



Because of the arm involvement in executing these movements, athletes tend to overlook the significant contribution of the abdominal muscle (abs) during these activities.

Many of today's athletes gravitate toward training programs that are performance-oriented, hoping to enhance their athletic ability. It is a positive step in that these programs are richer in functional style exercises, however, in our efforts to adopt elite training techniques we sometimes phase out the basics. A common example of this is core strength. The core refers to the abdomen, back and hip musculature.

Abdominal exercises may seem old hat and not very cutting edge, yet they are vital in the areas of speed development, power development and general strength development.

A clichéd but appropriate saying is: "a chain is only as strong as its weakest link." Limb strength emanates from this torso area and thus cannot be achieved without first having a strong core. In other words, if you want to lift heavy weight or excel in a plyometric training program, you need good core strength.

I realize that the number one concern here is tennis, but this concept holds true when running on a tennis court or hitting a tennis ball. Do not only consider this concept when on the tennis court, but also when in the weightroom or any other cross-training facility for tennis.

Even though core strength involves several areas, I would like to focus on abdominal exercises and more specifically, a particular category of abdominal exercises.

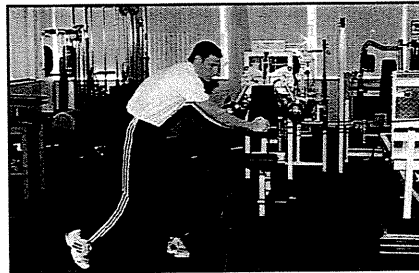
My athletes have four abdominal workouts per week. Each session consists of three to four different exercises where we do three sets of anywhere from 20 to 30 repetitions of each. I draw from a menu of about 40 different exercises that are split into the following categories: lower abs, upper abs and torso rotation. Each of these categories is accounted for during every workout.

**By NORMAN MELTZER**

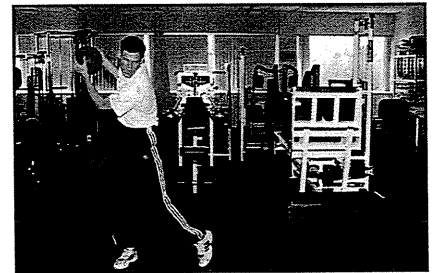
**W**hat do hitting a blistering forehand down the line, taking a slapshot and throwing a discus have in common? They all require a great deal of torso rotation.



**V-Twist (A)**



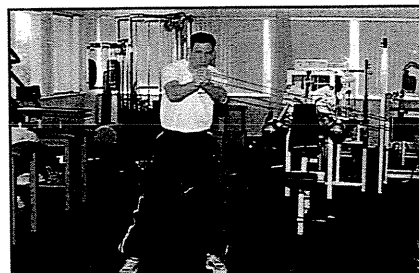
**Tubing Rotation (A)**



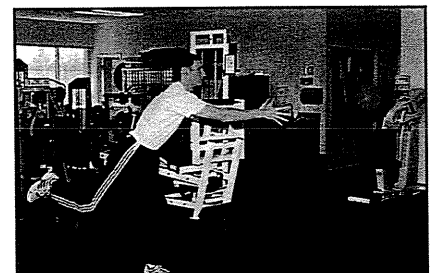
**Side Throw (A)**



**V-Twist (B)**



**Tubing Rotation (B)**



**Side Throw (B)**