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venting injuries and maximizing performance from the very first moment of a match or training session.

Obviously, as mentioned earlier, juniors lack well-developed physical strength and competitive experience. But, what most juniors don't know, is that a typical "fitness club type" routine will not prepare you well for the mental and physical demands of a competitive tennis match. Again, fortunately, there are ways to strengthen the core, legs and upper body, plus condition the mind to enjoy tangible results in a short period of time.

All junior tennis players would be served well by focusing greater attention to the "mind aspect" of their fitness training routine. What is the current status of your state of mind? Train like a champion ... be sure your fitness routine helps you develop a healthy belief system and strengthens your ability to stay focused

on process, not on results. Mentally speaking, nothing is more important than staying in the "here and now."

One simple exercise to help you develop greater focus and better tennis results would be to concentrate all of your attention on an object close to you and on your breathing process. That will switch you to a "here and now" state of mind. Want proof of how it works? Just take a look at the best players in the world ... they always look at their racquet strings between points! This simple exercise will help you stay focused between points, improve your recovery time and better prepare you for the next point.

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Shoulder Pain in Tennis Players: Do You Have a Good Foundation?



By Chris Ostling, PT, DPT

Shoulder pain is one of the more common injuries in tennis players, affecting

both young and old alike. The general reason is fairly simple: By design, the shoulder is not meant to perform such forceful, and often overhead, movements. Include the tremendous amounts of repetition inherent in the game, and you have all the key components of an injury waiting to happen.

Cheer up fellow tennis players. I'm not continued on page 49

USTA TOURNAMENT photogallery

Scenes From the 2009 USTA Boys 12s' National Indoor Championships

November 30 at USTA Billie Jean King National Tennis Center in Flushing, N.Y.













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suggesting that we lay down our rackets ... at least not without a fight! The most obvious solution to this problem is to try to affect the shoulder directly by using methods to strengthen or increase the flexibility of the shoulder. The rotator cuff. the group of muscles deep within the shoulder, does a lot of work for us when we're trying to smash a forehand by our opponent. It's only fair that we return the favor and make sure that it's just as healthy as our own game. While focusing our attention on the shoulder itself is very important, it's only part of the equation. Our body's foundation is the other major component and is frequently overlooked when dealing with shoulder pain.

Our foundation is comprised of both our leg and core (trunk) muscles. Believe it or not, our foundation is where a lot of our power comes from. Some estimates say at least 50 percent of our power comes from our core. Most people think that arm or shoulder strength is what makes you hit the ball hard-that's why when people want to hit a ball harder, they swing harder.

Using common sense, we can see that our foundation is more responsible for ball speed. First off, compare the size of your leg muscles and your shoulder muscles.

Your leg muscles are obviously much bigger and more powerful. From a practical standpoint, compare how hard you hit a ball moving forward and using your legs to drive through the ball, as opposed to when you're scrambling backwards and have to "muscle" the ball without any forward momentum.

As you prepare to hit a ball, force is generated in your legs and core and transferred through your mid-section and trunk. The force continues through the shoulder, which adds its own amount of force, traveling down the arm and through the racket as it impacts the ball. In reality, the shoulder is more responsible for transferring and directing the force being received from your foundation than attempting to generate all the force itself.

What happens when our foundation doesn't provide the needed force? The answer is that the shoulder will try to compensate for it by adding more of its own force. Here's the problem: For your shoulder to make up for a 20 percent loss in force due to a weak foundation, it would have to increase its speed of swing by almost 40 percent. That's hard work on the shoulder! Repeatedly having the shoulder try to compensate for a weak

foundation can lead to rotator cuff strain or tendonitis, as well as impingement. That's why a strong foundation is so important to your shoulder's health.

Do you have a weak foundation? Here's a quick way to check. Perform a one-legged squat. If you note balance problems or if your knee wobbles and falls inward towards your midline, then chances are you need to strengthen your foundation. Every player can benefit from a stronger foundation. Not only can it keep your shoulder healthy, but it can increase your power and improve your court coverage! If you're experiencing shoulder pain, a thorough evaluation by your physical therapist can help determine whether your problem is related to faulty shoulder mechanics or if the shoulder is overworked due to a weak foundation.

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