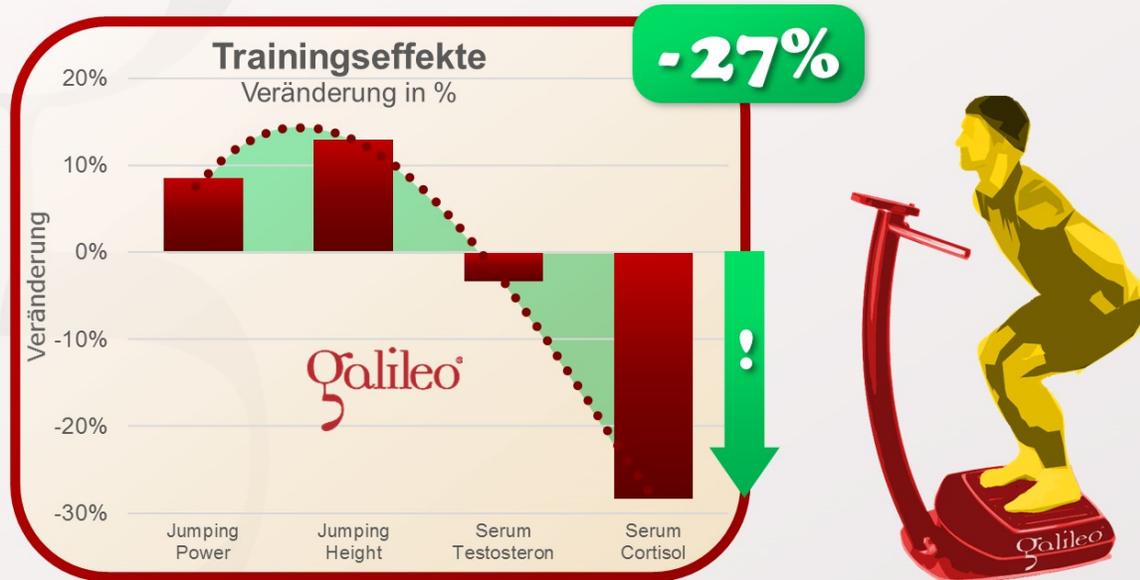


Can 7 minutes Galileo Training change the hormonal profile ?

The answer is: YES

This study tested the effects of just 7 times 60 seconds of intensive Galileo Training on jumping performance and the hormonal profile (7 * 60 sec., 30Hz, pos. 5, 90° squat). The Galileo Training increased the peak jumping height and peak jumping power in repeated jumping by up to 13% and decreased Testosterone and Cortisol by up to 27% - results which are comparable to heavy resistive training.



Bosco C, Colli R, Cardinale M, Tarpela O, Bonifazi M: The Effect of Whole-Body Vibration on Mechanical Behaviour of Skeletal Muscle and Hormonal Profile; Musculo-Skeletal Interactions, 2:67-76, 1999; GID: 211

Another very early study of Cardinale and Bosco done with Galileo Devices back in 1999.

This study investigated the effect of just 7 times 60 seconds intensive Galileo Training at 30Hz, position 5 and 90° squat on jumping performance and the hormonal profile.

Galileo Training showed increase peak jumping height and peak jumping power in repeated jumping of up to 13% and a reduction of Testosterone and Cortisol of up to 27%.

Results which are equivalent to heavy resistance training. Another proof for the efficiency of the deep squat on Galileo.



Abstract of the Ph.D. Thesis 2002

The effects of vibration on human performance and hormonal profile

By Marco Cardinale

With reference to the current literature, the results of this thesis have confirmed:

1. Vibration exercise can lead to an increase in vertical jumping ability even in well-trained subjects
2. Vibration exercise can lead to an increase in mechanical power of lower limbs
3. Vibration exercise improves force-generating capacity of human skeletal muscles
4. Vibration exercise determines specific hormonal responses based upon the treatment protocol
5. Vibration exercise can improve neuromuscular performance and affect hormonal production based upon the duration and the characteristics of the vibration stimulus

Conclusions

These findings suggest that vibration could represent an effective exercise intervention for enhancing neuromuscular performance in athletes. However, it seems appropriate to consider other applications to the general population. We are convinced that vibration could be an effective exercise intervention for reducing the effects of aging on musculoskeletal structures.

The potential influence of vibration on hormonal activity also opens interesting perspectives for its application in training and rehabilitation programs for different pathologies. Due to the enormous potentials of vibration exercise treatments, it is also important to study the effects of long-term vibration exercise programs on different physiological parameters and define safe exercise protocols based upon individual responses to vibration stimuli.

Ultimately, the effects of vibration exercise on musculoskeletal interactions need to be analyzed, to verify the effectiveness of this form of exercise on bone remodelling, including the potential effects on osteoporosis.