# **OrganicAthlete**

# Guide to Sports Nutrition

nicentities on to a far Lidie on to

# About OrganicAthlete

# Mission and Vision

Founded in 2003, OrganicAthlete unites people in a global effort to

create a better world through sport. Our mission is to promote health and ecological stewardship among athletes of all ages and abilities by sharing information, building community and inspiring through athletic example.

# Value Statement

The core values that guide OrganicAthlete combine the founding precepts of organic agriculture with an Olympic spirit. The organic



movement was founded to preserve ecological integrity, establish equitable food systems, and grow wholesome, nutritious food. The fundamental aims of the Olympic spirit are to find the joy in effort, the educational value of a good example, and respect for universal ethical principles.

The members of OrganicAthlete strive through word and deed to be living examples of the organic and Olympic ideals through:

- Compassion: We exercise with hearts of compassion and a deep reverence for all life.
- Truth: We endure through doubts and fears, aiming always for truth and integrity.
- Cooperation: We work cooperatively, giving selflessly to what needs to be done.
- Leadership: We lead by honest example guided by social and ecological responsibility.

Visit us online at:

# www.organicathlete.org

# Table of Contents

Introduction	4
Vegan Athletes Succeed	5
Why Eat a Plant-Based Diet	6
Eat Plants for Performance	8
Carbohydrates	10
Fat	12
Protein	13
Fiber	16
Vitamins and Minerals	16
Electrolytes	17
Building Strength and Muscle	18
Fueling for Endurance	19
Supplements	20
Guidelines for Healthy Nutrition	22
Meal Plans	23
Recipes	27
Saving Our Environment	28
The Ethical Athlete	29
Choose Organically Grown	30
Transition Zone	32
Controversies/Myths	33
Resouces	34
A Healthy Future Is In Your Hands	35

# Acknowledgements and Credits

This booklet was created by the OrganicAthlete education council: Bradley Saul, Dr. Doug Graham, Lennie Mowris, Brian Bauer, Justin Lucke, Matt Ruscigno, and Wes McGaughey. This booklet is dedicated to all the OrganicAthlete members who daily make a positive difference in the world.

Copyright 2006 OrganicAthlete

# Introduction

Dear fellow athletes and fitness enthusiasts,

When I became vegan, I wondered why more people weren't considering whole food, plant-based nutrition as part of a healthy athletic regimen. In terms of nutrition, health, athletic performance, and environmental impact, athletes and fitness enthusiasts can benefit greatly from consuming a diet based on fruits and vegetables. Unfortunately, myths and misconceptions abound when it comes to plant-based diets, so in 2003 I founded OrganicAthlete with one of our major missions being to educate athletes on the many benefits of a whole food, plant-based diet.

If I had a nickel for every time I've been asked where I get my protein, I would conduct a huge publicity campaign stating that vegans get protein from plants and plenty of it! I would have a picture of my friend and professional bodybuilder Kenneth Williams front and center. But good, healthy, common sense nutrition does not have a very large marketing budget, and most sports nutrition information available does not advocate a plant-based diet nor recognize its benefits. The fact is that athletes can succeed on a vegan diet, and more and more people are discovering a boost in health and performance from eating a plant-based diet.

With this first publication of the *OrganicAthlete Guide to Sports Nutrition*, we hope to clear up some of the confusion surrounding vegan nutrition. We explain that a whole food, plant-based diet is definitely not about lack of nutrients or restrictive dieting. Whether you're a long time vegan or just interested in sports nutrition, we hope this guide provides some information that will help you live healthfully.

May your life be fruitful,

Bradly Sul

Bradley Saul Founder/President



# Vegan Athletes Succeed!

Elite performance is possible with a plant-based diet.

Animal foods have long been associated with power and strength. Many athletes still believe that meat, dairy, and fish are critical parts of their nutrition program. Members of OrganicAthlete's Pro-Activist team

demonstrate that animal foods need not be a part of a successful athlete's diet.

These professional and elite athletes have been vegan for two years or more and have found plant-based diets to be part of their success. They not only succeed in their athletic goals on a healthy, plant-based diet, they *THRIVE.* And as this booklet explains, you too can obtain the optimal nutrition and fuel you need to power you towards your health and fitness goals.



# OrganicAthlete Pro-Activists

Brendan Brazier, triathlete [www.brendanbrazier.com]

Molly Cameron, cyclist [www.mollycameron.com]

Scott Jurek, ultramarathoner [www.scottjurek.com]

> Tonya Kay, dancer [www.tonyakay.com]

Adam Myerson, cyclist [www.cyclesmart.com]

Jason Sager, mountain biker [www.jasonsager.com]

Christine Vardaros, cyclist [www.christinevardaros.com]

Kenneth Williams, bodybuilder [www.veganmusclepower.com]

Read more about these and other vegan athletes at our website: www.organicathlete.org.

# Why Eat a Plant-Based Diet?

The choice for personal and planetary health and fitness by Bradley Saul

My transition to a plant-based diet required several years of independent study of nutrition and health. But after reading *Food Revolution* by John Robbins, I thought to myself, "why have I been eating anything but a vegan diet for this long?" As I learned more about a plant-based diet and lifestyle, the reasons for continuing to eat and live this way mounted. And as I experienced better health and faster recovery times, I was motivated to learn more and share this information with others. Now when someone asks me why I am vegan I couldn't even begin to list all my answers, but I think there are two primary reasons athletes will be interested in a plant-based diet: optimal nutrition and environmental stewardship.

Most of the time when you read or hear about vegetarian or vegan sports nutrition, the focus is on what you will lack by giving up animal products. "If you want to eat a vegetarian diet, be careful, for you might not get enough [fill in the blank - protein, calcium, iron, etc]," says the typical nutritionist and doctor. Or worse, they tell you it's not possible. While our understanding of sports nutrition has increased dramatically in the past several decades, what is lacking is our rationale for promoting foods (such as meat and dairy) that are strongly associated with chronic diseases and foods which have marginal nutritional value (such as supplements, refined energy bars, and sports drinks).

Even mainstream nutrition organizations support a plant-based diet: "It is the position of the American Dietetic Association and Dietitians of Canada that appropriately planned vegetarian diets are healthful, nutritionally adequate, and provide health benefits in the prevention and treatment of certain diseases."

I've learned that fruits and vegetables are the healthiest foods we can possibly eat. In terms of a total package of carbohydrates, protein, essential fats, fiber, and vitamins and minerals, fruits and vegetables have superior nutritional value compared to any other food group or processed food. Yet, education about whole plant food nutrition lags far behind relative to the marketing of meat, dairy and processed foods. The question is: who's to gain by consuming more fruits and vegetables? The answer is you.

The multi-billion dollar food industry makes its wealth at the expense of people's health and the environment. The major ecological issues facing our planet today -global warming, deforestation, soil depletion, and limited water resources -- are directly linked with animal production and conventional agriculture. As athletes, we must take this into consideration, for without clean air, unpolluted soil, and pure water, we do not have an environment worth exercising in.

