

Safety, Health & Fitness—

Lids on Kids

This season Aspen required all children (up to age 12) in its ski school to wear helmets. The Colorado resort is the first major ski area to mandate toppers. Aspen feels that the ski school kids are in their care, and it's their job to take care of them. Correct.

What the Pro Skiers Do in the Off Season to Stay in Shape

World-class skiers are focused, but they don't have one-track minds. Later in the season, they'll often take a break from their sport. And when they're not clicked into their bindings, they still improve their performance on the slopes. Adding other sports into regular training routines, whether hockey, cycling, tennis, or soccer, hones skiing skills and boosts skiing power.

Mixing it up helps the body to fine-tune its balance and its ability to adapt to changing conditions and unexpected situations. Skiers have to react quickly. It's the same with sports like ice hockey or soccer, where you have to react to the flick of a puck or a pass. These sports help you anticipate movements in response to an action, and keep you focused on always looking ahead.

Sports that incorporate plyometrics—jumping, twisting, and leaping motions—are crucial for increasing explosiveness and enhancing reaction time. The pathway from the brain to the body and joints needs to stay open so the brain can have quick reaction times. It has been shown that your responses can be faster when you practice. With plyometrics, either you use it or you lose it—so keep it up.

Dabbling in other sports allows you to develop different muscle groups that get ignored and rest the ones that get abused on the mountain. Skiing puts a lot of force on the body, and by going to another sport, it can take the pressure off joints and bones that get a pounding during the season. Basically, it gives the body a chance to heal nagging injuries or relieve muscle groups that get overused in skiing.

Street Skating Tips

Summer is a great time to get out those skates and roller blades and hit the bike paths. It's a great way to stay in shape for skiing. Here's some tips to keep you safe.

Stopping Techniques

One of the most important things to consider before and during skating is the ability to stop. Proper control of your skates and the ability to stop under any situation will give you the confidence to skate safe without the risk of injury. Keep in mind that the faster you go the longer it will take for you to slow down or stop. Knowing more than one way to stop or control your speed is beneficial and highly recommended. Please find illustrations of 5 different stopping techniques below.

V Stop:

The V-Stop, is similar to the T-Stop, but you do not bring your skate all the way back to the T formation. You only need to bring it out to the side at a 45 degree angle. Keep in mind that as the right skate in the diagram is at a 45 degree angle to the left skate, the skate itself should also be approximately at a 45 degree angle to the ground, allowing the skate to drag (slide) more efficiently. At first, simply apply moderate and even pressure to the skate, just practicing the position and balancing. As you become more comfortable, begin to apply more stopping pressure.

T Stop:

The T Stop is a popular inline skating technique and is a bit more advanced maneuver than the V Stop, so start off at a slow speed and work your way up. It is recommended to perfect the V Stop prior to attempting the T Stop. One skate remains straight while dragging the other behind to form a T formation. Notice the skaters right hand is extended forward and inside to counter-balance the right leg being dragged behind.

Wedge Stop:

This stopping technique resembles a skiers snow-plow. First, form a wedge shape with your skates, pointing the front of the skates inward. It is more common to leave one skate moving straight forward, while wedging the other skate inward at approximately a 45 degree angle to the direction traveled. It is also important to angle the skate frame about 45 degrees from the ground. The closer the frame comes to the ground the more the wheels will slide. You can control your stopping power by adjusting the angle of the skate to the ground.

Reverse T Stop:

This maneuver is considered advanced and more difficult to perform. As the skater hops up, he will actually turn his right skate around 180 degree's, or backwards to the direction traveled. At the same time, the left skate is turned 90 degrees, perpendicular to the direction of travel, creating a T formation. The skater is leaning his weight uphill and away from the skates. The left skate is angled at about a 45 degrees to the ground. Once again, the more you angle the skate frame towards the ground, the more the skate will slide.

Hockey Stop:

Probably the most difficult stopping technique. The skater quickly hops up, unweighting his skates, and turns both skates 90 degrees (perpendicular) to the direction of travel. Just the right angle to the ground is required to keep the wheels sliding. As you begin to slow down, you may stand more upright, adding more stopping power to the skates. Notice the positioning of the hands and arms for balance.

Skating Uphill

You can go up hills in the same way that you would on conventional skates.

Many users prefer to use ski poles which really help deliver more power to the ascent, not to mention providing a full body workout. Usually, you can skate straight up the hill, depending on its steepness. [Click to view video.](#)

You can even ascend the steepest of hills by traversing the hill upwards. Skate at about a 45 degree angle to the fall-line, zig-zagging your way up the hill. [Click to view video.](#)

Wheel & Bearing Maintenance

Not all wheels are created equal, and not all wheels are made for your skates or your skating style. If you're not sure what type of wheels work best for your skating style, visit the "Wheels" section of our online store for more details.

How to know when you should change or rotate your wheels.

Uneven wheels not only perform poorly, they're also unsafe to skate on. Be sure to rotate your wheels as soon as they show signs of wear. Proper maintenance of your skates, wheels and bearings is essential to fun and safe skating.

New wheels will dramatically increase the performance of your skates. You may be accustomed to skating on old wheels, but don't be fooled. New wheels are smoother, grippier and increase performance significantly.

How to choose the right the right wheel for you.Urethane:

Specially formulated urethanes are specific to surfaces and uses. Be sure to choose the right formulation for your needs.

Durometer:

The durometer or hardness of a wheel is measured from 72A (ultra soft) to 100A+ (very hard). Softer wheels are better for grip and a smoother ride, while harder wheels last longer and are often faster.

