

Sprouted Grain Breakfast Bowl



This is Brenda's favorite breakfast cereal. Sprouted grains are at the top of the whole grain hierarchy (see article in the general nutrition section). They have all the goodness of intact whole grains are more digestible and more nutritious. They are also very economical – even when they are organic. Purchase grains in bulk for extra savings.

Growing Grain Sprouts

Soak $\frac{1}{2}$ cup grains (kamut, spelt, triticale, rye, quinoa, etc.) in a mason jar for 24 hours. Drain and rinse (save all rinse water for your plants or garden!). Put a sprouting lid on the jar or piece of mesh or cheesecloth and secure with a wide elastic band. Place the jar on its side on a saucer (to collect any water that may run off). Rinse the grains 2 or 3 times a day. Grains are ready to use when they have a short tail – usually after 1-2 days of sprouting. If the tails get very long and turn green, they will taste like grass (they are good for you, but may be less palatable for some people). Once the sprouts have a short tail, store them in the refrigerator to slow the tail growth.

Ingredients

1/4 -1/2 cup (60-125 ml) sprouted grains
1 1/2 cups (375 ml) fresh and/or stewed fruits*
2 Tbsp chopped nuts and seeds (ground flax, hemp, chia and pumpkin seeds, walnuts, almonds)
1 Brazil nut
1/4 cup non-dairy yogurt or pear cream (see recipe in the dessert section)
1/4 tsp cinammon (optional)
1/4 cup dehydrated granola (optional)

Preparation

Mix ingredients in your favorite bowl or layer in a mason jar. Top with non-dairy milk. Enjoy!

*My favorite combination is blueberries, raspberries, peaches and stewed plums, however, any and all fruits can be used. I stew Italian prune plums by quartering the fruits, removing their pits and stewing very slowly over a very low heat until they are covered in liquid. They need no sweetener and no liquid, although you can add a quarter cup of water just so they don't stick when they begin cooking. The cooking time is usually about an hour or more.

Makes 1 serving.

Why Vegan?



Why Vegan?

A human being is part of a whole, called by us the Universe, a part limited in time and space. He experiences himself, his thoughts and feelings, as something separated from the rest- a kind of optical delusion of his consciousness. This delusion is a kind of prison for us, restricting us to our personal desires and to affection for a few persons nearest us. Our task must be to free ourselves from this prison by widening our circles of compassion to embrace all living creatures and the whole of nature and its beauty.

Albert Einstein

Nobel prize-winning physicist 1921

The words of Albert Einstein capture the very essence of “why vegan”. Becoming vegan is about making an ethical decision to widen our circles of compassion. It requires taking a stand against deeply rooted customs and traditions; customs and traditions that are often strongly held by people we love, respect and admire. For most of us, this triggers a long, hard battle with our conscience, in which our conscience prevails.

For me, the battle was waged as a young child, as it is for many people.

I spent countless hours picking worms off sidewalks after a rainfall. I remember regularly asking my mother for 2 cookies – one for me and one for my friend. I also remember the look of astonishment on my mother’s face when after insisting she meet my friend, I brought home a big yellow lab. And, I will never forget the shock and devastation that engulfed me when my family, while vacationing in Spain, decided to attend a bullfight featuring Spain’s most celebrated bull fighter, El Cordobes. I was 3 years old. Ten thousand cheering fans erupted in thundering applause when El Cordobes entered the stadium. I suspected that this beautifully dressed man was going to fight a bull, and I found the thought quite distressing. I could never have imagined that he was going to kill the bull. The picador, his accomplice, swiftly put pics into the bull, and each time he succeeded, the crowd roared with excitement. With each pic, the bull weakened and I winced. I was stunned by the spectacle of this innocent animal being tortured, and not a single soul coming to his rescue. I found it confusing and horrifying at the same time. I wanted desperately to help the poor creature, but I knew I was powerless. Towards the end, the bull stumbled, then with one last mighty effort he gored El Cordobes and sent him flying. The crowd gasped, then fell silent... you could have heard a pin drop. My heart leaped. I naively thought that perhaps the bull had scored enough points to be spared. I jumped up and cheered

with all my might. People glared with anger at my insolence. My parents quickly quieted me. I had been awakened to a new reality.

Despite this natural compassion for animals, I somehow became desensitized to their plight as years passed. Somehow, as I ate the flesh of animals, donned their skins and enjoyed their circus performances, their suffering did not weigh as heavily on my mind. Perhaps it was because of the assurances I received from story books, teachers and relatives. The party line was consistent – the animals humans use are well cared for; they don't have to worry about predators or food. Sure, many eventually pay the price with their lives, but their deaths are quick and painless. In adulthood, I began to question the party line. Vegetarianism intrigued me, although the only vegetarian I had ever met was my grade 8 science teacher. He was a hippy with long hair, a beard, and a gentle spirit. My father, who taught in the classroom opposite his, was disturbed that he would deny his children the protein they needed to grow. I was simply fascinated. As I went on to study human nutrition at university, I became increasingly convinced that a plant-rich diet was optimal. However, the battle of my conscience was not fully re-ignited until a rather remarkable interaction with my friend, the deer hunter. The year was 1989. The friend asked if he could drop by for coffee on his way deer hunting. Although my response was positive, I immediately began trying to figure out how to make him feel as guilty as possible before he killed another deer. After dispensing with the usual trivialities, I asked him how it was that he could justify pulling the trigger on such a beautiful animal. I pointed out that it wasn't fair – the deer had no defense against his bullet. I asked him if it made him feel like more of a man to shoot and kill another creature. His response stunned me, and changed the course of my life. He said, "You have no right to criticize me. Just because you don't have the guts to pull the trigger, does not mean you are not responsible for the trigger being pulled every time you