We have the choice to contribute to



the healing of our planet and the building of healthy bodies. It all begins with how we choose to feed ourselves. Will you choose to fuel yourself with foods that accelerate disease and hasten ecological damage? Or will you join us in powering our bodies with high energy, nutritionally dense foods that promote environmental restoration and speed the building of health?



# Eat Plants for Performance

A framework for good nutrition and fast recovery

Nutrition is more than meeting recommended daily allowances of nutrients. Nutrition is providing the infinitely complex human body the conditions and building blocks that it needs to function best as a whole system. Much nutritional understanding today, however, is focused on piecing together a proper diet based on single nutrients. Rather than considering the entire nutrient and anti-nutrient content of foods, a food's merit is often based on a single nutrient.

Milk, we've all heard, is a good source of calcium for strong bones. Yet relative to fruits and vegetables, milk contains a paucity of vitamins and minerals and also contains anti-nutritive factors such as the highly allergenic protein casein. Per calorie, dark leafy green vegetables contain nearly the same amount of calcium as milk. Furthermore, vegetable matter requires less digestive energy.

A framework for good nutrition should be based on adequate nutrient intake, minimizing digestive energy, and leading a healthful lifestyle.

# Nutrient Intake

In the last 100 years, thousands of nutrients have been studied in relation to human nutrition. We know the consumption of certain nutrients is critical for health. The human body cannot make vitamin C, for example, and this nutrient must be taken in through food or supplement. Despite all this study, relatively little is known about how the various nutrients function and interrelate. Rather than creating a diet prescription based on selectively getting enough of this or that nutrient, a whole food, plant-based diet is the most nutrient-dense diet one can eat with all of the necessary nutrients in proper proportions. Moreover, the nutrients in fruits and vegetables are readily absorbed by the body.

# Digestive Load

Heavy and complex foods like meat and dairy require longer digestive times and thus require more energy to process. This tremendous digestive load results in stress that taxes the body. For the athlete, this means less energy for the body to devote to recovery. Low-fat whole plant foods like fruits and vegetables not only supply an optimal dose of nutrients, they are also easily digested and assimilated. Athletes who consume a whole food, plant-based diet have an advantage over those who eat animal foods because they are reducing digestive stress.

# Lifestyle Factors

You can eat the best diet in the world, but how you live will also affect your ability to assimilate nutrients and respond to training. The following lifestyle habits should also be considered as part of "good nutrition."

- Exercise: Athletes usually don't have a problem getting enough exercise, but one's training load must be considered in relation to one's whole lifestyle. Training for endurance, strength, speed, flexibility, and coordination should be balanced according to one's athletic goals in order to prevent injury and maximize enjoyment.
- Rest/Sleep: "Races are won in bed," a wise coach once said. Adaptation to training occurs when the body can recover. If you're waking up groggy or need coffee and stimulants to get the day going, you're probably not getting enough sleep.
- 3. *Minimizing Stimulation*: One of the most popular stimulants among athletes is caffeine. The body must use energy and nutrients to expel the toxins in coffee and caffeinated sodas. This is a waste of energy that an athlete could be putting towards recovery or training.
- 4. *Sunshine*: Sunshine is important for more than just vitamin D. Natural sunlight plays a critical role in regulating our bodies' endocrine system and sleep patterns.
- 5. *Clean water*: Dehydration will rapidly impair athletic performance, but the impurities found in most tap water and bottled water may affect health in the long run. Distilled or reverse osmosis filtered water in non-leaching containers should be preferred.
- 6. Clean air: The average adult's lungs have a surface area of 100m<sup>2</sup>. This is a huge filtering system for air pollutants. For athletes living in or near cities clean air is hard to find. Do the best you can by training away from major traffic arteries and industrial areas.
- 7. *Emotional Health*: Anger, disappointment, frustration, doubt, and worry can quickly ruin one's athletic experience. Much has been written on sports psychology in the past several years, and these books, as well as practices such as yoga and meditation, are helpful in finding equanimity.
- 8. *Community*: A supportive group of friends or relatives makes a healthy lifestyle and achieving fitness goals much more enjoyable and attainable.

# Carbohydrates

The cornerstone of an athlete's diet

# Why are carbohydrates critical?

Even if you've never experienced "hitting the wall," you've probably heard about it. The dreaded bonk is the athlete's worst nightmare. One minute you're running comfortably, the next you can barely walk. When the body runs out of carbohydrate supplies, it goes into survival mode and athletic performance is compromised.

Carbohydrates are essential fuel for every cell in the body, and glucose (a simple sugar) is the primary form of energy in the body. Glucose not only supplies energy for the body, it is also an important precursor for protein production and lipid metabolism. Keeping the body's carbohydrate stores topped off, then, is essential for optimal nutrition. By choosing the proper foods for fueling our cells, you can avoid the bonk and maintain energy levels throughout exercise.

# Which carbohydrates are best for fueling activity?

What sporting event is complete without a spaghetti dinner? We've all heard that athletes should consume lots of "complex carbs" like pasta, bread, and grains. Complex carbohydrates are usually considered the best source of carbohydrates, and indeed these foods are rich in them. But in terms of nutritional density, fresh, ripe fruit is more easily digested and supplies more nutrients.

and supplies more nutrients per calorie than starchy alternatives.

Where breads and starchy foods can take up to twentyfour hours to digest, a meal of fruit digests and begins fueling your cells within minutes. Processed sugar justifiably got a bad reputation because of "Plant-based diets are naturally high in the most healthful forms of carbohydrates, helping athletes maximize glycogen stores, and allowing for harder work for longer periods of time." -Brenda Davis, RD

its nutritional bankruptcy, but simple sugars that come from *whole foods* have been unfairly lumped into this same category. Fruits provide a complete package of readily available carbohydrates and an array of vitamins, minerals, enzymes, co-enzymes, and electrolytes to provide balanced nutrition for all cellular actions.

### Seeking sweets

You may consider a sweet tooth the bane of your existence, but did you know a sweet tooth does have a purpose? To satisfy our appetites and biological need for simple sugars we seek them out in whichever form we can find them. Fructose, the primary sugar in fruit, is easily converted into usable glucose and also tastes sweet. Our need for glucose is undeniable, and fruit is the most readily available. healthful source of simple sugars. Unlike starchy foods, which require cooking in order to be made palatable, fruit requires minimal preparation time. The next time you feel you need to refuel your muscles or just have a meal, consider fruit as an optimal fuel.

