



The EpiCenter
SPORTS PERFORMANCE AT

OrthoCarolina

What to Eat Before Competition

What you eat before you exercise can make or break your workout. Each athlete wants to know if there is a magical formula or correct food. Unfortunately there is not a magical food or recipe but we will give you some helpful hints in this article.

The purpose of pre-exercise nourishment is 4-fold:

- 1) To prevent low-blood sugar which presents itself as light-headedness, extra fatigue, blurred vision, and indecisiveness. All of these can keep an athlete from top performance.
- 2) To help settle the athlete's stomach, absorb some of the gastric juices, and curb hunger that may occur during a long competition
- 3) To fuel the muscles needed during the exercise or competition. This is accomplished with food eaten in advance that is stored as glycogen and with food eaten within an hour
- 4) To psychologically influence your brain and ego that your body is well fueled for your upcoming event/activity.

To determine the right pre-training or competition meal experiment with the following 12 principles:

- 1) **Each day you should eat high-carbohydrate meals to fuel and refuel your muscles so they will be ready for competition.** Snacks eaten within an hour of competition primarily keep you from getting hungry during competition and maintain a constant blood sugar level.
- 2) **If you are exercising for more than 60-90 minutes choose carbohydrates with a low to moderate glycemic index.** Yogurt, bananas, oatmeal, beans, or apples are a few choices that make sense. When eaten an hour before exercise, the foods will be digested enough to be burned for fuel and will also help sustain energy levels during the long workout.
- 3) **If you will be exercising for less than an hour, you can snack on any "tried and true" foods that digest easily.** These would include bagels, English muffins, crackers, or pasta.
- 4) **Limit high-fat proteins.** High fat proteins take longer to empty from the stomach because fat delays gastric emptying. Cheese, steaks, hamburgers, French fries, or even large milkshakes can contribute sluggishness and even diarrhea. Try these selections instead: 2-3 thin slices of turkey or chicken in a sandwich or with pita bread. Low-fat cottage cheese with peaches or pineapple, or a glass of skim or 2% milk with cereal and banana

- 5) **Be cautious with sugary foods (such as soft drinks, jelly beans, candy bars) or foods with a high glycemic index.** Most athletes perform well with a pre-exercise sugar fix. However, some athletes who eat these types of carbohydrates just before hard exercise experience a drop in blood sugar that leaves them feeling tired, light-headed, and excessively fatigued. By experimenting with what you can eat before you exercise you can learn how your body responds. The majority of research currently shows that performance can actually improve with pre-exercise sweets. The safest way to accomplish this is to eat something (100-150 calories) 5-10 minutes before exercise. This short time span is too brief for the body to secrete excess insulin, the hormone that causes low blood sugar. Because the body slows in producing insulin when you start exercising you should be able to handle the sugar fix if the food settles comfortably in your stomach. However, eating a carbohydrate healthy breakfast and lunch will diminish your need to get the “sugar fix” before you exercise.
- 6) **Allow adequate time for food to digest.** High calorie meals take longer to leave the stomach than do lighter snacks. Allow at least 3-4 hours for a large meal to digest, 2-3 hours for a smaller meal, 1-2 hours for a liquid meal, and less than an hour for a small snack.
- 7) **Allow more digestion time before intense exercise than before low-level activity.** Your muscles require more blood during intense exercise than when at rest. Your stomach may get only 20% of its normal blood flow during a hard workout so any food in the stomach may get jostled around making you uncomfortable or even have GI distress. During exercise of moderate intensity, blood flow to the stomach is 60-70% of normal so you can digest some food. Moral of the story: If you are going to perform a track workout eat light. If you are going to go on a long run you can eat something a little more substantial.
- 8) **If you have a finicky stomach, experiment with a protein drink or liquid meal to see if they offer you an advantage.** Liquid foods tend to leave the stomach faster than solid foods. Always experiment with any new food during training to determine if it offers you any advantage.
- 9) **If you are jittery before exercise bouts or competition and cannot tolerate any food, make sure you eat well the day before.** You can have an extra-large snack before bed if you have difficulty eating breakfast the day of the event.
- 10) **If you have a “special” or “magical” food be sure to pack it along with your gear when traveling to an event.** No matter what the food even it is bananas, pack them so you will have some on hand before your event. Even if you don’t have a favorite food you should pack some “tried and true” foods so in case you have delays while traveling. Sports bars work great for this.
- 11) **Always eat familiar foods before a competition.** New foods always carry the risk of settling poorly, causing intestinal discomfort, heartburn, cramps; or frequent pit stops. If you want to introduce a new food, schedule to eat this food a few workouts before when you will have the same intensity level as the

competition. If you have no problems then you have just found a new favorite food.

- 12) **Drink plenty of fluids.** You want stare to death during competition but you can easily suffer from dehydration. Make sure you stay away from caffeine and the day before drink an extra 4-8 glasses of fluid the day before to over-hydrate. Drink at least two to three glasses of water up to two hours before the event.

Understanding why pre-event nutrition is important and experimenting with these 12 principles will enable your body to function at the highest physical performance.

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