buy a piece of meat camouflaged in cellophane in the grocery store. You are simply paying someone to do the dirty work for you. At least the deer I eat has had a life. I doubt very much you can say the same for the animals sitting on your plate." I was silenced, because he was absolutely right. I vowed to take responsibility for the food I was purchasing, and to find out about the lives of the animals I was eating. What I learned filled me with shame, guilt and outrage, but more importantly, it reawakened my compassion for animals. There was no question that war was over and my conscience had finally won. At the time, I was a public health nutritionist, encouraging the consumption of a balanced diet, including lean meat and low fat dairy products. As you can appreciate, I faced some interesting personal and professional challenges. With two young children, aged 4 and 1, I was uncertain as to how my husband Paul would respond to my desire to live on plants. I should have known better. Even though his closest friend was the deer hunter, Paul was always a step ahead of me. He smiled and said, "I thought you'd never ask".

When I think back, I realize that at 3 years of age I understood that animals have their own feelings, and their own purpose. Still, it didn't fully prepare me for the interaction I was to have with my son at the same tender age. I can't recall where we were going, but somewhere along the way, we drove by a McDonalds. He was excited just to see the golden arches. He asked me if we could go to McDonalds and buy a McDonald's hamburger. I knew he had watched the advertisements on television that showed the Hamburglar stealing hamburgers off trees. I suspected that he pictured a lovely grove of hamburger trees behind every McDonald's restaurant. I decided that the time had come to tell him about meat, and why we did not eat it. I explained that the hamburgers at McDonald's were not the same as the "burgers" at home. While our burgers were made of plants like beans, the McDonalds hamburgers were made of cows. He looked at me as though I had completely lost my mind and replied quite emphatically, "Mommy, **people** do not eat

cows". He seemed shocked I would say such a strange thing. When I went on to explain that people do eat cows, he began to cry. And through his tears, he pleaded, "But mommy, they have eyes, and he pointed to his eyes. He went on about their ears, noses and mouths in the same way. Finally in an exacerbated voice, he asked... "Mommy, don't they know that cows are people too?" I understood. He could see that cows think, feel, smell, hear, eat, sleep and love – just like people. He could not see why that was not enough.

Many people believe that being vegan is about eschewing hamburgers and ice cream. It is not. Being vegan is about widening our circles of compassion to include those who are commonly excluded, be they human animals or non-human animals. It is about understanding that our choices have consequences for ourselves, and beyond ourselves. It is about recognizing that eating animals and animal products is both unnecessary and potentially harmful. Being vegan is about making choices that are a true reflection of our ethical and moral principles, and acknowledging that custom and tradition justify nothing.

Vegans share a vision of this world as a place of goodness and peace, where life is supported and cherished; a place where violence and indifference are unknown, and where purposeful injury to living, feeling beings is unthinkable. Such a place is hardly conceivable in a world so profusely littered with hatred, greed, cruelty, and war. But each and every one of us who prays for peace, who dreams of a kinder, gentler world, has a responsibility to turn these thoughts into actions, to do what is within their capacity to bring us a little closer to this reality.

Our hope is captured brilliantly by the words of Dr. Albert Schweitzer, Nobel peace prize recipient and esteemed humanitarian:

"...the time is coming when people will be amazed that the human race existed so long before it recognized that thoughtless injury to life is incompatible with real ethics. Ethics is in its unqualified form extended responsibility with regard to everything that has life."

The first critical step is taking the blinders off.

Adapted from: *Becoming Vegan: Comprehensive Edition*, by Brenda Davis and Vesanto Melina (2014)

The Ethical Universe: Where are we really at?



This was a short speech given at NAVS Summerfest in 2003. Several people have requested copies, hence the old post.

Have you ever considered what a perfectly ethical universe might look like? It would undoubtedly be a place of goodness and peace, where life is supported and cherished; where kindness and compassion are the fabric of our hearts, and love and understanding are rooted in our souls. It would be a place where evil is unknown – where violence and indifference are fictional concepts that could hardly be imagined, and where purposeful harm to living, feeling beings is unthinkable.

Is a truly ethical universe an admirable sentiment but a practical impossibility? It is hardly conceivable in a world

so profusely littered with hatred, greed, cruelty, and war. But each and every one of us who prays for peace, who dreams of a gentler world; who shares this vision of ethics, has a responsibility to turn thoughts into actions, to do what is within our capacity to bring us a little closer to this reality.

