

# Skiers need to stretch and strengthen year-round

**DWIGHT CHAPIN**  
**HEALTH ADVISOR**

Skiing is generally considered to be a high-risk sport, independent of age. Although advances in equipment design, such as multidirectional release bindings, have reduced the number of injuries on the slopes, the knee remains vulnerable. A third of all skiing injuries are related to the knee joint, with ligament injury being the most common. Thumb injuries also frequently occur when a skier falls on an outstretched arm while still gripping the pole.

Slow twisting falls, or when beginners hold a snowplow position for too long, can put the ligament that supports the inner knee, the medial collateral ligament, at risk. A fall backward as

the lower leg moves forward, or simply “catching an edge,” can result in injury to the anterior cruciate ligament, or ACL, of the knee.

Skiers of all ages face these risks. But older skiers need to devote greater attention to their pre-season training and cool-down rituals if they are to maintain the balance, flexibility and strength that the sport demands. Bone density is also something that older skiers can have tested to appropriately manage the risk of fracture that may occur with a fall.

**Strength-train during the off-season**

Skiers who pay attention to pre-season conditioning with an emphasis on sport-specific movements will improve their per-

formance and delay muscle fatigue that often contributes to ski injuries. The following muscles are particularly important:

- ▶ **Quadriceps.** These large muscles that make up the bulk of the front of your thigh help hold you in a skier's position, as you make your way down the slope. The quads also provide protection to your knee. Try squats and lunges to build strength.
- ▶ **Hams and glutes.** Hamstrings and gluteal muscles help stabilize your flexed position when skiing. Try step-ups, deadlifts, bridges and hamstring curls using an exercise ball.
- ▶ **Abductors and adductors.** These outer and inner thigh muscles also provide stability and will help you with your turns. Try side lunges, monster walks and side-lying leg lifts.
- ▶ **Calves.** With your knees bent as

you ski, your calf muscles help you stay upright. Try standing calf raises.

- ▶ **Spine and core.** In order to maintain a neutral spinal posture and avoid a back injury, your core must be conditioned. Try bird dog, plank, side plank and superman.
- ▶ **Shoulders and upper back.** Use of your poles to move across flatter terrain will require good arm and upper-back strength. Try bicep and tricep curls, push-ups and reverse rows.

**Remember your après-ski stretches**

The goal of the cool-down is to promote recovery. With vigorous activity, muscle fibres and other soft tissues may be damaged, resulting in waste products building up in your tissues. This will

make you feel stiff and sore. The cool-down will assist your body in its repair, reducing the effects of delayed-onset muscle soreness.

A cool-down should include gentle stretching movements targeting the muscles listed above. This is not the time to be working on your flexibility with aggressive stretching. The goal is to gently lengthen the muscles that you have been working. Recreational skiers should reserve 10-15 minutes to cool down following a day of skiing before warming up by the fire.

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FROM PAGE 1

## Skiing: It is possible to breathe new life into an old body

▶ The big 6-0, which I hit last August, was like no other birthday I'd experienced. I found it – what are the words? – profoundly depressing. My colleague Ian Brown captured the dark mood and pangs of angst it can generate in his brilliant book *Sixty*. One line in it resonated with me: “How much life can you live in the fourth quarter, not knowing when the game itself might end?”

To cope with this dubious milestone, I made a list of all the things I wanted to do while I was still in decent shape and of sound mind. Topping it was learning to ski. I bounced the idea off a few friends; most gave me the kind of wincing look that said: “Poor boy's already losing it.” One said it was a lost cause – skiing was too difficult and intimidating a sport to take up after 50. Stubborn ass that I am, I was more determined than ever to press on.

I contacted the folks at Whistler-Blackcomb and told them what I wanted to do: learn to ski at 60. I also said I was going to chronicle my experience, good or bad. They loved the idea and set me up with the equipment I would need and also an affable and highly capable instructor – Tom Radke. We would spend three days together on the slopes, which was a colossal benefit. (Whistler-Blackcomb offers group lessons of up to four people, which are a great and much cheaper option.)

