

The Plant-Based Athlete

What's in it for me? Reach peak athletic performance on a plant-based diet.

What do the Tennessee Titans, Venus Williams, and Tarahumara ultrarunners have in common? Well, besides being bastions of athleticism, they all love plants – more specifically, they love eating plants. Athletes throughout history have benefited from swapping out meat for plants. That's because they knew a little secret: not only does a vegan diet not impair endurance and strength – it actually increases both. It can also help stave off a host of diseases like cancer, strokes, and diabetes. These blinks make the case for a plant-based diet, using the authors' personal experience, elite athletes' success stories, and research both old and new. They lay out all you need to know about a lifestyle that will make you feel healthier, happier, and fitter than ever before. In these blinks, you'll learn

the difference between calorie and nutrient density; why plants repair muscle tissue better than meat; and what the most important macronutrient is.

Plants are nutrient-rich and calorie-poor – so you'll lose weight while eating more.

“Plant-Based Diets Take Over Sports World.” “Why NFL Players and Other Athletes Are Going Vegan.” These recent, real-life headlines clearly demonstrate that the world has taken notice of a secret hiding in plain sight: a plant-based diet will improve your physical performance. Not only that, it'll ward off injuries and enable you to live longer. Anyone in any sport can benefit from adopting a meat-free lifestyle. Olympic medalists like swimmer Rebecca Soni and figure skater Meagan Duhamel swear by plants' performance-boosting benefits. Mike Tyson made an epic boxing comeback at the age of 52; leading a plant-based lifestyle for ten years had replenished his youthful strength and power. And ultrarunning legend Scott Jurek has long espoused the recovery-enhancing power of plants. Whether you're an elite champion or a weekend warrior, eating whole-plant foods will level up your athletic prowess and overall health. That's because at the foundational level, plants boast qualities that make them far superior to animal products. The key message here is: Plants are nutrient-rich and calorie-poor – so you'll lose weight while eating more. Ready for a crash course in the makeup of food? Macronutrients are the building blocks of nutrition; they're what provide calories – that is, energy – for your body. The three main macronutrients are proteins, carbohydrates, and fats. Micronutrients, on the other hand, are the minerals and vitamins that play a crucial role in keeping you healthy. Plants contain an abundance of micronutrients that help your body produce energy, boost your immune system, and repair muscles. A food's calorie density reflects how many calories it contains per unit of measurement. On food labels, this is usually listed as calories per gram. Plants like cruciferous veggies, fruits, and grains are high in volume but low in calories, so you'll feel full sooner compared to calorie-rich, low-volume foods like meat or oil. Then there's nutrient density – how many nutrients per calorie a food or beverage contains. Plants have a high nutrient to calorie

ratio. Combined with their low-calorie density, this means that you can eat more – and more healthily – and you’ll still lose weight. As an added bonus, shedding extra pounds can often make it easier, and more enjoyable, to exercise. The goal with all these components is not necessarily to eat certain quantities of each; it’s about achieving a diverse mix. We’ll get into the nitty-gritty of exactly how to do this in the following blinks. First up? Protein.

Protein is important, but it’s massively overhyped.

