

The Core of Health

The smells and sounds of summer are here. Mini-vacations are now being planned for local beaches and waterfronts. Colleges have only 2 months of school as students are already planning their summer trips. In the local retail stores we see swimming suits, beach hats, oversized sunglasses and magazine models with rippling abdominal muscles. Recent polls have shown the #1 area of improvement for women is the abdominals. Ripped abdominals say a person is in great physical shape right? Wrong! The abdominal muscles are only ¼ of a truly in shape person. A strong core dictates a fundamentally strong physique.

The major muscles of the core are the [pelvic floor](#) muscles, [transversus abdominis](#), [multifidus](#), [internal](#) and [external obliques](#), [rectus abdominis](#), [erector spinae](#) (sacrospinalis) especially the [longissimus thoracis](#), and the [diaphragm](#). Minor core muscles include the [latissimus dorsi](#), [gluteus maximus](#), and [trapezius](#). Weak core muscles can lead to injuries to knees, ankles and feet. Exercising and strengthening core muscles daily can lead to significant improvements in posture as we age.

Every movement we make begins with the core. From office workers to professional sports players, we all engage in ADL's (Activities of Daily Living) which engage the core. Reaching for an item in the pantry, sweeping the sidewalk, and washing the car are all examples of ADL's. Think about how many times you have had trouble getting out of bed, or leaning into the car to lift your young child. Learning to strengthen your core has many benefits to improve the quality of your life.

Research shows that improving core strength at any age help to form correct posture. Deficits in your posture can be from a variety of reasons including: weight gain, prior injury, a sedentary lifestyle or your occupation. Failing to properly engage the core muscles leads to muscle imbalances.

One of the easiest tests for posture is the standing relaxed pose. To perform, jump up and down briefly and stand still with your arms hanging to your side. Where are your thumbs pointed? If your thumbs are pointed toward your thighs, you suffer from adducted shoulders which means your shoulders are pulled forward. The muscle imbalance most likely is because of a sedentary lifestyle sitting at a desk in a chair causing you to lean forward to type on your computer. Or if you are active, you are performing too many chest exercises and not enough back exercises. To correct the muscle imbalance, you must practice exercises to pull your shoulder back into correct posture. Failure to correct an imbalance such as this will lead to lower back pain and a stooped over appearance.

Superman's and Swiss Ball T's are excellent beginning exercises to correct this problem. To perform a Superman, lie flat on your stomach on a sturdy surface with your arms and legs extended. Simultaneously raise your arms and legs upward and squeeze your lower back for 1 second. Return to starting position and repeat for 10-12 repetitions. Do not let your arms or feet touch the ground until you are finished with the set. For Swiss Ball T's lay on your stomach over a Swiss Ball with your chest hanging off the ball and your head lowered. Raise your head at the same time pull your arms backward toward your back and rotate your hands into a T position. Hold the position for 2 seconds and return to the starting position. Repeat for 10-12 repetitions.

In sports, a strong core is essential to maximize your performance. A prime example of a strong core is Tiger Woods. Last year Woods won the US Open despite a torn anterior cruciate ligament and double stress fracture in his left tibia. Remember this was a five day tournament (91 holes of golf) including the playoff. Five days of walking on 1.5 legs. Take the time to look at his shots in the final round. Wood's strong core enabled him to make shots on one leg that others on two legs couldn't make. The strength of his lower back and flexibility of his hips were evident in every shot. Imagine after his knee is totally healed how strong his game will become. Woods' workout routine was revealed in the Men's Health July 2007 Magazine and low and behold his #2 priority in his workout was "core exercises".

One of the greatest NFL players of all time is ex-Lion Barry Sanders. With 15,269 yards rushing Sanders ranks #3 currently on the NFL all-time list. While Sanders was a durable back, he is best remembered for "breaking ankles" all around the league. His ability to stop on a dime and change direction along with his elusiveness made him one of the most difficult players to tackle. His strong core was his trademark. His hip strength allowed him to be elusive and explosive with amazing acceleration. Sanders retired in July 1999 after 10 years in the NFL. During Barry's outstanding workout at Oklahoma State, his 40-plus-inch vertical leap, nearly equaling two-thirds of his height, caused the Lions coach Wayne Fontes' jaw to drop. That workout ended all speculation about his lack of ability. His short stature (5'8"), powerful legs (well over 500lb squat), and phenomenal core strength allowed Barry to move like no other person has ever moved on the football field.

Women use their core muscles, especially the transversus abdominus, during labor and delivery. Establishing a strong core distributes the stresses of weight bearing and helps the lower back. You don't have to suffer from a weak core. Changing your lifestyle and committing to improving your posture should be important. A strong core improves your self esteem and how you look to others. Strong straight posture radiates confidence and ability.