

Cross Country Nutrition

Answers to questions you might have about fueling for the season

By Emily Brown

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Nutrition is one of the most modifiable and controllable factors in athletic success, but too often it's also the most ignored.

Paying special attention to good sports nutrition, especially starting at a young age, may be the key to reaching new heights. The following are some of the questions that I've been asked, and have asked myself, through my years of training.

1) WHAT SHOULD I EAT BEFORE I RACE?

This depends first on when you eat the meal.

Let's start with the night before a morning race. It's best to have a dinner that's high in carbohydrates and moderate in fat and protein. Fat and protein will slow the digestion of the meal and allow your glycogen stores to fill up throughout the night. Choose complex carbohydrates with a low to medium glycemic index such as whole-wheat pasta, brown or wild rice, lentils and beans, and whole fruits and vegetables. Go easy on foods that are oily, greasy, or very high in fiber. Also take it easy on protein, as it digests slowly; 2-3 ounces should be enough. If you eat an earlier dinner and know that you'll have a tough time eating in the morning, have a small bedtime snack that has twice as much carbohydrate as protein, such as a bowl of cereal with milk. It's not necessary to overload on carbohydrates the night before, and the marathoner's practice of carboloading is overkill for most athletes, especially high school athletes running a 5K or shorter.

If you have at least three to four hours before your morning race, you can have a relatively large meal of up to 700-800 calories, with a minimum of 400-500 calories. Similar to the previous night's dinner, make it high in carbohydrate, moderate in protein, low in fat. Good examples of race-morning breakfasts are:

1 CUP OF CEREAL WITH MILK OR YOGURT, 1 SLICE OF TOAST, AND 1 PIECE OF FRUIT

1 MEDIUM BAGEL WITH 1 TABLESPOON OF PEANUT BUTTER AND 1-2 CUPS OF A SPORTS DRINK

2 PIECES OF TOAST OR BREAD, 1 OUNCE OF LEAN MEAT OR CHEESE, AND 1 PIECE OF FRUIT

These are just a few of many possible combinations. Any foods that you like and are comfortable with will work fine as long as they fall within the above guidelines.

If you only have one or two hours to eat before the competition stick with foods that digest quickly and easily, and limit the snack to 300-400 calories at the most, with a minimum of 150-250 calories. Good choices would be a granola bar or sports bar, 1-2 cups of dry cereal, a handful of trail mix and/or dried fruit, or an ounce or two of whole-grain crackers with a little peanut butter. If you're too nervous to eat solid food, nibble on snacks that are tolerable, and try drinking 2-3 cups of a full-calorie (non-diet) sports drink.

For afternoon meets, the above guidelines are appropriate, but there are additional challenges to keep in mind. The major challenge is finding appropriate foods among the many high-fat, high-sugar options that are prominent in school cafeterias. On race days or days of tough workouts, the best option is to pack your lunch with familiar foods that follow the guidelines for pre-workout meals. If you forget your lunch or can't pack it that day, don't despair. Although they may be hidden, healthy choices can be found in the cafeteria. Good choices include a sandwich with lean meat, a small plate of pasta with sauce, even a granola bar with a bottle of sports drink. Be creative and don't fall victim to filling up on junk food or not eating at all. Also pay attention to the time gap between your lunch and your race. If it's longer than three hours, be sure to have a pre-race snack planned out that you can have one to two hours before.

Regardless of when your race is, eat foods that are familiar and avoid foods that are spicy, greasy, or especially high in fiber. Never experiment with new foods or food replacements (energy gels, sports bars, etc.) on race day. Use your pre-practice meals to figure out what foods will work best.



2) HOW MUCH DO I NEED TO DRINK?

This varies greatly depending on your size, sweat rate, climate, and a host of other factors. The general recommendation is to drink plenty throughout the day so that you're never thirsty. Thirst is the first sign of dehydration. You'll probably be drinking at least 2-3 liters of water per day. Leading up to races you should drink four to eight extra glasses of water the day before, another two to three glasses at least two hours before, and one or two glasses 10-15 minutes before competition. The majority of your fluid intake should be plain water; sports drinks can provide extra calories and electrolytes, but sodas and other soft drinks should be limited as much as possible. You'll know you're drinking enough when your urine is clear, you're using the bathroom frequently, and you're not feeling thirsty. Adequate hydration should be practiced all day, every day. Don't try to fit it all in the hour before you race, as water overload is a very real and dangerous condition.

