# How to Avoid ACL Injuries While Skiing

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Nothing can spoil a skiing <u>vacation</u> faster than an injury, especially if it's a serious one. One of the most common injuries affecting skiers today is damage to their Anterior Cruciate Ligament. The ACL is a tough tissue that restricts forward movement of the thigh bone over the shin bone. But, there is good news. There are a number of things you can do to minimize the chances of injuring your ACL.

Difficulty: Moderate

### Instructions

#### things you'll need:

- Workout clothing
- Small bench
- Stairs
- The appropriate length of ski
- Good balance and form
- Ski school lessons

### Preparation and Fitness

- One of the best ways to reduce the chances of any type of ski injury is to get in shape before ski season. Studies show that fit athletes are less prone to injury and the magnitude and duration of their injury is reduced.
- On top of a solid aerobic <u>exercise</u> program, begin conditioning your legs using resistance training several months in advance of ski season. One of the best strengthening programs is simply walking or hiking downhill, exercise that emulates the skiing movement.
- 3 If you belong to a gym or club, try adding some <u>exercises</u> using a BOSU BALL or INDO BOARD. These are devices that demand added strength, agility and balance from your legs.
- 4 Add CLOSED LOOP conditioning exercises to your fitness program. Closed loop exercises are exercises that strengthen your legs but do not compromise the joints.

### Making Safe Decisions on the Mountain

- 1 Have your bindings checked for proper working order by a certified technician in a ski shop. Stay away from department stores or other retail establishments that do not specialize in skiing.
- The majority of ACL injuries occur DURING a fall, not after you've already gone down. If you feel like you're going to fall, relax your body and let the fall happen.
- Almost all ACL injuries occur when the skier falls to the DOWNHILL side of their skis, with their ski tips spread apart. This causes an abnormal amount of torque on the downhill knee. If you can, try to keep your legs together with your arms in front of your knees and fall UPHILL of your skis.

4 Avoid going off of jumps. Landing on the tails of your skis can set you up for an ACL injury. If you MUST jump, be sure that you keep your weight FORWARD of your feet and that you check out the landing area for a gentle decline.

## Tips & Warnings

- One of the best conditioning exercises you can do for skiing is walking or hiking downhill. Hiking downhill uses the same muscle groups as skiing.
- If you're exercising in the gym, concentrate on NEGATIVE resistance exercises. A good example of a negative resistance exercise is slowly stepping down to the floor from the top of a bench or step.
- Always ski on terrain that is within your ability.
- Have a certified ski technician choose the proper length ski for you.
- If you feel like you're going to fall, let yourself go. More injuries occur when people try not to fall than when they allow themselves to go down.
- Take a lesson from a certified ski instructor at least once a year. They can evaluate your skiing technique and point out habits where you may be at risk for injury.
- Avoid OPEN LOOP exercises such as the knee extensions using weight machines. This puts stress on the knees and actually does more harm than good.
- Avoid going over jumps and unknown terrain.
- Don't let yourself be talked into stunts by your friends.

## Resources

- Buy Bosu balls here
- Buy Indo Boards here