

PERFORMANCE PLAYBOOK



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Muscle Cramps: The Right Ways for the Dog Days

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August brings the grueling combination of training camps and intense heat. As athletes make their way back to school and get back into shape, dehydration and widespread muscle cramping sometimes occur. No laughing matter, whole-body muscle cramps or heat cramps are debilitating and can sideline an athlete for the day, at least. What's the game plan to defeat cramping?

What Causes Cramping

First, understand what causes cramping. Muscle fatigue, salt loss, and dehydration – all three acting together – play a role in heat cramping. Consider this: On a hot day, a 250-lb football player can easily lose as much as a gallon of sweat in the course of the game. In losing that much sweat, the player can lose enough sodium chloride to equal 2 to 3 teaspoons of table salt. Compared with the trivial losses of potassium, calcium, and magnesium in sweat, the loss of sodium can be huge.

The Loss of Sodium

Why worry about losing sodium? Sodium is key not only to maintain blood volume but also to help nerves fire and work. Sodium depletion short-circuits the coordination of nerves and muscles as muscles contract and relax. The result can be heat cramping. Players most prone to disabling whole-body cramps are those most lean and fit, intense and explosive at their position, who take many reps in the heat, sweat early and heavily, and end up with white streaks of salt on their shirt or skin.

So the first line of defense against cramping is to encourage your athletes to consume more salt and to drink enough of the right fluids.

A Balanced Diet

Set the tone for the team by advocating a balanced diet and recommending the best beverages for athletes before, during, and even after the dog days of summer. Popular foods

rich in sodium include tomato juice, canned baked beans, dill pickles, pretzels, canned soups, and cheese pizza.

Hydration Options

Options for hydration include various sports drinks and bottled waters, all claiming to help athletes reach peak performance. In hot and sweaty weather, it is vital that athletes choose the right fluids to stay hydrated and maintain a healthy balance of electrolytes, most importantly sodium (Gatorade thirst quencher has 110 mg in 8 ounces) to help fend off muscle cramping. Water, which contains almost no sodium, is not the best choice as your only drink in hot, humid playing conditions.

Salty Solutions

For most players, a balanced diet containing some salty foods and proper hydration with a sports drink will stave off cramping. For those who are prone to severe muscle cramps or who are salty sweaters, that may not be enough. Players with extreme heat cramping need even more sodium, which they can get on-field by adding ¼ teaspoon of table salt to a 16 to 20-oz beverage. They should also salt their food, focus on healthy salt-rich foods, and consider drinking tomato or V-8 juice with each meal.

Preventing heat cramping is all about what players put into their body. Keep them well-hydrated and replace sodium and other electrolytes and you'll keep them in the game.

