Activate and Initiate

Use a systematic approach to core training.

The core muscles support movement and help stabilize the spine. When designing a training program for the core, include exercises that activate the musculature and initiate movement in different ways, as happens during activities of daily living. This approach varies repetitive stresses and helps prevent injuries that can result from muscle imbalances.

Each of the following moves activates the core muscles in a variety of ways to stabilize or initiate movement. Try these exercises as an effective core-conditioning segment in your favorite cardio class, or use a pattern of "lower-ab" activation (LA), isometric activation (IA), "upper-ab" activation (UA) and spinal-extensor activation (EX) to create a balanced and thorough core circuit.

**HEEL-ON-TOE CRUNCH (UA)**
- Begin supine with legs straight, knees unlocked.
- Place left heel on top of right foot.
- Bring left hand behind head for support, and lift right arm straight up from shoulder.
- Curl up, raising head, neck, shoulders and shoulder blades off mat, contracting abdominals.
- Slowly return to start position.
- Perform desired number of repetitions and then switch sides.

**REVERSE CRUNCH ON STEP PLATFORM (LA)**
- Begin supine on a step platform, knees bent and hips flexed until back begins to flatten.
- Bring arms overhead and hold edge of step to help steady torso.
- Stabilize from rib cage and contract abdominal muscles.
- Moving from pelvis, lift tailbone up and off step until you have fully contracted the abdominal muscles.
- Slowly return to start and repeat.

**SIDE-LYING HIP LIFT (IA)**
- Lying on your right side with knees bent (or straight for advanced variation), place right elbow under right shoulder and engage shoulder girdle (push shoulder away from ear).
- Don't let rib cage slump toward floor; maintain natural curve of spine.
- Exhale and lift right hip off floor, and hold for a count of 3.
- Slowly lower to start position.
- Perform desired number of repetitions and then switch sides.

**BACK EXTENSION WITH ARM VARIATIONS (EX)**
- Begin prone with arms extended overhead, palms facing.
- Inhaling, lift arms up and off floor.
- Use upper-back muscles to hold arms in place, and breathe. On next inhalation, extend spine, allowing head, neck and shoulders to lift up and away from waist.
- Keep head aligned with body.
- While holding the spinal extension, slowly move arms out to sides; hold for a count of 3.
- Continue to breathe and move arms out and down, allowing for greater degree of extension.
- Hold for 3 more counts before bringing arms back to start, releasing spine.

Leigh Crews, a licensed corporate Wellcoach*, is an ACSM and ACE spokesperson and founder of Dynalife Inc. Her videos and DVDs include "Core on the Floor," "Strength in the Balance" and "Unleashing the Athlete With Zen." Leigh has made several television appearances and is also a freelance writer and consultant.

References