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Exercise

What should athletes (and the rest of us) be eating?

Whether you're a competitive athlete, a weekend warrior, or someone who exercises regularly for fitness and enjoyment, you've likely been told that when you exercise you need a great deal of protein. Even the most serious of athletes can thrive with just 8-10% of their total calories coming from protein, but more than 10% is not healthy for them or anyone else. The catastrophe that is the Standard American Diet is filled with processed foods and animal products, which are acid-producing foods. Over time this release of acid creates metabolic acidosis, which seems to create a muscle wasting response. In a study conducted at the Jean Mayer USDA Human Nutrition Research Center on Aging at Tufts University in Boston, researchers found that a diet rich in fruits and vegetables offsets the wasting of muscle tissue due to metabolic acidosis.

Generally when people think of acidic foods, citrus foods come to mind. In reality, foods should be considered alkaline or acidic based on the residues that are created in the body and excreted in the urine rather than whether they are alkaline or acidic themselves. Thus the renal acid load (the acid load on the kidneys) can be measured through analysis of urine. What becomes clear is that fruits and vegetables are metabolized to alkaline residues and therefore prevent metabolic acidosis and muscle wasting. And they are the richest source of the phytonutrients that act as natural antioxidants and natural anti-inflammatory agents. These should be the staple of an athlete's diet.

We've been taught that milk and cheese are healthy sources of calcium and protein, but their protein profile is so high that the body responds by leaching calcium bicarbonate from bones. This is the beginning of the osteoporosis spiral: the bones grow weaker, and then people feel that they need to consume more dairy in an effort to increase calcium intake. But the body can't handle the protein load from the extra dairy, and the cycle of leaching and alkalinizing begins again. It's not just dairy, however, that's dangerous to eat. Any protein, whether it is



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from animal sources or from soy, creates acidosis when too much is consumed. And you'd be surprised by how little protein is actually "too much" protein.

The most protein that the average person will ever need to consume in their lives is when they are a baby. Babies need lots of protein and fat to support the tremendous growth of muscle, bone, and brain that occurs during the first two years of life. But here's the kicker: this super diet that a baby needs should be comprised of approximately 6% protein! Breast milk, nature's perfect food, is made up of 6% protein. That's it. At no other time during a person's life is there more need for protein than during infancy. So if Mother Nature designed breast milk to have 6% protein, then that is all we ever need in our diet to be healthy. However, it is hard for people, especially athletes, to shake the belief that they don't need all that protein. That is because whenever you reduce your protein intake, it takes time for the body to adjust to the new diet and there is a period of detoxification that can make a person feel weak. There are other confounding factors that are beyond the scope of this article. However, the stakes are high and it is important to explore the long-term benefits of a more plant-based diet. A well-balanced whole-food, plant-based diet can include up to 8% of total calories from protein without becoming unhealthy. That is as much as the body can make use of without creating harmful waste and acidosis.

So how has it come to be that as a culture we consume so much protein? The diet industry, and its fascination with high-protein, low carbohydrate diets is partly to blame, but the diet industry and the doctors and nutritionists who are part of it were first duped by the food industry. It is the food industry that has driven our desire, and perceived need, for large amounts of protein in the diet.

Whey is a byproduct from the creation of cheese, and for centuries it's simply been thrown away. But the dairy industry saw an opportunity to reuse this waste product, and protein supplements were born. Today, you can walk into any gym or health food store and find whey-based protein products that are marketed as healthy means of building muscle. Even worse than athletes believing that they need huge amounts of protein is that this myth has trickled down to the rest of society so that even sedentary people are making high protein



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shakes with whey (or soy) protein, convinced that more protein and fewer carbohydrates are the keys to weight loss and health. And people are giving their children high protein snacks, shakes, and bars, believing these to be healthy alternatives to junk food like cookies or candy bars. While junk food is never a good choice, young children certainly don't need to be consuming these high protein meal replacement bars and drinks. Fruits, vegetables, and whole grains are what kids should be snacking on in order to build muscle and fuel their brains. It is quite useful, in fact, to think about the analogy of food as fuel when we discuss how athletes, and the rest of us, should eat.

For the human body, the "gasoline" that fuels us efficiently and effectively should almost always be whole-food carbohydrate sources, along with a small amount of fat and protein from plant sources. For this reason, whole grains are essential to the diet of an athlete, and to anyone who is exercising regularly. Acceptable whole grain choices are: all types of rice, other than white rice; quinoa, which is naturally high in protein, and has a nice chewy texture and pleasant taste that works well in recipes where rice is usually called for; buckwheat; amaranth; spelt; steel-cut oats; and millet. Chickpeas are an excellent source of protein, and can build muscles just as well as meat can. Better, in fact, since they are loaded with carbohydrates, and are a good source of fiber, Folate, and Manganese.

If whole grains are the gasoline that fuels our engines, plants are the oil that keep things smooth and lubricated, protecting delicate machinery. Just as we need to regularly put new, clean oil in our cars, we regularly need to replenish the plants in our diets. Plants have so much to offer, and eating a rainbow variety (every color fruit and vegetable that you can find that's grown locally and organically) will serve to keep you healthy - to keep your engine running smoothly. You want to eat fiber rich, anti-oxidant packed, nutrient dense leafy greens every day: kale, chard, bok choy, spinach, collard greens, dandelion greens, mustard greens, arugula, etc. They are excellent in a "Green Drink", which is the fruit and vegetable breakfast smoothie that I drink every morning (see Green Drink recipe), but they're great lightly sautéed in a bit of water, with a squeeze of lemon, or stir fried with garlic (again with water - there's no need to use oil) and a heap of your other favorite vegetables, served over the whole grain of your choice. Greens aren't just high in fiber and pretty in color. They truly



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are the “oil” that protects the various tissues in your body, all of which have unique needs. For example, too much exercise contributes to macular degeneration, but dark greens are high in luteins which can protect against macular degeneration. Luteins also may prevent clogging of the arteries, and are a powerful anti-inflammatory. And luteins are just one example of the manifold benefits that come from eating a wide range of fruits and vegetables.

The bottom line is that athletes need to be eating whole grains, fruits, and vegetables all day, every day, to keep their motors running. They also need to supplement with an anti-oxidant rich, whole-food based product like Juice Plus+®. Athletes literally cannot eat enough fruits and vegetables to get all of the nutrients they need to combat free-radical damage, so the right source of supplementation is key for them.

And those of us who aren't athletes, and who like to bike, swim, run, or do yoga for general fitness and enjoyment, should be eating the same exact stuff: a whole-food, plant-based diet with tons of leafy greens, and fruits and vegetables in every color of the rainbow, along with a whole-food based supplement like Juice Plus+®. Your kids can eat this way, too!