



Walking may be as helpful as Resistance Training in Increasing Bone Mineral Density in Men

by Pamela Jones, MA

Although more commonly associated with women, osteoporosis, or low bone density, should be a concern for men as well. Bones are in a constant state of remodeling in response to the demands placed upon them. This means that processes that break down and build bone are constantly at work. In youth, the process favors building. Certain medicines, diseases, an inactive lifestyle, and poor nutrition can cause the destructive process to outperform the building as we age. This can lead to weak bones and fractures. Although the fractures often occur later in life, bone loss can begin much earlier. Physical activity is known to help stimulate bone and decrease the rate of bone loss.

Researchers from Curtin University examined if a particular type of activity was more beneficial in increasing bone density in men. The study, published in *International Osteoporosis*, found that a basic activity like walking may be as effective as strength training in increasing bone density in men.

ABOUT the STUDY

The randomized trial included 143 men, aged 55-80 years. The men were assigned to either one hour of resistance training (weight lifting) or 30 minutes of walking three times per week. The hip bone mineral density was tested on the men at the beginning of the trial and after 12 months of training. Researchers also measured other fitness elements, such as lean body mass (level of muscle tissue), fitness levels, and lower limb strength. After 12 months, both groups had increases in hip bone mineral density. There was no significant difference in bone density gains between the groups. However, resistance training was also associated with increases in:

- Lean body mass
- Fitness level
- Lower limb strength

How DOES this AFFECT YOU?

In men, strength training appears to have a wider range of benefits than basic activities, such as walking, but both activities appear to be beneficial for maintaining healthy bone density. Doing regular physical activity appears to be the most important factor, rather than the specific activity you are doing.

The Center for Disease Control (CDC) activity guidelines for health benefits recommend 150-300 minutes of cardiovascular activity (like walking) per week and resistance training at least two days per week. For bone density benefits, the cardiovascular activity should be weight-bearing, such as walking or jogging. If you are just becoming active, adding a daily walk can be a safe and effective way to start. As you progress, think about adding strength training to increase the health benefits and to keep your routine fresh

RESOURCES:

- The National Institutes of Health Osteoporosis and Related Bone Diseases, <http://www.niams.nih.gov/>
- National Osteoporosis Foundation, <http://www.nof.org/>

SOURCES:

- Physical Activity for Everyone. Center for Disease Control and Prevention (CDC) website. Available at: <http://www.cdc.gov>. Accessed March 11, 2010.
- Whiteford J, Ackland TR, Dhaliwal SS, James AP, et al. Effects of a 1-year randomized controlled trial of resistance training on lower limb bone and muscle structure and function in older men. *Osteoporos Int*. 2010 Jan 21.

 **The Elliot.**
Live Better!

This article was first printed in Your Wellness Matters, Summer 2010 issue.