

Whole Body Vibration Does Your Bones and Muscles Good

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Standing on a vibrating platform can be beneficial for muscles and bones, particularly in older or sedentary adults.

Whole body vibration, or WBV, involves standing on a platform that sends mild vibratory impulses through the feet and into the rest of the body. It is claimed that the vibrations activate muscle fibers more efficiently than the conscious contraction of muscles during regular exercise.

Some studies have found that WBV increases bone density in the hip, and inhibit bone loss in the spine and hip areas.

Sources:

- » Reuters June 12, 2008
- » Current Sports Medicine Reports May-June 2008; 7(3):152-7

Exercise is clearly an underappreciated tool to treat disease. Many, including most physicians, fail to use it to achieve high-level wellness. Fortunately I am not one of them as I have been passionate about exercise for four decades. I have been exercising since 1968 and have been very healthy most of my life. I attribute much of my success in life to being in excellent physical shape.

In fact, I had a business need that required me to obtain some additional life insurance and was able to get the highest rating possible, one that is typically reserved for twenty year old athletes and rarely given to anyone over 50. I also had to perform a stress test for this exam. Before I got on the machine I asked what the record was at this facility, and they said that in over ten years the best anyone could do was 14 minutes.

I took that as a personal challenge and promptly proceeded to break their record and went 15 minutes. That is all the software program could do, it simply could not go any further. I am confident I could have gone another five minutes and was actually disappointed as I had planned on using that activity as a workout. Instead I had to go home and do a more intense workout.

It was also interesting that the treadmill facility questioned me about five times to make sure I was not taking any prescription medication. Seems that, in their experience, it is highly unusual for anyone over 50 to not be on multiple drugs.

Is a Vibration Platform Right for You?

The vibration platforms originate from research conducted during the 1960s space race. They work on the principle that if muscles are exercised while being shaken, they activate neighboring muscle fibers, hence building mass faster.

I first encountered this whole body vibration (WBV) technology in 2006, at which time I contacted one of the top personal trainers in the Chicago area, Tony Bruno -- an expert on muscle activation techniques – for his input on this approach.

Tony felt the technology was great and had been proven to improve proprioception, strength and balance, and decrease sway in the elderly, and found it **especially** beneficial in rehab to increase circulation.

A vibration platform has also been proven useful for athletes, improving speed and vertical jump height, and cutting your warm-up time by half. However, he indicated that because the platform does cause a temporary decrease in joint stability, you shouldn't use it before an event, as you'll need to be in top form. But it would be an excellent addition to the training phase of your program.

WBV training has also been shown to improve and maintain bone mineral density in postmenopausal women and the tactic is being studied for its therapeutic potential, such as increasing older women's bone mass – a far better alternative than the dangerous osteoporosis drugs currently on the market, for sure.

However, the authors of the study above warn that if you have certain health conditions, such as heart disease or high blood pressure, you may want to avoid WBV until safety concerns have been addressed more fully.

Remarkable Benefits for the Elderly

WBV training has demonstrated significant gains in most measures of muscle performance in sedentary and elderly individuals.

But one study, performed by the University of Liege in Belgium, investigated the effects of controlled whole body vibrations exercises on **overall health** in elderly patients and found that after 6 weeks (performing 4 one-minute sessions, 3 times a week), the participants experienced:

- 143 percent improvement in physical function
- 77 percent improvement in equilibrium
- 60 percent improvement in vitality
- 57 percent improvement in the quality of walking
- 41 percent reduction in pain
- 23 percent improvement in general health

Not bad for 12 minutes a week!

How Does Whole Body Vibration Training Benefit Your Body?

As Dr. Keith DeOrio, M.D. explains in another article, your entire body musculature, as well as your internal organs and glands, are affected by WBV stimulation.

Your muscle spindles fire secondary to the mechanical stimulation produced by the vibrating plate, and this rapid firing of the muscle spindle causes a neuromuscular response that leads to physiological changes in your brain as well as your entire body.

Traumas and injuries can leave cellular memories in your brain or body tissue that impede normal body movement or function, even after they're healed. Using WBV stimulation allows your body and brain to rapidly de-imprint these old cell traumas, re-imprinting with positive, healthy information. This allows for better and more efficient rehabilitation of injuries from sports or surgery than traditional methods of therapy.

According to Dr. DeOrio, studies have shown that a mere 12 minutes of training on a WBV plate is equal to a 1.5-hour workout with weights. And since it's accomplished with little amount of stress to your joints, tendons and ligaments, it can be a very good therapy regimen if you've suffered injuries, if you're elderly, or have disease conditions such as arthritis, fibromyalgia or multiple sclerosis, which would normally limit your fitness program.

The benefits of whole body vibration training include:

Increased muscle strength – (especially explosive strength)	Increased hormone secretion: IGF-1, testosterone, and HGH (human growth hormone)
Enhanced bone and muscle building	Increased lymphatic drainage
Increased flexibility and mobility	Cellulite reduction
Increased circulation	Decreased Cortisol levels
Pain reduction	Increased secretion of serotonin and norepinephrine,

Check out www.o2-wellness.com for more information on whole body vibration.