

The Abdominal Landscape

A SIX-PACK IS NICE, BUT WHAT RUNNERS REALLY NEED IS A STRONG CORE.

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PHOTOGRAPHY BY BRIAN BUCHSDRUECKER

COMPLETE ABDOMINAL TRAINING requires more than just crunches. Runners need to think of their abdominals and lower back muscles as structures that provide postural support to the spine.

The hidden postural muscles that sit below the visible *rectus abdominis* (the “six-pack” muscles) and external obliques, or “outer unit,” can be described as the “inner unit” of your core. The vast majority of exercises for the midsection focus on crunches for the visible six-pack, or “outer unit.” However, in order to follow a complete abdominal training program, the inner unit that provides postural stability and support for our spine must receive primary attention. The main muscles of the inner core unit consist of the *transversus abdominis*, internal obliques, pelvic floor muscles, and the multifidus.

Most functional activities of daily living require that the inner unit and outer unit work together. Improper or weak activation of our deep inner unit can predispose us to injury and pain.

INNER UNIT ABDOMINAL BRACING

This is a technique that can be performed virtually anywhere. You can do abdominal bracing while sitting, standing, lying down, and while doing other exercises. Once you have mastered the basic steps of this exercise, abdominal bracing should be used as a portable training tool to be incorporated into one’s execution of functional daily tasks. Consultation with a personal trainer, specialized instructor, or health professional is recommended for more education about training your inner core unit.

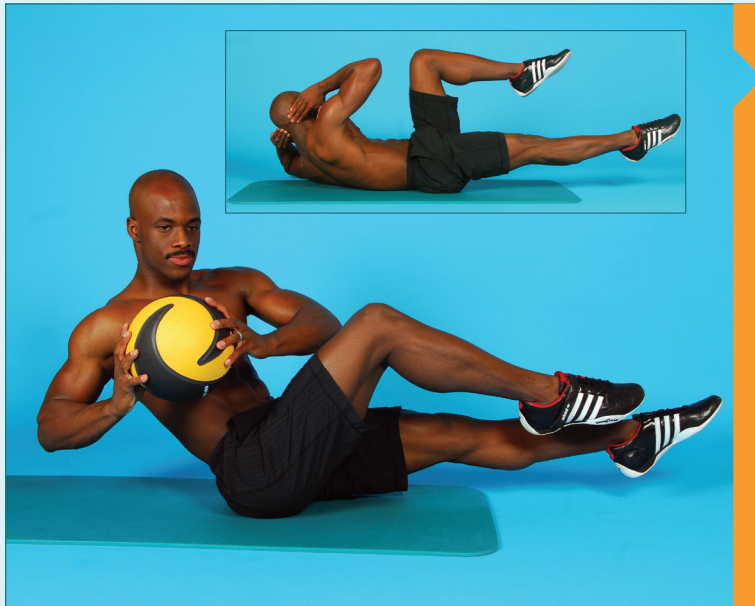
BASIC STEPS:

To correctly brace, you should attempt to pull your navel in toward your spine. This action primarily recruits the *transversus abdominis*. Be careful not to hold your breath. You should be able to breathe evenly while bracing. ▶



WORLD-CLASS ABDOMINAL EXERCISES

For all abdominal exercises, start with one set of fifteen to twenty repetitions and build toward three to four sets as you master the program. Always consult with a physician before undertaking a new exercise program and with a trainer or qualified exercise professional to ensure proper form.



> BICYCLE CRUNCH

(Targets those obliques)

A. PREPARATION:

- Sit balanced on both buttocks. Place your hands on the floor next to your buttocks for support, then lean back slightly, bend your knees, and slowly raise your legs toward your chest and hold the “V-Sit” position.

B. MOVEMENT:

- While in the “V-Sit” position, lift hands up off the floor and rest hands gently on the sides of your head.

- Extend your legs in a bicycle pedal motion, flexing them to about forty-five degrees and extending them in an alternating fashion.

- Bring your left elbow toward your right knee, then your right elbow toward your left knee.

- Exhale each time you bring an elbow toward a knee. Keep your abdominals tight and contracted for maximal core stability.

Beginners: Skip the “V-Sit” posture. Lie flat on the floor with your lower back pressed to the ground and proceed with the bicycle crunch.

Advanced: Keep the “V-Sit” position and add weight. Hold a medicine ball or dumbbell close to chest level and proceed with the bicycle crunch.

> SCISSOR KICK

A. PREPARATION:

- Lie on your back. Place arms close to your sides with palms on the floor. Activate your core by drawing your navel in toward the spine. Press lower back toward the floor and extend both legs outward with your heels approximately three to four inches above the floor.

