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Plant protein and peak performance

Four vegan athletes discuss why plant-based is best when it comes to protein. First up, triathlete Brendan Brazier busts some common myths.

At the age of 15, I made the decision that I wanted to race Ironman triathlons professionally. Aware that stacking the odds of making this happen in my favour would rely heavily on my following a sound nutritional strategy, I began to search for one. Going somewhat against the grain, I decided to experiment with a plant-based diet. As you might imagine, criticism abounded. Until it worked, that is. I raced Ironman triathlons professionally for seven years, all on a vegan diet, and I honestly don't believe I would ever have achieved what I did in this field if it wasn't for the attention I applied to my nutrition programme.

Protein, or lack thereof, is the greatest concern of those who adopt a plant-based diet. Or, perhaps more accurately in many cases, the greatest concern of those who surround that person. Solely thanks to marketing and industry-generated pseudoscience, many people believe that only animal protein is “complete” and that it's therefore superior to plant-based options.

Complete protein is protein that contains all 10 essential amino acids – the amino acids that cannot be made by the body so must be obtained through dietary sources. But in fact there are several complete plant protein sources and it is, in any case, easy to get all of

the essential amino acids by eating a wide variety of plant foods. It's a common misconception that these foods need to be consumed at the same time in order to meet our protein needs.

Raw plant protein also has a number of huge advantages over cooked and/or animal-based protein. First, the protein in raw plant foods is much easier for the body to break down into amino acids, which means less energy required for digestion and more available for other pursuits. And unlike in cooked foods, all of the amino acids are intact. Cooking can cause amino acids to become denatured, rendering them unusable by the body. So the reality is that you are likely to get more high-quality, complete protein if you eat a raw plant-based diet than if you eat a standard meat-based one.

I eat a big salad each day that's full of dark leafy greens. I realize that when most people think of salad, protein is not what comes to mind. But 30% of the calories in spinach, for example, come from protein and although spinach is low in calories, the protein is in the ideal form for the body to utilize, making it a great source.

Another big advantage of raw leafy greens is their pH. The most alkaline foods are those containing chlorophyll – the dark green pigment in many plants. In contrast, animal-based foods tend to

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be highly acid-forming, as are processed foods. As a general rule, the more that has been done to alter a food from its original state, the more acid-forming it will be; and the less that has been done to alter it, the more alkaline-forming it will be. So it's no surprise, for example, that whey protein isolate – an animal food that is highly processed – is highly acid-forming.

Eating too many acid-forming foods will promote inflammation, reduce immune function and cause calcium to be pulled from the bones in order to keep the blood at its ideal slightly alkaline pH of 7.35 to 7.45. This, of course, leads to lower bone density and, in many cases, osteoporosis. In fact, the over-consumption of acid-forming processed foods and animal-based foods is the real reason that people are contracting osteoporosis at younger ages than ever before in history.

Given that these are the facts about protein, I have to say that the meat and dairy industries have done an impressive job of instilling certain false beliefs into the vast majority of Westerners. Let's now take a look at that by focusing on the dairy industry.

Beginning around a century ago, the dairy industry launched a full-scale public relations and marketing blitz. They had a large budget and they needed one considering the magnitude of what they were about to tackle. Their plan, as diabolical and as implausible as it may sound, was to convince everyone that the milk from another species, designed to be consumed by its newly-born offspring, was a sensible thing for adult human beings to drink.

But they didn't stop there. They set their sights not only on making the drinking of cow's milk seem sensible, but on making it seem essential. Their aim was for cow's milk to be perceived as an elixir that would bestow health, vitality and strong bones on its human consumer. They also set out to make cow's milk synonymous with calcium and protein.

Here we are over a century later and, as we all know, they were successful. They pulled off what was arguably the greatest marketing coup of all-time. Convincing humans that they need to drink another mammal's milk to obtain health is quite a feat. In fact, the dairy industry serves as an inspiration to me. Whenever I'm faced with a challenge that seems insurmountable, I think about what they managed to achieve. Of course when I'm asked what inspires me and I reply “the dairy industry,” I get strange looks. But once explained, it's understood.



Brendan Brazier

is one of only a few professional athletes in the world whose diet is 100 percent plant-based. He's a professional ironman triathlete, the bestselling author of *The Thrive Diet*, and the creator of an award-winning line of whole food nutritional products called Vega. In 2007, *VegNews* magazine named Brendan one of the 25 most fascinating vegetarians. For more information see brendanbrazier.com.

The best sources of protein

By Sarah Best

All raw foods contain protein in a form that's very easy for the body to use, but some foods are an especially rich source. Unlike protein derived from animals, these foods are also loaded with essential vitamins, minerals and phytonutrients.

1 Leafy greens

The modern diet is too high in sugar and chronically low in magnesium. Enter leafy greens to restore balance with their low sugar content and high magnesium levels. They are also loaded with calcium, iron and free-radical-busting antioxidants. Enjoy them in salads, juices and smoothies.

2 Liquid blue-green algae

This complete protein source is best known as a powerful energy enhancer and brain booster. Many who've tried it report increased concentration and mental clarity, as well as enhanced mood. Find a high-quality source of this wild-growing wonder-food and take a tablespoon a day.

3 Nuts and seeds

The best protein source of all in this category is hemp. It is also a very sustainable choice since it requires no pesticides, suppresses weeds, improves soil structure and grows to maturity in just 100 days. Sprouting your nuts and seeds makes the protein extra-easy for your body to absorb and also greatly boosts the nutrient content.

4 Sea vegetables

Ounce for ounce, sea vegetables contain more protein than meat, more calcium than milk, and they're higher in vitamins and minerals than any other food group. They're also a treat to eat, whether you make your own nori rolls or just tear dulse over your salads.

5 Sprouted foods

The ultimate protein, vitamin, mineral, phytonutrient and enzyme supplement. Sprinkle sprouted legumes, grains and seeds on your salads. Juice wheatgrass, or for a potent living elixir that is easier on the palate try sunflower greens with cucumber.