



Power Plate®

Basic Fitness Academy Training

Research & Studies



Contents

1. Introduction
2. Bio Mechanics
3. Physiology
4. Application and Effects
5. Performance & Guidelines
6. Training
- 7. Research & Studies**



Studies and Research I

Title: Strength increase after Whole Body Vibration compared with resistance training

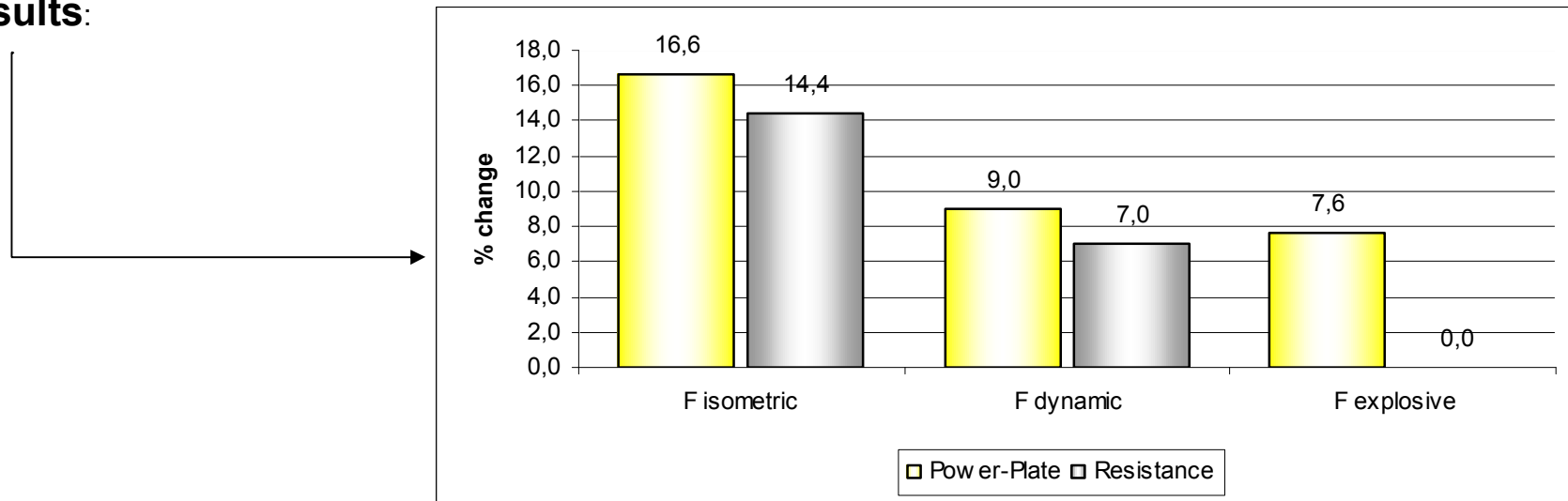
Published: „Medicine and Science in Sports and Exercise“, 2003

Location: University of Leuven

Duration: 12 weeks

Subjects: Untrained female

Results:





