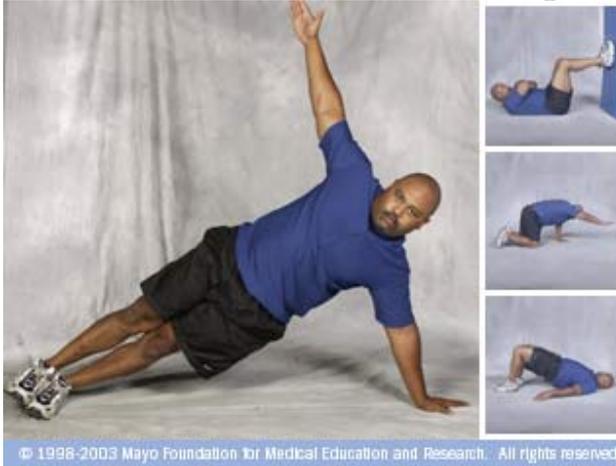


Core Exercises

Slide show: Core exercises strengthen abs and other core muscles



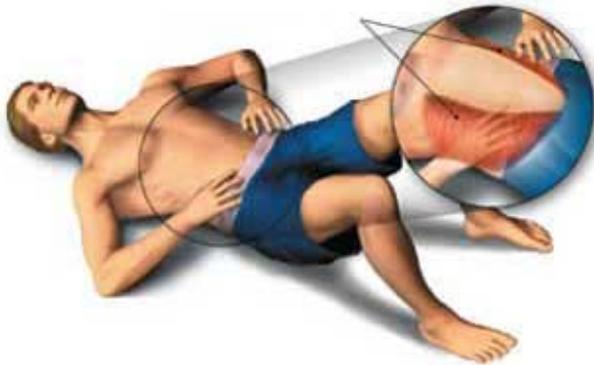
Core exercises build abs and other core muscles

The core, or trunk, of your body is your center of gravity. Strong core muscles — abdominal, back and pelvis — provide support to your spine for everything from walking, lifting and standing to sitting. Weak core muscles may lead to poor posture, lower back pain and injury.

You can strengthen your core muscles, including your abs, by doing core exercises at home on a cushioned floor surface or at the gym on a mat. Perform each of the following core exercises five times. Gradually advance to 10 to 15 repetitions as you get stronger. Master the basic exercises before attempting the advanced ones.

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Transversus abdominis



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Focus on your core

- Before you start to exercise your body's core, locate your deepest abdominal muscle — the transversus abdominis — by coughing once. The muscle you feel contracting is your transversus abdominis.
- Focus on keeping this muscle contracted while doing each of these exercises, and the rest of your core muscles get a workout, too. Once you know how to contract your abdominal muscles, begin the core muscle exercises.
- With each exercise, breathe freely and deeply and avoid holding your breath. Coordinate your breathing with the activation of your transversus abdominis to get the maximum benefit.



A

Bridge

This exercise works many of your core muscles in combination.



B

- Lie on your back with your knees bent (A). Keep your back in a neutral position — not overly arched and not pressed into the floor. Avoid tilting your hips up.
- Cough to activate your transversus abdominis. Holding the contraction in your abdominal muscles, raise your hips off the floor (B).
- Align your hips with your knees and shoulders. Hold this position and take three deep breaths — or for about five to eight seconds.
- Return to the start position and repeat. For a challenge, try alternately extending one knee while maintaining the bridge position.

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A

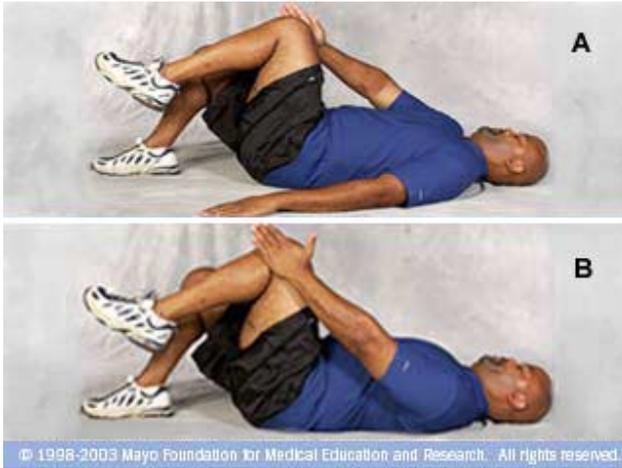
Single-leg abdominal press

- Lie on your back with your knees bent and your back in a neutral position (A). Cough and hold to activate your transversus abdominis.
- Raise your right leg off the floor — so that your knee and hip are bent at 90-degree angles — and rest your right hand on top of your right knee (B).
- Push your hand forward while using your abdominal muscles to pull your knee toward your hand. Hold for three deep breaths and return to the start position.
- Repeat this exercise using your left hand and left knee. Keep your arm straight and avoid bending more than 90 degrees at your hip.