Where are we at, as individuals and as a vegan community? How accurately does our behavior reflect the values that we have so strongly embraced? Could we do better?

The sincerity, generosity and commitment of people within our movement is consistently impressive. However, like all human beings, we can easily slip into patterns of behavior that can inadvertently undermine our goals. These patterns of behavior must be recognized if they are to be overcome.

The first might be called vegan supremacy. This is the attitude that vegans are morally superior to nonvegans, and are placed squarely at the center of the ethical universe. Taken to the extreme, it surmises that if you are not a vegan, you must be cruel, heartless, or morally defective.

But how does one weigh and measure the ethical correctness of an individual? Does the avoidance of animal flesh weigh more heavily than countless hours volunteering at a homeless shelter, years of advocacy work attempting to abolish slave labour, or a lifetime of dedicated service preserving a failing ecosystem and all its inhabitants? Can inherent value of such acts be accurately quantified? The benefits of selfless acts spread farther and deeper than logic would

dictate. Ethics has many components.

If we are to be completely honest with ourselves, there are many things that vegans know to be morally correct, that our ethics demand of us, yet we do not do. That is why being self-righteous about what we actually do, and placing ourselves on a higher moral plain than others is ultimately destructive. If we form an opinion about a person based on whether or not their perspectives are allied for or against us, we condition that person for hatred, anger, bitterness and resentment. This kind of judgement serves only to make people defensive and push them away. If we, as vegans are ever to succeed in moving people to expand their circles of compassion to include all living things, to completely alter their view of animals such that they could not possibly continue to consume, wear or otherwise contribute to their pain, suffering and death, we must step off of our pedestals, and connect with the people we strive to move. When we show kindness to those with whom we are at odds, we build bridges that are worth their weight in gold. We are all human beings, and the vast majority of us are trying, in our own ways, to make this world a better place. Only by acknowledging and appreciating the positive morals and ethics of each individual can we begin to rekindle the spirit of compassion that will ultimately change cultural norms.

This brings to mind my friend WH. About 25 years ago, our family moved from Northern Ontario to Vancouver. Just down the street from us lived a little girl that was about my daughter's age and they quickly became best friends. They spent every moment they could together, and we ended up spending a fair bit of time with her parents – even sharing special occasions. Her Dad, WH, was confirmed meat-eater, and our vegetarian lifestyle was a little mystifying to him, if

not somewhat disturbing. As the years went by, we grew to respect and appreciate one another's perspectives – even if we completely disagreed. About 7 years into our friendship, WH found out that his cholesterol was elevated. He started asking a few questions – about food, and about exercise. He decided to break down and try one of our veggie burgers, and he enjoyed it more than he expected he would. He started talking to my husband about his swimming regime, and before long he was an avid distance swimmer. Soon after we were to spend a weekend on a gulf island together. To our great surprise WH told his wife that he didn't want to bring any meat this time. I was stunned, but what really floored me was what happened after our return. He decided that if he could survive a weekend without meat, he probably didn't need it at all. WH became a near-vegetarian. He gave up steak, chicken, pork and even turkey on thanksgiving. I am quite certain that had I judged, moralized or otherwise condemned WH's very traditional position, he would have constructed an internal wall that would never have permitted the possibility of the choices he ultimately made.

The second destructive pattern might be labelled "vegan egoism" – this is the error of over-focusing on oneself, at the expense of others, in a quest for personal perfection. In its extreme we might imagine an egocentric vegan waking up each morning, gazing into his or her magic mirror and asking the ever-pressing question: mirror, mirror on the wall, who is the most vegan of us all? For many people the quest for personal righteousness is so intense that little else seems to matter; whether it be nurturing relationships with family and friends, building positive connections with colleagues or business associates, or contributing to activities that build stronger communities. We must remember that ethics, by nature is about being becoming more other-centered and less self-centered. This is certainly not to say that we should not

continue boldly on the path towards a 100% vegan lifestyle, but rather, in so doing we must insure that we do not purposefully torment or injure other people. We must recognize that our vegan lifestyle is a means to an end, not the end itself.

It is so tempting to be drawn into this sort of pattern, when we are competitive by nature. I vividly recall my concern about maintaining my vegan diet while staying for a couple of days with my aunt in Windsor. I love my aunt dearly, but she had been somewhat less than supportive of my radical stance where animals are concerned. The previous year, at a family gathering in my uncles home (my parents and my aunt were also there), I was receiving more than my share taunting— everyone seemed to think I was too skinny, although in my heart I wanted to say that the only reason I looked skinny was that everyone around me was obese. They were particularly expressive while devouring their steak and lobster. For me, the final straw was the endless pressure to get me to eat just a little piece of meat...finally I couldn't hold back any longer and just blurted out... I refuse to apologize for not partaking in the corpse of an abused animal. To me it is a barbaric custom and it is completely unjustifiable. Of course, no one was impressed, least of all, my aunt. She said that I shouldn't say such things at the table. So, when I was to be my aunt's house guest a year or so later, I wondered how the food situation would evolve. As it turned out, my 2 day visit was to end on 9/11 when I was to fly back home. Yes, the Sept. 11th. Needless to say, my flight was cancelled, and my stay was extended for 6 days. I was glad that during such a difficult and scary time, I was able to provide support for my aunt. I was determined to be kind to her and not to judge her or her diet. I thought that I would simply love her and support her in the best way I could. The most amazing thing happened. She decided that she wanted to eat whatever I was eating. I taught

