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The Importance of Strength conditioning, Warmup and Stretching for Soccer Players

Whether your child will be taking soccer straight to College or is just playing soccer as a recreational sport, strength conditioning, warming up before a game or scrimmage and stretching before and after an activity is crucial to the success of the sport and most importantly in the prevention of injuries. As a soccer Mom, that is what's most important to me and that is why I am writing this.

Since I've been watching soccer and screaming from the sidelines for the past 3 years, I realized that there are many components that are needed to play good soccer or any other sport. I called them the 7 S's and one L. Courtney, my daughter added the L. The 7 S's are:

1. Strength
2. Speed
3. Stamina
4. Smarts
5. Sight
6. Strategy
7. Skill
8. L = Love of the Game

First if all, your body must be **conditioned** to withstand an intense activity like soccer. Here are some ways to prevent injury for soccer players.

- A) **Strength Training**: helps you avoid injury and increases the ability of the joints to handle impact. Injuries usually occur because muscles around a particular joint (for soccer...the knees and ankles) aren't strengthened properly. Some exercises to be considered are calf raises for the ankles, squats or lunges (done properly) to strengthen the butt and thighs, leg extensions for the quads and leg curls to strengthen the hamstrings, and ab and lower back exercises for balance work. These exercises all focus on opposing muscle groups which is crucial in stabilizing the joints involved. (Female athletes are 10 times more likely to tear the ACL than a male athlete due to anatomical and neurological reasons.) Most athletes' quads are stronger than their hamstrings. This imbalance can lead to tearing the ACL.
- B) **Proper running technique**: to improve game speed (run fast, slowing down, reverse direction and land.) Speed is not just a measure of how fast you can move in a straight line, but also how well you slow down and change direction. In addition to improved performance, proper deceleration and landing techniques are also critical for injury prevention. It is not the speed that is dangerous, but the sudden stop. Generally, athletes stop with a locked

knee position which can damage the knee joint. You should stop with bent knees so the stress is placed on the muscle, not the joint.

Foot contact, posture/body alignment, leg recovery and arm action are also important techniques to help you run more efficiently, for example, foot contact: A walker and jogger should land heel to toe. A sprinter should land on the ball of the foot (slightly behind the toes). All three should maintain a toe-up position. The reason for keeping toes up is to minimize the amount of time your feet spend on the ground when jogging or sprinting. The faster a foot is on and off the ground, the more efficient and faster you become. This technique also relieves stress to shins and knees.

C) Warm-up and Stretching: We all know the importance of warming up and stretching, but we don't do it. Warming up is so important in preventing injury, especially when it is cold out. Our muscles are like taffy, if it's cold, you can easily break it. If it is warm, it is easier to stretch it. Light jogging, for example would be a good warm-up because it brings blood circulation to our extremities and our core. Stretching should come next and should be mandatory because it's proven to enhance performance and prevent or lessen the risk of injuries to the muscle and the joints involved. Consistent stretching also can improve the quality of joint function, and for some people with chronic joint pain, a well – designed stretching program can alleviate pain. Proper stretching is also crucial because if not done correctly, you can injure yourself or not stretch the targeted muscle. There are many types of stretching techniques, ballistic, static and PNF (Proprioceptive Neuromuscular Facilitation). Of course, stretching increases flexibility and the benefits of flexibility include:

1. decreased risk of injury
2. decreased stress
3. decreased chronic muscle tension
4. improved postural awareness
5. increased mind/body connection
6. relief of muscle soreness
7. decreased low back pain
8. increased motor performance
9. improved ability to perform activities of daily living

The next thing I want to discuss is **nutrition**, which is just as important as speed and strength. Your body is like a car, without fuel, it can't move. So, if you don't know what to eat, when to eat it and how much to eat, you will expect decreased energy and poor performance like running slower and fatigue faster. An athlete can work out all they want, but with poor eating habits, results can be minimized. Simple advice for your players:

- 1 Make sure to drink plenty of water throughout the day (Avoid soda, and high sugar juices.)

- 2 Eat 5-6 smaller meals throughout the day instead of 2-3 larger ones to keep blood sugar level even throughout the day.
- 3 Avoid products containing high amounts of sugar, high fructose corn syrup and fat.
- 4 Make sure there is a balance of protein, carbs and fat in every meal you eat throughout the day.
- 5 Make sure to have a quality post workout meal immediately following game like a protein shake.
- 6 Try to eat one hour before the game.

The last thing I want to talk about is **sufficient sleep**. Young Athletes need about 9 to 10 hours of sleep per night to function properly. As you know, if you have a bad night, you can perform very well at work. It is important that young kids get enough sleep. Sleep is when your body repairs itself. So turn off the TV and make them catch some Z's.

It is very important that the players start young and get into good habits of sleeping well, eating right, warming up and stretching before and after a game, do some strength exercises as well as speed and agility training to help prevent injuries and improve their performance.

Ladder work helps with speed and agility, improves foot work, coordination, good balance, change of direction and programs your body for technical moves. Also it is fun.

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