

# Strengthening Your Body's Core

**M**ANY OF THE MAJOR muscles of your shoulders, arms, and legs are attached to the pelvic bones and/or the spine, the core. If your trunk muscles are well conditioned, you will enjoy optimal transfer of energy from large to small muscles when you sprint, twist, lift, jump, throw, and perform other movements in your sport. Moreover, if the core is well trained, you are less likely to be injured in training or competition. What's the best way to strengthen your core? Here are some tips recommended by strength coaches and other training experts.

- ❖ Perform core training at the beginning of each workout and make certain that you select exercises that are safe but challenging to your nerves, muscles, and bones.
- ❖ Begin your core training with simple traditional exercises, abdominal crunches, back extensions, squat lifts, deadlifts, leg presses, lunges, leg raises, bridging exercises, pull-ups, and pull-downs, that stress the core muscles.
- ❖ As you improve, progress to more complex exercises that more closely mimic the specific dynamic movements required in your sport. For example, football linemen might practice driving off the line of scrimmage against larger team members, and wrestlers might participate in escape drills against training partners who provide varied resistance to the movements. Training with partners who provide unpredictable resistance in varying directions at varying speed helps train both your muscles and your nervous system to react quickly to changing environments.
- ❖ In the early stages of your training perform the exercises at controlled rates with light to moderate resistance. This helps build up your muscles and joints so that you will be less susceptible to injury. Later, you should progress to more explosive movements against heavier loads, similar to those you might encounter during competition in your sport.
- ❖ Vary the movements and the types of resistance that must be overcome. This will reduce boredom and risk of injury and will help you stick to your training regimen.
- ❖ Always perform your exercises exactly as they are meant to be performed and establish proper body balance while doing so. This will not only enable you to get the most out of your training, but it will also help minimize your risk of injury.
- ❖ Consider performing some of your exercises on unstable surfaces such as foam mats or balance boards to improve your body's ability to achieve stability and balance in the changing environments of sport.
- ❖ Consider performing trunk rotations and trunk flexions/extensions with medicine balls and using rubber band devices as resistance tools. This may more

closely mimic the changing resistances you encounter in your sport compared to using dumbbells and barbells.

- ❖ Don't exercise one body part to the exclusion of others. In other words, spend as much time training the muscles of your back as you do the muscles of your abdomen. Otherwise, you are less likely to achieve optimal stability of your spine and pelvis and you are more likely to be injured because of an imbalance of muscle strength.
- ❖ Improve the flexibility of your trunk and hips. Increasing your flexibility will help extend the range over which you can perform your movements and may decrease your chances of being injured.
- ❖ Be consistent in your training. If you stick with your training plan, you are much more likely to achieve success than if you train erratically. 🚴

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Suggested resources:

Brittenham, G., and D. Brittenham (1997). *Stronger Abs and Back*. Champaign, IL: Human Kinetics Pub, 248 pp.

## Typical core exercises

