



MARCH TIP OF THE MONTH

By Robin Weiss

TIP: Bone Density and Exercise

Our bones reach their maximum size and strength by the time we turn 30. As we age, our bones lose density, making them more fragile and subject to breaks. A 10% loss of bone mass in the hip corresponds to a three-fold increase in the risk of a hip fracture. Two key elements determine how dense our bones will be at age 70:

1 The peak bone mass we had in our youth: Studies have demonstrated that exercise at a young age significantly increases maximum bone density.

2 The rate at which we lose bone mass as we age: Studies on the effects of exercise on bone mineral density in middle-aged adults have shown that women who exercise prior to menopause lose less bone density after menopause than women who aren't as active. It is also clear that exercise among the elderly has dramatic effects.

Most of the systems of our body receive great health benefits from aerobic forms of activity, **but bones are different**. Stress, in the form of weight-bearing exercise, is necessary to stimulate the growth of new bone tissue. When you put demands on a bone, it responds by becoming stronger and denser. Any activity that works against gravity can potentially build bone. Examples of these kinds of activities include running, walking, and weightlifting. But an activity such as swimming, which isn't weight-bearing, doesn't build bone. Generally, higher-impact activities or resistance exercises, such as weightlifting, have a more pronounced effect on bone than lower-impact exercises, such as walking.

It is important to note that only the bone that actually bears the load of the exercise will benefit. So, unless we walk or run on our hands, we need resistance training to keep the bones of our upper body, including our spine, strong.

Reference: Women's Health Center at Everydayhealth.com May 2007