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A Ski Binding To Prevent ACL Injuries?

It's the dreaded moment that makes skiers shake in their boots and sweat in their gloves: the twisting and unmistakable popping sound of an ACL injury. Experts estimate that over 200,000 people injure their anterior cruciate ligaments (ACL) each year, with about 95,000 of those full tears. Skiing is one of the sports with the highest risk of ACL injuries--up to 70,000 per year, according to KneeBinding. KneeBinding is new company that has just released a reconfigured ski binding which allows the boot heel to come out sideways. Allowing the heel to release, they claim, will prevent almost all of the skiing-related ACL injuries.

"I wish they had this years ago," laments Ian Troxell, an artist and adventure guide, who has torn his ACL three time in the past five years amidst skiing, playing soccer, and doing other outdoor activities. He thinks the new design is "brilliant" and notes that it would have helped prevent his ski accident, which occurred when he caught an edge, skiing backwards and turning on a bare, grassy spot.

The binding, expected to retail next fall for about \$500, is an excellent prevention method for skiers. But Troxell notes that there's quite a few contributing factors that lead to a blown-out knee. Read on for a few tips on helping your ligaments stay attached while skiing:

1. Ski at your level. "Skiing too aggressively, if you're not at the right experience level, can be a huge problem," Troxell says. Think you can huck that 30-foot cliff with a steep icy landing? Think again.
2. Ski maintenance. Make sure your DIN settings are correct every time you ski, especially if you're using new equipment. This is the single easiest way to prevent ACL injuries. If your DIN settings are too high, you won't pop out of your binding when you fall, which is what causes your knee to twist in unnatural ways.
3. Preemptive knee braces. One idea that's slowly catching on is wearing knee braces all the time while skiing as a preemptive measure. ACL injuries happen when the leg twists, and the weakest part of the leg--your knee--is the first to give. Wearing a knee brace strengthens your knee in case this does happen. But knee braces often limit movement, so it's a personal preference.
4. Stay in shape. "The more in shape you are, the better your muscles can handle it, and you're far less likely to hurt yourself," Troxell says. During college, when he played soccer for his school, Troxell didn't have knee problems. But he injured his ACL for the first time right after college, once he started working and had less time to exercise.

But the bottom line is go out and have fun, and hopefully not worry about hurting yourself. "You're never going to stop young men or young women from playing sports for fear of injury." Troxell says.

--Melanie Lidman