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Aging in the Know



Walking on a "Cobblestone Mat" Improves Balance and Fitness and Lowers Blood Pressure, Study Finds

As we grow older, many of us find that we are not as strong or as physically fit as we used to be. Many of us develop chronic (or long-lasting) health problems. But growing research suggests that regular exercise can help prevent or help control many of these health problems.

Studies find that exercise can help older adults stay more physically fit - by improving our strength and balance, for instance - and can help prevent or control health problems such as high blood pressure.

Some common exercise programs such as aerobics and weight training may not be appropriate for older adults, however. So researchers have started investigating the possible benefits of other types of exercise, such as yoga, for older people.

One short-term study looked at the benefits of a new type of exercise called "cobblestone mat walking" - walking on long mats embedded with plastic models of smooth, small- to medium-sized stones- and found that it seemed to help older adults improve their balance, become more fit, and control their blood pressure.

New Research in the *Journal of the American Geriatrics Society*

To further investigate the benefits of cobblestone mat walking, researchers at Oregon Research Institute and Willamette University recently conducted a longer study of 108 older volunteers (ages 60 to 92). All of the volunteers lived in the community (rather than in a nursing home or other facility) and none had health problems that limited their mobility.

In the new study, half of the adults took a 60-minute cobblestone mat walking class three times a week for 16 weeks. The other half took a 60-minute exercise class in which they did regular walking three times a week for 16 weeks. At the start and at the end of the study, the researchers checked the volunteers' balance, their physical performance, and their blood pressure.

Both the volunteers who did cobblestone walking and those who did regular walking improved their physical performance in certain ways after the 16 weeks of exercise. Both groups lowered their blood pressure. But those doing cobblestone mat walking lowered their blood pressure more than those doing regular walking. The volunteers doing cobblestone mat walking also improved their balance, while the volunteers doing regular walking did not.

Cobblestone mat walking may improve balance because it requires walkers to pay close attention to maintaining balance while moving over the uneven surface of the mat. Because the "rocks" in the mat apply pressure to the bottoms of the feet, cobblestone mat walking may have effects similar to those of acupressure, a needle-free version of acupuncture, which has also been shown to lower blood pressure, according to the researchers.

Though some of the volunteers in the cobblestone mat walking group found walking on the mats slightly uncomfortable at first, all continued to participate and none fell or were injured while on the mats.

In conclusion, the findings from this study suggest that cobblestone mat walking is safe and acceptable, improves physical function, and reduces blood pressure in older adults.

What Should I Do?

Talk to your doctor about different types of exercise, and which types might be best for you. Always check with your doctor before beginning any type of exercise program.

For more information on exercise and physical activity, visit http://www.healthinaging.org/agingintheknow/chapters_ch_trial.asp?ch=11.

For more information about preventing and controlling high blood pressure, visit http://www.healthinaging.org/agingintheknow/chapters_ch_trial.asp?ch=39.

For more information on balance and falls, visit http://www.healthinaging.org/agingintheknow/chapters_ch_trial.asp?ch=21.

The summary above is from the full report titled, "Improving Physical Function and Blood Pressure in Older Adults Through Cobblestone Mat Walking: a Randomized Trial." It is in the August 2005 issue of the Journal of the American Geriatrics Society (Volume 53, Issue 8, pages 1305-1312). The report is authored by Fuzhong Li, PhD; K. John Fisher, PhD; and Peter Harmer, PhD.

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