### Are you eating enough?

Sometimes people transitioning to a

### Counting carbs

The anti-carb craze has people running from carbs. But to run faster, you should run towards carbohydrates from whole foods. Most sports nutritionists recommend 70-80% of calories consumed should come from carbohydrates. For an athlete eating 3000 calories that equates to 525 to 600 grams of carbs per day. In terms of whole foods that would equal:

- 12-13 cups brown rice
- 17-20 large bananas
- 20-22 medium potatoes
- 29-33 large oranges
- 53-60 figs

plant-based diet experience low energy levels. Often this is because people are not consuming enough calories. Animal-based foods are generally more calorically dense due to high fat content. A hamburger, for example, contains around 500 calories. 5-7 bananas would have to be consumed for the same amount of calories. This means a larger volume of food must be consumed, but in the end the body is supplied with far superior nutrition.

# The case of the Kenyans

A study of the diet of Kenyan runners found over 80% of their calories come from carbohydrates. The same is true for the Tarahumara Indians, the legendary marathon runners from Mexico. By the very nature of their profession, top athletes consume large amounts of carbohydrates. Animal foods, with the exception of dairy, are devoid of carbohydrates. Most athletes consume carbohydrates from processed foods like bread and refined sugar. All athletes – even the Kenyans – would do well to increase their consumption of whole foods as a main source of carbohydrates.

# Fats

A little goes a long way

### What is a fat?

Like carbohydrates, fats are composed of carbon, hydrogen and oxygen, but the number of carbon and hydrogen atoms far outnumber that of oxygen in fats. Fats are used by the body primarily for insulation, lubrication, and as a stored fuel source. Except for fat, the body does not have the capacity to store excess nutrients to any great degree. All excess calories, no matter their source, are stored as body fat. One gram of fat yields over twice as many calories as one gram of carbohydrate or protein, and for this reason fat is often misconceived as an ideal fuel source.

# Are all fats created equal?

Modern research has repeatedly shown that polyunsaturated and monounsaturated fats from plants are the best sources of fat for human consumption. The largely saturated fats found in animal foods have been linked to ailments such as heart disease, diabetes, and obesity.

While the average Americans' daily intake of refined fats and oils has increased by 216% since 1970, only two types of fat are essential in the diet: alpha-linoleic (an omega-6 fat) and alpha-linolenic (an omega-3 fat). From these two fatty acids all other non-essential fats can be manufactured by the body. These nutrients help with the clotting and flowing of our blood, the health of our skin, and brain development.

# **Essential Fat Ratios**

A healthy diet includes omega-6 to omega-3 fats at a ratio of 4:1 or less. Because refined oils, used in cooking and processing foods, contain high levels of omega-6 fat and little omega-3 fat, most Americans consume a ratio of 10:1 or higher.

# Smells Fishy

Many fish such as salmon are touted as a great source of omega-3 fatty acids. While some fish do contain this essential nutrient, leafy greens and certain seeds, such as flax, are better sources as they contain more nutrients and fiber but do not contain mercury and other pollutants. The daily recommended intake of omega-3s is around 2-4 grams per day. This amount is easily met with whole plant foods.

Omega-3s per serving:

- Flax (per tbsp): 2.3g
- Romaine Lettuce (per head): 0.7g
- Walnut (1oz): 2.5g

# Why are carbohydrates a better fuel than fats?

Like all other non-carbohydrate foods, fats must be broken down into glucose before they are available to fuel activity. This is done by a process called oxidation. Through oxidation the body attaches oxygen to the chains of fatty acids to convert them into monosaccharides. This process is only efficient when there is enough carbohydrate to fuel the activity. When there is insufficient carbohydrate to fuel the conversion of fats to sugars, you will "hit the wall."

The consumption of fats as a primary fuel source also decreases your body's ability to carry oxygen. Any endurance athlete should recognize the importance of our oxygen carrying ability. Decreased ability to transport oxygen to your muscles and brain limits your body's capacity to perform.

# Aren't fats good to help slow the absorption of sugars?

Fats do play an important role in our ability to utilize carbohydrates effectively. However, when excess fat is within the bloodstream due to an elevated dietary intake, the lining of our vessels, the blood cells, the insulin, and the glucose are coated with fat. This coating is slick and prevents insulin from performing its role of transporting glucose out of the bloodstream to fuel the cells, because it cannot attach to the glucose. This fosters sustained high blood sugar levels which are related to many different diseases including diabetes and candida. It also limits your ability to transport fuel to the muscles for recovery and for use during activity.

# Protein

Where do you get your protein?

Of all the misconceptions about plant-based diets, the protein issue is the most misunderstood. The truth is that so long as you consume adequate calories to meet your energy needs, it is virtually impossible to not get enough protein from whole plant foods.

In his article "Muscling Out the Meat Myth," Professor Emeritus of Nutritional Biochemistry at Cornell University T. Colin Campbell, Ph.D., writes, "Around the beginning of [the 20th] century, scientists came to believe--erroneously--that animal protein led to improvements in sport competitiveness." They believed that animal flesh, milk, and eggs stimulated body growth more "efficiently" than plant protein. Campbell continues, "Efficiency, in this sense, meant that by eating animal protein one could gain more body weight per pound of protein consumed. Efficiency, or high quality, can also mean speeding up all manner of body functions." Contemporary research links the consumption of animal protein with "speeding up" rates of chronic diseases, including heart disease, cancer, diabetes, and osteoporosis.

### What are proteins?

Proteins are the building blocks of all life. The easiest way to explain protein is with the analogy of the alphabet. Amino acids represent the letters of the alphabet. There are 20 amino acids found in human

proteins. When these amino acids (letters) are combined, we make words (proteins). Depending on the combination of these amino acids, we can come up with literally thousands of protein combinations specific to the human body. Only eight amino acids cannot be synthesized by the body, making them essential to the human diet. All the essential amino acids are present in plants, so a diet rich in whole plant foods will meet your amino acid needs.

# How much protein do we need?

According to international scientific organizations, including the World Health Organization, human dietary protein needs range from 2-10% of total calories. The average American takes in 120-158% more than the recommended daily allowance. Even the USDA's *Dietary Guidelines for Americans* says, "Protein is not limiting in vegetarian diets as long as the variety and amounts of foods

Protoin Contont of C	ommon Eooda		
Protein Content of Common Foods			
as percentage o	Brotoin		
<u>FOOU</u>	Protein		
Apricots	10%		
Asparagus	27%		
Bananas	4%		
Beef, ground (avg)	50%		
Broccoli	20%		
Cabbage	15%		
Carrots	6%		
Cheese, cheddar	26%		
Cherries	6%		
Corn	10%		
Cucumbers	11%		
Egg, poached	37%		
Grapes, red	4%		
lce cream, choc.	8%		
Kale	16%		
Lettuce, green leaf	22%		
Milk, whole	23%		
Oranges, Valencia	7%		
Peaches	8%		
Potatoes, baked	7%		
Rice, white	8%		
Spaghetti	14%		
Spinach	30%		
Strawberries	7%		
Tomatoes, red	12%		
Watermelon	7%		

consumed are adequate." For an athlete consuming 2500 calories per day, 2-10% translates into 12.5-62.5 grams of protein per day, which is easily met on a whole food, plant-based diet.

