:**

Ten CFS patients were enrolled in a protocol of a rehabilitative treatment over a six-month period: they underwent a submaximal and predominantly aerobic exercise with a reduced O<sub>2</sub> consumption using a Galileo 2000 system that provides mechanical vibrations characterised by sinusoid vertical sollecitations. Before and after such treatment, all patients underwent a pressure pain thresholds profile, an evaluation of physical and psychosocial parameters using the visual analogue scale (VAS) of Scott-Huskisson, and a muscle performance analysis by the CIBEX 6000 dynamometer.

#### **RESULTS:**

After the six-month period of study there was an overall improvement of the above described parameters as compared to the basal determinations.

#### **CONCLUSION:**

We conclude that the rehabilitative exertion provides an useful treatment for CFS patients particularly to realize an effective training of the explosive strength.

PMID:16767057