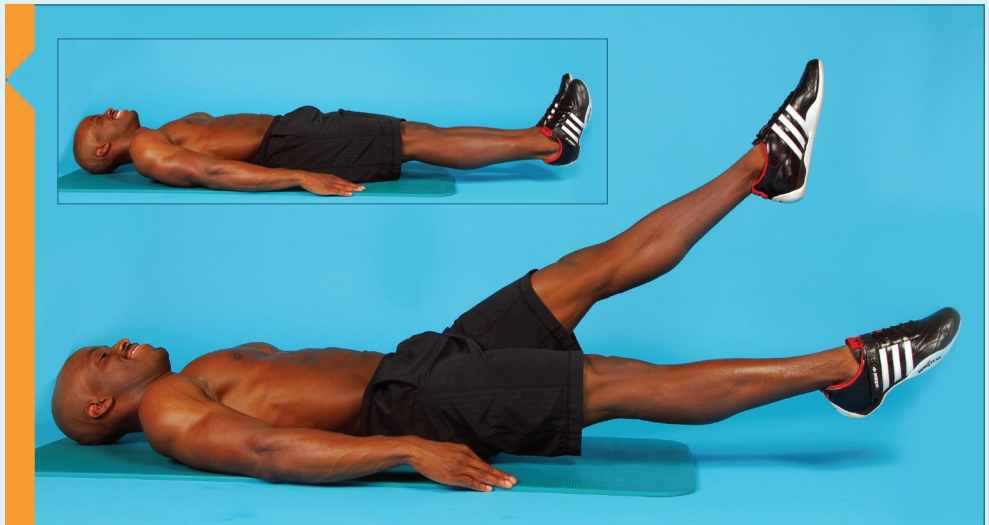
B. MOVEMENT

- Focus on keeping abdominals tight and low back in contact with the floor, and slowly lower extended left leg toward the ground as you bring the extended right leg toward the ceiling in a scissor kick motion.

- Remember to breathe evenly throughout the exercise, exhaling at the point(s) of maximal exertion.

Beginners: Keep abdominals contracted and low back in contact with the floor, and raise a bent left knee toward the chest, keeping right leg extended hovering above the floor. Continue exercise, alternating sides.

Advanced: Extend both arms above head, keep abdominals tight and low back in contact with the floor. Roll up on shoulder blades, keeping neck in a neutral position and contracting upper abdominals. Hold this position. Slowly move lower legs in an alternating scissor fashion as described.



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> LONG LEVER CRUNCH WITH A PELVIC LIFT (Great for the upper and lower abs and glutes)

A. PREPARATION:

- Lie face up with your knees bent, pelvis in neutral position and feet flat on the floor. Extend your arms straight above your head, with palms facing the ceiling. Activate your core by drawing your navel in toward the spine.

B. MOVEMENT:

- Lead the lift with both of your extended arms (long lever), press your palms toward the ceiling, rolling both shoulder blades up off the floor towards the ceiling. Keep neck in a neutral position. Hold this position.

- To complete the movement, contract your abdominals by gently pulsing your arms toward the ceiling and simultaneously lifting your hips fully into a bridge position, keeping your hips level.

- Focus on exhaling throughout the contraction. Pause at the end of the contraction, then lower and repeat.

Beginners: Remove the long lever and perform the pelvic lift crunch with hands gently placed on thighs, slide hands towards the knees as you lift hips into a bridge position.



> FOAM ROLL AB JUNGLE

(Targets them all)

A. PREPARATION:

- Gently position yourself to lie face up on top of a foam roller aligned with your spine. Place your pelvis in a neutral position, bend knees, and place feet flat on the floor. Rest hands on the floor beside you for support.

B. MOVEMENT

At each level repeat the exercise fifteen to twenty times and then switch sides. As you master a level progress to the next one for added difficulty.

· **LEVEL 1** (Two bases of support)

Extend left leg toward the ceiling, firmly plant left hand on the floor, broaden base of support with right leg on floor. Now contract abs by reaching toward the extended left leg with right arm.

· **LEVEL 2** (One base of support)

Extend both legs toward the ceiling, firmly plant left hand on

the floor. Now contract abs by reaching toward the outside ankle of the left leg with the right arm. Or extend left leg toward the ceiling, broaden base of support with right leg on floor. No hands on floor for support, reach both hands toward the outside ankle of the extended left leg and contract abdominals.

· **LEVEL 3** (No bases of support)

Balancing on foam roller, extend both legs towards the ceiling, no hands on floor for support, reaching both hands together toward the ceiling. ■

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