Research & Studies

Studies and Research II

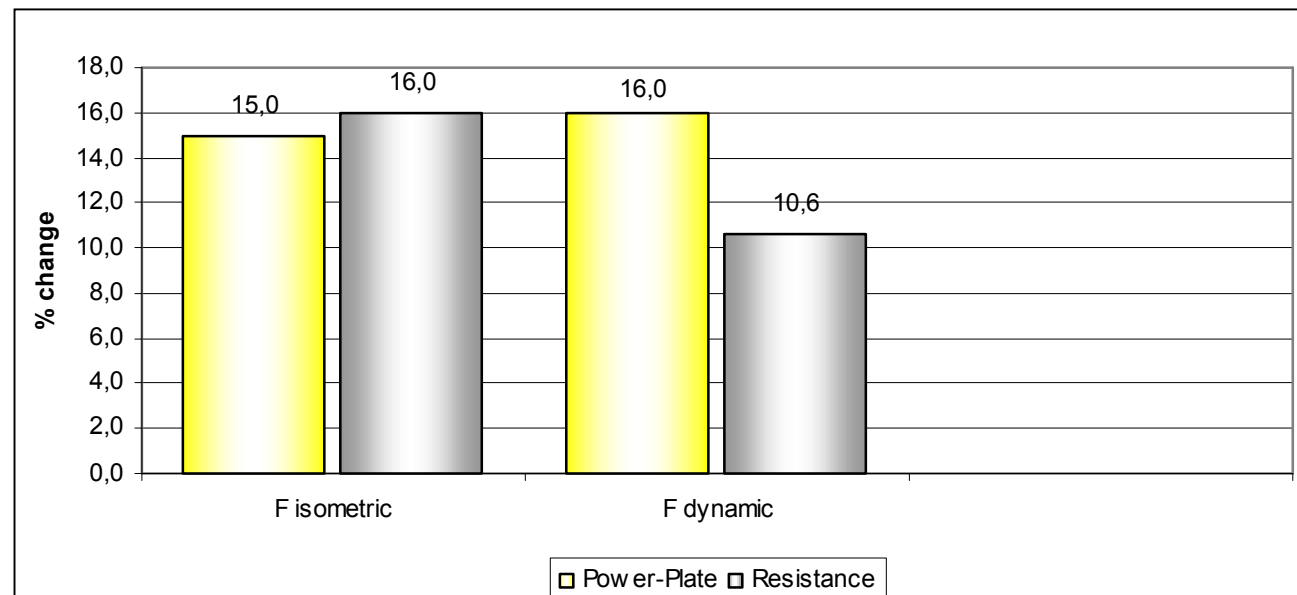
Title: Whole-Body-Vibration Training Increases Knee-Extension Strength and Speed of Movement in Older Women

Published: „Journal of American Geriatrics Society“, 2003

Location: University of Leuven

Duration: 24 weeks

Results:





Research & Studies

Studies and Research III

Title: Impact of vibration training versus impact of conventional training

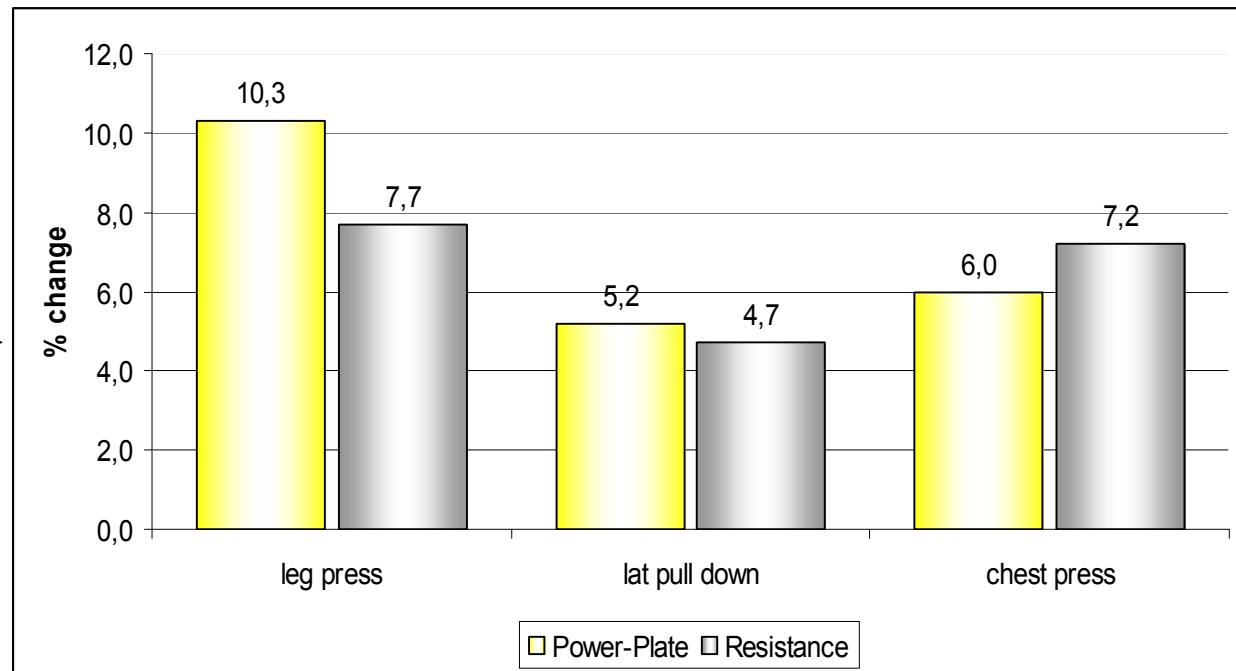
Location: University of Bayreuth - Germany, 2001-2002, unpublished

Subjects: Sports students

Duration: 9 weeks

Results:

Power-Plate is at least
equivalent
to conventional training!





