

SIDE LINES



Keep Your Motor Running: Fuel Before and After Competition

Jacqueline Berning, PhD, RD
Assistant Professor, U. of Colorado

Nutrition Consultant

Dr. Berning is a sports nutritionist who teaches sports nutrition and consults several sports teams including the Denver Broncos, Denver Nuggets, Colorado Rockies and Cleveland Indians.

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 secondly 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 should not 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 2-4 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 provide energy for working muscles.

The Post-Exercise Meal

Eating for peak performance also

includes making wise food choices post-exercise. The right post-game meal replenishes athletes' muscles for the event or competition around the corner. In fact, 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 2-4 cups of 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 3 cups 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

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

2-3 hours before AND 2 hours after

- Cereal/lowfat milk
- Fresh fruit

1 hour or less before AND 30 minutes after

- Yogurt
- Energy bar

- Spaghetti with meat sauce
- String cheese/grapes/crackers
- Energy bar/sports drinks

- Bagel with peanut butter
- Sports drink
- Energy bar

- Sports drink
- Pretzels
- Raisins