her how to make a whole grain cereal with kamut berries, oat groats and barley. She loved it. We made all kinds of ethnic dishes, and her very favorite, a marinated vegetable and tofu salad. It was quite simply wonderful. Three months later, we were talking on the phone and my aunt said, do you know that I have lost 17 pounds since you were here. And, this is the exciting part, "I have not eaten a single piece of meat". She added I could live on vegetables and tofu. I am so glad I know how to prepare all of this great food. At that moment I was deeply grateful that I had chosen to simply love her.

Finally, as a community, we have faced many challenges, some of which were painfully amplified in times of internal conflict. One might expect that when vegans are at odds, that we might come together in a spirit of mutual respect, and talk, compromise, negotiate, reconcile and deal with our differences in a caring and considerate manner. Unfortunately, we often fall short. The issue is rarely about who is right, and who is wrong, if there even is a right and wrong in such situations. Rather, it is a matter of ethics in interactions. When our energy is directed towards condemning one another, that energy gets sucked into a black hole that is riddled with bitterness, anger, resentment and hostility. This is a tragedy of significant proportions, when one considers the extraordinary potential for good that should rightly be harnessed from that energy. If we can ever hope to live in a truly ethical world – one that is guided by the principles of reverence for life, we must choose to commit to this reality in our own lives. How can we possibly expect our family, our friends, our neighbours and our leaders to adopt this philosophy in their interactions if we cannot succeed in doing so ourselves? There is one thing that we can be absolutely certain of – if an ethical world is ever to become a reality, it will be in spite of anger and aggression, in spite of cruelty and callousness, and in spite of hatred and hostility.

It will become a reality because we, as individuals, have set an example of kindness and compassion, of tolerance and trust, of peace and love, that is simply too compelling to ignore. It will come because we, as a community, have stood firmly together, arm in arm, in affirmation of our commonality, and in celebration of our differences. It is only in so doing that we will establish a spiritual and personal relationship with all living beings powerful enough to crumble the cruel customs that have for centuries crippled our consciousness. I believe that this is not only a possibility, but is an eventuality that is essential to the survival of all life on this planet.

Defeating Type 2 Diabetes



“The diabetes time bomb has been ticking for 50 years, and it’s been getting louder. Despite the warning, successive generations of world leaders have largely ignored the threat.”

International Diabetes Federation (IDF) President-Elect Martin Silink

According to the Centers for Disease Control and Prevention, one in eight American adults had diabetes in 2014. If the current trends continue, they estimate that as many as 1 in 3 adults will have diabetes by 2050. The rate of diabetes has increased from 0.9 percent in the late 1950s to 9.3 percent in 2014 (12.3% in those over the age of 20 years). The figures are even more staggering among American seniors (those aged 65

years or more) – over 25% have type 2 diabetes, and over 50% have prediabetes. While statistically, diabetes is the 7th leading cause of death in the United States, this figure belies the fact that most people *with* diabetes do not die *of* diabetes: they die heart disease, kidney failure, and other complications. Globally, diabetes has become the 21st century plague, crippling rich and poor nations alike.

Diabetes Statistics in the United States 2010

Diabetes rate among the entire population: 9.3%

Diabetes rate among Americans over 20 years of age: 12.3%

Diabetes rate among Americans over 65 years of age: 25.9%

Estimated prediabetes rate among the entire population over 20 years of age: 35%

Estimated prediabetes rate among the American population over 65 years of age: 50%

What is Diabetes?

Diabetes is a metabolic disorder that diminishes the body's ability to usher glucose into cells so it can be used for energy. Glucose is the primary source of energy for the body, and in order for glucose to enter our cells a "gatekeeper" called insulin must let it in. People with diabetes either do

not produce any insulin, do not produce enough insulin, or have become “resistant” to the insulin that they produce. This means insulin cannot do its job and blood glucose levels begin to rise. When blood glucose is elevated over time, body tissues become awash in sugar and health tumbles down a rather predictable slippery slope.

There are two main types of diabetes: type 1 and type 2. Type 1 diabetes is characterized by lack of insulin production by the pancreas, and it is generally regarded as an autoimmune disease. It occurs suddenly, and most often affects children and adolescents. Type 2 diabetes is distinguished by the preservation of insulin production, but faulty insulin action. Essentially the product of diet and lifestyle, type 2 diabetes is an insidious disease, often going undetected for many years. Globally, type 2 diabetes accounts for over 90 percent of all diabetes cases. The rise in diabetes runs roughly parallel that of overweight and obesity, with risk doubling in those who are overweight and tripling in those who are obese. While excess body fat plays a strong role in this disease, the way the fat is distributed is perhaps even more significant. Weight concentrated around the abdomen and in the upper part of the body (apple-shaped) increases risk far more than weight that settles around the legs and hips (pear-shaped). Fat that collects in and around vital organs (visceral fat) is far more damaging than fat that accumulates close to the skin’s surface (subcutaneous fat). Type 2 diabetes was once referred to as “adult-onset diabetes” because it was a disease rarely occurred in people under 50 years of age. Today, type 2 diabetes is seen in young adults, teens, and even children. Untreated or poorly controlled type 2 diabetes is a leading cause of blindness, premature heart attack and stroke, kidney failure, nerve damage, and amputations.

