

Strengthening Muscles for XC Skiing

Recently, I took my first xc skiing lesson. I had tried downhill skiing and am too chicken to go down and fast. It became an item on my “done that” checklist. My perception was that xc skiing doesn’t involve hills, going fast and is great exercise. Two out of three ain’t bad... About 10 minutes into the lesson, the instructor takes our class of 8 to the bottom of “mama bear” hill and tells us we have to go UP!! With fluid easy movement, she spreads the front of the skis out, making a V and proceeds to dig the edges into the hill, waddling like a duck. After all 8 baby ducks struggle to get to the top, she spreads the back of the skis out, making an inverted V and snowplows down the hill. Baby ducks are made to follow in short order. The lesson proceeded, followed by 2 hours of going it alone, which included performing both types of “V” techniques. Two days later I knew I had worked my adductors!

Adductors are the muscles that are on the inside of your thigh. There are 5 adductor muscles that originate from various locations on the pubic bone and 4 insert on the femur, 1 on the tibia. Their primary movement is to bring the leg in towards the mid-line of the body – adduction. When you have a “groin pull”, you have injured one or more of your adductor muscles.

So how do these muscles get a work out when you are spreading out your legs making a “V” with your skis? The muscles that allow your legs to move outward-abduction- to make a “V” are the 3 powerful gluteal muscles along with several smaller muscles. The adductors must resist the force of the abductors or you will end up doing a split. Think about it like a wishbone from the turkey. When you pull the sides of the wishbone apart you are acting like the gluteal muscles on your legs. There is no force trying to hold the wishbone together and the bone eventually splits in two. By contracting and generating the same force as the gluteals, the adductors prevent your legs from splitting apart.

So why do your adductors hurt the day after you have skied? Mostly because the adductors are not used to exerting the amount of force required to counteract the gluteal muscles. In general, most people have weaker adductors. Strengthening and stretching these muscles can help to reduce the soreness after a day of skiing.

If you belong to a gym, you can use the adductor machines to strengthen the muscles. You can adjust the amount of weight used and can begin at a very low weight increasing it as the muscles get stronger. But you don’t have to go to the gym to strengthen the adductors. You can purchase exercise resistance bands, exercise balls, and ankle weights for very little money.

Resistance Bands –

Tie one end of the band to a stable, solid object (like a pole) and the other around your ankle. Move away from the pole until the band is fully extended. Take your leg and move it towards the center of your body stretching the band. You can increase the intensity by moving further away from the pole and buying a greater resistance band.

Ankle Weights –

Place the weights snugly on your ankles. Lie on your side, the leg with the weights being on the ground. Take your leg and move it up toward the center of your body.

Exercise Ball –

Lie on your back with the ball placed between your legs. The farther the ball is from your thigh, the greater the contraction required to hold it in place. Bring your legs up and down keeping the ball firmly held between your legs.

Butterfly –

This very familiar exercise will help to lengthen the fibers of the adductors. Bend your knees and place your feet sole to sole. Take your elbows and gently press down on your thighs, making your legs become further apart. Do not bounce your legs. This can result in breaking the muscle fibers and cause a groin pull.