

THE CORE OF THE MATTER

Strengthen your core muscles, and you'll run smoother and faster, with fewer injuries.

By Jeff Purton

As runners, we tend to focus on building a stronger heart (cardiovascular system) and stronger legs, but we too often neglect the in-between areas. That's a mistake. A mechanical structure is only as good as its weakest link, and weak core muscles can lead to injuries and sub-par race efforts. Not to mention a not-ready-for-prime-time stomach.

In recent years, core strength training, which develops the muscles of the stomach, back, and hips, has become one of the hottest areas in the fitness field. Increasing numbers of athletes in all sports have come to realize that core training gives you more than just gorgeous, washboard abs. It also improves your performance and reduces injuries.

Take your pelvic area, for example. "When your pelvis is not aligned properly while you run, you become prone to injury," notes Mark Fidel, the director of Sports Medicine Institute International, who designed many of the exercises in this article. "You can get hamstring pulls, Achilles problems, and lower-back pain."

Which is why you need strong core muscles to keep that pesky pelvis right where it's supposed to be. A well-balanced core also improves your running economy. Result: faster times.

"The stronger your core, the more solid you are as you hit the ground," explains Jack Daniels, Ph.D., exercise physiologist for the Nike Farm Team. "That reduces your need for unnecessary stabilization, and allows you to be a more economical runner."

Each of the exercises that follows is designed to help you develop a strong and stable core. Mark Fidel suggests doing the exercises in the order shown, spending 60 seconds on each. Rest for 15 seconds before moving to the next exercise. After completing all six, take a 3- to 5-minute break, and repeat the entire series. Try to do this routine three times a week.

While doing each exercise, move slowly, and aim for total control. If you get tired and lose form, stop for the day. It's more important to maintain quality than quantity.

1. Step Downs

(A) Lie on your back with one hand under your lower back. Lift your legs so your thighs are at a 90-degree angle with the floor, and bend both knees to a 90-degree angle. (B) Tighten your lower back so that it doesn't move up or down, and slowly lower your right foot to within 1 inch of the floor. Keep your right knee bent at a 90-degree angle, and maintain the position of your left leg. Hold your right foot 1 inch off the floor for 2 seconds, then return it to the start position next to the left leg. Repeat the same action, but this time lower the left foot. Repeat both sequences three to five times.

2. Prone Stabilizer

(A) Start on your stomach, and raise yourself into a modified pushup position, with all your weight balanced on your forearms and toes. Keep your back as straight as possible. (B) Slowly raise your left leg until it lines up with your back. Hold this position for 4 seconds, then lower the left leg, and repeat for 4 seconds with the right leg. Repeat both sequences three to five times.

3. Bridge

(A) Lie on your back with your arms beyond your head, and your feet planted on the floor directly below the knees. Press down on your feet, and lift your torso and upper legs until they form a straight line. (B) With your weight on your shoulders and your feet, slowly extend the right leg by straightening the knee. Be sure to keep your back straight. Hold for 4 seconds, then repeat with the left leg. Repeat both sequences three to five times.

4. Side Stabilizer

Lie on your right side with your right elbow under your shoulder, and your left foot resting on your right foot. Press down with your forearm and foot until you lift your body off the ground. Keep your body as straight as possible; don't allow your hips to sag. Hold this position in a controlled fashion for 30 seconds. Repeat on your left side.

5. Fire Hydrant

(A) Start on your hands and knees. (B) Maintaining the 90-degree angle of your left knee, lift your left leg until the thigh is parallel with your upper body. Hold for 4 seconds, then lower. (C) Repeat the same motion, but this time continue it by forcing the knee and thigh as far to the left as possible. Hold for 4 seconds. Repeat A and B, but this time force the knee and thigh as far as possible to the right, crossing over your body's midline (not shown). Hold for 4 seconds. Repeat with the right leg. Repeat both sequences three to five times.

6. Supine Stabilizer

(A) Lie on your back with your legs fully extended. With your elbows under your shoulders, lift your entire body onto your forearms and heels. Keep your legs, hips, and back as straight as possible. (B) While maintaining this position, lift your left leg 4 inches off the floor. Hold for 4 seconds, then repeat with your right leg. Repeat both sequences three to five times.