# **GATORADE** SPORTS SCIENCE INSTITUTE

# YOUTH SPORTS HEALTH AND SAFETY: KEY NUTRIENTS TO ATHLETIC SUCCESS

Michael F. Bergeron, Ph.D., FACSM, Executive Director - National Youth Sports Health & Safety Institute

For young athletes, regular participation in youth sports can provide myriad health and fitness benefits, as well as an opportunity to learn about discipline, commitment and teamwork. The advantages can even extend to enhanced academic achievement.

Learning proper technique, being allowed to develop slowly, being exposed to a variety of foundational athletic experiences and getting enough sleep all contribute to young athletes maximizing athletic success. Eating well and hydrating sufficiently are also integral to maintaining performance *and* health and safety. Every youth athlete, no matter the ability level needs to be well-nourished and well-hydrated to train and play up to their capability.

## **DEHYDRATION – A PREVENTABLE PROBLEM?**

It's no secret that as the heat and humidity rise, athletes sweat more – so the need to consume more fluid during and after physical activity in such conditions is clear. Additionally, as intensity and duration of training and competition in the heat increases, sweating and total fluid loss increase even more as the body does its best to regulate temperature. Many adolescent athletes are capable of sweating quite a bit, especially with strenuous exercise or other physical activity.

## **Other Common Contributing Factors:**

- Poor habits developed during practice, like thinking that hydration doesn't matter unless a game is on the line. It's often apparent that what a young athlete gets away with in practice doesn't hold up during intense competition.
- Limited opportunities to consume fluids.
- Tournament play when multiple games are scheduled on the same day with short recovery periods between contests.
- Recent illness especially if it involved vomiting and/or diarrhea.

## The Solution:

Hydration efforts before, during and after training and competition for all youth athletes often have to be more deliberate than just leaving it to chance or waiting until there is a problem. This is especially critical in the heat. The harder and longer a young athlete trains or competes, and the hotter and more humid it is, the need for additional timely carbohydrate (energy) is proportionately greater. This is when a properly formulated sports drink can work well. And for those youth athletes who sweat a lot, oftentimes an increase in sodium intake during and after activity is necessary to help better retain and distribute fluid throughout the body.

#### WHAT ABOUT OTHER NUTRITION?

Especially for growing, active young athletes, proper nutrition is essential. A good place to start is by recognizing "What's good for health is good for performance." That is, youth athletes, like all kids, need to eat a well-balanced and nutritious diet with enough calories, carbohydrate and protein each day to support normal growth *and* sports participation. No skipping meals – and there should be enough time allowed to sufficiently digest a meal before working out or competing hard. Accordingly, nutritious pre- or duringworkout snacks and sport drinks work well the less time there is for a larger meal before having to train or compete.

#### THE MESSAGE:

Proper hydration and nutrition are essential for young athletes to maintain health, safety and performance. Hydrating and eating properly before, during and after training and competition will help give young athletes their best chance to perform at the highest level while also helping to keep them healthy and safe.