As any vegan – especially an athlete – will know, there’s one question that gets asked over and over: “But how do you get enough protein?” Cue the eye roll. Protein is involved with building and repairing muscle tissue, and it’s integral to making essential hormones and regulating immune function. In short, it is important. But it’s also blown way out of proportion. Many athletes seem to think they’ll waste away if they don’t consume “enough” protein, and so they’re constantly on a quest to find more – usually in the form of meat, milk, eggs, and supplements, to the detriment of their overall health. The key message here is: Protein is important – but it’s massively overhyped. Unfortunately, eating a lot of animal protein is associated with heart disease, stroke, and cancer – the saturated fat and dietary cholesterol that animal-based foods contain restrict blood flow to your organs. Studies have also linked meat consumption to chronic inflammation, which accelerates obesity, asthma, and Alzheimer’s. Of course, decreased blood flow and increased inflammation harm your athletic performance and recovery, too. Take former NFL football player David Carter. By the time he was 25, the physical stress of being a 300-pound defensive lineman who subsisted on cheeseburgers and chicken breasts had left his body riddled with inflammation, high blood pressure, and excess body fat. His pain was so bad he’d started losing sensation in his hands and had to pop pain pills just to get through games. Then he watched the documentary *Forks Over Knives*, which revealed that he could get all the protein he needed from plants – without any adverse health implications. In fact, plants offer extra vitamins, minerals, fiber, and 64 times more antioxidants than animal foods. Together, these can actually reverse conditions like obesity, diabetes, and heart disease. David became vegan overnight. Within two months, all his pain had dissipated, and he’d gotten faster and stronger. To maintain his body mass and get enough protein, he loaded up on rice and beans, greens, cashews, oats, and fruit. By eating every two hours and drinking lots of smoothies, he achieved a daily intake of 10,000 calories. Of course, a typical person doesn’t need to eat that much. And the suggested amount of protein for both women and men engaged in modest physical activity comes out to about 46-56 grams per day. For breakfast, mix one cup of cooked oatmeal with a tablespoon of peanut butter and ½ cup of soy milk, and boom – you’re already a third of the way there.

Complex carbohydrates deliver the most nutrient bang for their buck.

So if protein isn’t all it’s made out to be, what should we be focusing on? That’s easy: carbohydrates. Carb-rich whole foods, especially leafy greens like kale, have the highest ANDI score – that’s short for Aggregate Nutrient Density Index. This score rates foods based on their nutrient-to-calorie ratio. On top of that, both our muscles and brains

prefer using whole, unprocessed complex carbohydrates as fuel. Complex carbs are converted to glucose and then stored in our bodies as glycogen, to be used as energy later on. When we deplete those glycogen stores, our bodies turn to stored fat as a secondary fuel source. Protein is used as a last resort. The key message here is: Complex carbohydrates deliver the most nutrient bang for their buck. Scott Jurek is great at ultrarunning. In fact, Runner's World named him one of the top ten greatest runners of all time. And guess what? Scott credits his continued success to his plant-based diet, which he adopted back in 1999. The anti-inflammatory properties and nutrients in his diet help his body recover faster; this allows him to train more and develop better endurance. To fuel his body, Scott eats a diet of starchy vegetables, grains, legumes, seeds, and nuts. He drinks smoothies of pineapples, berries, or bananas, with kale, barley grass, and spirulina. Brown rice and pea protein, as well as good fats from avocado and coconut, round things out. All that fiber keeps his gut healthy, which in turn helps regulate his mood, metabolism, stress response, and immune system. On long runs, Scott chooses real foods that are easy to digest; one of his go-tos is a bean burrito. He consumes 25 grams of carbohydrates every 20-30 minutes along with lots of water and electrolytes. He completely avoids processed foods like sports drinks and commercial protein bars, which contain a lot of refined sugars that create energy spikes followed by crashes. Instead, like many plant-based athletes, he makes his own "Datorade." Give this a try yourself by pitting dates and then blending them with coconut water for a boost of naturally occurring sugar and electrolytes. Whole fruit is also one of the best pre-workout foods available; the authors call it "nature's perfect short-term energy source." For optimal athletic performance and health, aim for a 60:20:20 ratio - meals that are around 60 percent carbs, 20 percent protein, and 20 percent fat. This doesn't have to be exact. If your plate is about half full of carbohydrates with some protein and a little fat, you're good!

Fat is an essential part of your diet - but not all fats are created equal.

Fat. Everyone always seems to want to lose it, and yet it's an essential part of our existence. Fat protects your organs, produces important hormones, supports cell growth, and provides your body with energy. With 9 calories per gram, fat has more than twice the calorie density of carbohydrates or proteins. But eating fat won't automatically make you fat. Because while you need fat on your plate, small amounts are best. Also, not all fats are created equal. In addition to monitoring how much fat you consume, it's important to focus on which. The key message here is: Fat is an essential part of your diet - but not all fats are created equal. So what are the different types of dietary fat? Monounsaturated fats, which contain omega-9 essential fatty acids (EFAs), are made by your body. While you don't need to get these from outside sources, consuming omega-9 has been shown to improve insulin sensitivity, increase "good" cholesterol, and decrease inflammation. Great sources include avocados, chia seeds, and nuts like almonds and walnuts. Then there are polyunsaturated fats, which comprise omega-6 and omega-3 EFAs. Because your body can't produce them, you'll need to rely on your diet to reap their benefits. Try achieving a 3:1 ratio of omega-6s to omega-3s by reducing your oil intake and cutting out processed foods. Meanwhile, up your omega-3s through flaxseeds, hemp seeds, and chia seeds. These have been shown to boost mental health and contribute to weight loss. The American Heart Association recommends getting just 5-6 percent of daily calories from saturated fats; too many and the level of "bad" cholesterol in your blood will skyrocket. You can easily keep within