Diabetes is defined as fasting blood glucose of at least 126 mg/dl (7.0 mmol/L), while pre-diabetes occurs when blood glucose reaches at least 110 mg/dl (6.1 mmol/L). Pre-diabetes

is often manifested as “metabolic syndrome”, a cluster of risk factors characterized by elevated blood glucose, abdominal obesity, elevated blood pressure, elevated triglycerides, and low HDL-cholesterol levels. A cascade of problems ensues that commonly results in full-blown type 2 diabetes.

The Luck of the Draw?

Some people believe that type 2 diabetes is more a matter of bad genes than bad habits. While it is true that some populations have a greater susceptibility to the disease, genes serve primarily as a loaded gun; it is almost always diet and lifestyle that pull the trigger.

The people of the Marshall Islands provide a poignant example. The Marshall Islands are a group of islands about 2300 miles southwest of Hawaii with a total population of about 60,000 people. In the Marshall Islands, an estimated 28 percent of those over 15 years of age and 50 percent of those over 35 years of age have type 2 diabetes. Sixty years ago, diabetes was virtually unheard of in the Marshall Islands. While changes in genes were negligible during those few decades, changes in diet and lifestyle were profound. Sixty years ago the Marshallese were slim, physically active, and lived off the land and the sea. The diet consisted of edible plants such as coconut, breadfruit, taro, pandanas and leafy greens, and fish and other seafood. All of these foods were acquired through physical work. Today, the Marshallese diet consists primarily of imported, processed foods, and the Marshallese people have become largely sedentary. A typical breakfast consists of cake donuts or sweet pancakes and coffee. The first foods of the day for children are often popsicles, chips, soda pop, or dry ramen noodles with dry Kool-Aid powder sprinkled on top. Lunch and dinner feature sticky white rice

with meat or fish. Favorite meats are Spam, canned corned beef, chicken, and variety meats such as turkey tails or pig's intestines. The meal is predictably washed down with a sweet beverage. It would be difficult to design a diet that could more efficiently induce type 2 diabetes than the diet that has been adopted by the Marshallese people.

In a laudable effort to reverse the Marshallese diabetes epidemic, Canvasback Missions Inc. (a Christian, non-profit organization, specializing in medical missions to remote South Pacific islands), in partnership with Loma Linda University and the Marshall Islands Ministry of Health, launched a lifestyle-based diabetes research study in 2006. Brenda Davis was hired to serve as lead dietitian; to design and implement the diet portion of the treatment program. For each intervention, approximately half of the qualified participants were assigned to an intervention group and half to a control group. Intervention participants received diet and lifestyle instruction over a 3-6 month period, while the control group received the "usual care" (advice from a physician and/or other health care worker to exercise, eat more healthfully and take the appropriate medication). Control group participants were guaranteed a place in the intervention group once their six-month control period had been completed (although their data could not be used in the analysis). The two key elements of the lifestyle intervention were diet and exercise. The primary objective of treatment was to overcome insulin resistance and to restore insulin sensitivity as much as was physiologically possible. The diet was designed to support blood glucose control, reduce inflammation, reduce oxidative stress and restore nutritional status.. To accomplish this task, the dietary parameters were set as follows:

- Whole foods, plant-based diet
- Generous servings of non-starchy vegetables and legumes
- Controlled portions of intact (whole) grains, starchy

- vegetables fruits, nuts and seeds
- Minimal refined carbohydrates
 - Minimal ground grains (e.g. flour)
 - Very high fiber (40-50+ grams per day)
 - High viscous fiber foods (flax, oats, barley, beans, guar gum, psyllium)
 - Moderate fat from healthful sources such as nuts and seeds (20-25% fat)
 - Low saturated fat (<7% of calories)
 - Zero trans fatty acids
 - Sufficient omega-3 fatty acids
 - High phytochemical and antioxidant foods
 - Low dietary oxidants
 - Low glycemic load
 - Moderate sodium (Less than 2300 mg/day)

In addition to a highly therapeutic diet, participants received daily education about nutrition and lifestyle. PowerPoint presentations, practical workshops, dine-outs, shopping tours, and spousal cooking classes were all fundamental components of each intervention. To help increase access to affordable produce, participants were taught how to grow their own vegetables. Soil and gardening experts were brought in to conduct workshops, and participants were taken on agricultural field trips. Daily exercise including twice daily walks, aerobic classes, strength and flexibility exercises were all integral parts of therapy. The program results were remarkable during the first 2 to 4 weeks of the program. Typical reductions in fasting blood glucose were in the 50-75 mg/dL (3-4 mmol/L) range; and weight loss averaged approximately 2 pounds (1 kg) per week. Total and LDL-cholesterol, triglycerides and blood pressure plummeted. Participants consistently reported dramatic reductions or complete disappearance of pain in the legs, arms and joints. Many noted increased energy, improved mental clarity, fewer

nightly trips to the bathroom, and rapid relief of chronic constipation. The majority of participants stopped taking diabetes medications. After 12 weeks, progress varied according to the participant's commitment to the program. Those who stuck to the program continued to see improvements. Some reversed their disease, eliminating the need for medication, and experiencing blood glucose levels well within the normal range.

