

The Best Ways to Stay Injury-Free

How can you avoid running injuries? Here's what local coaches and medical experts say

by Jack Crager

Ask a dozen experts how to prevent running injuries and you'll get a dozen different answers. And that's probably a good thing.

"Each person is different," says Norbert Sander, MD, who has treated sports injuries for more than three decades as the founding director of New York's Preventive and Sports

Medicine Center. "Injuries are not always easy to predict," notes Sander, a lifelong runner who won the 1974 New York City Marathon. "You probably should be careful not to model yourself after a system: 'If I do this or that, I'll never get injured.' You've got to go with what works."

The coaches and medical experts we consulted offered candid, down-

to-earth advice to runners that reflects their own experience and expertise. "Among the lessons I've learned from running are to respect the sport and forge a lifelong bond with it," says multisport coach Scott Cohen. "You've got to develop skills and strategies that will keep you running smart, often, and pain-free."

A Pause that Refreshes

"If I was to pick one thing that keeps you injury-free, it's the concept of rest—getting enough sleep and relaxation and recovery between workouts," says **Norbert Sander**, who now practices at City Island in the Bronx. "You risk injury if you're running too hard too often or you're sleep-deprived. There is science to back up how training cycles work."



Sander has sage advice for easing into workouts. "For warm-up, I always say, start off like the Africans do—just little pitter-patter steps," he adds. "Give yourself a good quarter of a mile of extremely slow running, with very shortened strides, and then pick it up. That helps warm up the quads, hamstrings, and calf muscles by giving

them a better blood supply." Only then should a runner gradually stride out.

Another recommendation from Sander: Never force a hard workout. "Frank Shorter said he never did speed-work on tired legs. If the calendar dictates, 'Today is intervals,' but you go out and say, 'I'm beat,' then somehow you've got to adjust that. Because that's when you're asking for trouble."

Listening to the Body

"Running is incredibly rewarding but also potentially stressful," says **Scott Cohen**, who coaches NYRR's BRiX Bike-



Run classes. "Our bodies protect us from the continual impact of running by adapting and strengthening themselves. Much of this strength comes from allowing for proper recovery and from cross-training." (The term refers to the practice of including aerobic alternatives

to running in a fitness routine.)

For Cohen, the phrase "Listen to your body" should be the endurance athlete's byword. "It involves learning to develop an inner sense of pacing yourself and detecting signs or symptoms of soreness or localized tenderness in your quadriceps, hamstrings, calves, lower back, or other spots that bear the brunt of running," he says. "This can take time to develop in runners. A gradual progression in mileage—a 10-percent increase weekly or biweekly in your planned distances—should be a priority if you're new to running or out of shape."

In the past, says Cohen, some serious runners developed a one-dimensional mindset because of the addictive nature of the sport. "Perhaps we thought that if we ran and raced on a consistent basis, that's all we'd need to develop 'total strength,'" he says. "But now the thinking has shifted toward cross-training, as evidenced by the popularity of multisport events like the duathlon and triathlon."

Jack Crager is a New York-based writer and longtime member of NYRR.

Body Mechanics

"View running as a skill," advises **Jerry Macari**, owner of Urban Athletics stores and head of the eponymous running team and the RunUrban training program. "Developing this skill by learning proper mechanics will keep the body in balance and avoid any overload of a specific body part."

Macari is an advocate of strength-training. "The main benefit of weight-training for runners is injury prevention," he notes. "Strengthening the muscles and their attachments does wonders to prevent muscle pulls, strains, and tendinitis." Attention to form and full range of movement is key, he adds.

He also reminds runners to replace their running shoes regularly, and to consider compression apparel (synthetic sports clothing that fits closely to the body) while exercising. "It limits the vibration and movement of some muscles, lessening the micro-tears and damage to them," he notes. "It can also limit inflammation and increase circulation."

Muscle Reinforcement

"We sit on our butts for a lot of the day," says running coach **John Henwood**. "We need to compensate for this." Henwood puts his clients on a

twice-weekly weight-training program: a full-body workout for legs, core, and the upper body. "I also recommend hill sprints, which decrease the chance of injury

by making the legs stronger and improving running technique and efficiency," he says.

"Sports massage or deep-tissue massage can help remove tightness in the muscles and give you a fresh pair of legs if they're tired and sore," Henwood adds. "Dynamic flexibility movements—such as leg swings or side-leg swings—are good warm-up exercises before each run." A 2004 Olympian for his native New Zealand,

Henwood advises stretching 20 to 30 minutes per day—and he practices what he preaches. "I do five to 10 minutes before a run," he reports, "and static stretches after a run for 15 minutes."

Form and Function

"The main advice we give is to run with good form," says The Balanced Runner's **Jae Gruenke**, a physical therapist, educator, and practitioner of the

Feldenkrais Method of Movement Education. "Good running form makes you more coordinated, and coordination feels easy, not hard. If running takes a lot

of work and requires tightening muscles and tensing up—especially tensing your abs to try to keep your pelvis from moving—it is likely to hurt you. Healthy form involves relaxing and being tuned in to your body. If you have tension or discomfort you can't get rid of, seek help from a running-form expert before you get injured."

Target Specific Muscles

Many experts agree that body-wide strengthening and conditioning are critical for runners. "If forced to pick one specific intervention to prevent injury, I would choose integration of strength training into the training program," says **Jim Cavin**, MSPT, CSCS, manager of Yorkville Physical Therapy and Lower Manhattan Physical Therapy. "If I had to pick a specific body part, I would choose the gluteal area," he adds.

"Many runners with knee or hip pain demonstrate signs of an inward rotation and collapse of the thigh bone during stance phase." According to Cavin, this is a well-documented cause of knee pain in runners and is very likely involved in certain types of hip pain as well.

Fortunately, he says, there's a solution. "If I had to pick one easy exercise to train these muscles, it would be the prone hip abduction," he says. The

runner should lie face-down with the legs straight, then lift the legs just barely off of the floor, extend them to the sides as far as possible, hold briefly, and return. The knees should point straight down or slightly outward. Start with two sets of 10 and gradually work up to three sets of 20.

Core Training

"If your core is weak, everything can go haywire," says running coach and muscular therapist **Jimmy Lynch**. He defines core work as "strengthening those little intrinsic muscles that we don't always use to run so they can support the major muscles we are using," which can become overworked.

"We want the overall body to be strong—the abdominals, the back, the obliques—because we want them to hold the body up. An hour and a half into a long run, these other muscles can kick in and help carry the load," he explains.

Core strengthening needn't be complicated, says Lynch: "It's basic stuff: abdominal work, like crunches; upper body work, like pushups; exercising the hip flexors and glutes, which helps the back get stronger." The work should be done on the same days as your hard training days, he advises, because the exercises use the same muscle system. "You want to rest that system on the easy days. If you don't give the muscles time to recover, you can have a breakdown," he explains.

Yoga for Runners

"Ideally, I recommend that runners cross-train with yoga, which builds core strength, flexibility, and better performance through breathing and fine-tuning one's proprioceptive response," says Pure Yoga's **Dana Slamp**, managing teacher of NYRR's Yoga for Runners classes. She recommends some simple ways that time-crunched runners can use



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