

How much fluid do I really need during my race or workout?

By John Ruibal, MS, RD, CSSD, LD

Dear John,

How much fluid do I really need to drink during my race or workout?

Wouldn't it be wonderful if I could provide a short-and-sweet answer! Actually, I can – the only problem is this first response is now outdated. I'll share it anyway: Prior to 2007, guidelines from the Academy of Nutrition and Dietetics and the American Academy of Sports Medicine recommended the following:

1. Drink 16-20 ounces of water or sports drink an hour prior to your workout.
2. During the race or workout, drink another 7-10 ounces every 15 minutes of exercise
3. After the workout or race, drink 24 ounces for every pound lost during the race or workout.

As I said, these “one-size-fits-all” guidelines on hydration have been updated to help each athlete determine a more customized approach to hydration. The overall goal, based on current research, is to help each runner balance electrolytes and prevent runners from losing more than 2 percent of their body weight while running.

To accomplish this goal runners should start their workouts and races “euhydrated,” a fancy term for pre-hydrated. I recommend that you hydrate up to thirty minutes prior to your workout and then wait to drink after you have started running. This will allow you to use the restroom prior to hitting the starting line.

During your workout you should drink to replace a minimum of 75 percent of your sweat loss during your workout. After that, you should rehydrate to your pre-workout weight before your next workout. Of course, this answer leads to a new question: “How do I know how much fluid I lose during my workout?”

Simple! You calculate your sweat rate. To do that, you will need the following numbers:

- A – Your pre-workout weight (record your weight in pounds before your workout)
- B – Your post-workout weight (towel off, put on dry clothes, and record your weight in pounds after your workout)
- C – The ounces that you drank during your workout

Next, plug those numbers into the sweat rate formula: **$(A - B) \times 16 + C = \text{Sweat loss per hour in ounces}$**

Here is an example: My pre-workout weight was 152 pounds (A), and my post-workout weight was 149 pounds (B). I drank 12 ounces (C) of water during the workout. Now all I have to do is plug the numbers in to the calculation:

In my example: $152 - 149 = 3$, multiply this by 16 to give you 48 and then add 12 for the ounces of water consumed during the run. That gives me a sweat rate of 60 ounces of fluid lost per hour.

Now, remember that I said you need to replace at least 75 percent of fluid lost during the run, which means I should consume between 45 and 60 ounces of fluid per hour to stay hydrated. Fluids should be consumed every 15 minutes during the workout, so in this example 12-15 ounces of fluid should be consumed every 15 minutes.

Finally, don't forget about electrolyte balance! If you are working out longer than an hour, make sure to consume some form of electrolytes either in the form of a sports drink or electrolyte tablet or capsules.

The final thing to remember is to rehydrate to your pre-workout weight before your next workout. So to answer your question, how much do you have to drink during a workout? Your answer is in your sweat test.

John Ruibal, MS, RD, CSSD, LD, is a registered dietitian and is board-certified in sports nutrition from the Academy of Nutrition and Dietetics. He coordinates the distance running classes available at both iRun Texas locations in San Antonio. He has been running for more than 40 years and coaching for 25. To connect with John or learn more about his classes, visit www.iruntexas.net.