

## **You're Power Center**

Core strength is the hot topic in sports, health and fitness today. Sports performance, injury prevention, along with everyday health and wellness centers around the strength and flexibility of the core and abdominal area. The core muscles are composed of the abdominal muscles, made up of the rectus abdominus, external and internal obliques, and the transverses abdominus. It also includes the lower back, and the thoracic and cervical region of the spine. The abdominals are a major link in the body's musculoskeletal chain, yet they are typically the weak link. When properly strengthened and utilized, as these muscles are engaged they provide support, creating a solid base or foundation for which many of our body's movement are based. If not properly activated the spine or back will take a greater load and result in back stress and pain. Strengthening the core stabilizes the pelvis, the pelvis stabilizes the hips, which stabilize the foot. The lesson here is that the effects of the core are felt throughout the body. The key is to strengthen all areas of the core including the upper and lower area of the abs, the obliques and lower back through a variety of exercises.

Your core or torso is your "center of power" source and determines the coordination between your upper and lower body. Think of your core as the strong column that links the upper and lower body together. Remember the saying "A chain is only as strong as its weakest link" for many of us it is our core. Let's use an example of a basketball player with strong conditioned legs with a weak core, if he initiates a vertical jump the force or energy transfer from the lower body is dissipated into the core as if it were a sponge, never reaching the upper body dramatically reducing the resultant jump height. This link determines your potential power and performance level in all sports, individual sports from golf to running and team sports from baseball to volleyball. The core determines the level of athletic skill, and sports specific development. A weak abdominal and back will also limit an individual's ability to train at a higher level. A well conditioned core offers many benefits, including improved balance, strength, endurance, power, speed, and core control. It will also for example improve your vertical jump, increase the accuracy of your tennis stroke, and develop greater power in your batting swing or swim stroke.

The importance of a strong, stable core is not limited to athletes alone, it can enable you to perform household chores without fear of injury, enhance activities such as walking and maintain good health. It will simply help you look and feel better, along with prevent much of the back problems many encounter as they age. Strong back and abdominal muscles increase stability of the spine which prevents added stress and twisting of ligaments and connective tissue surrounding the discs resulting in a better pelvic alignment and a healthy low back.

Abdominal exercises used to be only crunches, twists, and sit-ups. Today full core training involves improving abdominal strength, muscular endurance, flexibility, body awareness and balance through a variety of exercise options. Options include using medicine balls, Swiss balls, Pilates, and a variety of functional mat, bench and floor work. There are no short cuts to developing your core, no gadgets or 5 minute abs, it takes disciplined work ethic and a well designed program with variety.

If you want to take your sport or fitness to another level consider investing more time in a comprehensive core training program. Seek out a professional to assist you in tailoring a complete program to your needs and make sure you are using proper form and technique. Be sure to start slowly if you have not engaged in a current core program and check with your doctor before starting any fitness or athletic program. Whether you're an athlete or fitness enthusiast a good core workout program will develop your body's "power center"

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