



THE WHITE STUFF

Leg and Core Strength are the keys to an injury-free ski holiday, suggests Dr. Andrew Comley

The fear of injury may stop some people attempting a snow sport such as skiing or snowboarding, but in reality injuries are less common on the slopes than from popular Australian sports such as football and netball. With proper preparation and sensible precautions the risk of ski-related injuries can be reduced.

Sensible precautions include spending some time familiarising yourself with the terrain and snow conditions as well as checking all equipment. A helmet is recommended for all skiers and snowboarders, as a head injury is arguably the worst injury that can be sustained on the slopes.

The most common musculoskeletal injuries from skiing and snowboarding involve the knees, wrists and lower back. Beginner snowboarders will soon become familiar with sore buttocks and wrists from multiple falls while learning. Wrist guards are a worthwhile investment for any beginner snowboarder as they do offer protection against broken wrists.

Fortunately most injuries are relatively minor. More severe injuries, such as broken bones, tendon tears and joint dislocations, may require surgery. All major resorts have ski patrols to initially examine fallen skiers, and take those requiring medical assistance to on-site practitioners. Injured skiers should hail help rather than be heroic and ski down; there is a risk of increasing the damage, especially on an unstable knee.

For simple sprains and bruises, the suggested treatment is rest, ice and immobilisation, along with gentle exercises, stretches or physiotherapy to mobilise the joint. Simple analgesics like paracetamol or over-the-counter anti-inflammatory medication can take the edge off the discomfort. While it may be tempting to retire to the chalet for some "liquid pain relief" it is not advisable to consume too much alcohol - it may mask symptoms that should be monitored.

Strength is the key to minimising the chances of a fall. Skiers should be strong enough to maintain a constant level of control under all circumstances - many

falls happen because the skier is not in control. Strength is a weapon against fatigue too; the stronger you are, the longer you can ski before tiring and losing control.

Skiing does require a reasonable amount of physical strength, to stay upright and to turn in a controlled fashion.

Ski for no more than two consecutive days.

Australian ski fields are notorious for being patchy with various areas of ice slush and soft snow. This can make for technically difficult skiing - and is tough on the body of anyone who falls hard.

Two main body areas should be the focus of a pre-ski strength program: the legs and the core. The legs do a great deal of work absorbing unevenness on the slope, and strength training increases leg power ready for a week on the slopes. This can be done in the gym, using leg-specific machines, weights or step classes. Hill running, bounding and jumping routines are also excellent training. To complement the strength side, so work should also be done to improve stamina and agility - cycling is great to build up aerobic fitness. For specific jumping and twisting training, hop on a trampoline and bounce side to side and one leg at a time.

Increasing core strength means strengthening the abdominal area and lower back, all of which combines to provide the capacity to control your spatial position and weight shifting over the skis. Sit-ups, crunches and Pilates-type exercises increase abdominal tone. It is, however, important to balance the anterior abdominal tone with lumbar strengthening. Fit balls are perfect.

Finally, some pearls of wisdom:

Regulate your activity level - even the strongest skier can become tired after hours of traversing icy ski fields. It's a very physically demanding sport, taking its toll on muscles in every part of the body. The general recommendation is to ski for two consecutive days, then rest for half a day.

Warm down and ice any muscles that are causing problems as soon as possible after returning to accommodation. Use spas and hot tubs if available. If muscles and joints are troublesome, or likely to be, an anti-inflammatory product should help.

Maintain adequate hydration - although it's cold in the fields, it's dry, and skiers can easily become dehydrated. Dehydration leads to rapid muscle fatigue and cramps. Dehydration is another reason to avoid too much alcohol during the course of the day.

Rest, stretching and icing, and taking a day off the skis, may appear to be wasting valuable holiday time. But they are cheap insurance policies for those unaccustomed to such strenuous recreation - they're simple measures that can greatly improve the enjoyment and safety of the trip.

***About the author:** Dr. Comley specialises in hip and knee replacement, arthroscopic, reconstructive knee and shoulder surgery. Click [here](#) for more details.*