



INJURY NUTRITION - EATING TO HEAL

The reality is, from time to time, athletes get side-lined with injuries. While this is unfortunate, focusing on optimal nutrition can help the body heal, recover, and get back in the game faster!

High Quality Protein

Of utmost importance is high-quality protein. Protein is made of smaller components, or building blocks, known as amino acids. While there are 22 amino acids, nine of them are considered essential because they cannot be made by the body. This means you must get them from the foods you eat. Protein is needed for various functions in the body including the growth and repair of tissues after injury (muscles, tendons, ligaments).



Protein sources are considered complete or incomplete. Complete proteins contain all the essential amino acids your body cannot make, while incomplete proteins only contain some of the essential amino acids. Animal proteins such as beef, pork, poultry, fish, dairy foods, and eggs are complete proteins. Some plant sources like soy foods, guinoa, and hemp seeds are also complete proteins. Most plant proteins including beans, legumes, nuts, seeds, nut butters, and whole grains are considered incomplete. While these foods provide protein, if you are eating them as your main source of protein, it is important to include a variety of plant-based protein foods in your eating pattern to ensure you are getting all the essential amino acids needed on a daily basis.

Vitamins and Minerals

Vitamins and minerals are known as micronutrients because they are required by the body in small amounts, but do not provide calories like macronutrients (carbohydrate, protein, and fat). Micronutrients are essential to every metabolic process in your body! They help create energy from the food you eat, strengthen your immune system, fight off disease and illness, build strong bones, enhance recovery from exercise, and help with the post-injury healing process. Think of micronutrients as the "behind the scenes crew" working to pull off a big concert; you don't know they're there, but without them the show would not go on.

Strengthening Immune Health

Lots of vitamins and minerals play a role in immune health, but vitamins A, B-6, C, D, and E, as well as the minerals zinc, selenium, magnesium, iron, and copper top the chart in regards to helping your body fight off disease and illness. While you may be thinking, "How will I ever get all these nutrients in my diet?" – the truth is that consuming a balanced, nutrient-rich eating plan will provide what you need. Focus on getting a variety of fruits, vegetables, whole grains, lean proteins, and good fats into your meals and snacks to help strengthen your immune health.



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Antioxidants for Injury Recovery

While a variety of micronutrients are needed to support exercise, focusing on antioxidants and omega 3-fatty acids can help with the recovery process. Antioxidants help protect cell membranes from oxidative damage that occurs during exercise. Antioxidants are often vitamins and minerals such as vitamins A, C, and E, selenium, zinc, and copper. Polyphenols and flavonoids found in plants also have antioxidant properties. Bright colored fruits and vegetables are the body's biggest suppliers of antioxidants as they are loaded with the nutrients required to rebuild, recover, and restore. Animal proteins like beef also provide the body with an abundance of zinc and selenium.

To obtain the vitamins and minerals your body needs to heal and recover, focus on eating high-quality protein at each meal, three servings of dairy a day, and a variety of colors of fruits and vegetables. Each color supplies the body with a package of nutrients, so try to eat a rainbow of colors. Ideally, you want to consume at least five servings (more is better) of fruits and vegetables each day. Fueling the body with nutrient-rich foods helps promote optimal healing and recovery from injury.

Bone Fractures and Breaks

Calcium, vitamin D, phosphorus, and magnesium are the main micronutrient players when it comes to bone health including helping bones heal from fractures and breaks. Calcium and vitamin D work in concert together to build and strengthen bones. Without adequate vitamin D, individuals only absorb about 10-20% of the calcium consumed.

Consuming this combination of nutrients is crucial for girls who put on 90% of their bone mass by age 17, and boys by age 22. Bones are completely developed by age 30, then calcium and vitamin D are required for maintaining strong bone mineral density. The best sources of calcium in the diet are dairy foods (cow's milk, cheese, and yogurt), but some calcium can also be found in fortified foods and plant foods. Vitamin D can be found in milk, egg yolk, and fatty fish (salmon, trout, tuna, mackerel, sardines), but is ideally "consumed" with 15-20 minutes of sunlight exposure in the middle of the day.