Tom is a bear of a man who learned to ski growing up in Sault St. Marie, Ont. Like many, he would come West and never return. Once he saw what real mountains looked like, and once he experienced the ecstasy of skiing down them, that was it. It became an addiction. Over time, he would become an in-demand instructor in both Canada and the United States.

One of the first things he asked me was whether I had played hockey growing up. I had. This, I would discover, would be an enormous advantage in learning how to ski. Day 1 was mostly spent on the bunny hill. Actually, we didn't even go to the bunny hill at first; we went to a bunny patch, which was mostly flat but did contain elevation changes of six inches or so. There, Tom taught me how to feel comfortable on one ski, then two, and then we quickly graduated to a snow plow – forming an inverse V with your skis – which is the elementary way to stop. After mas-



Gary Mason, shown here on Whistler-Blackcomb mountain, was astonished to see kids whizzing down slopes that left him paralyzed with fear. BEN NELMS FOR THE GLOBE AND MAIL

tering that, we hopped on a chairlift so we could practise the snow plow on something resembling a real hill.

This went fine. The only thing remotely upsetting was watching all the three- and four-year-old kids whizzing by me. There were literally dozens, coming from everywhere. It's shocking, actually, how young kids are when they start this sport. It's even more astonishing when you see the kind of runs they are going down – ones so steep that when I eventually faced one myself, I was paralyzed with fear.

On Day 2, Tom taught me the essentials of turning. This is where my skating skills came in handy. (It's all about the ankles.) The motions were familiar to me, even if I had five-foot slabs of fibreglass attached to my feet. I did well, despite catching the edge of my ski blade a few times in the snow and going for a tumble. On my third and final day,

Tom took me further up Blackcomb where, he assured me, there was a run he thought I could handle. I wasn't so sure. And when I had my first look at some of the drop-offs I was going to have to travel over, I felt sick – although I never displayed any hint of my nervousness to my supremely confident instructor.

Having said that, fear is a legitimate emotion. Skiing is not without its risks, especially as you get older. And you have to know and accept this. Broken bones, or worse, can happen, especially if you're not aware of your surroundings. A good helmet is a must. The better shape you are in off the mountain, the better chance you have of succeeding on it.

There are no official numbers on how many people older than 60 are downhill skiing in Canada today. In the United States, the National Ski Areas Association reported that just more than 5.3

per cent of skiers visiting American hills last year were older than 60. When I was in Whistler, I caught up with Wendell Moore, 67, who runs a senior ski team program at the resort for anyone 55 and older.

When it began, in 2003, only seven people took part, Moore told me. Most had skied before but wanted to continue in a group setting of like-aged adults. Today, Moore has more than 250 in the program, with six older than 80. “And many are excellent, excellent skiers, including a few over 80,” Moore told me. “Today, with the way they make and design skis, the sport is easier than it's ever been.”

Besides, when you're over the hill, you pick up speed. (Old ski joke, apparently.)

You don't want to hear about how I coped with some of the more technical aspects of skiing, and what was involved in mastering them (or beginning to). You

want to know how I did; whether I overcame the physical and psychological impediments my age placed in my way. The answer is I passed the test with flying colours. And it gave me a unique joy I hadn't felt in a while.

Why? The supreme rush of shushing down a ski slope, the wind hitting your face, the mountain scene spread out in all its glory before you. There is nothing like it. I was irritated that I'd waited so long to experience this feeling, and delighted that I fought the ennui that settles in with age, ignored the impulse to take a pass on things that seem remotely scary or even dangerous.

Now, I am forced to say here (my instructor insisted, seriously) that not everyone my age (or just on either side of it) who is contemplating learning to ski will enjoy the same success, at least immediately. I have an athletic background, played a lot of sports. I stay in reasonable shape. I have strong legs. This likely helped me avoid the sore muscles I fully anticipated having after each day on the slopes. There were a few bruises from falling, however.

And as I mentioned, years of skating was a considerable asset. You bend your ankles to turn in hockey in much the same way you do when you ski. I found I could come to a full stop with my skis the same way I do with my skates. That said, I believe most anyone can do what I did with time and motivation.

