

## Falling Facts

### NY Times Article on Fall Prevention



When discussing fitness goals, most people never mention fall prevention, but I suggest that it is more important than fat loss or improving your cardiovascular capacity. Please take the time to read Gretchen Reynolds excellent article; Falls Can Kill You. Here's How to Minimize the Risk. In the article, Ms. Reynolds presents several good lifestyle modifications and medication precautions that will help prevent

a fall. Try adding some of my long standing fall prevention training tips.

### **Exercise in a standing position.**

If your goal is to move better and remain free of injury, then 90% of your exercise activity should be performed in standing. Developing better kinesthetic awareness, strength, and coordination in a standing posture is the crucial component of training that prevents a fall. During my visits to commercial gyms, most of the exercise activity I witness is performed in a supine, seated, or supported position.

### **Practice moving in all directions.**

Fall prevention training involves improving multi-directional movement skills. Most falls happen from an unexpected disruption of your equilibrium. You get pushed to one side, twisted off center, or a foot slides from under the body. Most gym activities are predominantly sagittal plane- forward and backward. We need to be able to move well in all directions.

### **Practice moving faster.**

Fall reaction training should focus on exercise activities that make you quicker. Research on falls has shown that a gait pattern (how you walk) that starts to slow down is the best predictor for a future fall. Agility ladder footwork, medicine ball throws, and hurdle drills are examples of faster paced training activities. Yoga, Pilates, recumbent bicycle riding, and muscle isolation exercises will not make you better at moving faster.

### **Stand on one leg.**

A simple and proven fall prevention activity is single leg stance balance training. Single leg balance is a skill that tends to deteriorate with age, injury, and a sedentary lifestyle. Stand on one leg for twenty seconds. Stand on one leg and turn your head side to side. Stand on one leg and then close your eyes.

### **Practice getting up and down off the floor.**

One of the best anti fall training activities is consistent practice of getting up and down off the floor. Moving gracefully from standing to the floor and back up again is a life skill that keeps you independent and safe. As a Physical

Therapist, I frequently find people who are very impaired in this basic task of mobility. They crawl to a piece of furniture for an assist and transition from the floor in an unsteady and unsafe manner. Most of these patients are not elderly, they are tight, weak, and deconditioned.

**Perform single leg strength training.**

We are monopods. We absorb and then create force one leg at a time. During activities of daily living, one leg is loaded more than the other. It only makes sense that we train our legs the same way we use them. Work with a trainer and learn how to perform step ups, single leg squats, rear foot elevated split squats, single leg deadlifts...

**Become a better shock absorber.**

Fall events often occur because of an impact. The force of the impact causes our body to give in to gravity and down we go. Just like any other physical attribute, impact resilience can be trained. Mat work, medicine ball throws, and rope drills are some of the activities that can be used to improve impact resilience.

**Make balance practice a daily event.**

Integrate anti-fall training into your lifestyle. Stand on one leg while you brush your teeth--right leg thirty seconds then left leg thirty seconds. Perform multi directional exercise as movement preparation before a bike ride or run. Get some instruction on a program of exercise that improves agility, single leg strength, and power production.

Someday, somehow, and when you least expect it, you are going to have an unplanned interaction with gravity. Your fitness program should make you more responsive to a fall event and less likely to be injured.

*Michael S. O'Hara, PT, OCS, CSCS*