Research & Studies

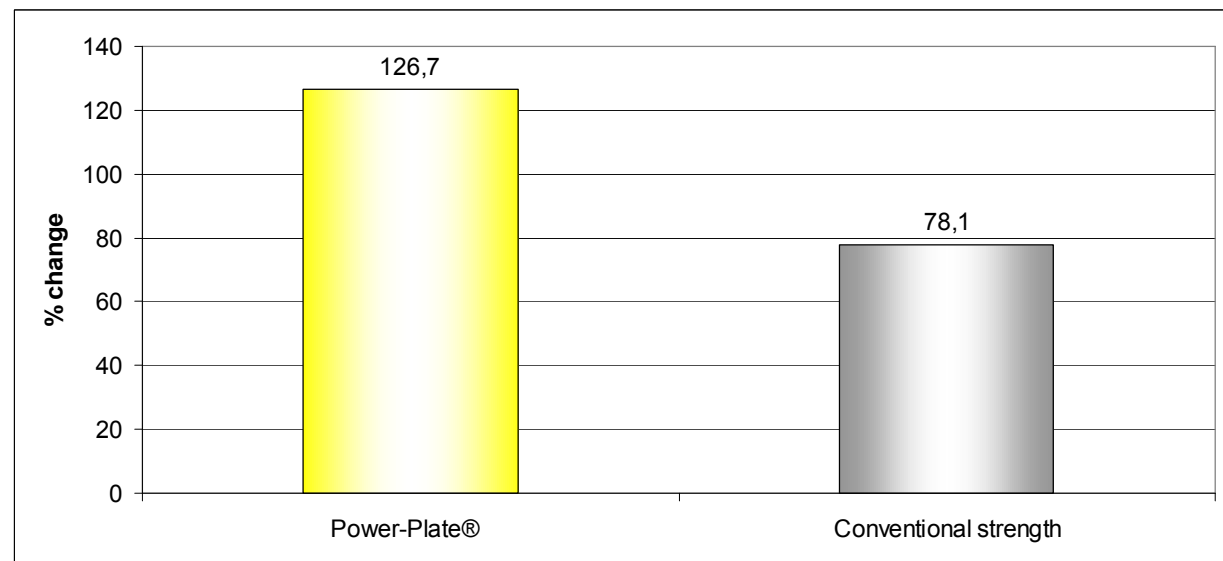
Studies and Research IV

Title: Impact of Vibration training on Strength in Rehabilitation

Location: Academy of Physiotherapy, Graz District Hospital, 2003, unpublished

Duration: 5 weeks

Results:





Studies and Research V

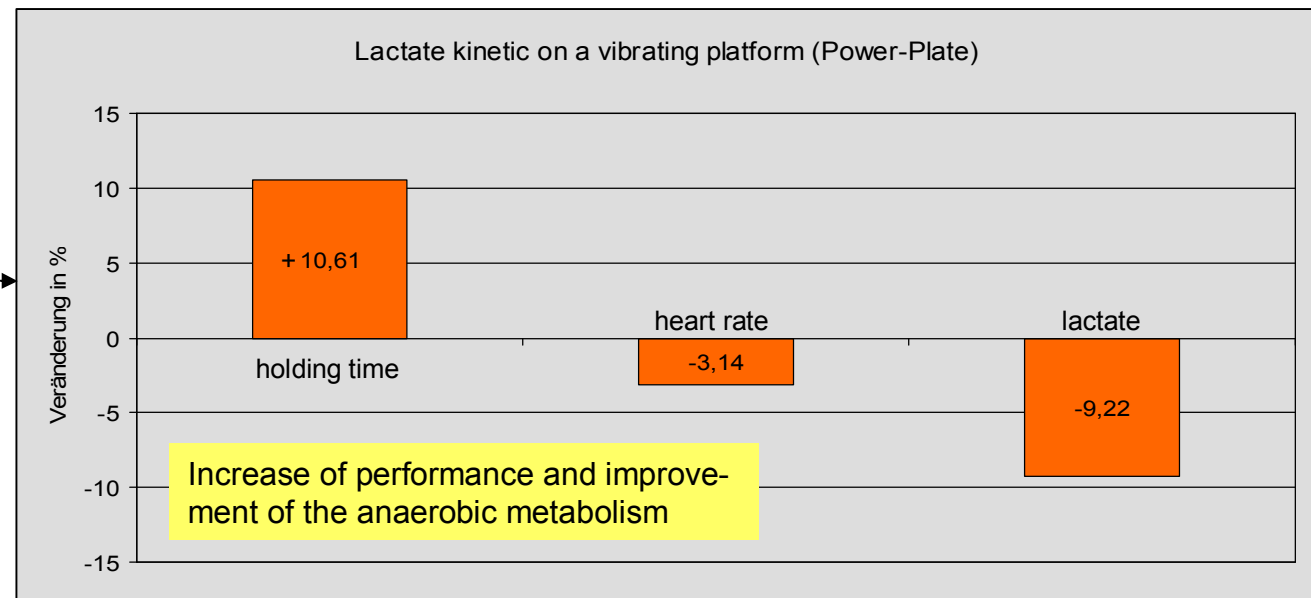
Title: Impact of Power-Plate on Lactate

Location: Medical University Clinic of Tübingen, Germany, 2005

Subjects: trained but not-vibration accustomed middle-aged males

Duration: 8 weeks

Results:





Research & Studies

Studies and Research VI

Title: Effect of vibratory stimulation training on maximal force and flexibility

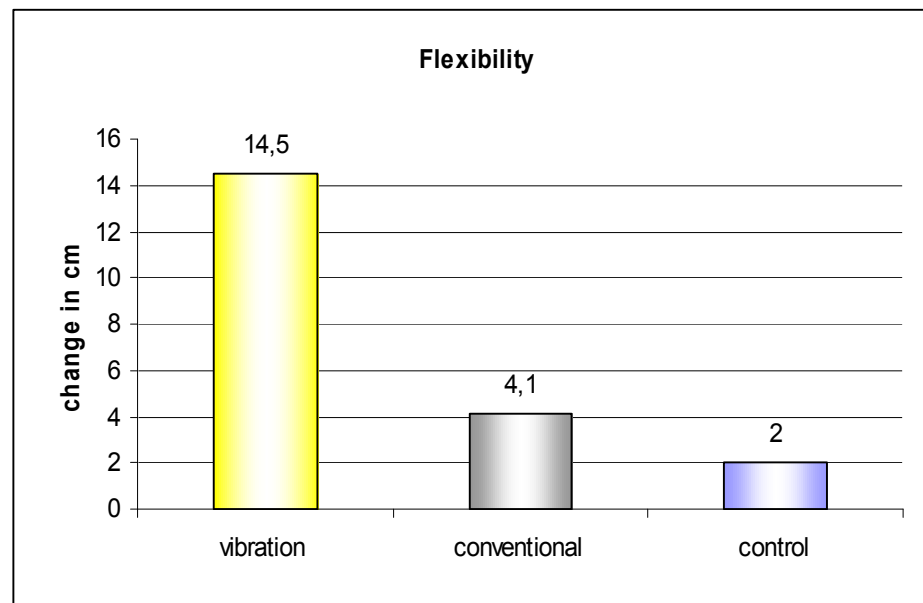
Published: „Journal of Sports Science”, 1994

Location: Wingate Institute, Israel

Duration: 3 times a week for 3 weeks

Additional: heel-to-heel length in the two-leg split across; flex-and-reach test for body flexion

Results:





Studies and Research VII

Title: Influence of vibrations on the bone density in healthy postmenopausal female