this range by avoiding dairy products and instead consuming small amounts of coconut. Finally, there are trans fats, which abound in things like processed meats, dairy, and partially hydrogenated vegetable oils. Studies have linked consumption of trans fats to stroke and heart disease. Cut these out of your diet entirely; that shouldn't be too hard on a whole-foods plant-based diet. Consuming the right amount of fats helps elite endurance athlete Laura Kline maintain healthy bones and joints, avoid sluggishness, and keep up her stamina: "When you eliminate the unnecessary animal products from your diet," she says, "your body doesn't have to work as hard to process and digest them, which leaves more energy for it to perform."

Supplements should play second fiddle to real foods.

Do you dutifully pop a multivitamin every day? If so, join the club! The Council for Responsible Nutrition reports that 77 percent of adults in the US take dietary supplements of some kind. But many professional athletes forgo supplements completely, including Team USA heavyweight boxing champion Cam Awesome, and Rebecca Soni, a swimmer who's won six Olympic medals and set five world records. So do you really need to supplement in order to get adequate nutrition and excel as an athlete? Well, if your diet consists of processed foods devoid of the vitamins, minerals, and nutrients you'd normally get from whole plants, then yes. On the other hand, a diverse plant-based diet can provide almost everything you need to live a healthy life, so you can keep your supplements minimal. The key message here is: Supplements should play second fiddle to real foods. While a plant-based diet offers nearly everything you need, a handful of essential nutrients that aren't abundantly available from plants – or that our bodies don't easily absorb – can complement it. These include vitamins B12 and D, zinc, iodine, and vitamin K2. Aside from that, some plants are so healthy that you could almost consider them natural supplements. Take iron – something that people transitioning to a plant-based diet are often concerned about getting enough of. Contrary to popular belief, vegans don't have higher rates of anemia. They're busy tapping into potent iron sources like lentils, tempeh, brown rice, pumpkin seeds, swiss chard, and blackstrap molasses. There are a few tricks to ensure you're absorbing enough iron. First, eat smaller doses more often throughout the day. Second, consuming iron-rich foods along with vitamin C can boost its absorption by five times – so drizzle some lemon juice on your salad. Third, avoid drinking coffee and tea for a couple of hours before and after eating because the tannins block iron absorption. Adaptogens are certain herbs and mushrooms that are also so healthy they're practically supplements themselves. As their name suggests, they help your body adapt to physical and mental stress. Many athletes incorporate sea buckthorn, ginseng, ashwagandha, reishi mushrooms, goji berries, and licorice root into their daily routine. Obviously, oxygen is important during exercise. Studies have shown that beets contain a lot of nitrates, which help dilate your arteries and increase oxygen flow to your cells. Try drinking one to two glasses of raw beet juice an hour before your workout.

Good habits and a winner's mindset will take your plant-fueled body to the finish line.

As we saw in the last blink, supplements should complement a nutritious diet – not make up for the lack of one. And ultimately, the best performance-enhancing drugs are hydration, work ethic, and attitude. You probably know that your body is 70 percent water. As such, you need to properly hydrate to nourish your cells and muscles. Not only will this keep you healthy, but it'll also reduce soreness. Don't worry about measuring out exact cups; just drink a dozen glasses of water every day. You'll also be hydrating through all the fruits and vegetables in your plant-based diet.

