Middle and high school athletes need a balanced diet, but they also need extra energy and fluid to fuel harder, longer workouts. Here are some nutrition and hydration tips for keeping these athletes at the top of their game:

Food is Fuel

- **Eat nutrient rich foods from all five food groups** (low fat/fat free dairy foods, fruits, vegetables, whole grains and lean protein).
- **Complex carbohydrates** provide quick energy and are found in whole grains, fruits and vegetables instead of simple carbohydrates that have a high sugar content.
  - Simple carbohydrates can give a “sugar rush” and “crash” instead of sustained energy for physical activity.
- **Protein** is an important part of your diet. It is needed for growth and strong muscles.
  - Good sources of protein include meats, beans, nuts, eggs and low-fat/fat-free dairy foods.
- **Calcium** is needed for strong bones and can be found in dairy foods like milk, cheese and yogurt.
- **Iron** helps carry oxygen to muscles and can be found in meats, eggs, beans and green leafy vegetables.
- Eat a meal **about 3 hours before** physical activity.
  - The meal should be foods that you would usually eat, with mostly complex carbohydrates, some lean protein and not too much fat.
- Eat a small snack of fewer than 200 calories **about an hour before** being active. The snack should be mainly complex carbohydrates.
- Eating or drinking a small amount of complex carbohydrates **during** physical activity lasting longer than 60 minutes can improve performance.
- **Recovery:** eating after a game or practice will refuel your muscles and prepare them for the next workout.

Within 30 minutes after the workout, eat a small meal or snack of mostly complex carbohydrates and some protein.

- Drink low-fat chocolate milk. It supplies the carbohydrates to provide energy, protein to support growth and repair of muscles, and electrolytes to rehydrate.
- **Sports nutrition bars or recovery drinks** can be a quick source of complex carbohydrates and protein.
- Eat again **about 2 hours after** physical activity. This should be a meal that has complex carbohydrates, protein and some fat, e.g. peanut butter sandwich and milk.

Stay Hydrated!

- **Not getting enough fluid can lead to poor performance and fatigue.**
- **Drink water throughout the day on days with a game or practice.**
- **Drink plenty of water 2-3 hours before physical activity.**
- **Drink 5-10 ounces of fluid every 15 minutes during physical activity or more if it is very hot.**
- **Water is the best choice, but sports drinks can be helpful for games or practices longer than 60 minutes and/or in hot weather.**

For more information go to: [http://kidshealth.org](http://kidshealth.org)