Scott Moody, Founder and President of Centers for Athletic Performance (CAP) is a contributing author for our soccer conditioning segment. Moody founded Centers for Athletic Performance, Inc. (CAP) in 1999, and brought together a group of motivated strength coaches, researchers, physical therapists, and performance based technology manufacturers to form the first CAP Advisory Board. Moody then opened a 5,000 sq ft facility where he implemented speed, power, strength, and stability based programs for athletes of all ages and sports located in Overland Park, Kansas. This is the part two of an article that focuses on importance of nutrition for soccer players.

In Soccer Nutrition Part I – Nutritional Goals for the Youth Athlete, we established some goals for healthy eating. Most of these goals were centered on the new food pyramid and making adaptations for young athletes with busy schedules. We discussed making healthy choices when it comes to nutrition and young athletes rather than meal plans and measured portions. In Part II we will discuss tournament nutrition and outline a typical weekend during the season where the athletes might play multiple games.

The goal of every soccer fitness coach is to adequately prepare his or her team to play at a high level (speed, endurance, etc) throughout the game and still have enough left in the tank to finish strong. This becomes increasingly important during championship runs as the players are asked to play multiple games in a weekend and sometimes multiple games in a single day! We tend to think that the athletes that don't seem to finish well have some issues with their conditioning level and they might be out of shape. This is not always the case. As Dr. Michael Yessis points out in his book 'Women's Soccer – Using Science to Improve Speed', elite male soccer players have their heart rate around 160-200 bpm for the entire game. Playing at that intensity for such a long time makes it hard to replenish the amount of carbohydrates being used. The tired feeling that the players feel may not be due to their conditioning, but quite possibly their diet.

The body needs to be efficient in getting energy from multiple sources if you expect it to play at a high level for an entire game, multiple games, and over a tournament weekend. The body will use carbohydrate stores (muscle glycogen) for quick energy in sprints, cutting maneuvers, etc. Then as these become depleted and the intensity of the match decreases, the body needs to be able to switch to using fat as a primary energy source. This saves the readily available carbohydrate stores for the next intense period of the match. After the match, the body needs to recharge the batteries (more carbs) very quickly, then when energy levels are high enough one or two hours later, begin to rebuild and repair the muscle damage endured during the game. Later the body will need to reload with protein, fats and carbs for the next match.

Four "R's"

- Ready the body for competition (fuel up on fluid, carbs, good fats and good proteins)
- Relegate (using muscle glycogen for short bursts, to using fat for slower periods)
- Recharge (ingest quickly absorbed carb sources immediately at half time, and post game)
- Refuel (reload the carb, fats and proteins to ready the body for the next game)

Some advocates of sports drinks will give their team high carb sports drinks during practice every 15-20 minutes. This reliance on replenishing the carbohydrate stores cannot happen during the course of a game when the athletes don't come off the field often enough to refuel. So even though this is a good training strategy, it ends up hurting the athletes during the game. Thus a body that has been accustomed to having readily available carb stores now does not, and if the body has not been prepared to be efficient in the utilization of fat as an energy source (or if there is not enough good fat in the diet) will cannibalize the muscles to keep a safe amount of fat in the body, according to Dr. Yessis. This will leave the athletes fatigued and slow as the game wears on.

The Plan

The plan for finishing strong is a season long process to determine each individual's "ideal" tournament diet. Make some suggestions early in the season about what to eat before practice, post practice and the night before a morning practice. Ask the athletes how they feel, have them chart their daily activity in an Energy Management Tracker (download a trial version at www.athletebydesign.com). An example of the tracker is shown on the next page. Once they have identified what makes them feel the best and their ideal meal size and timing, we can start to plan our weekend meals.

Night Before

The night before the morning game should be spent in the READY phase, fueling up the body for the next day's activity. This should be comprised of a balanced meal (usually with the team) of 2/3 of your plate filled with carbs (pasta, whole wheat breads, colorful vegetables, etc) and the other 1/3 filled with good proteins and fats (fish, chicken, nuts, etc). Don't load up on simple sugars, sweets, soda, etc. Make sure you also drink plenty of water.