## **SPORTS MEDICINE**

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## Start Your Ski Season Off Without Injury

If you are an outdoors snow enthusiast, every year you look forward to the first day of ski season. When that day finally arrives, you will have your gear ready to go, the car filled with gas, and feel the excitement and anticipation of a day on the slopes. Are you physically ready though? Each year thousands of people leave the mountains bound for the emergency room or doctor's office with an injury caused by falling on the slopes. Accidents do happen, yet many of these injuries may be avoidable. Skiing and snowboarding require the appropriate balance, leg strength, and core strength to help maintain control and prevent falling. Without this control you may be at risk for injury. Here are three exercises that can help you prepare for your next ski trip to the mountains.

Balance during skiing and snowboarding is required to negotiate changing surfaces and terrain. One way you can prepare for this demand is to perform single-or double-leg stance balance exercises with your eyes closed or while on a variable surface. This will challenge your body to use senses other than vision to help maintain your balance. You can find variable surfaces to stand on at the gym, like a DynaDisc or BOSU Ball. If you cannot get to the gym, pillows and couch cushions work great. (Fig. 1)

An effective way to prepare your legs for skiing and snowboarding is to focus on your hip muscles. These muscles provide important stability during skiing and snowboarding and are typically weak in many people. A great way to target these muscles is through an activity call the crab walk. Start in a slight squat position with your feet about shoulder width apart. Place a circular piece of elastic tubing around your knees or ankles, and take slow steps to each side while maintaining your squat position with your feet facing straight forward. Complete 20-30 steps and then repeat in the opposite direction. This exercise will effectively target the hip stabilizing muscles. (Fig. 2)

Core strength is important because it gives your legs an improved ability to generate force and maintain control. A great way to improve core strength is to complete a bridge. Bridging also targets your legs providing an extra benefit. This exercise can be done on the floor, but for a bigger challenge use an exercise ball. Place both feet on the ball while lying on your back and bridge up by lifting your hips off the floor. (Fig. 3)

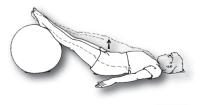
These exercises cannot guarantee prevention of major injuries, but they can help improve strength and balance, which should decrease your chances of falling and promote a safe day on the slopes. You should start these exercises up to one month prior to ski and snowboard season to get the greatest benefit. Remember, there are many other keys to injury prevention. Wear a helmet, stay in bounds, and obey the rules. Proper preparation and following safety guidelines can make for a more enjoyable day on the slopes and help prevent an unwanted trip to the emergency room.



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Fig 2



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Fig 3

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