Could It Work at Home?

Some people ask if the kind of program we use in the Marshall Islands could work in North America and other developed parts of the world. If the impoverished people of the Marshall Islands can succeed with the enormous barriers they face, it should be a relative breeze at home. The Marshallese have somehow managed to overcome seemingly insurmountable mountains of Spam, donuts, ramen noodles, and sweet drinks. They have put together low cost, healthful meals despite the high cost and poor quality of their produce, their infertile soils, and their lack of resources. They have managed with little education and marginal English skills. They have succeeded with few gyms, no hiking trails, and a cultural taboo against women wearing pants, shorts or other fitness wear. Their example inspires hope for everyone, everywhere.

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The “Paleo” Phenomena: Facing Facts



Our culture has suddenly sprouted a reverence for all things “paleo”. Grass-fed beef, bone broth and coconut oil are hailed as the new “superfoods”. Athletes, dieters, and health seekers of all stripes are swapping their oats for organ meat. Paleo, caveman and primal diets attract athletes, dieters, and health seekers of all stripes. The basic premise of these diets is simple—what humans ate in preagricultural, Paleolithic times is best suited for human health. Whether or not what these relatively short-lived humans ate is what’s optimal for the health of today’s relatively long-lived humans is a matter of considerable debate.

Preagricultural diets—which essentially consisted of wild plants, wild animals, and wild fish—varied considerably, depending on location, season, hunting and gathering skills, available tools, and so on. People didn’t consume oil, sugar, or salt; anything from a box or bag, or the milk of other mammals. Today’s new paleo devotees attempt to copy this diet by eating meat, poultry, fish, eggs, vegetables, fruits, nuts, and seeds and avoiding processed foods, grains, legumes, and dairy products.

Followers of the new paleo diet naturally assume that their nutrient intakes approximate that of Paleolithic humans, but their actual intakes may be wide of the mark. Nutritional anthropologists have been estimating the nutrient intakes of cavemen for several decades. As it turns out, vegan diets may actually come closer to matching the macro- and micronutrient intakes of Paleolithic diets than new paleo diets. Table 1 summarizes the results of a comparison among recommended paleo menus, recommended vegan menus, and a true Paleolithic diet eaten by early humans. The data compare three days of recommended paleo menus from a popular paleo website, three days of recommended vegan menus from *Becoming Vegan: Comprehensive Edition*, and the estimated average daily intakes of Paleolithic people.

Table 1 also provides dietary reference intakes (DRIs) for adult males (M) and adult females (F) who aren't pregnant or lactating. Nutrients and other dietary factors in the new paleo or vegan diet that are more similar to the true Paleolithic diet are highlighted (pink for the new paleo diet and green for the vegan diet).

Table 1. New paleo, true Paleolithic, and vegan diets compared

	DRI	New paleo diet	True Paleolithic diet	Vegan diet
Energy (cal/day)	2,200–2,900	3,000	3,000	3,000
Macronutrients				
Protein (%)	10–35	32	25–30	14

Carbohydrate (%)	45–65	15	35–65	57
Fat (%)	15–30	53	20–35	29
Saturated fat (%)	<10	19	7.5–12	6
Cholesterol (mg)		1,308	480	0
Omega-6: omega-3 (ratio)		11:1	2:1	4:1
Fiber (g/day)	25 (F) 38 (M)	31	70–150	70
Vitamins				
Riboflavin (mg)	1.3 (F) 1.7 (M)	2.6	6.5	2.6
Thiamin (mg)	1.1 (F) 1.2 (M)	2.7	3.9	4.6
Vitamin C (mg)	75 (F) 90 (M)	226	500	417
Vitamin A (mcg RAE)	700 (F) 900 (M)	2,436	3,797	1,513
Vitamin E (mg)	15	24	32.8	31.3
Minerals				
Iron (mg)	8 (M) 18 (F)*	25	87.4	32.3
Zinc (mg)	8 (F) 11 (M)	33	43.4	21.3
Calcium (mg)	1,000–1,200	643	1,000–1,500	1,847
Sodium (mg)	<2,300	4,193	768	2,005
Potassium (mg)	4,700	4,762	7,000	6,724

Sources: New paleo data: average of 3 days (Wednesday, Thursday, and Friday) of recommended Paleo menus, adjusted to

3000 kcal.¹ Vegan data: average of three days from the Becoming Vegan: Comprehensive Edition menus, adjusted to 3,000 calories. True Paleolithic data^{2, 3}

*RDA for iron is 18 mg for women of childbearing age and 8 mg after age 50.

