

Give Your Workout a Caffeine Kick

By Marty Munson
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If people look askance at you for drinking coffee before or after your workout, just be nice when you pass them on the swim, bike, or run. When you know how to use it, caffeine can be an effective performance booster, explains [Liz Applegate, Ph.D.](#), Director of [Sports Nutrition](#) at UC Davis and author of the "Fridge Wisdom" column in *Runner's World* magazine.

Caffeine has a place before, during and after workouts when you want to perform your best. Here, Applegate explains how athletes at all levels can take advantage of its boost.

Before A Workout

What it does: "Caffeinated beverages like coffee or Diet Coke prior to a workout can help promote endurance and a lower rate of perceived exertion (RPE) during exercise," says Applegate. In events lasting two hours or less, caffeinating beforehand may even help you have more strength at the end of your workout, so you may have extra kick to get across the finish line—or at least you won't feel so drained. Tip: Get the caffeine in 45 minutes to an hour before your workout so it has time to take effect.

How much it takes: About 3 milligrams of caffeine per kilogram of body weight. That means a 150-pound person would want 210 to 400 mg caffeine. A 20-oz Starbucks coffee contains about 200 mg; iced tea has about 40 mg; diet soda about 50 mg.

During a Workout

What it does: It's hard to know exactly what's going on metabolically with caffeine during a workout; studies to determine that are invasive and many factors in a workout can contribute to performance changes, not just caffeine, explains Applegate. Its most likely benefit: Reduced perceived exertion.

How much it takes: Most products designed to be consumed during a workout have fairly low levels of caffeine—about 20 to 50 mg. But they still may be worthwhile experimenting with: The cognitive benefits of taking it can be what you need to climb the next hill like you want to.

After a Workout

What it does: Caffeine after exercise may help your muscles replenish their glycogen stores better than if they don't have the energy-boosting substance. "It's not clear whether caffeine enhances carbohydrate absorption in the intestines, helps increase delivery of glucose to muscle cells, or whether the stimulation of adrenaline may promote enhanced uptake—these are all theories," says Applegate. Whatever the reason turns out to be, the result is that topped-off glycogen stores help you recover and better execute your next workout.

How much it takes: Same as before a workout—about 3 to 6 mg of caffeine per kg of body weight. Just be aware that this probably isn't the trick to try if you work out in the evenings.

Disclaimer

While caffeine is a safe substance, it's not for everyone, reminds Applegate. It may make you feel jittery or off your game if you're not used to it. (But it doesn't do half the bad things people think it

does.) "And I don't recommend caffeine pills," she says. "I'd go with a beverage if you can, and that way you get hydration benefits as well."

Marty Munson is a USAT Level 1 triathlon coach. Her writing has appeared in Health, Prevention, Marie Claire, Shape.com and RealAge.com. Find more triathlon tips and strategies from her and other experts in the field at trieverything.wordpress.com