**The Power of Plant-Based Protein for Runners**

**A few protein myths debunked, and why trail runners can look to plant-based foods to get strong**

As runners, we’ve long known that we need high-quality carbohydrates and healthy fats as a source of fuel. Protein, on the other hand, remains one of the most misunderstood areas of performance nutrition. The strength-training community has long embraced the benefits of protein, and while trail runners may understand the necessity of eating enough protein to stay strong and healthy, for many of us, understanding how much, and from what sources, remains a bit of a mystery.

Here’s a primer.

**The Role of Protein**While protein is important for the creation of hormones, enzymes and antibodies, we most often hear about its role in muscle repair. When we are talking about protein, we are more accurately referring to amino acids, the building blocks of protein. Although our body is able to produce many amino acids, there are eight (nine for children) other important amino acids, known as essential amino acids, that must come from our diet.

**The Vegetarian Protein Myth**While most food contains some protein, focusing on plant-based sources has many benefits. Plant-based foods are very nutrient dense, meaning they contain high amounts of nutrients with very few calories. For example, a source of plant-based protein like legumes not only contains protein but also fiber, vitamins and minerals. In fact, almost all plant-based proteins provide a good source of fiber (beneficial for blood sugar control) while remaining low in saturated fat and cholesterol.

There’s no nutritional myth that has lasted longer than the notion that meat, fish, dairy and eggs are our only possibilities to receive adequate protein. For a singular type of food to be referred to as a “complete protein source,” it must contain all of the essential amino acids. While the myth suggests that plant-based foods are incomplete protein sources that cannot be relied on to meet our needs, this is simply untrue.

Many animal foods do indeed contain all essential amino acids, but so, too, do many plant-based complete protein sources: soy, hemp, quinoa and buckwheat, to name a few. Furthermore, even if a single food does not provide *all* essential amino acids, the act of eating a variety of plant-based foods easily provides us with all the amino acids we need.

Eating a variety of protein sources not only contributes to a complete amino acid profile, but also a more balanced one. Where one source of protein will be low in a certain amino acid, another might be high. Vegetarians have long been advised to eat rice and beans together because rice has the amino acid methionine which beans lack, and beans contain lysine, which rice is low in. To ensure you are getting enough protein in your diet, just focus on enjoying a variety of plant-based sources such as lentils, beans, nuts, seeds, grains and organic soy throughout the day.

**Protein for Trail Runners**The Dietary Reference Intake (DRI) recommends consuming 0.36 grams of protein per pound of body weight for the average person. Most athletes, specifically runners, will actually need a little more than that—closer to 0.6 grams of protein per pound. For instance, a 175-pound trail runner requires about 105 grams of protein per day.

Besides consuming a variety of proteins, branched-chain amino acids (BCAAs) can help performance. After your workout, your muscles are in a catabolic state, meaning your body will continue to break your muscles down. To recover and make strength gains, BCAAs help your body to switch to an anabolic state initiating protein synthesis and muscle tissue repair.

While many athletes choose to supplement with BCAAs in a powder form, there are many whole-food options that contain substantial amounts of BCAAs. Eating brown rice, hemp seed, alfalfa and legumes is an easy way to get BCAAs. Adequate consumption of good quality protein, as well as sufficient BCAAs, can be just what you need to keep you consistently running, leading to improved strength gains and performance.

Regardless of what type of protein you choose to eat, it’s important to realize that you do have a choice. For those of us looking for an edge to push our performance to the next level, remember that when it comes to protein, quality is just as important as quantity.

*Andrew Raines, RHN and Education Manager at* [*Vega*](http://myvega.com/)*, is an advocate for clean, plant-based sports nutrition, and is an ultrarunner with a background in competitive kickboxing and soccer. As a coach and trainer, Andrew thrives on seeing people boost their performance with plant-based power. He’s a Registered Holistic Nutritionist and has a Certificate in Plant-Based Nutrition from eCornell and the T. Colin Campbell Foundation.*