# Be strong at the core!

adapted from www.mayoclinic.com

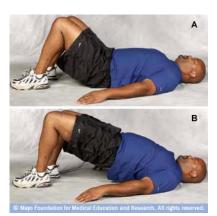
The core muscles include those in the lower back, hips and abdomen and around the pelvis. Strong core muscles can improve posture, prevent back pain and prevent muscle injury, and make it easier to do many every day activities and sports. If you have back problems, osteoporosis or other health concerns, talk to your doctor before starting core strength exercises.

Do core-strength exercises on a carpeted floor or mat. Breathe freely and deeply during each exercise. Repeat each exercise five times. As your core strength improves, build up to 10 to 15 repetitions. These exercises and some more challenging adaptations can be found at <a href="http://www.mayoclinic.com/health/core-strength/SM00047">http://www.mayoclinic.com/health/core-strength/SM00047</a>.



#### Abdominal crunch

- 1. Lie on your back and place your feet on a wall so that your knees and hips are bent at 90-degree angles. Tighten your abdominal muscles.
- 2. Raise your head and shoulders off the floor. To avoid straining your neck, cross your arms on your chest rather than locking them behind your head. Hold for three deep breaths.
- 3. Return to the start position and repeat.



#### **Bridge**

- 1. Lie on your back with your knees bent (A). Keep your back in a neutral position, not arched and not pressed into the floor. Avoid tilting your hips. Tighten your abdominal muscles.
- 2. Raise your hips off the floor until your hips are aligned with your knees and shoulders (B). Hold for three deep breaths.
- 3. Return to the start position and repeat.



#### Single-leg abdominal press

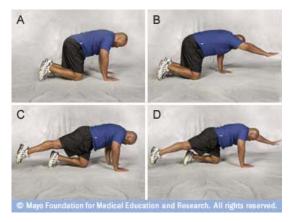
- 1. Lie on your back with your knees bent (A). Keep your back in a neutral position, not arched and not pressed into the floor. Avoid tilting your hips. Tighten your abdominal muscles.
- 2. Raise your right leg off the floor so that your knee and hip are bent at 90-degree angles. Rest your right hand on top of your right knee (B).
- 3. Push your hand against your knee while using your abdominal muscles to pull your knee toward your hand. Keep your arm straight. Hold for three deep breaths.
- 4. Return to the start position and repeat using your left hand and left knee.



#### Segmental rotation

- 1. Lie on your back with your knees bent and your back in a neutral position. Tighten your abdominal muscles. Keeping your shoulders on the floor, let your knees fall slowly to the left (A). Go only as far as is comfortable. You should feel a stretch, but not pain. Hold for three deep breaths.
- 2. Return to the start position. Repeat the exercise to the right (B).





## Quadruped

- 1. Start on your hands and knees. Place your hands directly below your shoulders, and align your head and neck with your back (A). Tighten your abdominal muscles.
- 2. Raise your right arm off the floor and reach ahead (B). Hold for three deep breaths. Lower your right arm and repeat with your left arm.
- 3. Raise your right leg off the floor (C). Tighten your trunk muscles for balance. Hold for three deep breaths. Lower your right leg and repeat with your left leg (D).



#### Modified plank

- 1. Lie on your stomach. Raise yourself up so that you're resting on your forearms and your knees. Align your head and neck with your back, and place your shoulders directly above your elbows. Tighten your abdominal muscles.
- 2. Create resistance by pressing your elbows and your knees toward one another. Neither should move from their positions on the floor. Hold for three deep breaths.
- 3. Return to the start position and repeat.



# Side plank

- 1. Lie on your left side, raising yourself onto your left forearm (A). Place your left shoulder directly above your left elbow, keeping your shoulders, hips and knees in alignment. Rest your right arm along the side of your body.
- 2. Tighten your abdominal muscles. Hold for three deep breaths. Repeat on your right side.
- 3. For added challenge, balance on your left hand. Raise your hips off the floor and extend your right hand toward the ceiling (B). Hold for three deep breaths. Repeat on your right side.



## Superman

- 1. Lie on your stomach with a rolled towel or a small pillow under your hips to support your back. You might also use a folded towel to support your head. Tighten your abdominal muscles.
- 2. Raise your right arm off the floor (A). Hold for three deep breaths. Lower your right arm and repeat with your left arm.
- 3. Raise your right leg off the floor (B). Hold for three deep breaths. Lower your right leg and repeat with your left leg.
- 4. In some versions of Superman, you raise the opposite arm and leg at the same time.

