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PERFORMANCE NUTRITION FOLLOWING AN INJURY—FROM PERSONAL EXPERIENCE

Eating healthy when training and competing is intuitive. Many tactical athletes are precise and often ritualistic with pre- and post-workout nutrition, hydration, and rest. However, the question arises as to whether the same approach is applied when the unexpected and tragic happens and someone is injured. Recovering from an injury may be more critical than recovering from a workout and how tactical athletes nourish themselves during this time can facilitate or delay their recovery.

After an injury, people usually do not feel like cooking and may select foods based on convenience rather than nutrition. Also, people often tend to get depressed post-injury. They may binge on unhealthy comfort foods (in some cases this may include foods that are high in simple sugars or saturated fats), drink more alcohol, or even start smoking when injured. Use of any of these items in combination or excess can contribute to the inflammatory process and delay healing (1). What prompted me to write this article was a bike crash I endured and my pursuit to apply my knowledge and experience in nutrition to promote a quick recovery.

One day after work, I went out for what was going to be about a 40-min bike ride. About 10 min into my ride, I was struck by a car. I flipped over the hood and landed on my head and side. Immediately after the incident, a United States Army medic stopped and rendered aid, along with an emergency medical technician (EMT), police officer, and I think a fire truck—all of the main branches of the tactical community were represented. I was taken to the emergency room and after x-rays, a computerized tomography (CT) scan, and being put on three different narcotics, I was released and allowed to go home. Amazingly, nothing was broken but I did get banged up pretty good.

The last snack and fluid in preparation for my ride was at 2:30 pm and I suffered significant muscle trauma about two and half hours later. I returned home around midnight, over seven hours after the initial trauma occurred. During that time, I was not given any food at all post-injury. While most of us would prefer to crawl into bed after an evening like that, narcotics should usually be taken with food and the injured muscles require adequate nutrition to start the healing process. Fortunately, I had a milkshake in my freezer containing 20 g of protein. Other options may have included meal replacement drinks, protein powders, cereal and milk, or Greek yogurt. I also went to bed with a bottle of water to take with my second dose of narcotics.

The days immediately following an injury are critical. As activity levels decrease, and swelling and inflammation set in, maintaining a diet that promotes healing is essential to keeping weight under control and speeding up recovery (1).

Often during workouts, people are reminded to drink adequate amounts of water. When not training as much, they may unintentionally drink less. A minimum of 3.7 L of water per day for men and 2.7 L per day for women is recommended for proper hydration, which will assist in the overall recovery process (4). Sport drinks are not necessary and the extra sodium may not help the swelling and edema. However, sports drinks can be used to help replace electrolytes and therefore hydrate an individual if they have difficulty consuming plain water. However, these drinks should not be used as a replacement for water.

Protein is needed during the recovery phase as well. It is recommended to consume about 20 – 30 g of protein 3 – 5 times per day (as opposed to all at one time) as protein is better utilized in smaller doses, especially when recovering and an individual is less active (5). A fantastic source of protein for healing is salmon. This is due to the high content of omega-3 fatty acids, protein, and vitamin D (1). In fact, salmon is one of the richest food sources of omega-3 fatty acids and one of the few food sources of vitamin D, both of which have anti-inflammatory properties. These nutrients are also important when a potential head injury is involved. Though I was wearing a helmet and the CT scan indicated no damage, it did not hurt to get some docosahexaenoic acid (DHA), a form of omega-3 fatty acid, from salmon to aid in my healing and brain health (2). For the low maintenance cook, frozen, canned, or pre-cooked salmon is readily available. Farmed salmon may have more omega-3 fatty acids, whereas wild salmon may have more vitamin D (1).

Fruits and vegetables are also tremendously important to consume when injured (1). They are a great source of fluid and fiber, which may help prevent the aforementioned possibility of constipation caused by consuming prescribed medication to manage pain. The natural anti-inflammatory nutrients found in these foods may help curtail the inevitable inflammation post-injury (1). Pineapple is rich in bromelain, an enzyme with anti-inflammatory properties (3). Dark green vegetables such as kale, spinach, Brussels sprouts, asparagus, broccoli, and collard greens are also plentiful in anti-inflammatory nutrients (3). Adding beets to a diet may help with blood flow, especially to the brain (6). Another option to obtain additional antioxidants and unsaturated fats is to cook vegetables in a small amount of olive oil and top salads or oatmeal with walnuts.

Generally speaking, tactical athletes are at a high risk for traumatic injuries. Since being a tactical athlete is their job, a fast recovery is paramount. To do so, one must treat the injury like the most intense strength training session ever in terms of nutrition. During rehabilitation, tactical athletes should respect the rehabilitation process like they would respect a training camp. They should be sure to get adequate rest, stay hydrated, and consume fruit, vegetables, protein, and whole grains 2 – 3 times per day.

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ABOUT THE AUTHOR

Trisha Stavinoha's United States Army and dietetic career began in 1998 after earning her Bachelor of Science degree in Nutrition from Texas State University and being accepted into the United States Army's dietetic internship program. Stavinoha earned her Master of Science degree in Sport Nutrition from Long Island University while concurrently competing on their track and field and cross-country teams. She has been a credentialed sport dietitian and strength and conditioning coach since 2008. Her credibility in sport nutrition comes from being a soldier, scholar, and athlete. Stavinoha's experience with athletes includes a wide range of Olympic hopefuls in the Army's esteemed World Class Athlete Program, high school and collegiate cross country runners, triathlon and endurance athletes, tactical soldiers, Wounded Warriors, and overweight service members trying to pass body fat and physical fitness standards.