The comparison shows that this recommended new paleo menu supplies protein, vitamin A, and zinc in amounts closer to a true Paleolithic diet than do the vegan menus. However, its fat and saturated fat levels are about double, cholesterol almost triple, and sodium five times as much as that of true Paleolithic diets. In addition, the new paleo menu contains about a third of the carbohydrates, and half the vitamin C, calcium, and fiber of true Paleolithic diets.

Even the 100 percent plant-based vegan menus deliver fiber in amounts at the lowest end of the estimated Paleolithic intake range; clearly our preagricultural ancestors ate plenty of plants (the only source of fiber). The vegan menus do provide intakes of carbohydrate, fat, saturated fat, fiber, riboflavin, thiamin, vitamin C, vitamin E, iron, calcium, sodium, and potassium that are closer to the levels supplied by a true Paleolithic diet than do the new paleo menus.

Why are new paleo diets and the true Paleolithic diet so far apart nutritionally? The answer lies in the differences between the meat and vegetables consumed today and those eaten in the Paleolithic era. The wild animals eaten then provided an estimated 6 to 16 percent of calories from fat compared to about 40 to 60 percent in today's domestic animals—even those that are grass-fed. They were also free of hormones, antibiotics, and environmental contaminants. All animal organs were consumed, and insects provided significant amounts of protein. In addition, virtually all fruits and vegetables available in supermarkets are more palatable, more digestible,

and easier to store and transport than their wild cousins, at the expense of valuable protective dietary components. Wild or uncultivated plants provide about four times the fiber of commercial plants (13.3 grams of fiber per 100 grams versus 4.2 grams of fiber per 100 grams, respectively).³

Certainly, there are some benefits to switching from a standard Western diet to a paleo-type diet—highly processed foods, refined carbohydrates, fried foods, and fast foods are eliminated, and fresh fruits, vegetables, nuts, and seeds are encouraged. On the other hand, today's paleo eaters tend to consume large amounts of red meat, ignoring the impressive evidence linking meat consumption to chronic disease.

Grains and legumes are dispensed with, even though these foods have a long and impressive track record as valuable sources of calories and protein for the world's population. The value of legumes and grains in the human diet is validated by people of the Blue Zones – the longest lived, healthiest populations in the world – all of whom consume legumes and grains as part of their traditional fare.

Modern paleo advocates claim that these foods weren't part of Paleolithic-era diets, but new research challenges that assumption.⁴ They also argue that lectins naturally present in these starchy foods are harmful to human health. Consuming too many lectins can cause significant gastrointestinal distress. However, because legumes and grains are almost always consumed in a cooked form—and lectins are destroyed during cooking—eating beans and grains doesn't result in lectin overload. Sprouting also reduces lectin levels in plants, although not as effectively as cooking. Generally, pea sprouts, lentil sprouts, and mung bean sprouts are safe to consume, as are sprouted grains, which are naturally low in lectins. Most larger legumes contain higher amounts and should

be cooked.

The Bottom Line: With its focus on consuming large quantities of meat, the new paleo diet is a pale imitation of the diet of early humans. Unfortunately, this dietary pattern also ignores the numerous health risks associated with eating meat, the ethical issues associated with an increased demand for food animals, and the looming environmental crisis that makes eating lower on the food chain an ecological imperative. People who want to move closer to a true Paleolithic diet should explore plant-based diets—such diets come as close to true paleo diets as modern day people can hope to achieve.

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Coconut Oil: Menace or Miracle?



Coconut Oil: Menace or Miracle?

There are few foods that have been at once maligned and acclaimed as much as coconut oil. Some view it as a notorious health villain because it's the most concentrated source of saturated fat in the diet –even higher than butter or lard. Not surprisingly, it rests at the very top of the list of foods that must be strictly avoided in many heart-healthy diet programs. At the other end of the spectrum are those people who view coconut oil as a fountain of youth and the greatest health discovery in decades. These coconut advocates claim that coconut oil can provide therapeutic benefits for cancer, diabetes, digestive disturbances, heart disease, high blood pressure, HIV, kidney disease, osteoporosis, and overweight. So what is the truth? Is coconut oil a menace or a miracle where health is concerned?

The primary criticism of coconut oil is that over 90 percent of its fat is saturated. Saturated fat is known to increase blood cholesterol levels. When coconut oil is blacklisted, it's almost exclusively because of this extreme saturated-fat content. While many people imagine saturated fat as a single tyrant that clogs arteries, there are actually several different types of saturated fats. These fats contain between 4 and 28 carbons, and depending on the length of their carbon chain, they have very different effects on blood cholesterol levels. The saturated fats that are most plentiful in the diet are lauric acid (12 carbons), myristic acid (14 carbons),

palmitic acid (16 carbons), and stearic acid (18 carbons). Their main sources are outlined in the sidebar on page XX.

