

Core-Based Training: A Look at the Abdominals and Obliques

The abdominals and obliques can only be conditioned through proper exercise stabilizing the hips, legs, and spinal column. In sport science, we teach the basic abdominal curl and oblique curl to all beginner and intermediate exercisers who want to train their torso.

For decades, spine busting sit-ups and leg raises were the standard exercises used to develop a strong torso. That lasted until millions of people decided that their aching lower back and painful neck were more important than a half-ways decent six-pack. So sit-ups and leg raises began to go by the wayside in trade for crunches, curls, and various twists. Hey golfers: Tiger's into torso training. The golf community utilizes core-based training heavily. The Butch Harmon Golf Training Program uses the MedX Rotary Torso machine designed to focus on exercising and strengthening the torso. Great machine and exercise if you can locate it.

Whether you select the following exercises to train like the Olympic athletes, or use your own variations, I encourage you to take the time to really focus on your torso. I'm doing so more for my own personal well being and bowling. It has clearly, in my eyes, become one of the more important areas I've neglected for your bowling and athletic development. Not anymore.

View the Sights

The abdominal wall, a single sheath of muscle, consists of multiple portions of the muscle attached and separated via tendons and other tissues. The Rectus Abdominus originates on the Pubic Crest and to Inguinal Ligament inserting on the Costal Cartilage ribs 5, 6, and 7. The abdominal wall takes the shape of six blocks of muscle aligned in two parallel rows of three. Each contract simultaneously working together in a collaborative effort to flex and bend the trunk forward. Ironically, the rectus abdominus only flex the trunk 30 degrees in a range of motion. This is largely unknown to most beginning and many other exercisers who believe full range sit-ups exclusively work the abdominals. WRONGO.

The abdominals are duly supported by the internal and external obliques. External obliques are most prominent on a well defined mid-section at the sides of the abdomen. The lesser visual and known internal obliques rest inferior (below) to the abdominals. Both set of obliques work to assist the abdominals with trunk flexion, but mainly produces rotation and lateral flexion at the waist.

Train those Abs

Exercising the rectus abdominus and internal and external obliques are actually quite simple, and they require no specific apparatus. Don't have to go to the gym here friends. Try these on your bed at home; great cushioning in the bed. In our case with the abdominals, we will use a combination of gravity and body weight to be the resistance factor stressing the muscles, fatiguing their energy stores, ultimately promoting growth and adaptation. Many sport science experts including myself agree that training the abdominals every other day provides substantial recuperation time. Don't do this everyday!!!! The group consensus is to hit the floor on alternating days exercising the mid-section using only body weight as the resistance factor.

Abdominal Curl - lie in standard bent-knee sit-up position, and while exhaling, very slowly raise the shoulders and upper back off the ground. Keep the lower back in constant contact with the floor throughout the movement. Hold the curl for one or two seconds in the completely contracted position, then slowly return to the floor. Note: keep the arms at the side of the body on the floor completely lifeless while relaxing the neck by viewing the ceiling the entire time.

Rotational Abdominal Curls - lie in the same standard bent-knee sit-up position, and while exhaling, very slowly raise the shoulders and upper back off the ground rotating to one side. Keep the lower back in constant contact with the floor throughout the movement. Hold the rotated curl for one or two seconds in the completely contracted position, then slowly return to the floor. Rotate to the opposite side and count both as a single repetition. Note: keep the arms at the side of the body on the floor completely lifeless while relaxing the neck by viewing the ceiling the entire time.

Slow Down – What's Your Hurry

Olympic athletes have been performing these routines and exercises for years. Their mechanics were flawless, their strength was apparent, their form and flexibility were incredible, and their balance and coordination were impeccable. There were some exercises even I had difficulty performing properly. Yep even little me. You won't see those just yet though, I'm saving them for later. Start subtly with these exercises, before you really dive into them with intensity and motivation. Take your time, learn the motion and movement, be patient to avoid the risk of injury and more importantly to learn the biomechanics of the movement and even the feeling of the lumbar spine working.

It's really that simple. Let the Olympic athletes lead us by their example. Train your torso for explosive power at the line, balance in your finish, and to keep you in our sport that much longer.

Until we meet again.