

# Top-of-the-World Stretches

by Kenneth D. Forsythe, M.D.

Never be so eager to start skiing that you forget to stretch your muscles before hitting the slopes. People who don't stretch first not only perform more poorly than those who do, but they also increase their risk of sustaining muscle, ligament and bone injuries.

The main benefit from stretching is an increase in a joint's range of motion, accomplished by loosening up and stretching the ligaments—the tissues that connect the muscle to the bone—of a particular joint. Obviously, the more range of motion a joint has, the further it can be pushed before some sort of tear, strain, break or other injury occurs.

But the common misconception is that the *very* first thing you should do before skiing is stretch. In fact, what you should do is warm up your ligaments with light exercise for five or ten minutes. This not only loosens up the ligaments for stretching but also gets more blood flowing in the limbs and extremities. This increased blood flow is important, since only 5 to 10 percent of your total blood flow is in the extremities during rest, and the body needs about 80 percent of total blood flow in the extremities during vigorous skiing.

When you stretch, avoid sharp, sudden exertion, since that can tear your ligaments before you're even on the slopes. Instead, do your stretching in a slow, steady, patient manner.

Many people neglect their upper bodies when stretching. This is a mistake. Skiing requires a great amount of upper-body flexibility in addition to flexibility in the hips and lower back. In fact, the side-to-side hip motion is the pivotal motion involved in skiing.

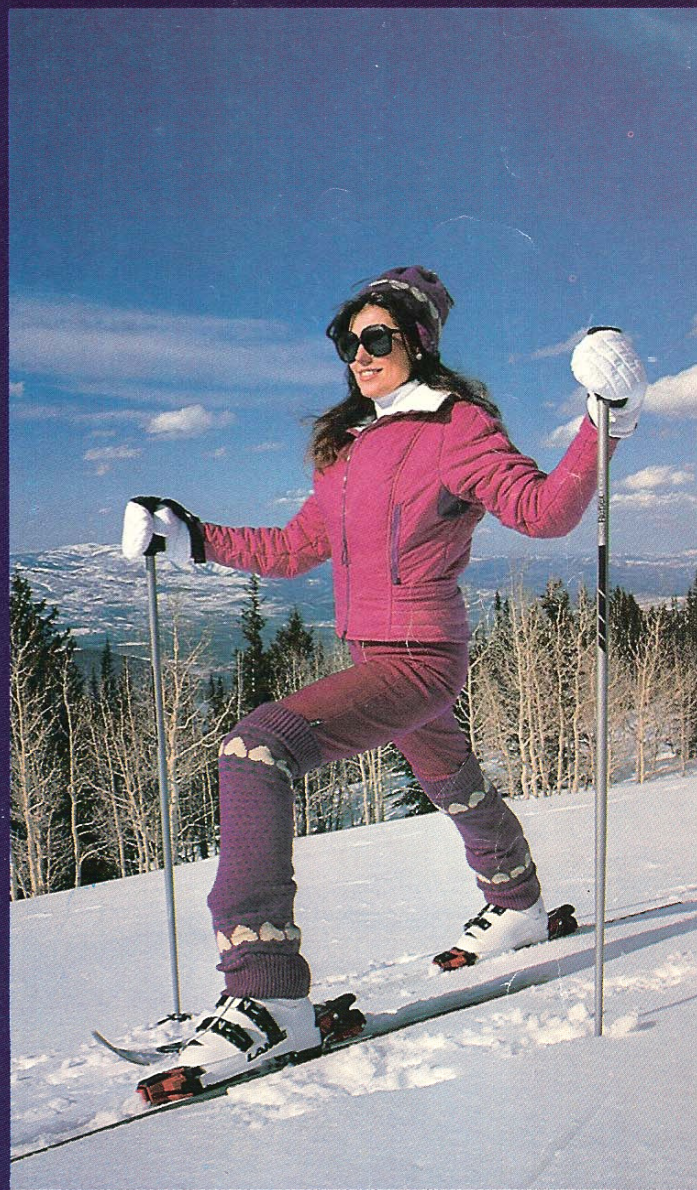
It is also important to stretch your ligaments *after* you ski. Called cool-down, this type of stretching helps prevent your ligaments from shrinking back to their former degree of inflexibility and should be done after skiing for five to ten minutes, spending at least one minute on each major muscle group.

The ankle was once the most commonly injured joint, but with the advent of the high ski boot, this dubious honor has now been passed on to the knee. This delicate joint can be injured by twisting, tearing, straining, spraining or deranging, to mention just a few of the most common knee injuries. For these reasons, stretches that increase the flexibility of the ligaments around the knee are very important. But don't neglect your ankles when you're stretching, for in spite of the improved boots, ankle injuries still occur.

Make stretching as much a part of your ski experience as the act of skiing and you'll increase your chance of having fun. And fun is what skiing is all about. ■

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Outfit by Head. Leg warmers and hat by Serrac. Boots by Lange; gloves by Kombi; skis by K-2.



PHOTOGRAPH: BRIAN LEATART

*Ski safely by loosening up  
and stretching out before  
you head downhill.*