B

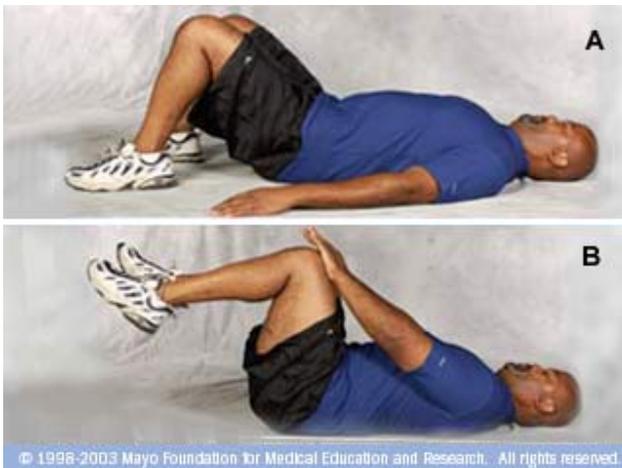
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Single-leg abdominal press variations

To work your core muscles more completely, vary your routine:

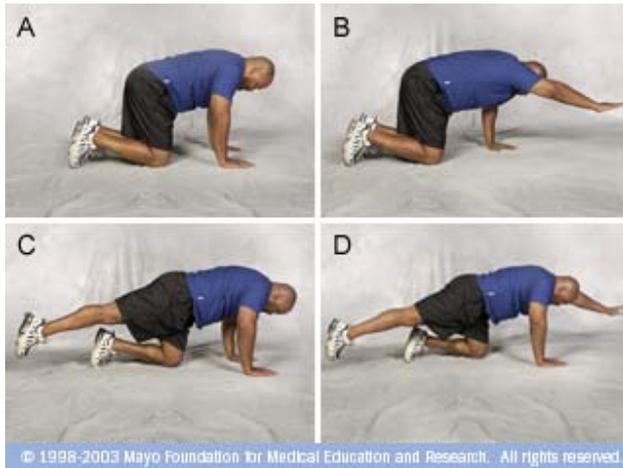
- **Opposite hand on opposite knee.** Push your right hand against your left knee while pulling your knee toward your hand (A). You'll be pushing and pulling across the center of your body. Repeat this exercise using your other hand and leg.
- **Hand on outside of knee.** Place your left hand along the side of your left knee (B). Use your hand to push your leg inward. At the same time, create resistance by pushing your knee away from the center. Repeat using your other hand and leg.



Double-leg abdominal press

This is an advanced version of the single-leg abdominal press.

- Lie on your back with your knees bent and your back in a neutral position (A). Cough and hold to activate your transversus abdominis.
- Raise your legs off the floor one at a time and rest your hands on top of your knees (B). Push your hands against your knees while using your abdominal muscles to pull your knees into your hands.
- Keep your arms straight and don't let your hips bend more than 90 degrees. Hold for three deep breaths. Then return to the start position.



Quadruped

- Start on your hands and knees with your hands directly below your shoulders and your head and neck aligned with your back (A).
- Cough and hold your core muscles tight. Raise one arm off the floor and reach ahead (B). Hold for three deep breaths, return your arm and raise your other arm.
- Repeat the exercise by raising each leg (C).
- Challenge yourself by raising one arm and the opposite leg together (D). When raising your leg, avoid rolling your pelvis. Center your hips and tighten your trunk muscles for balance. Do this on both sides.



Segmental rotation

- Lie on your back on the floor with your knees bent and your back in a neutral position. Cough and hold to activate your transversus abdominis.
- 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 no pain, only a stretch.
- Use your trunk muscles to pull your legs back up to the start position. Repeat the exercise to the right (



Modified plank

- Lie on your stomach. Raise yourself up so you're resting on your forearms and your knees.
- Keep your head and back in line and imagine your back as a tabletop. Align your shoulders directly above your elbows.
- Squeeze your core muscles. 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, then return to the start position and repeat.



Modified plank variations

- Starting from the modified plank position, concentrate on contracting your core muscles. Raise your right arm off the floor and hold for three deep breaths (A). Repeat with your left arm.
- Next lift each leg, in turn, from the modified plank start position (B). Hold for three breaths before returning to the start position.
- When you've mastered the single-arm and single-leg lifts, lift both an arm and the opposite leg at the same time for an extra challenge



Side plank

Side planks challenge your stability and work the muscles along the side of your body.

- Starting on your left side, raise yourself onto your left forearm. Tighten your core muscles to keep your shoulders, hips and knees in alignment (A). Align your left shoulder directly above your left elbow. Rest your right arm along the side of your body.
- Hold this position for three deep breaths before relaxing. Repeat this exercise on your right side.
- For an 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, relax and switch sides.