Do athletes need more protein than the average person? Yes, but *in direct correlation to an increase in calories consumed*. Active people will need to consume more calories to meet their energy needs. These needs are easily met with whole plant foods. Many sports nutritionists recommend as much as 1.5 grams of protein per kilogram of body weight. This does not mean athletes should be eating concentrated protein foods like meat, fish, eggs, or protein supplements. In fact, according to Thomas Incledon, M.S., R.D. they should pay more attention to their calorie intake. It takes 2,700 calories of energy to produce 1 pound of lean muscle. Consider this: a 70 Kg (150 pound) sedentary male consumes a 2000 calorie diet of potatoes, beans, and broccoli. This gives him 56 grams of protein per day (0.8 g/Kg). He starts training for the Boston Marathon and increases his calorie intake to 4000 calories a day. Eating the same diet, he is now getting 112 grams of protein or 1.6 g/Kg.

### **Protein and Recovery**

The body becomes stronger and faster with the adaptations from training; therefore, recovery is tantamount to athletic development. Protein is commonly and incorrectly viewed as an energy food that will help you recover faster. If you're feeling weak and tired, the thought goes, you need to eat more protein. Recovery does not occur because of increased dietary protein. Growth and repair happen best when the conditions needed for recovery are met: adequate nutritional intake of carbohydrates, protein, essential fats, vitamins and minerals, and sufficient rest and relaxation. The first of these conditions is best met on a whole food, plant-based diet, and insufficient rest and sleep are often overlooked as a cause of low energy and poor recovery.

# **Protein Supplements**

The health and sports nutrition marketplace is clogged with protein supplements heralded as the elixirs that will help you recover fast or gain muscle. Many athletes will take a protein supplement just to be "sure" they get enough protein for recovery. Yet supplements are one of the most processed foods you can buy. Most of the nutrition that the original food had is lost in the refining process. Athletes should give their bodies exactly what they need nutritionally. Whole plant foods do just this.

# Fiber Whole, plant foods aid the digestive system

Fiber is an essential nutrient that comes in two main forms, soluble and insoluble. Soluble fiber literally dissolves in water. Soluble fibers, such as guar and pectin, hold water and help to soften stools and also prevent sugar uptake from being too rapid. Insoluble fibers tend to be coarser than their soluble counterparts. Cellulose is an insoluble fiber, as is bran. The softer insoluble fibers, such as those found in fruit and tender vegetables, provide bulk that enables the peristaltic action of the intestines to move food through the digestive track at the appropriate speed. The tougher and sharper insoluble fibers found in cereals and whole grains irritate the delicate intestinal lining, speeding the passage of food through the length of the intestines, often to the degree that the uptake of nutrients is compromised. Whole foods provide our best source of fiber, and the healthiest fibers for us is that found in fresh fruits and tender vegetables.

# Vitamins and minerals

You can't beat fruits and vegetables

For many years, nutritionists thought that certain minerals such as iron and calcium were deficient in vegan and vegetarian diets. On a whole food, plant-based diet that emphasizes fruits and vegetables, this is not a concern. All of the known essential nutrients can be found in whole, fresh fruits and vegetables. If you compare the total vitamin and mineral profile of all the food groups, fruits and vegetables come out ahead of grains, legumes, nuts and seeds, and all animal products.

Just because a food contains a vitamin or mineral does not necessarily make it a good source. Milk, for example, contains calcium, but relatively few other vitamins and minerals. it also contains pus, hormones, and casein, a highly allergenic protein in humans. Dark leafy greens have calcium, plus many other vitamins, minerals, and phytonutrients. Animal foods and grains have to be "enriched" to make them nutritionally complete. Fruits and vegetables already contain a broad profile of essential vitamins and minerals, as well as carbohydrates, essential fatty acids, and protein.

# Electrolytes How much salt do you need?

Electrolytes are mineral salts that your body uses to maintain homeostasis. Sodium, potassium, calcium, chloride, magnesium, bicarbonate, and phosphate are all critical electrolytes that the body needs to maintain osmotic gradients between intracellular and extracellular fluids. The balance between them affects hydration and blood pH and is essential for nerve and muscle function.

Most sports drinks contain a high concentration of common table salt (NaCl). One 32oz bottle of Gatorade contains 440 mg of sodium. One of the rationales for consuming more sodium during exercise is that the body excretes more sodium when sweating heavily. You've probably seen athletes caked in salt after a hot day of exercising. Is this a sign that the athletes need more salt or that the body is taking the opportunity to rid itself of excess salt? These athletes are covered in salt because

they have too much salt in their diet. The excess salt is excreted as a waste product in their sweat. Thus, the caked salt is a sign that salt consumption should be decreased, not increased.

The body actually needs only a small amount of sodium (250-500mg daily) to function optimally. This amount is easily met by eating whole, unprocessed foods and rapidly exceeded by eating processed, salty foods. The average American consumes an estimated 10g of salt daily. One quarter of a teaspoon of salt has 600 mg of sodium.

Meeting one's electrolyte needs is quite simple when eating a whole food, plant-based diet. Fruits and vegetables contain all the electrolytes that the body needs in easily digestible and utilized forms.

### Eat Your Greens!

by Bradley Saul

Leafy vegetables such as lettuce, kale, spinach, and chard are full of vitamins and minerals. Most people consider a salad a side dish. Why put the healthiest, most nutritious part of meal to the side? Celebrate it! I have a large salad every night that consists of at least one head of lettuce, assorted vegetables, and a delicious dressing of blended fruits. I can have a salad dinner ready to go in less than ten minutes without compromising the nutritional quality of the typical "fast" food. Sometimes I just eat a head of romaine lettuce plain. It's so sweet!

# Building Strength and Muscle

Vegan bodybuilders get huge!

If we listened to the logic of mainstream nutrition information, it would seem that all we need to do to build muscle is eat protein and plenty of it. But if we randomly selected an un-athletic individual and modify his diet, dramatically increasing the amount of protein, would his muscles begin to grow? No. Training is the stimulus that increases strength and muscle size.

Muscle grows as a result of hard training and recovery. One's protein requirement increases in proportion to the total energy needed to fuel the body. A plant-based diet provides sufficient protein for muscle growth, as demonstrated by bodybuilders who eat a vegan diet.



Kenneth Williams is In Defense of Animals' (<u>www.idausa.org</u>) national spokesperson for a vegan diet. Kenneth has won bodybuilding tournaments and is an obvious example that getting enormous muscles is possible on a vegan diet.

Charlie Abel is a raw food bodybuilder. He eats fruits, vegetables, nuts, and seeds. His website is <u>www.charliesgym.us</u>. Charlie presented a workshop on "Raw Vegan Bodybuilding" at the 2005 OrganicAthlete Conference. A DVD of this is available at our online store.



Kenneth Williams

# Fueling for Endurance

Going the distance on whole plant foods

The science of endurance nutrition has advanced dramatically in the last several decades. Much has been learned about the importance of carbohydrates, electrolytes, and other nutrients. But today we have hundreds of "scientifically formulated" products which claim to be the next great energy food.