Published: „Journal of Bone & Mineral Research“, 2004

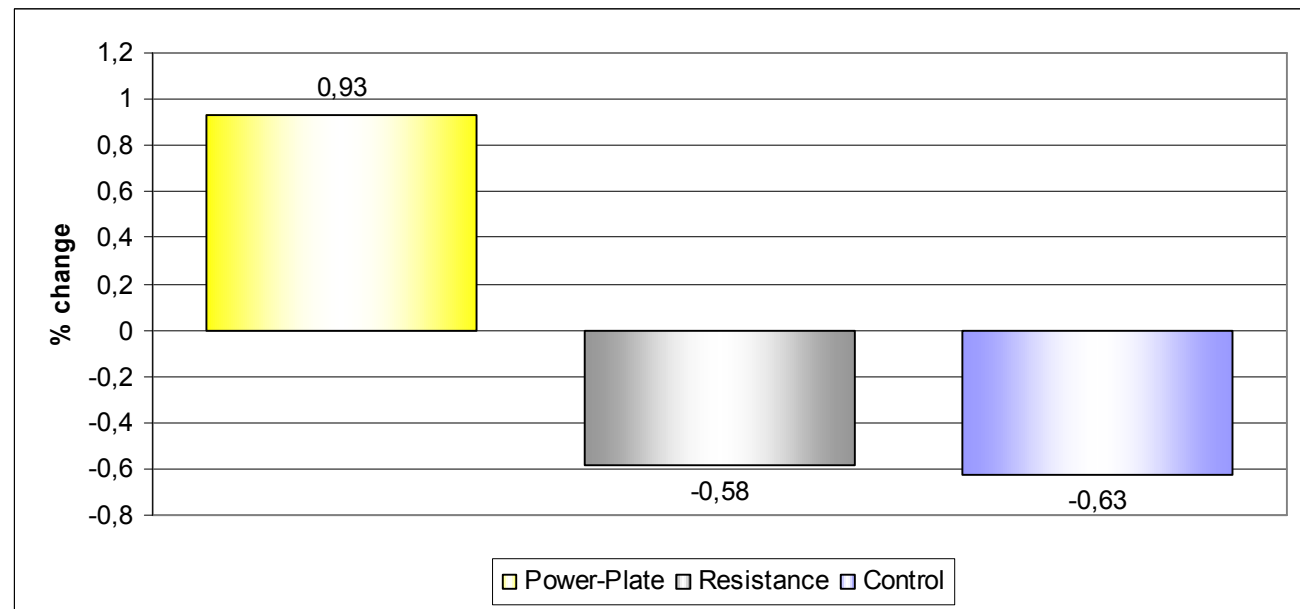
Location: University Center for Metabolic Bone Diseases, Leuven in Belgium

Duration: 24 weeks

Results:



Additional:
Increase of strength &
improvement of
postural control





Research & Studies

Studies and Research VIII

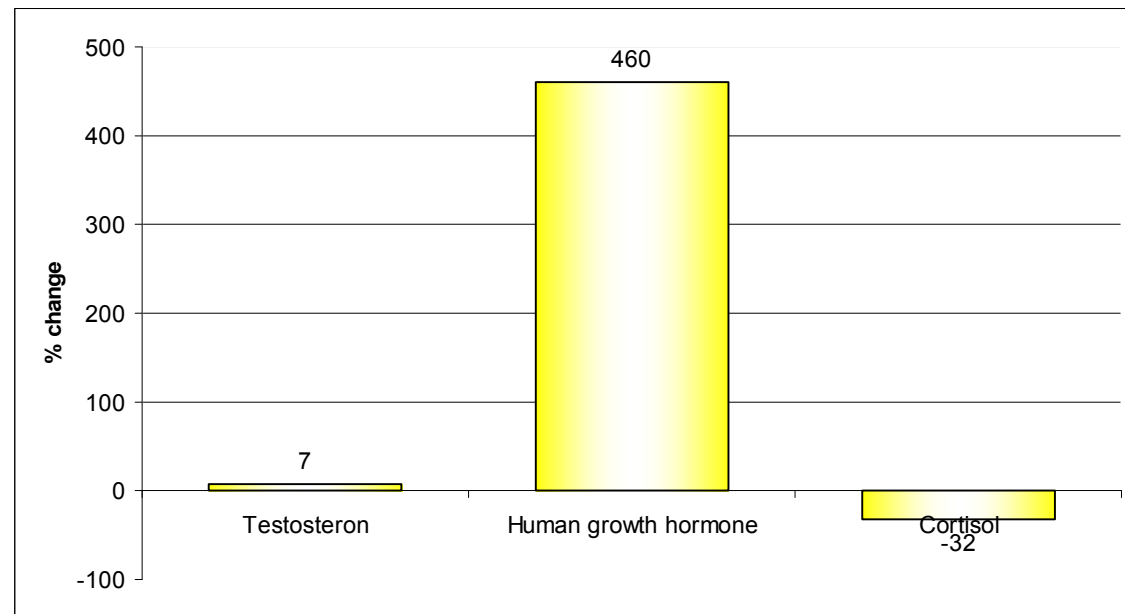
Title: Hormonal Responses to Whole-Body-Vibration in men

