# Healt Conitor 5



Bone Loading Exercises To Help Combat Osteoporosis. By Mirabai Holland, MFA

#### Bones may not look alive but they are. They're living tissue.

The smooth hard outside is called cortical bone. The inside, is made up of a honeycombed structure called trabecular bone.

This unique combination makes the skeleton strong and flexible while keeping it light. If you have osteoporosis the cortical bone gets thinner and the trabecular bone loses pieces of its honeycombed structure making bones weak and vulnerable to fracture. Bones can become so weak that they break during every day activities, like walking upstairs or even sneezing.

The good news is Osteoporosis can be prevented in many cases by simple lifestyle choices; a calcium rich diet and weight bearing and resistance exercise.Studies with tennis players show that the resistance of whacking a ball back and forth causes the bones in the racquet arm to become stronger and denser than the bones in the non-racquet arm. This process is called bone loading.

Of course consult your doctor before doing this or any exercise program. And if you have Osteoporosis or you are greatly at risk you should be aware of these exercise don'ts: Don't bend forward at the waist with back rounded. This puts too much pressure on vertebrae. So no toe touches, sit-ups, or ab crunches.

Here are 5 bone-loading exercises you can do at home. No fancy equipment needed, just a bath towel and kitchen chair.

They are designed to strengthen the areas most at risk for osteoporotic fracture: the spine, the thigh bone at the hip and the forearm at the wrist.



### Towel Back Loader: Loads the spine

Stand tall, shoulders square over your hips, feet hip width apart, knees slightly bent. With abdominals contracted, hold towel just above your head a little wider than shoulder width, elbows slightly bent. With your arms just behind your head, stretch the towel tight, while squeezing your shoulder blades together. Hold 10 seconds, while exhaling, release. Repeat 3-6 times



### Back Extension: Extends and stretches the spine

Stand tall, shoulders square over your hips, feet hip width apart, knees slightly bent. Place your hands behind you in the small of your back.

Keeping your abs pulled in slowly and gentle arch your back while looking forward. Hold 10 seconds, while exhaling, release. Repeat 3-6 times

## Standing Leg Loaders load the standing leg as well as lifting leg.



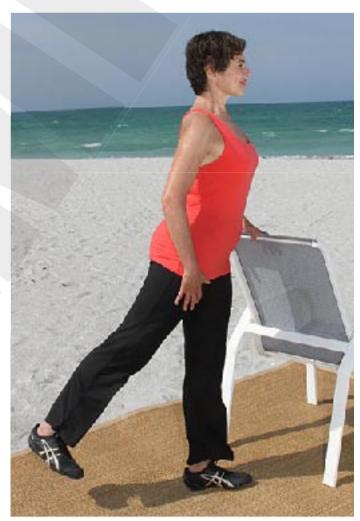
### **Hip Extension**

Use the same starting position as hip flexion. While exhaling lift leg straight out behind you to about knee height without bending forward. Hold 2 seconds and lower. Repeat 10-15 times, and then switch legs

### **Hip Flexion**

Using a chair or wall for support, stand tall, shoulders square over your hips, with weight on one leg, abdominals contracted.

While exhaling, slowly lift other leg straight out not higher than your hip. Hold 2 seconds and lower. Repeat 10-15 times, and then switch legs.





### Towel Wring Loader: Loads wrist and forearms

Grasp towel with both hands about 6 inches apart. Wring it as tightly as you can in one direction and hold 10 seconds while exhaling. Wring and hold the other direction. Repeat 3-6 times.

Mirabai Holland M.F.A. legendary fitness pioneer, specializes in preventive and rehabilitative exercise. Her Moving Free® approach to exercise is designed to provide a movement experience so pleasant it doesn't feel like work. For more info please visit <a href="http://www.movingfree.com">www.movingfree.com</a>