

Summary: Research indicates that the most important risk factors to modify, to reduce the risk of Osteoporotic fractures are strength, balance, and bone density. In addition, the literature makes it clear that traditional “weight-bearing” activities are ineffective. Bone density improvements related to exercise are site-specific and load-dependant. This means that the customized muscular loading utilized only at The Exercise Coach is the ideal stimulus for enhanced bone health.

Journal of The American Medical Association, 1994

“High-Intensity strength training had a positive effect on bone mineral density, strength, muscle mass, dynamic balance, and activity level. Thus, a single intervention is capable of positively modifying multiple risk factors for fracture in women.”

Miriam E. Nelson, Ph.D – *Strong Women, Strong Bones*

No study has ever shown that a middle-aged or older woman can increase her bone density by taking up walking!

Journal of The American Medical Association, 1994

“High-Intensity strength training is an effective and feasible means to preserve bone density while improving muscle mass, strength, and balance in post-menopausal women.”

Medicine and Science in Sports and Exercise, 1992

“Six months of resistance exercise, that isolates and strengthens the muscles of the lower back (MedX Lumbar), increased the bone mineral density of the lumbar spine by 14% in 50 elderly subjects, but treadmill walking or stair climbing had no effect on bone mineral density.”

Mayo Clinic Proc., 1986

“There is a significant positive correlation between back strength and the bone mineral density of the lumbar spine in post-menopausal women.”

Douglas M. McGuff, M.D. – *Body by Science 2009*

“There is no shortage of data in the medical literature indicating that significant increases in bone mineral density can be derived from Strength Training.”

Journal of the American Medical Association, 1990

Exercise effects on bone mass in post menopausal women are site-specific and load-dependant. Only resistance training involving heavier loads will increase bone mineral density.

Journal of the American Medical Association, 1990

“Our observations regarding the safety of strength training, even among the frail elderly with underlying cardiovascular disease, should be emphasized because the known hazards of immobility and falls seems to outweigh the potential risk of muscle strengthening interventions in this population.”