For workouts and events over 1.5 hours it is critical to take in some form of fuel in order to maintain blood sugar and avoid the "bonk." During long workouts, bike rides, or runs, the most nutritionally dense fuel source is fruit. Fruit contains the sugars, proteins, essential fats, vitamins, and minerals necessary for proper fueling.

Dates, bananas, and dried fruit are great foods for training. The concentrated calories and carbohydrates in dates make them ideal for carrying with you during any event. They tend to be firm so they do not crush as easily as other fruits may. If you like the convenience of energy gels and processed sports drinks, fruit can also be prepared to be easily stored in a pocket or water bottle. For more on this, look at the sports drink and



energy bar recipes in the recipe section on our website.

### The Glycogen Window

After long or difficult training sessions, the body may have utilized most of its glycogen stores. Consume carbohydrates within 2 hours of exercise in order to restore glycogen stores to their maximum level. During this time, the body's metabolism is primed to convert blood sugar into glycogen. A post-workout fruit smoothie is a great way to replenish yourself.

# Supplements

by Randall Phelps

It seems as if we are constantly being bombarded with advertisements for the latest dietary supplements: "Amazing new herbs boost athletic performance!," "Take these antioxidants to prevent cancer!," "Special protein formulation yields maximum muscle growth!," "Alleviate your ailments with new super-absorbable vitamins!," or "Lose weight with breakthrough discovery!" We are then told that some ingenious doctor has discovered the miracle substance that will make us thinner, stronger, smarter, or better at whatever we do. Best of all, we are told, this supplement works without any real effort and has absolutely no side effects. All we have to do is dig deep into our pockets, hand over our money, and then swallow the miraculous elixirs.

Additionally, doctors and many health and fitness magazines would have us believe that without the benefits of supplemental vitamins, minerals, amino acids, herbs, botanicals or some concentrate, extract or mixture of these, it is not possible to succeed with our health and fitness goals. Even the die-hard skeptic may find himself wondering if he should take a sulfur-based supplement for the worn cartilage in his knees, or the latest green powder for his receding hairline.

So, are we to assume these products are safe and effective? Should we take them as "insurance" against deficiencies, as many do? In many cases, no one really knows. The U.S. Food and Drug Administration does not check on the safety or effectiveness of dietary supplements before they are put on the market. The FDA must wait until it receives reports of problems caused by a supplement before it can investigate and ban it. This process can take years. Meanwhile, those who take dietary supplements are volunteering, even paying, to be the manufacturer's guinea pigs at the risk of their own health.

Each supplement is taken for specific reasons, and while some ailments may improve, the side effects and nutritional imbalances eventually make them "detriments" instead of "supplements," as Dr. Douglas Graham, President of Healthful Living International, has said.

What side effects? According to the New England Journal of Medicine, lead poisoning, impotence, lethargy, nausea, vomiting, diarrhea, and abnormal heart rhythms top the list of disorders resulting from taking powerful herbs and vitamin pills. These supplements often contain toxic contaminants and even potent drugs and hormones in products that are labeled as "all natural" and "drug free". In one study, 83 of 260 supplement samples were found to contain poisonous heavy metals such as lead, arsenic or mercury, or drugs not listed on the label. All of this doesn't even begin to take into account the long-term nutritional imbalances that are inevitably created by favoring certain nutrients in abnormally heavy doses.

In spite of all these problems, according to a 2002 survey, 75% of American adults are confident in the safety, quality, and effectiveness of dietary supplements, and 94% of consumers trust doctors or other health care professionals for reliable information on supplements.

Health experts agree that the best way to get all the nutrients you need is to get them from your foods, as has been done from time immemorial. Nutrients must be present in specific, complex ratios with other nutrients in order to perform their functions. Too much of one nutrient will interfere with the effectiveness of another nutrient or may even build up to toxic levels in body fat. There are many more substances in our foods besides those that we have managed to name, measure, and isolate. Those nutrients that we have not discovered are already present in our foods, just waiting to synergistically interact with just the right proportion of other nutrients to nourish our bodies optimally.

Our nutritional needs are easily met by basing our diet on fresh fruit, green vegetables, and small amounts of nuts and seeds. These fresh

organic foods most closely mirror the nutrient ratios that our bodies thrive on. Anything less than whole foods disrupts our bodies' nutritional balance to our long-term detriment, even if it does help one specific ailment short-term.

Now is the time to decide. Are we going to be gullible guinea pigs supporting supplement



companies, on the gamble that we will somehow benefit, or should we trust in the time-tested science of natural history?

Randall Phelps studied at Heidelberg College and New Mexico State University and has been competing as a runner and triathlete for over 20 years. His supplement-free diet has evolved through many years of study and experimentation.

# Guidelines for Healthy Nutrition

What to think about when choosing food

In the following sections are four sample meal plans for vegans and raw vegans. The meal plans demonstrate what a simple healthy whole food vegan diet might look like.

OrganicAthlete does not create individualized meal plans nor make individual dietary recommendations. We educate people about plantbased nutrition and encourage individuals to do their own research and consult with health professionals for specific plans. The following guidelines are meant to give you a basis for choosing foods.

- Eat plants. No animal products are necessary for maintaining a healthy athletic lifestyle. Whole plant foods are nutritionally superior to meat, dairy, and eggs.
- Eat organic foods. Organic foods support ecologically responsible farming practices and have been scientifically shown to contain more nutrients.
- 3) Choose whole foods. Processed and fractionated foods offer less nutritional value compared to their whole food counterparts.
- 4) Eat a varied diet. No matter how healthy a food is, eating the same food all the time is a nutritional stalemate.
- 5) Eat immediately after you work out. It's important to replenish glycogen stores after exercising.
- 6) Raw is good. Fresh uncooked fruits and vegetables are the most nutritionally complete foods you can eat.
- 7) Shop local. Buying locally grown produce keeps the money in our communities, uses less energy and is often fresher.
- 8) Drink plenty of fluids. Drink before, during and after working out. Dehydration can greatly diminish athletic performance.

### Find more meal plans at our website in the articles section.

# Sample Meal Plan #1: Raw Vegan

#### Breakfast: Blueberry Mango Salad

16 oz. blueberries

24 oz. mangoes (about 5-6)

Directions: Peel mangoes and remove seed. Dice into bite-size chunks, and toss into a bowl with blueberries. Enjoy!

Blueberry Mango Salad	Carb	Protein	Fat
Grams	181	7	3
Calories	724	28	27
% Total calories	93	4	3
Total calories for this meal	779		

#### Lunch: Banana Smoothie

45 oz. banana (about 9 large)

Directions: Blend with enough water for your preferred consistency. Simply Delicious.