3) WILL DRINKING COFFEE OR AN ENERGY DRINK LIKE RED BULL GIVE ME A BOOST IN A RACE?

Short answer: no. Although some studies have shown enhanced performance following caffeine ingestion, these studies are limited to laboratory conditions and laboratory forms of caffeine. Drinking coffee hasn't produced the same results.

Caffeine is a stimulant, and stimulants aren't needed for enhanced performance in athletics because we already produce a natural stimulant, epinephrine, in response to the anticipation and intense physical activity that comes with racing. In addition to caffeine, energy drinks are loaded with extra stimulants plus tons of sugar, and a mixture of herbs and vitamins that can have unknown effects on the body. Ingredients in energy drinks are often not standardized, so one drink could provide way more caffeine or stimulants than anticipated. Side effects of stimulants include dizziness, nausea, anxiety, irritability, the jitters, and possibly even heart palpitations.

Bottom line: Energy drinks don't provide real energy, which can come only from calories, but they do provide a potentially volatile mixture of ingredients that may severely impact performance and health.

Caffeine is a bigger issue than a lot of people realize. In 10 years of coaching, I've had two kids drop -- not drop out, but drop -- in races, one in the state cross country meet. In both cases, the doctor described it as a condition produced by consuming caffeine before a race. As a result, I'm very cautious about kids thinking even a little caffeine buzz before a race is a good thing.

Alan Versaw, COACH OF THE CLASSICAL ACADEMY, COLORADO SPRINGS, COLO., 7-TIME GIRLS AND 3-TIME BOYS STATE CROSS COUNTRY CHAMPIONS

4) WHAT KINDS OF SNACKS SHOULD I KEEP IN MY LOCKER AND/OR GYM BAG?

Try to eat a meal or snack every three to four hours to keep your blood sugar up and your glycogen stores full. As a high school athlete, that means you'll need to find a way to snack throughout the day. This is best achieved by keeping non-perishable snacks close at hand to nibble on between classes and on the way to practice. Great foods for this purpose include granola bars and/or sports bars, trail mix and dried fruit, pretzels, whole-grain crackers, dry cereal, sports drinks, 100 percent juice boxes, string cheese, peanut butter sandwiches, and whole fruits and vegetables, just to name a few.

5) WHAT SHOULD I EAT AFTER I RACE?

Post-race or post-exercise nutrition is just as important as pre-competition nutrition. Although the tendency is to celebrate and pig-out, it's important to fill up on something other than just junk food. Sports nutrition should always be a matter of what-I-should-eat versus what-I-can-eat. Eat post-exercise meals as soon as possible, preferably in the first 20-30 minutes, to refuel the body as quickly as possible. Our bodies are most receptive to replenishing our glycogen stores and repairing our muscles during the immediate time period post-exercise. In addition to replacing the fluids and electrolytes lost through sweat, focus on consuming foods high in carbohydrate and moderate in protein. Chocolate milk is a great example of a recovery food because it has a 3:1 carbohydrate- to-protein ratio and is a good source of both. It also aids in replacing fluids and some electrolytes. Furthermore, milk is an excellent source of calcium, which is crucial for young athletes with developing bones.

6) HOW MANY CALORIES SHOULD I EAT?

Every athlete is different in terms of size, shape, activity level, etc., so it's impossible to give guidelines that will meet the needs of each athlete. However, the general recommendation for distance runners is to consume 55-65 percent of calories from carbohydrate, 15-20 percent from protein, and 20-30 percent from fat. To individualize these recommendations and come up with a personal diet plan, visit the MyPyramid Plan at mypyramid.gov. Remember, restricting your intake is never the way to become a better athlete. Your body needs fuel to perform optimally, and the only way to get that fuel is from food. If you follow these guidelines and eat appropriately, your body will be the size it needs to be for athletic success no matter what your teammates or competitors look like.

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