

Feeding a young player well takes a little bit of planning

During the busy season an easy stop at the nearest drive-thru restaurant can be appealing, but it is important that parents try to keep in mind what's healthiest for their young athletes.

Following a balanced diet that includes foods from all the major food groups every day will give kids the nutrients - proteins, carbohydrates, fats, vitamins, minerals, and water - to provide young athletes with the proper nutrition that can help them get the most out of the game.

Schedules are not the only battle parents have in getting kids to eat healthy. Their young athletes may be opposed to healthier food options. Dr. Matt Marturano, naturopathic physician and nutrition and wellness coach for Lifetime Spa and Fitness in Troy, says the easiest way to get around this is to simply start introducing healthy foods into their diet rather than taking away the junk food and let the child decide.

"The athlete's body will start craving the healthier foods, connecting how they eat with how they feel," Marturano says. "Eating junk food leads to a lack of performance and their body feels like junk. When they eat better they will perform better."

PRE-GAME MEAL

Before any intense activity like a hockey game, athletes need a small snack for optimal performance. Marturano recommends a piece of fruit and a small handful of nuts or seeds.

Young athletes need energy for games and practices, so meals before competition should contain mostly carbohydrates and starches, which are easier to digest than fats and proteins, and help to steady blood sugar levels.

"You can't have too much protein before exercise because your body will stop using that protein and it will weigh you down or cause cramping," Marturano says. "Focus on a meal of mostly carbs and healthy fats."

A few small meals that are quick and easy for young athletes are a handful of walnuts or almonds with fruit, or a fruit smoothie made with a tablespoon of peanut butter.

It's best to exercise on a mostly empty stomach. Digestion routs blood that's needed to carry oxygen to exercising muscles to the digestive tract, so eat at least three hours before exercise to allow time for digestion. Marturano suggests eating three small meals with two snacks throughout the day to avoid exercising on a full stomach.

Drink plenty of fluids before, during and after exercise and stay away from sugary foods, as they can cause fluctuations in blood sugar levels without any real energy boost.

ENERGY

Carbohydrates provide the energy to working muscles during exercise. They also contain other nutrients like antioxidants; vitamins A and C that help maintain healthy cells in the body, and B vitamins that help the body use that energy.

"Always the primary source of energy is a mixture of carbs and healthy fat," Marturano says. "Complex carbohydrates are foods that also have fiber and they are essential to a high-intensity work-out."

Marturano recommends eating healthy fats - nuts, seeds, avocados and coconut milk - throughout the day to build your young athlete's energy.

Foods high in energy-boosting carbs include whole-grain bagels, yogurt, oranges, bananas, apples, pears, fruit juices, pasta, rice, dried beans, breads, oatmeal and vegetables like potatoes, carrots, peas, corn, winter squash and sweet potatoes.

According to nutrition experts, in order to supply essential fatty acids and to help their bodies absorb beta-carotene and vitamins A, D, E and K, young athletes can consume up to 30 percent of their calories as fat.

MUSCLE REPAIR

Post-game is where protein comes into the diet - it's essential for building and maintaining enzymes, tissues and muscles - but a young athlete only needs it in moderation.

"All that was lost during the games were enzymes, so you need to replenish those with protein," Marturano says.

Most nutritionists say that drinking a couple of glasses of milk and eating a serving of meat, fish or poultry along with a variety of whole grains and some vegetables spread out over the whole day will more than meet daily protein needs. Excessive protein intake doesn't help muscles get bigger and can lead to dehydration.

Susan Kundrat, M.S., R.D., L.D., believes an easy way to eat for fitness is to divide a plate into three equal portions. Fill 1/3 of the plate with grains, preferably whole grains, 1/3 with fruits and vegetables, and 1/3 with lean protein sources, like chicken or turkey breast, eggs, or nonfat/low fat yogurt. Then, choose a high-nutrient drink like skim milk or 100 percent juice.

STAYING HYDRATED

Your body is made up of about 60-70 percent water. Blood is mostly water, and your muscles, lungs, and brain all contain a lot of water. Bodies need water to regulate body temperature and to allow nutrients to travel to all your organs. During exercise, muscles generate heat that is carried by fluids to the skin where it's released by sweating. When you're severely dehydrated, sweating stops and the body overheats leading to fatigue, dizziness, or worse.

