

Pel ot Performance Coaching

CORE STRENGTH!!

Athletes need to have a very strong mid-section. To train the muscles of the core for maximum sports specific strength athletes need to perform exercises that recruit and challenge the muscles of the torso similarly to the way that these muscles are activated during sport. In most sport situations the muscles of the core are used to stabilize and brace the mid section during activities and movements that typically occur when an athlete is fighting to overcome some sort of external resistance such as: movement, overcoming momentum, or moving resistance (pulling, pushing, rotating).

For example, during an athletic maneuver such as an explosive cut (changing direction at high speed), an athlete's torso must battle the change in momentum. For a visual you can picture a raw spaghetti noodle, versus a wet spaghetti noodle. Or if you were to take a drinking straw and place it on a table vertically, then push the top of the straw down (as if you were trying to push the straw into the table), eventually the straw will buckle. This is an example of buckling within the mid-section is a good representation of what happens when athletes sprint, jump, land and change direction. If the core does not provide the necessary bracing support athletes will not perform to their maximum capacity.

Dependent upon an athlete's movement speed prior to changing direction, an athlete may have to overcome resistances that may be several times greater than their body weight. These moves happen all over every court, field, and other athletic events. Performing exercises on training devices such as air filled balls, disc or other balancing equipment, may provide an athlete with an improvement in balance and control, but such exercises do not fully prepare an athlete's body for the demands of sport.

When training the core on unstable surfaces, resistance used can be limiting to maximal core strength development. Performing exercises on unstable surfaces can seem difficult even for advanced athletes and can be very beneficial for the acquisition of balance and enhanced coordination, but these types of exercises alone do not recruit and prepare the muscles of the core for the demands of sport. Unlike fitness enthusiasts or recreational strength trainers, athletes require their torso to combat high levels of resistance from many different directions while trying to maintain rigidity. This awareness only re-enforces the need for athletes to perform exercises that not only promote muscular endurance of the core, but also exercises that challenge the core under maximal or near maximal levels of resistance.