Banana Smoothie	Carb	Protein	Fat
Grams	293	14	5
Calories	1170	54	41
% Total calories	93	4	3
Total calories for this meal	1265		

#### Dinner: Course 1: Mango Tomato Soup

16 oz. mangoes (about 3-4)

12 oz. tomatoes (about 2 large)

Directions: Peel and pit the mangoes, toss with tomatoes into a food processor, blend, and devour!

Mango Tomato Soup	Carb	Protein	Fat
Grams	90	5	2
Calories	360	20	18
% Total calories	91	5	4
Total calories for this meal	398		

#### Dinner: Course 2: Tomatavo Salad

1 avocado (about 7 oz.)

12 oz. tomatoes (about 2 large)

1 1/2 lb. romaine lettuce (about 1 large head)

Directions: Tear the lettuce into a large bowl. Peel and core the avocado, dice into chunks. Chop the tomatoes roughly, toss with the avo, and arrange over the lettuce.

Tomatavo Salad	Carb	Protein	Fat
Grams	53	15	32
Calories	212	60	288
% Total calories	38	11	51
Total calories for this meal	560		
Daily Totals	Carb	Protein	Fat
Daily Totals Grams	<b>Carb</b> 617	Protein 41	Fat 42
Daily Totals Grams Calories	<b>Carb</b> 617 2466	<b>Protein</b> 41 162	<b>Fat</b> 42 374
Daily Totals Grams Calories Caloronutrient ratio for the day	Carb 617 2466 83	<b>Protein</b> 41 162 5	<b>Fat</b> 42 374 11

# Sample Meal Plan #2: Raw Vegan

#### Breakfast: Black Pear Salad

12 oz. blackberries

24 oz. pears (about 4 medium)

Directions: Peel and core pears. Dice, and arrange in alternating layer with blueberries in a clear bowl.

Black Pear Salad	Carb	Protein	Fat
Grams	138	7	2
Calories	495	26	20
% Total calories	91	5	4
Total calories for this meal	541		

#### Lunch: Persimmon Pudding

48 oz. persimmon (about 8)

Directions: Peel and remove seeds. Mash into a bowl. Absolutely scrumptious.

Persimmon Pudding	Carb	Protein	Fat
Grams	456	11	5
Calories	1645	39	44
% Total calories	95	2	3
Total calories for this meal	1728		

#### Dinner Course 1: Pineapple Cuke Soup

24 oz. pineapple (about 1.5)

12 oz. cucumber (about 1)

Directions: Peal and core pineapple, toss everything into a food processor, and devour!

Pineapple Cuke Soup	Carb	Protein	Fat
Grams	93	6	1
Calories	336	20	11
% Total calories	92	5	3
Total calories for this meal	367		

#### Dinner Course 2: Sweet and Tart Salad

1 1/2 lb spinach

20 oz. oranges (about 4-5)

Directions: Place spinach in a large bowl. Save one orange, peel the rest, and separate into sections. Toss orange pieces with the spinach, and squeeze the remaining orange over the top.

Sweet and Tart Salad	Carb	Protein	Fat
Grams	78	24	3
Calories	265	81	24
% Total Calories	72	22	6
Total calories for this meal	370		
Daily Totals	Carb	Protein	Fat
Daily Totals Grams	<b>Carb</b> 765	Protein 48	<b>Fat</b> 11
Daily Totals Grams Calories	Carb 765 2741	Protein           48           166	<b>Fat</b> 11 99
Daily Totals Grams Calories Caloronutrient ratio for the day	Carb 765 2741 91	Protein           48           166           6	<b>Fat</b> 11 99 3

# Sample Meal Plan #3: Vegan

#### Breakfast: Fruit Smoothie

- 3 cups orange juice
- 3 bananas

Directions: Blend ingredients.

Fruit Smoothie	Carb	Protein	Fat
Grams	159	10	3
Calories	636	41	24
% Total calories	90	6	4
Total calories for this meal	701		

#### Lunch: Potato Salad

- 9 medium potatoes, boiled and cubed
- 1 cup cucumber & tomatoes, diced

 $^{1\!\!/_{\!\!2}}$  cup parsley or cilantro, minced

1/2 lemon

Directions: Mix all ingredients together to make a potato salad. Spice to taste.

Potato Salad	Carb	Protein	Fat
Grams	249	24	1
Calories	996	94	12
% Total calories	90	9	1
Total calories for this meal	1102		

#### Dinner Course 1: Large Salad

1 head romaine lettuce, 1 nectarine, and 1 tomato

Directions: Blend nectarine and tomato to make a dressing.

Large Salad	Carb	Protein	Fat
Grams	41	10	3
Calories	164	40	26
% Total calories	71	18	11
Total calories for this meal	230		

#### Dinner Course 2: Quinoa with Vegetables and Lemon Tahini Sauce

1 cup each: broccoli, carrots, quinoa

Sauce: 1/2 lemon, 2 tbsp tahini, water

Directions: Rinse and drain quinoa. Bring 2 cups water to a boil. Add quinoa. Cover, reduce heat to low and simmer for 10 minutes. Add vegetables and let cook for another 5 minutes. For the sauce, blend lemon and tahini with enough water for desired consistency.

Quinoa with Vegetables	Carb	Protein	Fat
Grams	149	34	27
Calories	596	135	241
% Total calories	61	14	25
Total calories for this meal	972		
Daily Totals	Carb	Protein	Fat
0			
Grams	598	78	34
Calories	598 2392	78 310	34 304
Calories Caloronutrient ratio for the day	598 2392 80	78 310 10	34 304 10

# Sample Meal Plan #4: Vegan

#### Breakfast: Fruit and Cereal

1/2 cup millet

2 apples

4 bananas

1 cup blackberries

Directions: Bring 1.5 cups water to boil. Stir in millet and simmer for 25 minutes. Remove from heat. Mix in apples, berries, and chopped bananas. Add cinnamon to flavor. Serve.

Fruit and Cereal	Carb	Protein	Fat
Grams	148	10	4
Calories	570	39	32
% Total calories	89	6	5
Total calories for this meal	643		

#### Lunch: Bananas, Dates, and Celery

5 bananas, 10 medjool dates, 2 celery stalks

#### Directions: Eat separately or blend into a smoothie with water.

Bananas and Dates	Carb	Protein	Fat
Grams	281	10	2
Calories	1126	41	20
% Total calories	95	3	2
Total calories for this meal	1187		

#### Dinner Course 1: Large Salad

1 head romaine lettuce, 2 tangerines

#### Directions: Blend tangerines to make a dressing.

Large Salad	Carb	Protein	Fat
Grams	43	10	3
Calories	172	39	23
% Total calories	73	17	10
Total calories for this meal	234		

#### Dinner Course 2: Spinach, Lentil, and Brown Rice Burrito

1/2 cup brown rice	2 tomatoes
1/4 cup lentils	1/2 avocado

2 cups fresh spinach

Large whole wheat tortilla

Directions: Bring 1 <sup>3</sup>/<sub>4</sub> cups water to boil. Add lentils and rice. Cover, reduce heat to low, and simmer for 1 hour. Stir spinach into hot rice. Wrap all ingredients into torilla. Serve with salsa if desired.

