Soccer is among the most popular youth sports, both domestically and abroad. It provides athletes with an enjoyable sport, outstanding aerobic exercise and helps players develop agility, coordination, and teamwork. However, soccer has inherent injury risk, particularly risk of lower extremity injury and/or concussion. As athletes return to competition in the current COVID-19 landscape, a renewed emphasis on injury prevention is paramount. Most athletes are coming off a period of relative inactivity, and may be facing an accelerated return to sport. This combination is a recipe for overuse injuries, muscle strains, and ligament injuries.

Soccer players can follow the below steps to mitigate injury risk and improve readiness to return to play.

**Include an Effective Warm-up.** This may seem simple, but a thorough warm-up of at least 10 minutes before activity should be planned into every practice and competition. We recommend beginning with a light jog to loosen up muscles and elevate your heart rate. A dynamic warm-up with lunges, hip swings, and high knees is especially important for lower extremity flexibility and muscle activation for soccer athletes. Don’t forget that a thorough cool down and muscle stretching is as important as the warm-up. An outstanding soccer specific warm-up program has been developed called *FIFA-11+* and is a must read for any soccer coach, parent, or athlete. It has help reduce soccer injury rates¹ and a pdf schematic of this regimen is attached [here](#).

**Enhance Your Strength, Mobility, and Agility.** Outline a gradual progression of lower extremity strength training to help you track progress and build toward a goal. Some athletes may find strength training challenging without typical access to gyms and training rooms, but effective training regimens can still be followed with a little creativity. Use equipment and objects around your house to your advantage. Instead of a BOSU® ball or foam mat, use a couch cushion to incorporate balance challenge, and as a progression of a simple squat. Wear a backpack for added weight instead of using a bar with weights.

It is well understood that mobility is an important component of injury prevention and recovery. Foam rolling of the torso and lower body should be integrated in your regular routine. Finally, soccer is a sport of sudden stops, pivots, and explosive change of direction so your body has to be ready for this. Focusing on balance and agility drills can pay dividends to not only improve performance when you return to the field, but also help prevent injury.

**Build Endurance and Cardiovascular Health.** Soccer is a sport that requires athletes run a significant distance during a normal game. If your cardiovascular stamina is not built up gradually, your muscles can fatigue and result in a higher injury risk. Interval training is a great way to build cardiovascular fitness and stamina. Go for tempo runs and vary your distance, speed, and pace.
Embrace Nutrition as Fuel. Good nutrition is as important as a high-level workout routine. If you provide your body with the right balance of nutrients, you will notice improved performance. A balance of carbohydrate and protein intake is preferred over a solely high carbohydrate diet. Eat a diet anchored in fruits and vegetables (eat your colors). Try to eat approximately 2 hours before a strenuous practice or soccer competition, not directly prior.

Stay Hydrated. Staying hydrated is crucial to reduce muscle tears and promote optimal performance. Drink on a schedule – it is best to drink fluids throughout the day rather than trying to drink a large amount all at once. Mix sports drinks as well as water. Your individual fluid requirements will vary based on a number of factors (body size, humidity, and level of exertion, for example) but in general aiming for 4-8 liters per day is an excellent goal. An easy way to check your hydration status is your urine; well hydrated athletes urinate clear-light yellow urine every 2-3 hours when they are awake.

Reduce Concussion Risk. US Youth Soccer has guidelines on heading in practice and competition to limit concussion and neck injuries in skeletally immature athletes\(^2\). They prohibit athletes age 10 and younger from heading the ball in any setting. Children ages 11-12 are permitted to head the ball up to 25 times per week, and there are no limitations on children ages 13 and older. Regardless of age and heading limit, following proper technique needs to be taught and reinforced by coaching staff, particularly for the youth and high school levels.

Returning to soccer has been a goal of many athletes since the pandemic began. However, doing so safely and with a plan should be included in that goal. The simple tips mentioned above will provide a framework to return to soccer in an enjoyable way while limiting injury risk. Preventing injuries is always more efficient than treating them.

References
