

# Performance Playbook



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## Keep Your Motor Running

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Many high school student athletes skip meals before they train or work out, especially if the workout happens to be in the early morning. Skipping meals or not eating before a workout can impair athletic performance, and not eating after a workout or competition leaves the athlete running on empty. Make nutrition a priority for your athletes before, during, and after exercise.

### The Pre-Exercise Meal

The pre-event meal serves two purposes. First, it keeps athletes from feeling hungry and sluggish before and during the game, and second, it helps to maintain optimal levels of energy (blood glucose) for the exercising muscles during training and competition.

Eating before exercise can be challenging for athletes. While they need fuel to perform, they will not want to exercise on a full stomach. Food that remains in the stomach during training or competition may cause indigestion, nausea and, possibly, vomiting. A good recommendation is to eat a meal 2 to 4 hours before exercise. If an athlete is nervous about his or her performance, the digestive process may take even longer.

The ideal pre-exercise meal should be primarily carbohydrates, moderate in protein and low in fat. Carbohydrates are digested rapidly. Protein and fat take longer to digest. Pre-exercise meals high in fat (like a lot of options at school and fast food restaurants) can cause stomach upset, gas, and bloating.

### Hydration During Exercise

The importance of nutrition does not stop with the pre-exercise meal. During practice or competition, remind athletes to drink sports drinks to avoid dehydration and to provide energy for working muscles.

### Recovery Nutrition

Eating for peak performance also includes making wise food choices post-exercise. Failing to eat or drink after a competition will have a negative effect on performance. This is especially true for sports that have repeated competition, such as tournament play found in sports like volleyball, basketball, soccer, swimming, and tennis.

Athletes who fail to refuel or rehydrate after these activities will not have the optimal level of energy for the next day. A carbohydrate-rich snack with protein consumed within the first 30 minutes after competition or practice will allow the body to recover faster than when eating past 30 minutes. Muscles are most receptive to recovery during the first 30 minutes after competition. Athletes should follow these tips:

- To completely restore muscle energy, eat within 30 minutes after exercise and then eat small meals at 2 hours and again at 4 hours.
- If you can't take solid foods 30 minutes after exercise or they are not available, try drinking a sports drink or eating an energy bar. Then eat more solid foods 2 and 4 hours later.
- Be sure to hydrate after a workout or game. Weigh yourself, and drink 20 to 24 ounces of fluid for each pound lost during the competition.
- Choose high-carbohydrate, moderate protein foods, like the examples shown.



### GET IN THE HABIT: KNOW WHAT TO EAT AND WHEN TO EAT IT

Keep a snack supply in a backpack or locker to prevent exercising on empty. The same kind of high-carbohydrate, power-packed foods are recommended for BOTH before and after an event or competition:

#### 4 or more hours before AND 4 hours after

Grilled chicken/rice/fruit  
Turkey sandwich/raw carrots  
Spaghetti with meat sauce  
Trail mix with nuts/raisins  
Grilled chicken sandwich  
Energy bar/sports drinks  
String cheese/grapes/crackers

#### 2 to 3 hours before AND 2 hours after

Cereal/low-fat milk  
Fresh fruit  
Bagel with peanut butter  
Sports drink  
Baked potato  
Energy bar  
Fruit smoothie

#### 1 hour or less before AND 30 minutes after

1/2 whole-grain bagel  
Yogurt  
Energy bar  
Graham crackers  
Sports drink  
Pretzels  
Raisins