

## **Stairs!**

**By Scott Lohmann, Instructor, Adaptive P.E.**

For many, stairs are a barrier, an obstacle that prevents us from doing or going to where we want to go. I can recount several conversations from students and clients that talk about their friends or loved ones that are reluctant to go on vacation because the place they desire to visit does not have elevators; instead, they have to climb multiple flights of stairs daily. For the rest of us, stairs are just one more thing we ascend day in and day out. But to many people with movement issues they are often not only an insurmountable challenge, but also a potential risk for disaster.

I grew up in a house that had a tall flight of stairs. I never had any trouble with the stairs of my parents' house. I literally used to sprint up and down the stairs like it was simple and easy. I can only think of one time where I stumbled on my father's stairs and went down pretty hard. So for the entirety of my life I was always comfortable with stairs. My grandmother's house, however, is the exception. As a child I absolutely feared her stairs. They were steep and rickety. They were so poorly engineered that I always had the sensation of falling backwards. So why am I talking to you about this? Well, there's a pretty good chance that many of you reading this article have fears about stairs, and especially considering my recent knee injury, which was the direct result of falling down stairs!

Lets look at the flip side of fear: stairs, for all their challenges, can actually make us better. The question is how? First off, it provides us an opportunity to strengthen muscles that I mentioned in previous articles. So think of your stairs as a gym in your own house. Living in a house with stairs, you should practice this daily. Go to the bottom of your stairs. Place one foot on the first step. Make sure the foot is pointed straight with the heel flat and pushing into the step. This will activate your butt and hamstring muscles, which will protect your knees and increase your self-confidence by taking away the fear of falling backwards. The butt and hamstrings are essential hip muscles. When the hips are stable there is no feeling of instability as you move. Once you have stepped up with both feet, pause for a moment and then reverse your step back down to the ground slowly! Once again, it's those butt and hamstring muscles that will control your downward motion to the floor.

Once you gain mastery of the upward movement, try the downward movement. Once again step up to the first step with both feet. Turnaround and slowly lower your foot down to the ground. As soon as you reach with your foot you will immediately feel the weight of your body loading the foot, leg and hip that still remains in contact with the step. Once again engage the butt and hamstrings muscle as you control your descent, culminating in your lead foot making firm contact with the ground. I would repeat this several times until your confidence improves. If you're having trouble with the balance use the banister for added stability. You will also find another muscle that I mentioned in the knee surgery article called the VMO (vastus medialis obliquus) playing a major role in the downward descent. This muscle is located on the inside of your knee and is part of your thigh muscles called the quadriceps. This one small muscle alone gives you the control as you step down the stairs. If you find the step to be too high, try something smaller and move slowly with control! Try these steps daily for better leg strength!