

Nutrition

As a runner, your diet is important not only for maintaining good health, but also to promote peak performance. Proper nutrition and [hydration](#) can make or break a workout or race, and also greatly affects how runners feel, work and think.

A balanced diet for healthy runners should include these essentials: carbohydrates, protein, fats, vitamins, and minerals. Here are some basic guidelines for a nutritious, healthy balance:

Carbohydrates

As a runner, carbohydrates should make up about 60 - 65% of your [total calorie](#) intake. Without a doubt, carbs are the best source of energy for athletes. Research has shown that for both quick and long-lasting energy, our bodies work more efficiently with carbs than they do with proteins or fats. Whole grain pasta, steamed or boiled rice, potatoes, fruits, starchy vegetables, and whole grain breads are good carb sources.

Protein

Protein is used for some energy and to repair tissue damaged during training. In addition to being an essential nutrient, protein keeps you feeling full longer, which helps if you're trying to [lose weight](#). Protein should make up about 15% - 20% of your daily intake. Runners, especially those running long distances, should consume .5 to .75 grams of protein per pound of body weight. Try to concentrate on protein sources that are low in fat and cholesterol such as lean meats, fish, low-fat dairy products, poultry, whole grains, and beans.

Fat

A high fat diet can quickly pack on the pounds, so try to make sure that no more than 20 - 25% of your total diet comes from fats. Stick to foods low in saturated fats and cholesterol. Foods such as nuts, oils, and cold-water fish provide essential fats called omega-3s, which are vital for good health and can help prevent certain diseases. Most experts recommend getting about 3,000 mg of omega-3 fat a day.

Vitamins

Runners don't get energy from vitamins, but they are still an important part of their diet. Exercise may produce compounds called free radicals, which can damage cells. Vitamins C, E, and A are antioxidants and can neutralize free radicals. Getting your vitamins from whole foods is preferable to supplementation; there's no strong evidence that taking supplements improves either health or athletic performance.

More: [Do Runners Need to Take Supplements or Vitamins?](#)

Minerals

Calcium: A calcium-rich diet is essential for runners to prevent osteoporosis and [stress fractures](#). Good sources of calcium include low-fat dairy products, calcium-fortified juices, dark leafy vegetables, beans, and eggs. Your goal should be 1,000 to 1,300 mg of calcium per day.

Iron: You need this nutrient to deliver oxygen to your cells. If you have an iron-poor diet, you'll feel weak and fatigued, especially when you run. Men should aim for 8 mg of iron a day, and women need 18 mg. Good natural sources of iron include lean meats, leafy green vegetables, nuts, shrimp, and scallops.

More: [Sports Nutrition Mistake: Not Getting Enough Iron](#)

Sodium and other electrolytes: Small amounts of sodium and other electrolytes are lost through sweat during exercise. Usually, electrolytes are replaced if you follow a balanced diet. But if you find yourself craving salty foods, it may be your body's way of telling you to get more sodium. Try drinking a sports drink or eating some pretzels after exercise. If you're running longer than 90 minutes, then you should need to replace some of the electrolytes you're losing through sweat by [drinking sports drinks](#) or [taking in salt](#) during your runs.

What to eat before practice or the day of a Competition

When you begin a run, you should feel neither starved nor stuffed. You don't want to eat immediately before running because it may lead to cramping or [side stitches](#). But [running on an empty stomach](#) may cause you to run out of energy and leave you feeling fatigued and lethargic during your runs. Your best bet is to eat a snack or light meal about 1 1/2 to 2 hours before you start running.

Your choice of pre-run meal is important, as eating the wrong foods could send you looking for the closest bathroom during your run. Choose something high in carbohydrates and lower in fat, fiber, and protein.

Some examples of good pre-workout fuel include: a bagel with peanut butter; turkey and cheese on whole wheat bread; a banana and an energy bar; or a bowl of cold cereal with a cup of milk (better yet – apple juice instead of milk). Stay away from rich, very fatty, or high-fiber foods, as they may cause [gastrointestinal distress](#).

FOODS TO AVOID BEFORE RUNNING

It's important to [eat before running](#) to make sure you're properly fueled. But if you've had issues with [gastrointestinal distress](#) (also known as runner's trots) during or after your runs, the foods you're eating in the 24 hours before your runs may be the culprit. Here's a guide to what you should and shouldn't eat before your runs.

FOODS TO AVOID BEFORE RUNNING

Try limiting or eliminating some of these foods before running to see if it makes a difference:

High-fiber foods: Whole-grain foods, vegetables, legumes, and fruits that are high in fiber can cause [gastrointestinal distress or diarrhea](#). While those foods are excellent, [healthy food choices for runners](#), they may cause digestive issues in runners who consume them the night before or morning of a long run.

High-fat foods: Foods with a lot of fat -- such as fried foods, cheese, hamburgers, or bacon -- digest slowly and will feel like they're sitting in your stomach.

Caffeine: [Coffee](#) or other caffeinated beverages can cause stomach issues or diarrhea. (Although some runners, especially regular coffee drinkers, can tolerate it without problems.)

SAFE PRE-RUN FOODS

These are the best types of pre-run foods to help avoid gastrointestinal distress during or after running:

Refined Carbs: Processed white foods, like regular pasta, white rice, and plain bagels are good choices. Although they're not as nutritious as whole grain and unprocessed foods, they're easier on your stomach because the whole grain is already broken down. A plain bagel with some peanut butter (and a glass of water) would be a safe choice before a long run.

Low-Fiber Fruits and Veggies: If you really want to eat fruits or vegetables before runs, zucchini, tomatoes, olives, grapes, and grapefruit are all low in fiber.

Safe Dairy: Some people have issues when they consume [dairy products before runs](#).

Soy, rice, and almond milks generally don't contain the sugar lactose, which can be tough to digest. You can also try acidophilus milk and yogurts with live cultures, which contain bacteria that help with digestion.

What to eat after a workout or race

After running, especially a [long run](#), you want to replenish energy as quickly as possible. Studies have shown that muscles are most receptive to rebuilding glycogen (stored glucose) stores within the first 30 minutes after exercise. If you eat soon after your workout, you can minimize muscle stiffness and soreness.

You'll want to consume primarily carbs, but don't ignore protein. A good rule of thumb for post-run food is a ratio of 1 gram of protein to 3 grams of carbs. Nutrition bars, such as Clif bars or Power bars, are healthy options. Other examples would be a bagel with peanut butter or a smoothie made with fruit and yogurt.

If you feel like you can't stomach solid food immediately after a run, try drinking some [chocolate milk](#). Chocolate milk provides plenty of protein, carbohydrates and B vitamins -- making it a great [recovery drink](#). And cold chocolate milk tastes pretty refreshing after a run.

Don't forget to rehydrate with water or a sports drink after your run. If your urine is dark yellow after your run, you need to keep rehydrating. It should be a light lemonade color.

While it's important to eat something and replenish fluids after a run, be careful that you don't overindulge and consume way more calories than you need.