

## MYTHS ABOUT SOCCER NUTRITION

### **Myth #1 – What I eat and drink doesn't affect my soccer performance.**

The truth is that if you are not careful about what you eat and drink, you will run less, run more slowly, make bad decisions, touch the ball less, score fewer goals, and give up more goals late in the match.

### **Myth #2 – If any type of food is critical in soccer nutrition, it's protein, not carbs.**

With rare exceptions, soccer players in developed countries get plenty of protein in their normal diets. But players on most teams eat too little carbohydrate, the most important nutrient in the successful soccer player's diet. Hard sprinting and running in soccer rapidly uses up the stored glycogen (carbohydrate) in your muscles and liver. To replace that glycogen, you should emphasize carbohydrate foods in your daily diet, especially during the 24 hours before a match and during the first few hours of recovery from matches or hard training sessions. Here are some guidelines:



- Your in-season daily diet should include 8-10 grams of carbohydrate per kilogram of body weight (3.5-4.5 g/lb). Cereals, fruits, vegetables, breads, and pastas are good sources of carbs.
- About 4 hours before a match, eat a meal that includes plenty of easily digestible, carbohydrate-rich foods. Avoid fried foods and foods with fatty sauces because fats are slowly digested. If you tend to be nervous before a match, consider an easy-to-digest liquid meal such as a nutrition shake that contains 60-70% of its calories as carbohydrate.
- About 2 hours before a training session or match, drink about 500-600 ml (16-20 oz) of a carbohydrate-electrolyte sports drink that contains 5-7% carbohydrate. This will provide some last-minute carbohydrate and body fluids insurance.
- During stoppages for injuries and penalties and during half-time, drink as much of a carbohydrate-electrolyte sports beverage as you can comfortably consume.
- As soon as possible after a match or hard training session, start consuming carbohydrate-rich foods and beverages to rapidly begin replacing glycogen stores. Energy drinks that contain 18-20% carbohydrate (18-20 g/100 ml or 43-48 g/8 oz) can be a good source of easily digested carbs. A little protein is good, but don't go overboard. Aim to consume plenty of carbohydrates (8-10 g/kg) in the 24 hours following strenuous play.

### **Myth #3 – Drinking fluids during practice and matches is for sissies.**

If you play hard in practice and in matches, you lose lots of sweat, especially when it's hot and humid. Some of the water in that sweat comes from your blood, and the last thing you want to do is reduce your blood volume. Blood carries oxygen and nutrients to your muscles, removes lactic acid and other substances, and transfers heat away from your muscles to your skin, where the heat is released to the air. If you do not replace most of the fluids you lose in sweat, your performance will deteriorate and you may become susceptible to muscle cramps, heat exhaustion, and even heat stroke. Each player should have individualized, chilled, well-marked fluid containers, and teams should place those containers about every 20 meters along the sidelines, readily available for a quick drink during play stoppage.

#### **Myth #4 Water is the best fluid-replacement beverage.**

Although water is better than nothing, research studies have shown definitively that replacing sweat losses with a carbohydrate-electrolyte sports drink has real advantages over water. The carbohydrates supply energy, and the carbs plus electrolytes stimulate thirst and accelerate the restoration of body fluids when compared to water.

#### **Myth #5 – As long as I drink whenever I'm thirsty, I'll get plenty of fluids.**

Thirst is not a good indicator of fluid needs, so you must force yourself to drink early and often, whenever there are stoppages in play. Your goal should be to never lose more than about 1.5% of your body weight in a practice or match. In other words, if before practice or a match you weigh 70 kg (154 lb), you should not lose more than 1.05 kg (2.3 lb) after play. To find out more precisely how much you should be drinking, weigh yourself before and after practice and measure the volume of fluid you drink, if any. If you lose more than 1.5% of your body weight, you will need to drink more. If you actually gain body weight, you should drink less.

To rapidly replace fluids and electrolytes like sodium and potassium after practice or a match, you should drink about 50% more fluids than you lost. (The reason for this is that drinking stimulates urine formation, and additional fluids are needed to make up for that loss.) Again, sports drinks are better than water for rapid rehydration because they encourage drinking and cause less urine production.

#### **Myth #6 – To perform my best, I need to supplement my diet with creatine.**

There is no persuasive evidence that creatine supplementation has any noticeable effect on soccer performance. In fact, any gain in body weight—a common side effect of creatine supplementation—may actually be harmful to running performance in soccer. Moreover, soccer performance has a large endurance component, and creatine does nothing to enhance endurance.

#### **Myth #7 – When the team travels to an away match and the game is over, it's O.K. to eat whatever I want at restaurants.**

Even when your team is taken to a buffet restaurant or a food court where good selections are available, many players will make poor choices, but you can be smarter. The idea is to get ready for the next match. Proper food choices—lots of carbs, little fat—will put more energy in your muscles, which means better performance in the next game. If your opponent isn't as enlightened as you, then you will be at an advantage. If you are unsure about which foods are high in carbs and low in fats, ask for help. If you have a team nutritionist, that would be best. A team physician or athletic trainer or coach may also be able to give you sound advice. Also, some fast-food restaurants have printed materials available that list the nutritional contents of their foods; just ask.

### **SUGGESTED ADDITIONAL RESOURCES**

Burke, L.M. (1997). Fluid balance during team sports. *J. Sports Sci.* 15:287-295.

Coyle, E.F. (2004). Highs and lows of carbohydrate diets. *Sports Sci. Exchange* 17:1-5.

Kirkendall, D.T. (1993). Effects of nutrition on performance in soccer. *Med. Sci. Sports Exerc.* 25:1370-1374.

Williams, C., and C.W. Nicholas (1998). Nutrition needs for team sports. *Sports Sci. Exchange* 11: 1-6.????