Burritos	Carb	Protein	Fat
Grams	150	31	26
Calories	599	123	232
% Total calories	63	13	24
Total calories for this meal	954		
Daily Totals	Carb	Protein	Fat
Daily Totals Grams	Carb 622	Protein 60	Fat 34
Daily Totals Grams Calories	Carb 622 2487	Protein           60           241	<b>Fat</b> 34 307
Daily Totals         Grams         Calories         Caloronutrient ratio for the day	Carb 622 2487 82	Protein           60           241           8	<b>Fat</b> 34 307 10

# **Recipe Ideas**

Simple and fresh

# Nature-made Energy Food

The best energy foods available are the ones that nature made. These foods are easily carried in a backpack or jersey pocket during a hike, run or bike ride.

- Bananas
- Dates
- Fresh figs

- Dried figs
- Raisins
- Dried apricots

# **Energy Drinks**

For an easy to prepare energy drink, soak your favorite dried fruit in a water bottle. The soak water is a carbohydrate and nutrient rich energy drink. Use the soaked fruit in a smoothie after your workout. You'll have to experiment to find the concentration you like. Another great energy drink is watermelon. Blend watermelon, strain out the seeds, and enjoy!

### Salad Dressings

A daily salad is a nutritious and delicious part of a whole food, plantbased diet, and simple salad dressings of 2-3 ingredients can be prepared in short order. Here are some examples: orange-tahini, tomato-mango, blackberry-celery, lemon-pinenut, or tomatillo-basil.

# Fresh Is Best

Health food store shelves are packed with vegan energy bars, cookies, and snacks. Most of these qualify as junk food. Simple, fresh

ingredients are more tasteful and more nutritious.

### Simple Works

Eating for performance need not be a gourmet task. Simple nutritious meals of whole plant foods can be prepared in five minutes or less.

### **Recipe Resources**

We have lots of recipes at our

website, www.organicathlete.org. Check the websites in the resources section for more recipe ideas.

# Saving Our Environment

One Bite at a Time

Environmental issues are getting unprecedented media attention and global warming is an especially critical topic. Many scientists researching global warming say that it's worse than they previously thought. Polar ice caps and glaciers are melting rapidly. Biologists are

tracking widespread changes in species diversity and populations. And some predict vast ecological, economic, and human disasters if we don't turn the situation around.

Most recommendations for environmental action stop short of the one thing you can do that is even more effective than not driving a car. Yes, eating a plant-based diet is not only good for you, it's good for the environment too.



# How a Plant-based Diet Reduces Your Ecological Footprint

• Water and Resource Consumption

1 *pound* of beef requires 2500-5000 gallons of water to produce. That's enough to shower every day for a year! 95% of the grain in the US is grown for animal feed, and that's just the tip of the (melting) iceberg of the resources that a meat-centered diet consumes.

# • Factory Farming

Most meat and dairy in the United States is "farmed" in horrible conditions that compromises the health of the animal, the consumer, and the surrounding environment. These farms concentrate huge amounts of toxic effluent that runs off to poison our waters.

# Deforestation

According to the United Nations, 37.5 million acres of rainforests are cut down annually. Much of that land is converted to cattle ranches. Once cut down, rainforests are extremely difficult to regenerate.

# The Ethical Athlete

The strength of compassion

"Sports serve society by providing vivid examples of excellence." -George F. Will

As athletes we are not only participating in our sports, we are actively shaping our culture. No matter our level of athletic performance, we are role models for health and fitness. This is a tremendous power. We have the choice to aim this power towards living, training, and competing in a way that benefits all life.

Each day, millions of animals are needlessly killed and tortured to feed the world. The people who eat the most animal products also suffer the most disease, but the meat, dairy, and fast food industries have co-opted the athletic image to further the idea that animal products are necessary for health and strength.

We, as athletes, as people who want to demonstrate what we're physically capable of, can reclaim the position as symbols of health and strength. We can choose to eat a plant-based diet that is simultaneously healthy for our person and our planet. Let's be "vivid examples of excellence" for a sustainable, healthy future by fueling our bodies with whole fresh organic plant foods.

# The Power of Example

Is a vegan diet for everyone?

We cannot escape the history and culture of meat-eating, and athletes are not immune to the influence of a society that encourages meat consumption. Most people do not consider giving up animal products. Many are afraid. Some have tried some version of a vegan diet but for one reason or another resumed eating animal products. Many people do eat a vegan diet and have done so for much, if not all, of their lives. Is someone right, and someone wrong?

OrganicAthlete encourages the individual to decide for him or herself what is best. We do believe that, contrary to popular belief, people *can* thrive on a plant-based diet. We're not here to tell people what to do or how to live, but to demonstrate by living example that consuming more whole plant foods is definitely a good idea.

# Choose Organically Grown

Better for you and the planet

"Without a doubt," says pro cyclist Christine Vardaros, "organic foods are always my preference." Many top athletes are making the commitment to fuel themselves with organically grown foods. Is organic that much better? If so, why?

# What is Organic?

Organic growers use different growing methods than conventional farmers. To become certified organic, farmers must meet stringent standards for growing and processing. USDA regulations prohibit the use of genetic engineering, ionizing radiation, and sewage sludge in organic production and handling. Organic growers generally use more sustainable farming practices that conserve water and other resources.



# Quality

Organically grown fruits and vegetables have consistently higher amounts of essential vitamins, minerals, and other nutrients compared to their conventionally grown counterparts. "As an elite athlete concerned about health and appearance for my sport of bodybuilding," says bodybuilder Robert Cheeke, "I feel that organic foods give me the essential nutrients I need, without the stuff I don't need, and provide an athletic edge over those who don't eat organic." In one recent study, antioxidant levels were about 30 percent higher in organic food compared to conventional food grown under the same conditions.

# Uncontaminated

Organic foods are free from pesticides and other chemicals known to be toxic to the human body. As pro triathlete Brendan Brazier points out: "As an athlete the removal of stress from the body is critical to facilitate quick regeneration. The consumption of toxins such as pesticides and herbicides is an added stress on the body; it must eliminate them." Many pesticides have severe documented effects on human health. You can avoid these damaging effects by choosing organic.

# Where and How to Buy Organic

Shop local first

Farmers have been growing organically for centuries. But with the "Green Revolution" of the twentieth century, the use of dangerous pesticides and their proliferation by chemical manufacturers became widespread. The organic movement is growing rapidly in response to consumer demand for safe clean food. In 2001, the USDA created the organic labeling program which mandates that food labeled and marketed as organic meets certain standards.