Size:

The size of a wheel is measured in mm's (millimeters). Smaller wheels are slower and used predominately for aggressive street skating. Larger wheels are, mostly, faster and used for recreational skating and racing.

How to know when you should clean or replace your bearings.

The best way to improve your skating is to improve your bearings and wheels. Bearings are the engine of your skates and often neglected because you can't see them. If your bearings, sound or feel worn, do something about it -- it'll increase your skating speed, and make your skating improve significantly. BSB offers a whole family of Lubes and Cleaners, in addition to the newest bearing technologies.

Fitness— Use It Or Lose It

by The Trainer, Kellee Katagi, Ski Magazine, May/June 2003

Does it hurt your skiing if you lay off the weights until fall?

There are plenty of ways to keep muscles toned without setting foot in a gym. One option is to set up a small weight set in your yard; a bench, a bar, a few dumbbells. If you don't have the dough— or desire—to assemble a backyard Bally's, try lower-cost equipment such as exercise tubing or an exercise ball.

Push-ups, pull-ups, stomach crunches and wall squats are a few examples of exercises that don't require gear. And good old summer fun— hiking, mountain hiking, trail running, inline skating— are effective complements to strength-training.

But don't ignore your muscles. Stop working out, and you can lose strength quickly, at about half the rate of gain. But even a token weekly workout can keep you in the game. Research shows that in just one 30-minute strength session a week, you can gain 60 to 75 percent of the strength of someone who does the same routine three times a week. Translation: A half-hour a week in the summer can save your butt.

Improve Your Skiing This Summer by Rollerblading

by The Professor, Stu Campbell, Ski Magazine, May/June 2003

Not long ago, I stood with former gold-medalist Phil Mahre watching an international slalom race in Colorado. Noting how technique had changed since his day, Phil remarked, "It's like these guys are on Rollerblades."

He's right. Watch tapes of the Winter Olympics in Salt Lake. See how the best slalom skiers show very little up and down movement, but spread their feet apart and smoothly roll both skis from edge to edge. There is no pivoting of the skis and rarely any skid—just arc-to-arc carving. Balancing on inline skates is identical to standing over the sweet spot on a modern slalom ski. There is little margin for error. You can't be too far forward, and sitting back will put you down in a second.

Given the short shaped skis available to us these days, inline skating is even more effective for cross-training. I'm not talking about skating on roads and bike paths. Find a wide paved area with a gentle pitch. Try a local school or mall. Set up some traffic cones in your parking lot, and "run gates." Wear a helmet, knee and elbow pads and wrist protectors, and "ski" this slope all summer.

The real beauty of inline skates is that their rubber wheels won't skid. Turning them feels just like carving. The more miles you skate, the more ready you'll be to make precise turns and impress your friends next season.

Protect Your Knees, Learn to Land that Jump

Females endure an unfair amount of knee injuries. Jump training may be the silver bullet. They tend to tear the anterior cruciate ligament (ACL), the key ligament holding the knee together, two to three times more often than males. And it's a problem that's bound to get worse with the ever-increasing popularity of throwing trick airs in the pipe and park. The solution may be sending those new jumpers back to school.

They call it jump training, but it's really about learning to land properly. The trick is to jump and land without making noise. A 1999 study by Timothy Hewett published in the American Journal of Sports Medicine showed that women who jump trained for six weeks lowered the incidence of knee injury by a whopping 75 percent.

Silent jumps strengthen the hips and legs, enabling skiers to engage that all-important flexed knee-hip position that is vital to safe skiing and landing. Jump training is a powerful training tool that may help reduce ACL injuries in female skiers.

In explaining the gender inequities of ACL injuries, researchers point, in part, to muscle differences. When you examine how women and men recruit knee muscles, you find significant differences. The hamstrings are critical knee stabilizers. Studies have shown that men, when actively stabilizing the knee, recruit their hamstrings first, whereas women tend to recruit their quadriceps first. Add to this anatomical differences like hip width, joint laxity, and ACL size, and you have a recipe for disaster.

Jump training may help avert that disaster — not only through soft landings but also by building strength where women need it. A healthy and safe knee demands that the surrounding muscles are strong. Jump training is the only intervention proven to reduce ACL injuries in female athletes. So, the skier who finds herself flying through the air should take a cue and get some jump therapy.

To practice jumping always keep the knees facing straight ahead, not knock-kneed. With knees and hips slightly bent, jump up. Then, as you land, bend at the knees again, giving slowly to reduce the impact. Keep your body in a "controlled position of hips over knees over feet. Concentrate on making the landing soft and quiet and light as a feather.

Heart Rate Monitoring

When you exercise, the heart beats faster to meet the demand for more blood and oxygen by the muscles of the body. The higher the intensity, the faster the heart will beat. This is why heart rate monitoring can be your best coach! It lets you know if you're working too hard or not hard enough.

To find your estimated target heart rate, take

$$220 - \text{age} \times .60 = \text{Low end of training heart rate}$$

$$220 - \text{age} \times .85 = \text{High end of training heart rate}$$

For general conditioning keep at the low end of the training heart rate. For higher intensity keep at the higher end of the training heart rate. For interval training try one minute at the high end, then one minute at the low end. Alternate for 15 - 20 minutes. Remember this is just an estimate. If you feel like you're exercising too hard, you probably are. Reduce the intensity.

Duration: 30 - 45 minutes for general conditioning, 15 - 20 minutes for interval training.