The key message here is: Good habits and a winner's mindset will take your plant-fueled body to the finish line. When it comes to work ethic, set yourself up for success by creating a timeline to help you stay focused and on track. Once you have a specific goal, decide on a realistic timeframe for achieving it, and then plot your training regimen accordingly. Also include the new daily habits you want to cultivate, like hitting your 60:20:20 macronutrient ratios or waking up earlier to work out. Consistency is key; achieving smaller wins is a lot more effective than focusing on the final prize. When you put your plan into action, it's critical that you warm up before each training session to prepare your body for the stress it's about to undergo. Five to ten minutes of jogging, push-ups, and jumping jacks will do the trick. Next, stretch the major muscles in your body to loosen up and promote flexibility during your workout. And after your workout, don't forget to cool down. Try going for a short walk while circling your arms. And then remember to rest! Give your body a total break at least one day per week, and incorporate naps, massages, and restorative yoga into your routine. Finally, your attitude plays a huge part in your athletic performance. As professional mountain biker Sonya Looney puts it, "The way we tell ourselves stories about what's happening around us is the key to a strong mindset." Say it's the day of a 100-mile mountain bike race. You wake up and see that it's cold and rainy out. You could tell yourself you're going to be miserable. But instead, why not say that you'll have an awesome, fun adventure that will make you even stronger? Finding joy in your pursuit will ensure you're less likely to burn out – and more likely to reach the finish line.

A plant-based lifestyle helps your athletic performance, animals, and the planet.

Obviously, a plant-based diet is hugely beneficial for your performance as an athlete. But there are other good reasons to cut out meat, too. For one, it destroys the environment. The meat-production industry is responsible for 50 percent of global warming. Not only that, it's likely one of the main factors behind the COVID-19 pandemic. In fact, the CDC has warned that three out of four new diseases in people will come from animals. Another reason to quit meat is an ethical concern about harming living creatures for food or supporting horrific factory farms. That's what drove both of the authors to adopt animal-free diets. And although they switched to plants to reduce animal cruelty, the change catalyzed incredible personal transformations. The key message here is: A plant-based lifestyle helps your athletic performance, animals, and the planet. One of the authors, Robert, went vegan at the age of 15. He'd always been skinny, so when he decided to pursue bodybuilding, he had to change up his training and eating habits. This meant consuming a nutrient-dense meal every three hours, totaling six meals a day. A couple of years and many pounds later, he'd become a professional, prize-winning bodybuilder on his own terms, debunking the myth that vegan bodybuilding wasn't possible. For Matt, the other author, the transformation

started in college. On a whim, he and some friends decided to tackle the Boston Marathon, which requires a qualifying time of 3 hours and 10 minutes. And Matt wasn't a runner; he'd barely ever gone over 3 miles. A few years into his endeavor, he switched to a plant-based diet for ethical reasons and saw his performance soar. His workouts were going better, he was recovering faster, and he wasn't getting injured at all. After seven years of training, he finally qualified for the Boston Marathon; within a few more years, his vegan lifestyle was fueling him on 50k, 50-mile, and 100-mile races. Matt and Robert's meals are usually some variation of "a grain, a green, and a bean." This could mean BBQ tempeh tacos with cabbage, or pasta with red sauce, chickpeas, and broccoli. By building their meals around these three components, they hit all their macros and optimal nutrient density. It's easy, too. Try batch-cooking different grains, greens, and beans just a couple of times per week. Your fridge will always be stocked with whole foods you can whip into delicious meals in just minutes - and your body, the planet, and other living creatures will thank you!

Final summary

The key message in these blinks is that: Contrary to popular belief, a plant-based diet is superior to meat-based fare when it comes to achieving peak athletic performance in any sport. By eating a diverse mix of fruits, vegetables, grains, legumes, nuts, and seeds, you'll enhance your training sessions, speed up recovery times, stave off injury and disease - and maximize your chances for a happy, healthy, long life. And here's some more actionable advice: Get all your macros and optimal nutrient density with a green smoothie. For the perfect pre-workout boost and post-workout recovery, try Robert's High-Energy Fruit Smoothie with Greens. Combine 1 ripe banana with 1 cup each of water, coconut water, frozen blueberries, mangoes, raspberries, spinach, kale, and ½ cup of ice. Blend on high until smooth. Pro tip: don't be scared to add things like white beans or silken tofu for added creaminess and nutritive value!