I can see joining a program such as Wendell Moore's one day, but not yet. I have lost time to make up for. I need to get better. I need to put some miles under my skis. But I've discovered that learning the sport has opened up an entire new world. Now I spend my time researching equipment and techniques. I'm looking for a new ski jacket, to replace the hand-me-down snowboard coat that one of my kids loaned me for my ski lessons.

It is possible to breathe new life into an old body and in the process feel exhilarated in a way you haven't for a long time. In fact, I can't wait to get back up to Whistler, to feel the power and energy the town and the sport give me. And I can't wait to be sitting in some bar afterward, hoping someone asks how I found the conditions.

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FROM PAGE 1

## Hutchinson: Air's moisture negligible no matter what humidity is

▶ At 0 C, on the other hand, the same air holds only 4 grams of water even at 100-per cent humidity, since slower-moving water molecules are more likely to condense or freeze. By the time you get down to -25 C, that drops to less than a gram of water. Below freezing, it's fair to say that all cold is dry cold.

This objection was noted by Crow, whose exhaustive review, published in 1988, summarized the results of a series of military experiments in Canada, Britain, and the United States in the late 1950s. Hapless subjects were exposed to near-freezing temperatures at low and high humidity, with and without clothes, while having their skin and rectal temperatures measured and their subjective responses noted. Humidity didn't make any measurable difference.

Still, this apparent debunking conflicts with the experience and convictions of millions of



Below freezing, it's fair to say that all cold is dry cold. FRED LUM/THE GLOBE AND MAIL

Canadians, so Crow considered other theories.

One possibility is that droplets of water vapour – fog, essentially – get into your winter clothing and reduce its insulation. There's no doubt that wet clothing loses heat more quickly, as quantified in peer-reviewed studies such as “Impact of wet underwear on thermoregulatory responses and

thermal comfort in the cold,” by Norwegian and Danish researchers.

This explanation may be plausible for “British winter” conditions with fog and temperatures just above freezing. But at colder temperatures, it runs into the same problem: The amount of moisture in the air is negligible no matter what the humidity is.

In her search for answers, Crow turned to Environment Canada to get weather records for 12 Canadian cities and an air base in Germany. The cold-wet sensation, she determined, wasn't associated with wind or atmospheric pressure, but did seem linked to cloud cover.

This line of reasoning makes sense. By some estimates, Crow reported, direct sunlight can make the air feel 5 degrees warmer than it actually is. And Environment Canada's map of annual sunlight (compiled for solar power development) could

easily be mistaken for a guide to where people boast about their “dry cold,” with a broad hot spot across the Prairies.

The top sunlight cities in Canada: Regina, Saskatoon, Calgary, Winnipeg, Edmonton.

In the end, then, it may be that cold, dry air – as measured in a laboratory climate chamber, at least – feels no different than cold, damp air. But cold, dry air under a clear blue sky feels much nicer than the cloudy grey skies that afflict cities such as Toronto and Vancouver, whatever the humidity.

It's a nice theory, but its confirmation will have to wait for further study. “You know those raw days when you feel chilled to the bone the moment you step outside?” Crow wrote in a 2009 memoir, more than 20 years after her literature review was published. “I still don't know why this makes one feel so cold.”

TODAY'S SUDOKU SOLUTION

5	9	3	4	7	1	8	2	6
4	2	1	3	6	8	5	7	9
8	6	7	2	9	5	1	4	3
2	8	9	5	4	6	3	1	7
7	4	5	8	1	3	6	9	2
1	3	6	7	2	9	4	5	8
3	1	8	9	5	2	7	6	4
6	7	2	1	8	4	9	3	5
9	5	4	6	3	7	2	8	1

TODAY'S KENKEN SOLUTION

12+	72x			5-	5
4	2	6	3	1	5
3	5	2	1	6	4
6+	4	2-			24x
1	4	5	6	3	2
5	6	3	4	2	1
3-		4			3-
6	1	4	2	5	3
2	3	1	5	4	6