

Why Your Sports Drink Should Contain Protein

Carbohydrate is usually considered to be the most important nutrient for endurance athletes. Protein, on the other hand, is associated with strength and power sports such as football and weightlifting.

It's true that endurance athletes do not require especially large amounts of protein in their regular meals. However, exciting new research from leading sports science laboratories is reshaping our conception of the ideal sports drink. This research has shown that, when consumed during aerobic exercise, a sports drink containing carbohydrate and protein in a 4:1 ratio provides four benefits compared to a conventional carbohydrate-only sports drink: 1) better hydration, 2) greater endurance, 3) less muscle damage, and 4) faster muscle recovery.

1. Better hydration

In a study conducted at St. Cloud State University and published in the *International Journal of Sports Nutrition and Exercise Metabolism*, researchers compared the rehydration effects of a sports drink containing carbohydrate and protein in a 4:1 ratio (Accelerade®), a conventional carbohydrate sports drink (Gatorade®), and water. The carb-protein sports drink was found to rehydrate athletes 15 percent better than the conventional carbohydrate sports drink and 46 percent better than water.

2. Greater Endurance

In a study conducted at the University of Texas and published in the *International Journal of Sports Nutrition and Exercise Metabolism*, researchers found that a carbohydrate-protein sports drink increased endurance by 29% in cyclists compared to a conventional, carbohydrate-only sports drink. Consuming protein during exercise may increase endurance by providing an additional energy source to the muscles and by improving the efficiency of carbohydrate usage during exercise.

3. Less muscle damage

A study published in *Medicine and Science in Sports and Exercise* found that a carbohydrate-protein sports drink reduced muscle damage in an exhaustive workout by 83% compared to a conventional sports drink. Consuming protein during exercise may reduce muscle damage by reducing cortisol levels. During hard workouts, cortisol, a stress hormone, is normally released in large amounts and subsequently breaks down muscle proteins, causing muscle damage.

4. Faster recovery

When athletes experience less muscle damage during a workout, they recover faster and perform better in the next workout. This was demonstrated in the above-mentioned study in which a carb-protein sports drink was found to reduce muscle damage compared to a conventional sports drink. As part of this study, athletes returned to the testing site the next day for a follow-up workout. On average, the athletes had 40% greater endurance in the follow-up workout when they consumed a carb-protein drink in the first workout than they did when they drank a conventional carbohydrate sports drink.

Research You Can Use

All of the latest research on the benefits of consuming protein during aerobic exercise adds up to one conclusion: If you're serious about your performance, you should consume a sports drink containing a 4:1 ratio of carbohydrate and protein in every workout.