



Reducing Osteoporosis Risk

And Maintaining Healthy Joints

As far as the skeletal system, exercise helps to prevent osteoporosis. . . and new research finds we can actually rebuild bone tissue that has begun to grow thin.

And, exercise doesn't stop at improving bone and muscle tissue. Exercise also strengthens tendons (which attach muscles to bone), and ligaments (which connect bone to bone).

Studies reported in *Medicine & Science in Sports & Exercise*, involved Australian researchers, collaborating with colleagues in Finland and the U.S. in a 24 week exercise program with older women who participated in moderate-intensity strength training, and older women who participated in low-intensity walking.

Pre-study measurements were taken on lumbar bone mineral density, muscular strength and calcium turnover in the women who took part in this study.

The walking program consisted of two 50-minute sessions a week, in addition to the subjects' usual daily activity.

The weight training program consisted of two sessions with three sets of progressive resistance training exercises ranging in intensity from 60-70 percent of one-repetition maximum.

The results reinforced the value of strength training for older women. . . there was clear evidence -- based on the osteocalcin response -- that the resistance training groups were maintaining their bone more efficiently than the walking-only group.

Keeping our joints in good working order involves exercising regularly, but also keeping our weight in check and maintaining a good diet.

Scientists at Wake Forest University found that for every pound of weight you lose, the pressure on the knees decreases by four pounds. In addition to reducing joint pain, weight loss may also improve range of motion and reduce the demand on nearby muscles to provide stability.

The University of California Berkeley Wellness Letter (7/05) reports that overweight people are 3 times more likely than leaner people to tear the meniscus cartilage in the knee. Obese people, more than just overweight people, are 5 to 25 times more likely, according to researchers from the University of Utah School of Medicine. This cartilage bears much of the load on the knee joint, and excess weight greatly increases the stress on it. About half of the 850,000 meniscus tears that require surgery each year in the U.S. can be attributed to extra weight.



If you're a cola drinker, you might be interested in knowing that drinking at least three cans of cola a week, even diet cola, may lower hip bone density in women. Drinking more cola may lower bone density further.

Reports in the *Nutrition Action Healthletter* (12/06) indicate scientists studied over 2,500 men and women subjects in a recent research study involving cola drinkers and hip bone density. After taking into account the impact of calcium, vitamin D, physical activity and other factors, they found about 4 to 5 percent lower hip bone density in women who consumed one cola a day than in those who drank one cola a month.

Lower bone density was not linked to cola consumption in men. And women who drank other soft drinks had no lower bone density. Still, the data indicates that cola consumption may lower hip bone density, and limiting or eliminating cola products lowers the risk of deteriorating bone density in later life.