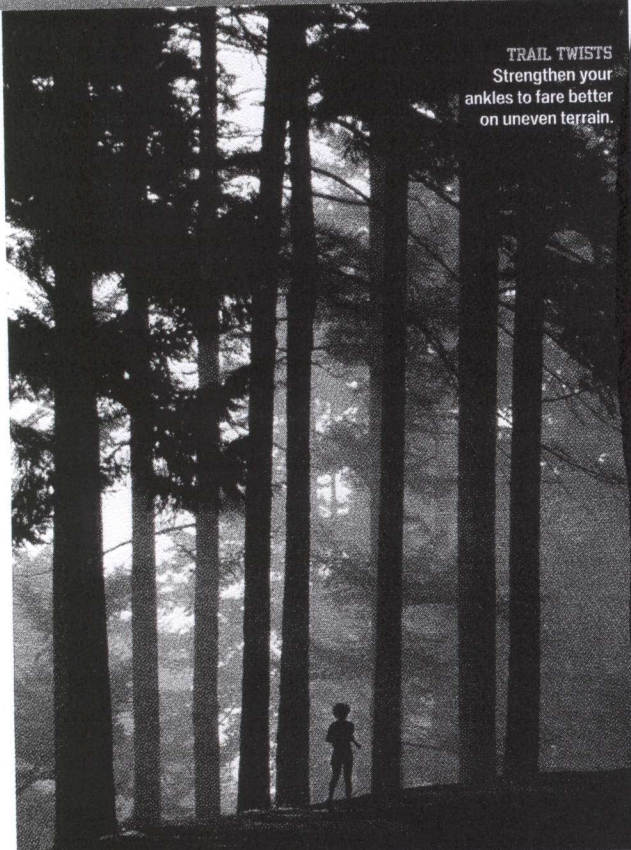


WARMUPS



TRAIL TWISTS
Strengthen your ankles to fare better on uneven terrain.

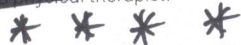
Q+A ASK THE EXPERTS

Q: What can I do to avoid twisting my ankles when I run trails?

A: You can improve the strength and stability of your ankles with proprioception exercises. Proprioception is your brain's ability to know where your body is in space. By enhancing it, your reaction time in response to the ground will improve, reducing the odds of an ankle injury.

Try this three times per week. Stand on one slightly bent leg. Keep your heel and toes in contact with the ground. Stare straight ahead. Hold for 30 to 60 seconds and repeat five times for each leg, alternating legs. Too easy? Try it with your eyes closed, or standing on an unstable surface like a balance

board. Or do any standing dumbbell exercise, such as biceps curls, standing on one leg instead of two. —MICHAEL CONLON of Manhattan's Athlon Physical Therapy is a Team In Training-New York City marathon coach and physical therapist.



Q: I don't race longer than 10-K, so do my training runs need to exceed that distance?

A: Yes, longer runs are beneficial even for 5-K and 10-K runners because there is a relationship between endurance and speed. The legendary coach Arthur Lydiard advocated building a base of long, steady runs to develop your cardiovascular and muscle capacity and lay the foundation for distance-running

performance. Adding aerobic miles (those done at about 70 to 80 percent of your maximum heart rate) serves to increase your aerobic threshold—your top aerobic speed—so you can run a faster pace with the same effort. This translates into faster race times.

As your body becomes more aerobically efficient through endurance training, your ability to take in oxygen and recruit muscle fibers improves, which has a direct impact on 5-K and 10-K racing speed. Your connective tissue is also strengthened. Most of these adaptations occur in the latter stages of a longer run, when you're pushing into new territory, which is why long runs are so important. I recommend a weekly run of at least 90 minutes to two hours. Gradually build up to the distance and run them at a speed that feels comfortable.

—LORRAINE MOLLER, 1992 Olympic Marathon bronze medalist, is a Colorado running-club coach and cofounder of the new Lydiard Foundation.

Q: If I work a night shift, what's the best time for me to run?
A: The time of day that you run doesn't matter too much for your slow, easy runs. Your pace during these runs may vary by a

few seconds per mile for the same effort at different times of day, but that's less important than running at a time that fits best in your schedule. Pay attention, however, to when you run speed workouts, when a few seconds per mile *does* matter.

For most people, the best time for a peak effort is 10 to 12 hours after waking up. Studies show most athletes perform best in the late afternoon or early evening—for you this may mean an early-morning workout after your shift. The worst time is when you first fall out of bed, because your body temperature is lowest, and muscles and joints are least flexible. If you do need to run soon after you wake up, spend ample time warming up before hitting your pace.

—MICHAEL SMOLENSKY, Ph.D., is a runner, a professor at the University of Texas-Houston School of Public Health, and coauthor of *The Body Clock Guide to Better Health*.

STEP ON IT
Stair stepping strengthens the legs with no impact.



MY ROUTINE

Runners' regimens—minus the miles

I spend a lot of time on a stair-stepper because it mimics how I run—up and down on my toes, like a little roadrunner. Stair stepping strengthens my lower body without having to do weights, and it saves my legs for running. I usually set the machine on a medium pace and go anywhere from a half hour to two hours.

—Sabrina Monro, 2004 USA Club Cross-Country runner-up