Nutrition For The Growing Athlete: The Good, The Bad And The Ugly

May 12, 2008 — For millions of American children and teens playing sports, good nutrition is critical for maximum health, performance and normal growth. Yet, with all the information available out there, it’s becoming harder than ever for a young athlete to filter truth from myth, and detangle the good from the bad and the ugly, says Amanda Leonard, M.P.H., R.D., a pediatric sports nutritionist at the Johns Hopkins Children’s Center.

During May, Physical Fitness and Sports Month, Leonard and other Hopkins Children’s experts want to stress the importance of good sports nutrition and, as the hot weather approaches, the dangers of dehydration.

“I always remind parents: For children and teens the focus should be optimal health, not optimal performance,” Leonard says. “With optimal health, comes optimal performance. It really is that simple.”

The Good

As a general rule, 20 to 30 percent of the calories in a young athlete’s diet should come from fat, 50 to 65 percent from carbohydrates and 15 to 20 percent from protein. But, Leonard says, endurance training, such as long-distance running, requires more calories from both carbs and protein, while strength training increases the body’s need for protein. Be careful with protein, she warns, because too much of it can cause dehydration and put a strain on the kidneys.

Young athletes typically don’t require dietary supplements. Eating a healthy diet rich in fruits and vegetables plus a daily multivitamin should provide all the nutrition an active growing body needs. Sports bars and gels enriched with protein, vitamins and minerals offer no greater nutritional benefit than regular food, Leonard advises. However, their size and convenient packaging make them a fast, easy way to replenish nutrients after prolonged activity.

The Bad

Dehydration among children playing sports is common, especially in the hot summer months, but may go unnoticed in its milder forms, Leonard says. Younger children are more prone to dehydration because their bodies produce more heat while sweating less. Children recovering from a recent illness, especially one that caused vomiting or
diarrhea, may be more prone to dehydration. To ensure hydration, water is the best choice. Any activity that lasts less than 60 minutes doesn’t require electrolytes, so you can safely skip electrolyte-enriched sports drinks.

To avoid dehydration:

- Before exercise, drink 4 to 8 ounces
- During activity, drink 4 ounces every 15 minutes
- After exercise, drink 16 to 24 ounces per every pound lost

Symptoms of dehydration include muscle cramps, dry mouth and severe thirst, reduced sweating and urination, headache and dizziness.

The Ugly

Leonard offers a word of caution on dietary supplements: The Food and Drug Administration does not test them before they reach the market, so their benefits and safety are not independently verified. Pediatricians should always ask young athletes whether they take dietary supplements because some can aggravate pre-existing conditions. Creatine, for example, can cause kidney damage in a child with pre-existing kidney problems.

Also on the dark side of sports are eating disorders, which are common among both girls and boys competing in sports with weight categories such as wrestling and rowing and in sports where appearance is emphasized such as skating and gymnastics. Parents and pediatricians should watch out for signs including obsessing about one’s weight and appearance, drastic weight loss and excessive exercise. Eating disorders can cause loss of periods in menstruating girls, osteoporosis, teeth erosion, delayed puberty and stunted growth.