

ABS 101

5 Tips for a Healthier, Stronger Core

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Core training has become the new “buzz” word over the last few years as more and more people have begun to realize its role in posture, spinal health, performance and overall aesthetics. What is less commonly known is that the core is anatomically defined as the region between the shoulders and knees, not simply the midsection. Most people view the core as simply being their abdominal muscles and, as such, miss out on a tremendous amount of value that other functional movements provide.

When I refer to the core I allude to the inner and outer units of our body. The inner unit consists of smaller, more static stabilizing muscles such as the transverse abdominis, multifidus, and the pelvic floor and diaphragmatic musculature. The outer unit is comprised of larger phasic (or dynamic) muscles that generate movement such as the gluteals, latissimus dorsi, erector spinae group, biceps femoris, and peroneals. Aside from generating movement, these muscles work synergistically to provide much needed pelvic stability during motions such as walking, running, and so forth. Because all functional movements such as lunges, squats, step-ups, most stability ball movements, and many others revolve around the pelvis, they will offer tremendous core training effects when done with proper technique. The following are 5 tips you can use to train the inner and outer units of your core with maximal efficiency.

TIP #1 – Brace your abdominals

This is the first thing you should be aware of during any and every movement that you will ever perform. Abdominal bracing consists of three parts. First, draw in your belly button as if you were to put on a tight pair of pants. This will activate your transverse abdominis, the body’s waist belt muscle. Second, raise your pelvic floor by performing a kegel (contracting the pelvic floor muscles up as if you holding in a full bladder). This helps to increase intra-abdominal pressure which will aid in spinal stabilization. Third, lightly create tension in your abdominal muscles as if you were about to get punched in the stomach. This activates the internal and external oblique muscles. By performing all three of these actions you will ensure that your spine is well protected through all movements. Abdominal bracing should be initiated before and maintained through each and every exercise. With repetition, these muscles will remember their roles and tend to maintain a tighter constricted waistline, even without you being aware.

Exercise: Belly tucks

Lie face down on the floor with your forehead rested on the back of your hands. Inhale, pushing

your belly button into the floor (“ballooning” your abdomen). Hold for 3 seconds. Exhale, drawing your belly button towards the ceiling (as if being pulled by a string), raise pelvic floor, and tighten your abdominal muscles. Hold for 3 seconds. Repeat 10 times.

TIP #2 – Maintain a neutral spine

A neutral spine is attained when your spine is kept in its natural alignment. This is best achieved by ensuring that your back is flat (with slight lumbar lordosis) during all movements, especially lifting. This, in conjunction with abdominal bracing, is essential to better support the spine during all movements. Let us take the example of picking up a heavier box from the floor. The last thing you want to do in the situation is reach down without bending knees and picking up the box...this is a sure way to throw your back out. What is instructed to do in such a case would be to squat down keeping your torso tall (ie. neutral spine), with your abdominals braced, and lift through your legs as opposed to extending up through your torso. If these lifting mechanics are not met, you place your spine at a greater risk of disc herniation, especially if the load is heavier.

Exercise: Cat/Camel motions

In a four point stance (hands and knees) take your spine through a series of cat and camel stretches. Meaning that you round out the back like a camel and then arch it out like a cat. Repeat 6 times. Once you have completed the 6 repetitions simply allow your back (spine) to relax. Wherever it feels most relaxed is your neutral spine!

TIP #3 – Incorporate unilateral lifting

Unilateral refers to the concept of carrying (or pushing) a load on only side of the body. For instance, walking to work holding your brief case in one hand. By doing so, the body automatically activates its contralateral (opposite) side to stabilize the torso and maintain good posture. Studies have shown that this type of lifting stimulates much greater core muscle activation compared to bilateral lifting (equal load on both sides).

Exercise: Unilateral Lunge Walks

Perform your lunge walks while holding a weight, equivalent to 10% of your body weight, in one hand. Perform 10 reps with the weight in one hand, and then switch. The key is to focus on keeping your torso upright and minimizing and lateral swaying.

TIP # 4 – Use a Stability Ball

Incorporating a stability ball into your workouts will make such a difference in your core strength and spinal health. Working on the stability ball offers several benefits such as increased balance, range of motion, coordination, and muscle activation. Simply by sitting on the ball, your core muscles fire to a much greater degree in order to stabilize your body. Any unstable surface for that matter will foster much greater core muscle activation as your body is constantly readjusting itself to maintain proper posture. This type of body awareness is known as

proprioception, and is immensely beneficial for athletes of all endeavors, and even for people who want more balance while standing in the subway. Incorporate the aforementioned unilateral lifting and you get twice the benefit!

Exercise:

Exercise: Stability Ball 1-Arm DB Chest Press

Position your body on the ball so that only the shoulders, neck and head are resting on it. With the feet shoulder width apart raise your hips so that your body is in one straight line (essentially forming a bench within your body). Squeeze your buttocks together as if holding a \$1,000 bill between them. Next, with a DB in one arm, push it up and towards your body's midline as if creating an arc like motion. Repeat 12 times and then switch arms. Ensure to keep your body and then ball as still as possible. Notice the muscle activation in the posterior side of the body especially in the glutes and lower back!

TIP #5 – Incorporate multi-planar movements

Our bodies rarely operate in one single plane (ie. front to back, side to side). Often, our movements require us to move through several different planes such as when walking and looking back over your shoulder. It is important to remember that all movement stems from the core, especially rotation based movements. As such, it is important to strengthen those core muscles accordingly to ensure movement efficiency and injury prevention. Did you know that 80% of our core musculature inserts on a diagonal. This means that our bodies are anatomically constructed for such multi-planar movements involving diagonal and rotational movements. Examples are throwing, kicking, and swinging a tennis racquet or golf club. I've seen clients improve their golf drive by 30 yards by simply incorporating these multi-planar movements into their routines.

Exercise: Cable chop (from knees)

Position yourself in the middle of the cable crossover machine. Face your body at a right angle from the cables. Starting from your knees, keeping your body upright and strong, reach over and across your body grabbing the handle (with both hands) on the highest setting. Keeping both arms straight "chop" the cable across your body from above your starting shoulder to the opposite hip. Return slowly and repeat 8 times on each side. Be sure to drive the movement from your obliques and not your arms.

By incorporating these 5 core essentials, you can look forward to having firmer, stronger and more performant core muscles. Not only that but you will also be more efficient and stable in all your movements. And, if you participate in regular sporting activities you will have an added edge over your untrained counterparts.