

REFILE: Whole body vibration may do muscles, bones good

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NEW YORK (Reuters Health) - Standing on a vibrating platform may sound like an odd way to pass the time, but a new research review suggests it may do the muscles and bones some good -- particularly in older or sedentary adults.

Writing in the journal *Current Sports Medicine Reports*, researchers detail the evidence for and against so-called whole body vibration training. WBV involves standing on a platform that sends mild vibratory impulses through the feet and into the rest of the body.

These vibrations activate muscle fibers more efficiently, it is claimed, than conscious contraction of muscles during regular exercise. WBV is often touted as a way to improve muscle power, jump higher or sprint faster.

The tactic is also being studied for its therapeutic potential, such as increasing older women's bone mass.

And there is some evidence to back it up, according to Dr. Dennis G. Dolny and G. Francis Cisco Reyes of the University of Idaho in Moscow, who conducted the review.

In 1 study of 28 postmenopausal women, for example, researchers found that WBV appeared to increase bone density in the hip. The 8-month training regimen required the women to stand on a WBV platform, in a squat position, for six 1-minute cycles, 3 times per week.

Another small study of postmenopausal women found that over one year, WBV training seemed to inhibit bone loss in the spine and hip area.

As for the usefulness of WBV in enhancing athletic prowess, studies have mixed results, according to Dolny and Reyes.

A few small studies, for example, have found that performing squats on a WBV platform is slightly more effective than standard squats in boosting muscle power and jump height.

However, other research questions the added benefits of WBV in young, fit people, according to Dolny and Reyes. And it's unlikely, they note, that WBV alone, with no "external load" to exert the muscles, would do much good.

On the other hand, WBV might hold promise as an exercise therapy for older adults, the researchers say.

"In sedentary and elderly subjects, there is greater likelihood for WBV to improve muscle performance to at least the same if not greater extent (as) traditional training methods," Dolny and Reyes write.

However, they add, more research is needed. People with conditions such as heart disease or high blood pressure should avoid WBV until safety concerns are better addressed.

SOURCE: Current Sports Medicine Reports, May/June 2008.