Got Milk? Try Chocolate After Your Workout

Downing chocolate milk after a tough workout can help replenish exhausted muscles and significantly aid exercise recovery, new research shows.

By Kelly L. Phillips

**Post-Workout Drinks**

When it's time to choose a liquid chug after a long, tough workout, there's a slew of options out there. Water? Gatorade, POWERade, or All Sport? Endurox R4? Physiologist Joel Stager, director of the Human Performance laboratory at Indiana University, has even one more potential workout recovery drink to add to the list: chocolate milk. His latest study, published in this month's *International Journal of Sport Nutrition and Exercise Metabolism*, names this kids' favorite an optimal post-exercise recovery aid.

Before your stomach recoils, take a look at chocolate milk's ingredient list. For a high-endurance athlete, Stager's team sees it as a catch-all workout recovery drink. Compared to plain milk, water, or most sports drinks, it has double the carbohydrate and protein content, perfect for replenishing tired muscles. Its high water content replaces fluids lost as sweat, preventing dehydration. Plus it packs a nutritional bonus of calcium, and includes just a little sodium and sugar — additives that help recovering athletes retain water and regain energy.

Drinking plain water after exercise replaces sweat losses — and that's it. "Chocolate milk provides carbohydrate replenishment to your muscles — something they can metabolize," said Jason Karp, MS, another researcher for this study. "There's nothing to metabolize in water."

Stager's assessment of chocolate milk is even simpler. "It's water plus a whole lot more," he said.

**The Case for Carbs**

Ready to switch your bottled water for chocolate milk? Assess your workout level first. Downing a post-workout beverage chock-full of carbohydrates isn't just for the weekend tennis player, said Stager — and that's key. A drink like chocolate milk is most useful to a cyclist, swimmer, or long-distance runner. These sports stress high endurance levels and constant, sustained movement. Competing athletes need high levels of calories, carbs, and protein to sustain that level of performance.

Stager tested out chocolate milk's performance as a workout recovery drink on nine cyclists. In his lab, each athlete biked until exhaustion, and then rested for four hours. During this break, each consumed low-fat chocolate milk, Gatorade, or the high-carbohydrate sports drink Endurox R4. Afterward, they cycled to exhaustion again.

The results were positive. His research team concluded that the athletes who consumed chocolate milk performed just as well or better as those who drank the other beverages. The high carb and protein content in milk make it an incredibly effective recovery drink, Stager said — even though it's never been marketed as one.

**When to Fuel Up**

Choosing the right post-workout drink is just step one of the recovery process, says Karp. Besides what you use to re-fuel, when you do it is just as important. Recent research points to the importance of a post-exercise "meal" within 30 to 60 minutes of working out at the point when muscle glycogen (energy) stores are at their lowest. "I generally recommend eating or drinking something in the first 20 minutes after a workout," said Mike Huff, coordinator of the Duke University Sports Performance Program. "At that point, your muscle fibers have been depleted and they're ready to suck something up."

And not taking steps to replenish your muscles right away can hurt your next performance — big time, Karp says. "Elite athletes may only have six to seven hours between workouts. It's much more important for them to make a full recovery, and strategies like these can maximize that."

**Choosing a Workout Recovery Snack**

Flavored drinks stimulate your appetite and allow you to drink more, replacing water lost as sweat from the workout. You consume more if you actually like what you're drinking, Stager found. His athletes clamored for chocolate milk — and shunned other high-carb options like Endurox R4, energy bars, or gels.

After-workout food options don't have to end at the supermarket shelf either. A trainer, basketball player, and avid weight lifter, Huff loves creating his own blend. His homemade high-carb, high-protein beverage is a mixture of bananas, peanut butter, Carnation Instant Breakfast (a high calcium, protein, and carb powder), and — you guessed it — milk.

Eating liquid or solid carbohydrates are equally good — your body doesn't care, as long as it gets what it needs, says sports nutritionist Nancy Clark, RD, author of *The Cyclist's Food Guide* (Sports Nutrition Publishers, 2005) and the monthly syndicated column "The Athlete's Kitchen." "You just have to learn which sports snacks settle best for your body — gels, gummy bears, dried figs, animal crackers, defizzed cola, whatever," she said.

But as for milk, Stager continues to recommend it to his athletes, and Karp, a runner and coach, has permanently switched from Gatorade to chocolate milk to recover from his daily runs. "Gatorade was expensive, but milk's something I already have in my refrigerator,” Karp said. "It's easy, it's cheap, and it's got everything that I need after my workout."

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