Children have a lower capacity for sweating capacity, don't tolerate temperature extremes as efficiently as adults and produce more heat during exercise.

So the best way for young athletes to stay hydrated and avoid fatigue is to drink water all day long.

But what about all those sports drinks out there? Where do they fit in? Most contain a lot of sugar and shouldn't be a substitute for water.

Marturano says, "Sports drinks are good used sparingly during the game. What's best is to take a few sips of the sports drink to replace some of the electrolytes lost then switch to water."

By Sarah Zientarski

BE OUR GUEST ON THE SIDE OF CAUTION: SPORT'S CONCUSSION UPDATE

BY DR. MICHAEL CZARNOTA, PH.D.



The area of sport concussion remains highly complex - and sometimes contentious - and there continues to be new developments in the field.

Keep in mind that concussion is defined as a disturbance in how the brain works, not how it looks. That is why head CT scans are not sensitive to the effects of the injury: just because a CT scan is negative for damage does not mean that a concussion has not occurred.

Secondly, a player does not have to lose consciousness to have a concussion and this actually occurs in a relatively small percentage (5-10%) of cases.

Lastly, it has been estimated that there will be over 1.6 million sport-related concussions per year. For athletes in collision and contact sports such as ice hockey, football and soccer that means that about 10% of the team will have a concussion during a typical season.

EXPERT FINDINGS

In October, 2008 an international panel of experts called the Concussion in Sport Group met for the third time and released its recommendations on concussion management. Known as the Zurich Consensus Document, it largely reinforced previous recommendations for injury definition, recognition and management.

However, it completely avoided "grading" the severity of the injury and made a strong statement that all cases should be managed on an individual basis based on an athlete's presenting symptoms (signs and symptoms, cognitive impairments, behavioral changes, sleep disturbances), medical and injury history, rate of recovery and availability of medical personnel.

There was a strong recommendation that athletes under 18 years of age should be managed more conservatively because of a combination of maturation, academic and risk factors.

The panel's findings also stated that the child or adolescent athlete should not return to play the same day of a concussion. Since the brain is a thinking organ it was also recommended that "cognitive rest", such as temporary absence from school, modified examination schedules, limited video games and movies, etc., may be useful with younger athletes.

Lastly, because concussion can present differently from person to person, risk factors vary and management issues are often complex, the benefit of trained professionals was stressed.

For these reasons and more it was suggested that evaluating and integrating the thinking skills of an injured athlete is best provided by a trained neuropsychologist.

COACHING EDUCATION

Several states have recently passed legislation in response to catastrophic injuries or deaths related to concussion and brain injury that require high

school coaches to become better at recognizing and managing concussions. The coaches must complete a training course that stresses awareness of symptoms, proper management and medical referrals.

WHAT OTHER LEAGUES DO

The National Hockey League (NHL) began incorporating computerized neuropsychological testing in 2007 based in part on the successful use of such testing throughout the Ontario Hockey League (OHL) and Western Hockey League (WHL). The majority of the minor pro Central Hockey League also uses this approach, while the ECHL mandated that all skaters must undergo baseline neurocognitive testing beginning with this season.

Minor youth hockey in areas of Ontario have expressed great interest in making this available for their players and Hockey Canada is considering extending this service to its international tournament teams.



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THE TAKE HOME MESSAGE

- Become aware of concussion signs and symptoms (players, parents and coaches)

- Athletes need to be evaluated and cleared by experienced clinical health care providers

- Do not attempt to play with symptoms/do not allow a symptomatic athlete to play

- Expect or demand comprehensive care for concussed athletes that includes balance evaluations and cognitive testing

- When in doubt, sit them out

- Talk to your team, league or school about implementing pre-injury baseline testing of balance and cognition (memory, reaction time)

- Proper concussion management from the start results in fewer problems and a quicker return to play

For free downloads and good information on concussion, go to:
www.cdc.gov/concussioninYouthSports

For information on concussion, neuropsychology and baseline testing, go to:
www.sportconcussions.com

Dr. Czarnota is a local neuropsychologist who has included the management of sport concussions in his clinical practice since 1999. He currently serves as a consultant for a variety of teams and leagues that include high school, collegiate and professional athletes. For questions or more information he can be reached at 248 253-8208 or his website.