

Avoiding the High Price of Injury

By Stephanie Tutalo

As a parent, you want the best for your child. You want to give them every opportunity possible, including making them the best at what they do... or what sport they play. A recent article in the Cincinnati Enquirer noted that parents spend, on average, \$6000 per child on fees for sports such as club teams, personal training, camps, clinics, tours and other year-round athletic services for their kids. That's a high price to pay when you considering that your child's athletic participation can come to a sudden stop when an injury occurs.

Under these circumstances, it is worthy to note the alarming rate of knee injuries in our young athletes. Each year in the United States, one in 100 female high school athletes will suffer a serious, season ending injury. Alarmingly, the rate of knee ligament injuries in female athletes is 6-10 times that of male athletes depending on the sport. In sports involving cutting, jumping, landing, and pivoting, the risk of tearing the ACL becomes higher. The cost of an ACL injury per athlete, including reconstruction and rehabilitation, is approximately \$17,000. This is in addition to the traumatic effect of the injury on the athlete, including losing an entire season, possible loss of a scholarship, and the effect on the athlete's academic performance and mental health.

Although, there is not much that can be done to avoid a contact injury, there are injury prevention programs that teach athletes the proper techniques of cutting, pivoting, jumping and landing that can keep them from suffering a non-contact injury. Sportsmetrics™ is the first training program scientifically proven to improve neuromuscular problems in athletes by increasing hamstring strength and teaching athletes how to land from a jump and cut/pivot in safe positions, with proper body positioning. The program was designed by Dr. Frank Noyes, one of the most influential orthopaedic physicians in the world, and his research team at Cincinnati SportsMedicine Research and Education Foundation. It is a six-week jump training program that meets three times per week on alternating days. Each session is approximately one and a half hours and includes the following components:

1. **Dynamic Warm-up:** Prepares the body with functional based activities that use sport specific motions. It raises core body temperature, increases blood flow to the muscles and improves flexibility, balance and coordination.
2. **Plyometrics/Jump Training:** Plyometrics, to core of the Sportsmetrics™ program, are used to focus on correct jumping technique and are divided into three two week phases. Each phase has a different training focus and the exercises change accordingly. Plyometrics develops muscle control and strength that are critical for reducing the risk of knee injury and increasing jump height.
3. **Speed and Agility Training:** Emphasizes body alignment and form while performing sprinting and cutting movements. The goal of speed and agility training is to condition your body and increase skill level.
4. **High Intensity Strength Training:** With emphasis on body alignment and form, Sportsmetrics™ provides structured (yet adaptable) strength training guidance. This section focuses on development of core strength and improving overall muscular efficiency. This can be done with or without equipment or free weights.
5. **Flexibility Training:** Stretching is essential to achieve maximum muscle length, allowing muscles to work with power through complete range of motion. This is important for decreasing injury and post-training muscle soreness.

For athletes that do not have the option of training 3 days a week for six weeks, we offer Sportsmetric™ WIPP (Warm-up for Injury Prevention and Performance.) WIPP is a specially designed warm-up that incorporates all of the above components of Sportsmetrics™. WIPP takes approximately 20 minutes and can be performed as a warm-up prior to practice and games.

Many parents, local and national, have taken an active step toward injury prevention for their child by using Sportsmetrics™ as a preseason conditioning tool or as a return-to-play program after physical therapy. Stephanie Busam signed up her daughter, Morgan, for Sportsmetrics™ after a devastating knee injury. "Its important to have my daughter participate in Sportsmetrics™ before returning to her sport. I don't feel that she is prepared to protect her knee on the field without going through the program." Stephanie is enthusiastic about getting the program into her daughter's high school to help other athletes avoid injuries like Morgan's. "Our athletic director is very committed to the program and is planning to have Sportsmetrics™ implemented as part of their overall athletic regimen"

The Cincinnati SportsMedicine Research and Education Foundation has received international recognition for our published studies that document our ability to reduce serious knee injuries in female athletes who train with *Sportsmetrics*™. Our research has been featured in the New York Times, USA Today and the Cincinnati Enquirer, and on ESPN and ABC's Wide World of Sports.

It is easy to get caught up in the race to make your child the fastest and strongest in his or her sport. But it will never happen if they suffer a knee injury. Take charge with Sportsmetrics™ so your number one athlete can get stronger, jump higher, run faster...injury free.

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