Five Fantastic Stretching Exercises from Debbie Pitchford

Flexibility Can Make You Faster

IT WAS NOT A PULL, but more a strain of my hamstring muscle. I had injured the left hamstring while training last summer for the World Veterans Championships in Gateshead, England. Going over hurdles did me in. I strained the muscle further while running a sub-par 1,500 meter run at Gateshead. Warming up for the 2,000 meter steeplechase two days later, I could barely move, so pulled out of the race.

A month later, even though I could still run, the hamstring was not getting any better. That was a problem, since I had a commitment to run a 12-mile leg in the Klondike Road Relay in Alaska within a week. Running a sub-par race bothered me less than letting down my teammates.

That's when I decided to see Debbie Pitchford.

Pitchford is a physical therapist for Novacare and works at Medical Group Outpatient Rehabilitation in Michigan City, Indiana. She had run cross-country and track (300 meter hurdles) in high school in Brownsburg, Indiana, but her main sport was gymnastics. Pitchford placed tenth at State in the uneven bars her senior year, despite competing with a broken ankle. "Landing was an adventure," recalls Pitchford with a rue smile.

She did not participate in sports while obtaining degrees at Purdue University (B.A.) and the University of Evansville (B.S.) that led to her current career as a physical therapist, but jogged for enjoyment, an activity she continues today. Pitchford usually runs 3-5 miles, 3-4 times a week near her home in New Buffalo, Michigan.

As a physical therapist, Pitchford understands how to stretch correctly, something she claims not all runners know how to do. She offers the following advice for runners who want to increase their speed and prevent injuries by developing flexibility.

Warm Up and Cool Down: Stretching is important during your warm-up, before you run, because it increases blood flow to the muscles. But stretching during your cool-down may be even more important. "After running, stretching helps to remove lactic acid from the muscle, which in turn reduces muscle soreness," says Pitchford. "That promotes better flexibility." Stretching afterwards also will help you relax.

Don't Overstretch: While stretching can promote flexibility, stretching too far actually can *damage* the muscles—particularly if you're recovering form an injury. "A healthy muscle can elongate up to 1.6 times its length," suggests Pitchford, "but generally doesn't respond well to that much stretching." By overstretching, you create an automatic myotatic reflex that actually will cause the muscle to recoil to protect itself from tearing and injury. Also, don't bounce while stretching. Holding your stretch in a static position works best.

Combine Stretching and Strengthening: A good time to do your stretching exercises is while resting between lifts during your strength training. (See: Strength.) Strength training will *not* decrease your flexibility, says Pitchford, as long as you do it properly and perform your lifts through their full range of motion.

Use MICE Rather Than RICE: Health professionals frequently promote RICE as one way of treating an injury: Rest, Ice, Compression and Elevation. But Pitchford promotes MICE. "Move it," she says. This is because immobilizing a muscle can lead to decreased blood flow and muscle atrophy. If you stretch properly while recovering from an injury, you can speed that recovery.

Resist Aging: Pitchford believes it a myth that aging is the only factor that causes us to lose flexibility. "It's lack of exercise," she says. "Studies show that a sedentary lifestyle is a bigger factor in decreasing flexibility than aging." If you stay active aerobically and use stretching to maintain your flexibility, you will look and feel younger because of the way you move.

Finally, the key to the exercises presented below is to maintain good form. Don't look sloppy stretching. The 90-degree angles featuring straight backs and carefully positioned limbs that work in the strength exercises promoted by personal trainer Cathy Vasto also work well in many of the stretching exercises promoted by Debbie Pitchford. Pitchford's five fantastic stretching exercises follow. (Hold each stretch for 10 seconds, repeating 10 times.)

1. **Quadriceps Stretch:** The quadriceps is the muscle in the front of the thigh, important for lifting your knees and increasing your speed. It is the "quads"

that often go at the end of marathons, causing runners to come shuffling across the finish line because they have a hard time lifting their feet off the ground. To do this exercise while standing, simply grab hold of a stationary object for balance with one hand and use the opposite hand to grasp the leg around the ankle, lifting it toward your buttocks. Pitchford points out several form faults: "You want to keep your back straight and not allow the knee to drift forward ahead of the stance leg. A lot of runners slouch forward, which effectively negates the stretch's effectiveness."

An even more effective way to do this exercise, however, is lying on a bench, using a towel wrapped around the ankle to pull your foot toward your buttocks. You should position yourself on the edge of the bench with the foot of your dangling leg forward, knee bent, leg relaxed. As with the other stretching exercises, hold each stretch for 10 seconds and repeat as many as 10 times for each leg.

Quadriceps Stretch Positions

2. **Hamstring Stretch:** This is the exercise that got me ready to run the Klondike Relay. Most runners do this exercise by putting their foot on a waist-high stationary object (or a hurdle if at the track) and slowly leaning forward, reaching down the shin until they feel a stretch in the hamstring. The hamstring is the muscle that runs from just below the knee up into the buttocks. It's the muscle that lifts the lower leg and bends the knee after the quads have lifted your knees. Sprinters pull this muscle more than distance runners, but as I discovered, even straining your hamstring can limit your ability to run fast.

The best way to do this exercise, however, is not with your foot on a stool, but rather while lying on your back. This is how Pitchford taught me the hamstring stretch. Lie on your back, keeping the back flat and your eyes focused upward. Grasp the back of one thigh with both your hands and (leg bent) pull that thigh into a 90-degree position vs. the floor. Then slowly straighten your knee. After you've gotten used to doing this exercise, you can achieve a better stretch by pulling your thigh closer to your chest—but don't overdo it!

Hamstring Stretch Postions

3. **Piriformis Stretch:** The piriformis muscle is responsible for lateral rotation of the hip. It is particularly important to athletes who have to change direction, such as tennis players and running backs in football. But though runners run straight ahead, keeping the piriformis muscle loose is important for overall flexibility. Lying on your back, cross your legs just as you might while sitting in a chair. Grasping the "under" leg with both hands, pull the knee toward your chest until you feel the stretch in your buttocks and hips.

Piriformis Stretch Position

4. **Gastroc Stretch:** This push-off exercise is the one you most often see runners doing before races. Typically, they lean against a wall to stretch the calf muscles—but they don't always do it right, claims Pitchford. The gastroc muscle, along with the soleus, is located in the back of the calf. It is the calf muscle that actually propels your leg across your grounded foot while running. Lean against a wall or other stationary object, both palms against the object. The leg you want to stretch is back, several feet from the wall, your heel firmly positioned on the floor. Your other leg is flexed about halfway between your back leg and the wall. Start with your back straight and gradually lunge forward until you feel the stretch in your calf. "It is important to keep your back foot straight and angled 90 degrees from the wall," says Pitchford.

Gastroc Stretch Position

5. **Soleus Stretch:** "This is the stretch that most runners forget," says Pitchford. "They stretch their gastroc muscles (as above) without realizing there's a similar stretch for the soleus." The soleus is the other major muscle in the calf, located in front of the gastroc. It is important for planting the foot on the ground before your push off. Position yourself similar to the gastroc stretch with back straight and palms against the wall. The difference is that you start in a "seated" position with your legs bent, your buttocks dropped. Gently lean into the wall until you feel the stretch in your lower calf.

Soleus Stretch Position

Stretching is important, says Pitchford, not only because it will make you a better runner, less likely to get injured, but it can also help you to maintain flexibility to do all the other activities in your life.