The Hydration/Sweat Connection

To avoid heat-related illness in practice and competition it is important for an athlete to sweat. This keeps his or her body at a safe temperature and helps to prevent overheating. As the temperature starts to increase, water and heat are released from the body in the form of sweat. The body cools off as the sweat sits on the skin and then evaporates, carrying the heat from the body into the air. Without proper hydration, the body does not have the water it needs to sweat and cool properly.

Remember that each athlete’s sweat rate differs, depending on gender, genetics, age, the environment, exercise intensity, fitness level and acclimatization.

Fluids play a critical role in health and athletic performance. Even mild dehydration can lead to poor performance, decreased endurance and increased risk of heat-related illness.

• Drink water throughout the day - This can help to prevent early fatigue and overheating and promote optimal alertness, body temperature regulation and recovery time after the event is over.

• Drink plenty of fluids before, during and after the event - Drinking after physical activity helps to replenish the body.

• Know if you are a salty sweater - If so, a sports drink or salty snack may also be recommended.

• Know other ways to hydrate - While water is the best choice, other foods and beverages including milk, smoothies, broth-based soups, and fruits such as watermelon, oranges and grapes help hydrate as well.

• Work with your doctor, athletic trainer or sports dietitian for more specific recommendations and needs. These professionals may help by routinely measuring pre- and post-exercise body weight to help determine your sweat rate, hydration goals and fluid recovery needs.

Signs and Symptoms of Dehydration

• Fatigue early in the game or practice
• Decreased/poor performance
• Headache
• Difficulty focusing

• Overheating
• Not sweating when usually a normal to heavy sweater
• Urine that is dark in color, like apple juice (late sign of dehydration)
• Urine that is low in volume (late sign of dehydration)

Keys for Success:

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The Center for Excellence in Sports Medicine at Scottish Rite for Children is a comprehensive practice specializing in the treatment of sport-related injuries and conditions in young and growing athletes. Sports Medicine physicians, pediatric orthopedic surgeons, physical therapists, athletic trainers, psychologists and others work side-by-side with athletes, parents and coaches to develop the best game plan for recovery.

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