

Tips for Avoiding Injury During Winter Running

By Stride Longley

Running in the winter can be some of the most satisfying running you will do all year. There's just something about getting out there in the nastiest of nasty weather when others dare not tread, something elemental that eludes definition. After such a run you feel empowered and ready to face any challenge the day may bring. These runs do, however, come with increased injury risks that one does not face during the warmer seasons. The most common are Achilles tendonitis, plantar fasciitis, and calf strain. A few simple pointers can help you transition into the winter running season feeling healthy and ready to tackle those New Years Running Resolutions.

Running on snow and ice covered roads brings about changes in your gait and biomechanics that can challenge your ability to stay injury-free. It all comes down to how your foot transitions during the gait cycle. The gait cycle has three distinct phases: rear foot strike, mid foot weight bearing, and toe off. On a dry surface your foot has a predictably solid surface to strike and transition into mid foot weight bearing. Then, like a loaded spring, the foot moves to toe off, propelling you forward.

Enter snow and ice. As your foot strikes the ground and makes the transition into mid foot weight bearing, the foot will tense up and become more rigid. A rigid foot does not absorb shock well. Once past mid foot weight bearing, the foot transitions into toe off. It is during this third phase of the gait cycle that problems occur. As the foot pushes off the ground, the decreased friction of the surface allows the foot to slip a very small amount. This slipping places a tremendous amount of stress and strain on the Achilles tendon, plantar fascia, and both muscles of the calf (the gastrocnemius and soleus). You may not feel it right away during the run, but give it a day or two. Continued running will increase this strain, and could eventually cause injury.

Using moderation in your training will allow your body to adapt to the new stresses being placed on it. By cutting your runs back marginally over the first two weeks of inclement weather, your body will be better prepared to handle the change and therefore less likely to become injured. To aid in the transition, you can also use Yak Trax or Due North (formerly Get-a-Grip) snow and ice cleats on your shoes to gain traction without compromising the fit and function of the shoes.

So when the snow flies and you're determined to get out and run, take a measure of caution. You'll be thankful in the long run.

-Stride