

# The New Vibe On Improving Strength and Flexibility

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Improving strength, core stability and flexibility can assist you to improve performance and reduce the risk of injury. But how do you make time for it when you are training for the three disciplines of triathlon? The VibroGym may be the answer you are looking for...



VibroGym is a worldwide advance in training that has been used in Europe and the USA since 1999. Originally based on research done by Russian Space Scientists to combat the effects of micro-gravity on cosmonauts, vibration training has been adapted to enhance sports performance and fitness.

#### HISTORY OF VIBRATION TRAINING

The potential of vibration training was initially uncovered by Professor Dr Biermann of the former German Democratic Republic, in 1960. Scientists from the Russian Space program adapted this research to assist cosmonauts maintain muscle tone and bone density, allowing them to stay in space for an unprecedented 420 days. At the same time American astronauts were forced to return to earth after only 120 days.

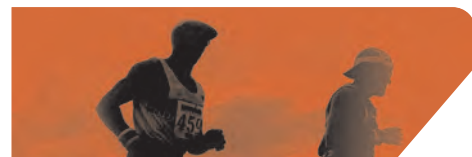
Using the theory of Whole Body Vibration, a Dutch Olympic trainer then developed the first version of the VibroGym to aid the 1984 Dutch volleyball team to win Olympic gold. International users of the VibroGym include the New York Mets, San Antonio Spurs, Anaheim Mighty Ducks, FC Barcelona, Arsenal and Chelsea Soccer teams.

The VibroGym can be used for improving strength, enhancing flexibility and improving recovery through the machine's massage function. Results are achieved with minimal stress on the joints and ligaments.

#### RESEARCH ON THE VIBROGYM

The benefits of the VibroGym are supported by many International clinical trials and research studies. Documented benefits include:

- Strength gains with less training time (49.8%)
- Decreases in body fat (11.2%)
- Increases in explosive power (8.5%)
- Increases in bone mass density
- Increases in repair and human growth hormones
- Improved recovery and reduced soreness post-training
- Decreases in cortisol (stress hormone)
- Increase in Basal Metabolic Rate (21%)
- Decreases in cellulite (25.68%)



The VibroGym was formally known as PowerPlate until a name change in March 2004. All research prior to this time refers to the European designed and built machine now known as VibroGym. Further research is being conducted in Australia and internationally and a large number of research articles on the VibroGym can be viewed at [www.vibrogym.com.au](http://www.vibrogym.com.au).

#### FITTING IN STRENGTH WORK WITH THE DEMANDS OF TRAINING

Improvements in strength on the VibroGym are achieved in much less time than traditional training due to increased levels of muscle activation achieved while exercising on the platform.

In traditional strength and power training the load on the muscles is determined by the weight lifted. On the VibroGym a specific frequency and amplitude of vibration is chosen and the accelerations of the platform loads the body.

The vibrations also stimulate a reflex contraction within the muscle which leads to almost 100 per cent muscle activation. This compares to conventional training where an average sportsperson will use as little as 45 per cent of muscle fibres and even elite athletes only achieve around 80 per cent activation.

The end result is that you can achieve the gains equivalent to a one and a half hour session in only 15 minutes. This means fast effective sessions that are easy to fit in with a full training schedule.

#### ENHANCING CORE STABILITY

Because the vibrations of the VibroGym are transmitted through the whole body the activation of the deep abdominal and back muscles are enhanced while performing exercises on the platform. Activation of these muscles is important for improving technique and preventing back pain and injury.

The enhanced activation of stability muscles on the VibroGym effectively allows you to achieve a number of desirable training effects in a single session.

#### FLEXIBILITY AND MASSAGE

Where VibroGym has a significant advantage over other fitness equipment is its versatility. While lower frequencies create strength gains, the higher frequency settings on the machine are used for massage and muscle relaxation.

By laying particular body parts across the machine you can stimulate rapid muscle relaxation and increased circulation. Research in the UK showed subjects exposed to intense downhill running had less delayed-onset muscle soreness and recovered muscle power faster when massage was performed on the VibroGym in the days post-exercise.

VibroGym also improves the effectiveness of stretching. Applying Whole-Body Vibration while stretching stimulates the muscle to relax by reflex and reduces the time required to increase range of motion.

#### OTHER USES OF THE VIBROGYM

VibroGym is an effective means to improve bone density, balance recovery and muscle strength. This can be particularly important for older athletes.

VibroGym is also an ideal way to increase energy expenditure, promoting fat loss and improving basal metabolic rate. Research at the well-known Sanaderm health clinic in Germany also found that when exercises and massage were performed three times a week on the VibroGym for 24 weeks, cellulite was reduced by 25.68 per cent. When combined with cardio training this increased to 32.30 per cent.

#### EXERCISES THAT CAN BE PERFORMED ON THE VIBROGYM

You can perform static or dynamic movements including standing, sitting, kneeling, lying, and placing your hands on it - almost any exercise from a typical gym workout can be done on the machine. In addition to standing and lying exercises, the VibroGym has straps attached to the machine that allow upper body exercises to be performed.

#### WHERE YOU CAN TRY THE VIBROGYM

The VibroGym is now installed in many fitness centres across Australia and NZ. Visit the VibroGym Australia website at [www.vibrogym.com.au](http://www.vibrogym.com.au) to enquire where you can find your nearest VibroGym centre. VibroGym's domestic model has also recently been launched in Australia allowing the benefits of a VibroGym to be received in the comfort of your own home.

You can also try the VibroGym by registering online for an upcoming workshop in each capital city, or by visiting the Australian Fitness Expo in Sydney from the 21st - 23rd April. 📍

*Dan Fivey is a Personal Trainer with 10 years of experience who has travelled the world promoting WBV. He has worked with athletes (runners, soccer, rugby, tennis, golf), general public, disabled (Parkinsons, MS, CP, CF and Wheelchair) and rehab patients (stroke, whiplash and sporting injuries) with WBV with excellent results. Dan can be contacted through [www.vibrogym.com.au](http://www.vibrogym.com.au)*

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