## **Athletes and Nutrition**

Starting in middle childhood some youngsters participating in competitive sports are looking for an edge that might make them run a little faster or throw a little harder. Often they will turn to nutrition for help.

However, there is no magical food or supplement that can transform an average athlete into a superstar. No matter what the age of your youngster, optimal performance depends more on a balanced diet, sufficient nutrients to meet the demands of physical activity, and adequate rest. To maintain that balance, some sports activities may require increases in:

## Caloric (Energy) Intake.

Without adequate calories your child may feel weak and fatigued, and his/her athletic performance may suffer. To raise caloric consumption, your child should rely primarily upon carbohydrates (potatoes, rice, pasta, beans, bread), which are excellent sources of energy during exercise.

## Protein Intake.

The protein needs of an athlete may be only a little higher than those of a more sedentary individual. Even so, some evidence suggests that a small increase in protein, in conjunction with exercise, may be important when trying to increase muscle mass and lean tissue. Often, simply by increasing caloric intake in a well-balanced diet, a child will obtain any additional protein she may require.

## Fluid Intake.

Additional liquids are often overlooked, both by children engaged in sports and by their coaches. Yet during exercise, perspiring youngsters lose fluid that must be replaced to prevent dehydration and overheating. Children should drink plenty of water before exercising, and then drink again every ten to twenty minutes during exercise itself, even if they are not thirsty. This is particularly important when exercising in hot weather.

Fluid intake needs can vary widely from child to child, based on his or her body size, level of physical activity, and the weather. These

requirements generally range from 1.5 to 3 quarts per day of fluid; your child should drink an extra 8 to 12 ounces of water for every half hour of strenuous physical activity.

Thanks to persuasive advertising, many children and their coaches believe that commercially prepared electrolyte or sports drinks have some advantages over water. These drinks do provide some replacement for the salts and sugars that are lost with vigorous exercise. However, they may be high in sugar, which can sometimes cause cramps, nausea, and diarrhea. Despite its simplicity, water is usually the best choice.

If your child is involved in a sport where his weight is important-perhaps wrestling or gymnastics-he might be drawn to unhealthy weight-management strategies, perhaps adopting a crash diet, taking laxatives, or consuming special supplements. Wrestlers, for example, in an attempt to "make weight," may be tempted to fast, which is potentially harmful. You might choose to consult your child's pediatrician or a registered dietitian to evaluate the adequacy of your child's diet or with any concerns.

Modified 2010 from the AAP by Dr. Amanda Dropic