Published: European Journal of applied Physiology and occupational Physiology, 2000

Location: University of Rome

Subjects: Elite male athletes

Duration: 1 session





Studies and Research IX

Title: Treatment of Lower back pain with Whole Body Vibration

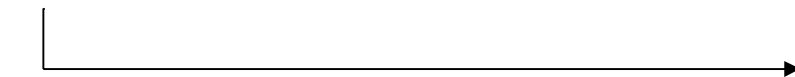
Published: Spine, 2002

Location: Institute for Physiology, Free University of Berlin

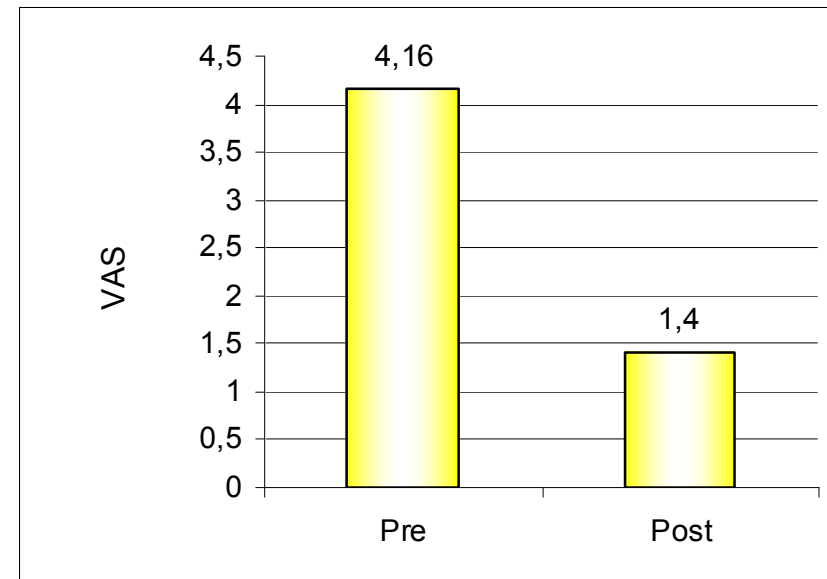
Subjects: Chronic lower back pain patients

Duration: 3 months

Results:



WBV leads to a **significant** reduction of pain sensation and pain related disability.