# Local Farmer's Markets, CSAs, and Farm Direct

The best place to buy your fruits and vegetables is fresh from the field. Farmer's Markets are seeing a revival all over the country, where smallscale organic growers find a market niche. Another buying option is Community Supported Agriculture, or CSA, where you pay a membership subscription fee (usually once per season) for a weekly box of fresh produce delivered to your door or to a local pick-up location. For more on where to find organic growers, markets and CSAs in your area, visit www.localharvest.org.

# **Health Food Stores**

Health food stores are where most people find their organic food. With several national chains, organic food is now readily available in many US cities. Small-scale cooperative grocers often rely on local farmers for their produce. For more on where to find a health food store in your area, try these websites: www.cooperativegrocer.coop, www.wholefoods.com, www.healthyhighways.com, or www.happycow.net.

# Tour d'Organics

OrganicAthlete organizes a series of bicycle rides that feature local organic food and farms. As organic farming enriches the earth, the Tour d'Organics enriches your body, mind, and spirit with a fitness challenge, good company, and fresh locally grown organic food. For more information, visit www.tourdorganics.com.



Enjoying the Bounty at the Tour d'Organics Photo by Rachel Donovan

# Transition Zone

Making the Switch to a Vegan Diet

Changing from the Standard American Diet (SAD) to a whole foods, vegan diet may seem daunting, but with a couple of thought out steps you'll be eating a healthier, more satisfying diet before you know it.

Don't give up your favorite foods immediately. If you love cheese pizza more than an early morning bike ride or life itself, then suddenly removing it from your diet will bring more gloom than benefit.

Start by eating more of the vegan foods you already eat. Then add more of these foods to any meals that you usually eat with animal products. Eliminate animal foods you don't eat often. You won't miss these, so let them go first.

Find other vegetarians and vegans! Most likely they will be super excited to share with you their favorite foods and meals. There are many types of vegetarians with varying food preferences, so talk to as many as possible.

Next find recipes and cookbooks that you like. Skip the gourmet ones (for now!) and go for the ones that are most similar to your cooking style. Cook with others. Invite friends over for a vegan dinner feast. Involving those around you with any change you want to make in your life only makes it easier. We already know the benefit of riding or running with a group -- eating is no different.

Today health food stores, and with increasing frequency grocery stores, carry plenty of vegan foods like soy milk and other non-dairy alternatives, organic produce and whole grains. Take the time to explore!

There are many types of soymilk, rice, vegetables, etc. and even more ways to prepare them. If you don't like some a certain way, try different ones or different preparation methods.

Be prepared. Stock your kitchen with the healthy vegan whole foods you want to eat and it will be harder to lapse into old ways.

Stay connected. Use the resources in this guide to stay up on the health, ethical and environmental benefits of a vegan whole foods diet.

# Controversies

Areas of nutrition where opinions differ

# Is raw hot or not?

The raw food lifestyle has gained a lot of media attention lately, but is a raw food diet truly optimal for athletes? Health educators such as Dr. Doug Graham have shown that athletes are competitive eating only raw foods. Regardless whether you're interested in a raw food diet, whole, uncooked fruits and veggies are the healthiest foods you can eat.

# The B-12 Factor

Though the amount we need is miniscule, vitamin  $B_{12}$  is critical for health. Vitamin  $B_{12}$  is produced by bacteria, but due to over farming much of our agricultural soil is microbially dead. Most vegan doctors and nutritionists recommend supplementation or eating enriched foods.

# Going Against the Grain

While grains, pasta and bread are often staples in both the athlete's diet and a vegetarian diet, you are missing the opportunity to eat the more nutritionally complete option of fruits or vegetables.

# Myths

Misconceptions about a vegan diet

# **Rice and Beans**

The idea that vegetarians need to eat multiple protein sources in the same meal was refuted in the 70's. Vegans can easily obtain all of the essential amino acids as long as a variety of protein sources are eaten throughout the day and adequate calories are consumed.

# An Iron Grip

Studies show that people eating vegetarian or vegan diets are no more likely to be iron deficient than people who eat meat. Optimizing the absorption of non-heme (plant-based) iron is as simple as eating a *healthy*, whole foods diet.

# It's Just Too Difficult

Any lifestyle change is as difficult as you make it. For some, switching to a vegan diet happens overnight. For others, eating more plants on a daily basis is a great first step.

# Resources

There are a number of resources available to support you on your path to health and performance. Here are a few of them.

### **OrganicAthlete Resources**

- WEBSITE: Our website contains hundreds of in-depth articles about plant-based health and nutrition. Visit **www.organicathlete.org.**
- MEMBERSHIP: Our membership program and local chapter system are designed to connect like-minded athletes. See the back cover for information about joining.
- CONFERENCE: Every Fall we hold a conference in San Francisco bringing together some of the best vegan athletes, nutritionists and doctors. Find details at **organicathlete.org/conference.**
- CYCLING TEAM: Seeking inspiration? Check out our elite vegan cycling team at **teamvegan.org.**
- TALKS and SEMINARS: Members of our cycling and pro-activist teams are available to give talks to your school, community or business group. Contact us at **info@organicathlete.org** or 866-258-6179 for more information.

### **Other Health Resources**

- Physicians for Responsible Medicine www.pcrm.org
- Healthful Living International www.healthfullivingintl.org
- Dr. Doug Graham www.foodnsport.com
- Dr. Ruth Heidrich www.ruthheidrich.com
- Vegan Outreach www.veganoutreach.org
- Vegan Health www.veganhealth.org

### **Other Vegan Resources**

- Happy Cow www.happycow.net
- Vegnews www.vegnews.com
- In Defense of Animals www.idausa.org
- Vegsource www.vegsource.com
- Earthsave www.earthsave.org

# **Books to Read**

- Diet for a New America by John Robbins
- The China Study by T. Colin Campbell
- Nutrition and Physical Performance by Dr. Doug Graham

Check out OrganicAthlete's online book store for more book titles.

# A Healthy Future is in Your Hands

And we're here to support you

Ultimately, becoming vegan and eating a plant-based diet is not just for the health benefits. This way of living encompasses an ethic of compassion for oneself, our fellow human beings, all sentient life, and Mother Earth.

Countless people have come by our booth at an event and said, "Vegan. I could never do that." If Sir Roger Bannister had said "never" when he ran the first 4 minute mile...if Billie Jean King had said "never" when she faced Bobby Riggs...if Jesse Owens had said "never" at the 1936 Olympics...you get the point. It's all in what you believe. Fortunately, believing in a plant-based diet is backed by strong science and reams of evidence.

This booklet was meant to introduce you to plant-based nutrition, but don't stop here. Do the research yourself. OrganicAthlete is dedicated to providing the information, inspiration, and support you need to succeed on a plant-based diet.

# Become a Member

Join us in the race for life on earth

OrganicAthlete is a global membership community for athletes

committed to creating a better world through sport. Through our international organization and local chapters you can meet, train and/or compete with athletes and fitness enthusiasts who share your values. We're here to help you in improving personal and planetary health and fitness.

Fill out and mail the membership form on the back cover or go to our website to join.



# www.organicathlete.org