



Borrowing From Barefoot Running

In the last few years, there has been increased interest in barefoot and minimalist shoe running. Research shows differences in the mechanics of a barefoot runner and markedly less repetitive use injuries. Though running and walking have very different biomechanics, there is some useful information that we can all apply. The primary message? The stronger your feet, the less likely you will fall or suffer injury.

Two key components to success are 1) positively stressing the balance systems and 2) focusing on strength of the lower leg muscles, especially the small muscles in your feet.

Research shows a decreased prevalence of both ankle and foot injuries after balance or proprioceptive training. Balance work improves awareness of where your body is relative to the ground and the body. Try this test to see how well you do. Using a timer, see how long you can stand on one foot without losing your balance. If that seems easy, stand on one foot with your eyes closed. Compare to the opposite side. Closing your eyes places more demands on your proprioceptive system. This system reacts when you step on a rock or curb to avoid falling and injuring yourself. Balance work should be a consistent and important part of everyone's workout.

Incorporate balance work by standing on one foot while brushing your teeth. Focus on where you feel the weight in your feet. If your weight starts to shift to the outside of your foot, try and press the inside of your foot down. Need something more challenging? Close your eyes and stand on a pillow, bed, or a bosu ball.

If you do not have foot injuries, spend some time walking barefoot at home. If you always wear shoes, start with small time increments and increase as tolerated.

The small muscles in the feet often get ignored with strengthening and can be overly supported by shoes. The two exercises below will work on those small foot muscles that help create an arch in the foot and assist with overall stability.

If you have any pain or difficulty with the exercises, see your local physical therapist for an evaluation.



Towel Scrunches:

Sitting on a non-carpeted floor, lay a hand towel on the ground with your heel resting on the back. Use your toes to grip the towel and pull back towards your body. Set your foot down again and pull farther up on the towel. You should do this until the towel is completely bunched under your feet. Repeat 10-15 times.



Standing Weight Shifts:

Rise up onto the balls of your feet, keeping your weight equally distributed (without holding on if possible). Shift weight to the right foot without letting your heels drop, then slowly come back to the middle, maintaining the elevated position. Repeat to the left side. Go back and forth until your leg muscles feel fatigued.