Research & Studies

Studies and Research X

Title: Whole-body vibration exercise leads to alterations in muscle blood volume

Published: Clinical Physiology, 2001

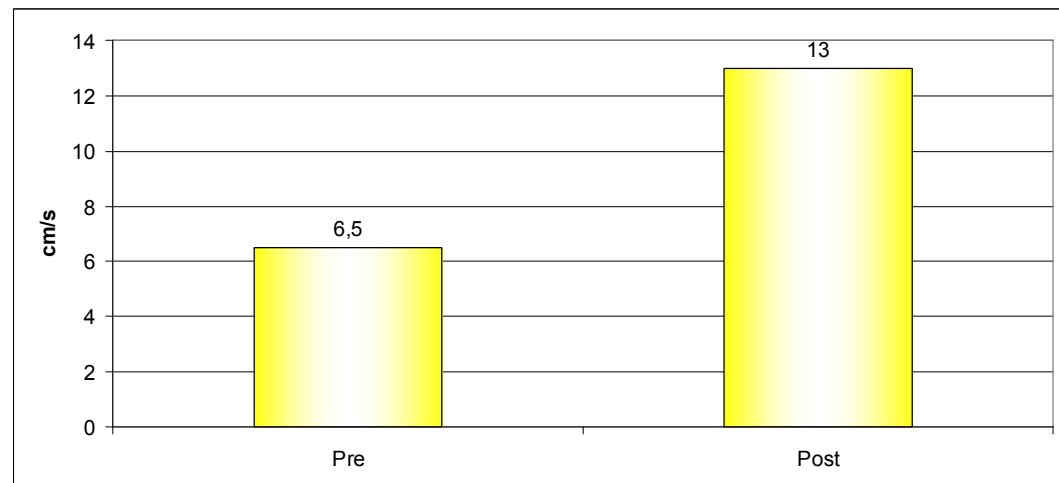
Location: Department of Physical Medicine and Rehabilitation, University of Vienna

Subjects: Healthy volunteers

Duration: 1 session of 9 minutes in total

Results:

Muscular blood circulation in calf and thigh **significantly** increased after exercise.





Studies and Research XI

Title: Influence of a six-month Power-Plate vibration training on the cellulite-grade

Location: Professional clinic for skin illnesses and allergology Sanaderm, Bad Mergentheim in Germany, 2003, unpublished

Subjects: Healthy females

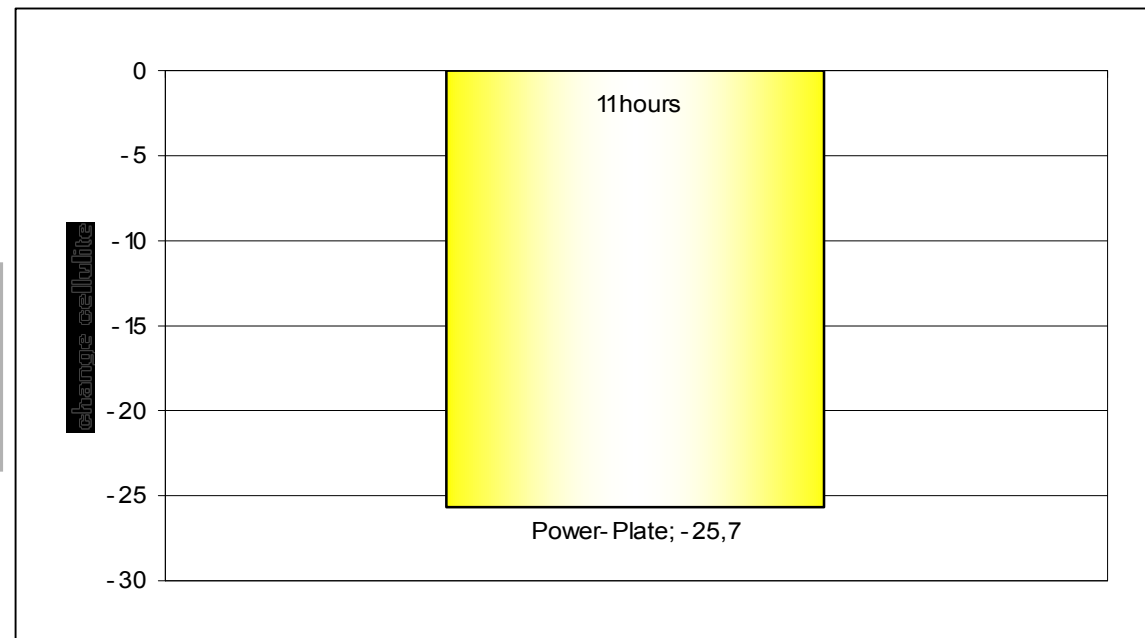
Duration: 24 weeks

Results:

Regression of the cellulite agreeing to one cellulite-grade with a time exposure of 11 hours in 6 months

Additional:

The extra effect of cardio-training is minimal!





Thank you.

