Nutrition & Hydration Guidelines

General Hydration Tips for Runners

Endurance athletes, especially those who train in hot and humid weather, are at constant risk of dehydration. The risk becomes greater the longer the workout, or when athletes train or compete more than once a day.

Some risks include:

- **Cramping.** If exercisers lose too much fluid in sweating without replacing the lost fluid and electrolytes (like sodium and potassium), they risk becoming dehydrated. Endurance athletes can use sports drinks to replace fluid and electrolytes -- in combination with water -- to help ward off dehydration and muscle cramps.
- **Dehydration.** Dehydration can diminish energy and impair performance. Even a 2% loss of body weight through sweating (i.e., three pounds for a 150-pound runner) can put athletes at a disadvantage.

An easy way to determine how much fluid you need during a workout is to notice how sweat-soaked you are afterward.

- If sweating is light (your skin is moist and a little sweat is visible around your collar), drink 4-6 ounces every 15 minutes.
- If sweating is moderate (your skin and clothes are noticeably wet), drink 8-12 ounces every 15 minutes.
- If sweating is heavy (your skin, clothes and hair are completely drenched), drink 13–16 ounces every 15 minutes.

Because endurance events last longer than most sports, endurance athletes run a higher risk of over-hydrating, so be prepared with a hydration plan. Remember to take fluids throughout the day. It is important for endurance athletes to begin workouts and competitions hydrated. Hydration does not occur during the event.

- Start out hydrated on the day of an endurance event by drinking a sports drink, then using fountains, coolers and other beverage opportunities as triggers for drinking throughout the day.
- Hydrate 2-3 hours before training and competitions. Aim for at least 16 ounces of fluid during this time and add another 8 ounces of fluids 10-20 minutes before the event.
- Drink to replace sweat, but do not over drink (see guidelines above). Endurance athletes, especially inexperienced runners who tend to run slowly and stop for more fluid breaks, risk over hydrating, which can lead to a dangerous condition called hyponatremia. Hyponatremia occurs when an athlete takes in too much fluid and the sodium level in their blood drops too low.

General Nutrition Tips for Runners

If you follow these guidelines, especially on your long run days, you'll find you feel refreshed rather than exhausted after your workout.

Before Run

Consume 25-50 grams of carbohydrates 1-2 hours before exercise. Avoid foods that are likely to upset your stomach and bowel such as greasy foods, high-fiber foods, high-protein foods and caffeinated drinks. Carbohydrates with a low glycemic index rating are best pre-exercise.

Drink 8-16 ounces of water or sports drink along with the carbohydrate. Train your body to get used to drinking 8-16 ounces of liquid this close to exercise.

Experiment to see which works better for you: eating a small 300-600 calorie meal one hour before exercise (1-2 grams carbs/kg), eating a larger 800-1200 calorie meal four hours before exercise (3-4 grams carbs/kg), or something in between. Liquid meals work best for some people.

During Run

Consume 25 grams of carbohydrates for every 45 minutes of exercise. Drink 4-8 ounces of water or diluted sports drink for every 15 minutes of exercise. Consuming sports drinks and carbohydrates during most runs reduces the stress on your body and improves post-run recovery. Train your body to get used to drinking 4-8 ounces every 15 minutes during exercise.

After Run

Immediately after exercising, consume 25-50 grams of carbohydrates. This can be a combination of food and drink. You will need to rehydrate with water if your carbohydrates are things such as an energy bar, bagel, etc. An alternative is to drink 25-50 grams of carbohydrates in a premixed sports drink. Complex carbohydrates are best.

Weighing can be a great indicator of hydration levels. Drink 16 ounces of water for every pound lost during exercise and continue to drink water throughout the day.

30 minutes after exercise, consume another 25-50 grams of carbohydrates.

1 hour after exercise, consume 50-100 grams of carbohydrates and 20-40 grams of protein. This is a great time to eat a well-balanced, sit-down meal.

6 hours after exercise, continue to consume 50-100 grams of carbohydrates per hour and 20-40 grams of protein every 2 hours.

Carb list

25-50 grams each: energy bar, toast, cereal, bagel, banana, carbohydrate drinks and gel pack (easy to digest).

Tips for Runners

1. A good diet will help you to stay healthy enough to run your best.
2. Drink lots of water rather than just sports drinks.
3. Replenish your carbohydrates within 2 hours of exercise.
4. You should get 60 - 65 percent of your calories from carbohydrates, 15 % of your calories from protein and 20 - 25% of your calories from fat.
5. Keep a food diary and track what you eat.
6. Besides eating a well-balanced diet, the following vitamins/minerals are helpful to many runners: Vitamins C and E, Betacarotene and one-a-day multivitamins.

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