

## **Ski Fit**

*by Michael Bidwell ATC, CSCS  
Certified Athletic Trainer/Strength & Conditioning Specialist*

While there is no way to prevent all the bumps and bruises that skiing delivers, with some preparation and targeted exercises, you can improve your endurance and core strength to make this a great ski season.

We always hear about those dreaded twisting injuries to skier's knees that put them on a stretcher and out of commission for the rest of ski season. These mechanisms of injury usually occur at the end of the day, when muscles are fatigued. They may fall after catching an edge, losing control through moguls, or simply lose their balance. While all injuries can't be prevented, a lack of muscle endurance, as well as overall conditioning, can be addressed through specific exercises.

When we talk about conditioning, we mean the whole body. Physical conditioning refers to the development of physical fitness through the adaptation of the body and its various systems to an exercise program. When conditioning for skiing, we must include those demands that are placed upon the body during the activity. The major components of skiing include power and endurance. Think of the turns as the power, while the transitions are endurance. Proper conditioning includes both elements. Regardless of the frequency in which you ski, a careful plan for the preseason should include training. Generally, your body will adapt the more you ski, but it's the skier that goes "all out" for 5 straight days without training, who often sustains an injury.

First off, start with some high intensity cardiovascular intervals. Pick your favorite piece of aerobic equipment at the gym or go running outside. Begin with a modest ratio of 1:3 hard to moderate work. For example, when running, run as fast as you can for 1 minute, then decrease to a slow jog for three minutes. Repeat these intervals for 15-30 minutes. As you get stronger, change the ratio to 2:2, increase the total time, and change your machinery. The more cross training you do the better.

For strength training, try out these sure-fire core exercises. Endurance is the key here, so look for 3-5 sets of 15-30 reps.

**Single Leg Ball Squat** – Targets the quads for those burning runs down the slope.

Stand with a gym-ball behind your back against the wall. Balance on one foot, then slowly lower into a squat position and repeat. To increase the challenge, come up out of the squat and switch legs, then continue to alternate.



**Side Plank Twist** – Keeping the core strong and facing downhill is key.

Start by lying on your side while supported on your elbow. Lift the torso up until your shoulders, hips, and legs are inline. While maintaining this position, twist and reach underneath your lower hip.





**Supine Rotations** – Focus on control to engage the deep abdominals. Lie on your back with both knees bent and your feet up. Maintain this position and slowly rotate your lower body from side to side. Keep your shoulders flat on the the ground and maintain tight abdominals throughout the movement.



**Split Squat Row** – Combination movement will work legs with trunk. Begin in a split squat position with the arm straight. As you stand up, pull back on the band or cable. Switch arm/leg and repeat for the other side.

.....*Performing these exercises in addition to a general fitness routine should help prepare you for the upcoming ski season.*.....