Sources of Saturated Fatty Acids with 12 to 18 Carbon Atoms

Lauric acid: coconut, coconut oil, palm kernel oil

Myristic acid: coconut, dairy products, nutmeg oil, palm kernel oil, palm oil

Palmitic acid: animal fats, palm oil

Stearic acid: beef, butter, cocoa butter, lard, mutton

Saturated fatty acids, with 12–16 carbons, increase blood cholesterol levels, while stearic acid does not. When stearic acid reaches the liver, it's converted to oleic acid (an 18-carbon monounsaturated fat), which may help to explain why it doesn't raise cholesterol. As a result, consumers are often advised not to be concerned about their intake of stearic acid. However, cholesterol is not the only marker for heart disease, and adverse effects of stearic acid have been reported. In one large study, stearic acid increased coronary artery disease risk more than lauric, myristic, or palmitic acid.¹ Apparently, stearic acid may reduce good HDL cholesterol, increase Lp(a), which is another risk factor for heart disease, increase certain blood-clotting factors, and result in lipemia (excess fat in the blood) after eating.^{2, 3} In a critical review of dietary fats and coronary artery disease, the authors of the review advised that stearic acid not be

distinguished from other saturated fats when providing dietary advice to reduce coronary artery disease.²

As it happens, coconut oil is about 50 percent lauric acid, 18 percent myristic acid, and 8 percent palmitic acid. This adds up to 76 percent of the fat in coconut oil being the kind that raises cholesterol. Case closed? Well, not exactly. The predominant fat, lauric acid, does raise total cholesterol, but it appears to raise good HDL cholesterol to an even greater extent than bad LDL cholesterol. The effect on the ratio of total to HDL cholesterol is consistently favorable.^{4, 5,}

⁶ Myristic and palmitic acid do not have this affect. Does the 50 percent lauric acid in coconut oil cancel out the 26 percent myristic and palmitic acids? We don't really know. We do have evidence that fats rich in lauric acid, such as coconut oil, result in more favorable blood cholesterol levels than hydrogenated vegetable oils laden with trans fats.⁴ Trans-fatty acids not only raise bad LDL cholesterol, but they also decrease good HDL cholesterol. We also know that coronary artery disease risk is reduced most effectively when trans-fatty acids and saturated fatty acids are replaced with unsaturated fatty acids.² The effect of coconut oil, rich in lauric acid, remains somewhat uncertain. However, we cannot ignore the fact that in many parts of the world where coconut and coconut oil are staples in indigenous diets, rates of chronic disease, including coronary artery disease, are low.^{7, 8,}

⁹ There is one major caveat. The benefits seem to apply only when coconut products are consumed along with a diet that is unprocessed and rich in high-fiber plant foods. When the indigenous diet gives way to a more processed, Western-style diet laden with white flour, sugar, and fatty animal products, disease rates escalate even when coconut continues to be consumed.

It is worth noting that most of the fatty acids in coconut,

particularly lauric acid, are known to have significant antimicrobial properties.^{10, 11, 12, 13} Virgin coconut oil also contains a variety of protective phytochemicals, including phenolic acids, which are largely eliminated through the refining process.^{14, 15}

Another important attribute of coconut fat is its stability. It is so highly saturated that it is not easily oxidized or otherwise damaged.¹⁶ Plant foods that grow close to the equator have a higher quantity of saturated fatty acids in order to protect themselves from the ravages of oxidation that occurs in warm temperatures. Foods that grow in cold climates generally contain higher amounts of unsaturated fats such as omega-3 fatty acids. Once again, this is necessary for the survival of the plant and its seeds; certain fluids in the plant need to remain liquid, even in very cold temperatures. The saturated fat that comes from whole plant foods, such as coconut, may in fact turn out to be of benefit for vegans. Vegan diets sometimes contain excessive amounts of unsaturated fats, which are more prone to oxidation, while the saturated fats in coconut are very stable fats with a low risk of oxidation. While we want to keep our total intake of saturated fat low, we don't want to completely eliminate it (an impossible task on any diet).

It turns out that coconut oil is neither a menace nor a miracle food. Coconut should be treated in much the same way as other high-fat plant foods—enjoyed primarily as a whole food. As such, it is loaded with fiber, vitamin E, and healthful phytochemicals. As a bonus, it has powerful antimicrobial properties. On the other hand, coconut oil should be viewed the same way as other concentrated oils: a food that provides a lot of calories with very few nutrients. When your diet is high in concentrated fats, it can be difficult to meet your needs for other nutrients. It's okay to use some coconut oil when preparing special-occasion treats,

but don't rely on it as part of your daily fare. Base your diet on whole plant foods, and when you do use coconut oil, make sure it is organic and virgin.

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Plant-based Diets and Gout



Gout has long been known as the “disease of kings” as it is most common in overweight or obese men who consume rich foods, and excessive alcohol. It is also associated with hypertension and renal impairment. Diet can help to reduce the incidence of gout, and can play an important role in the treatment of gout.

Generally, with active disease, dietary purines are restricted. In the body, purines are metabolized to uric acid. Purines can elevate uric acid in the blood. Although normal levels of uric acid can assist in scavenging free radicals, higher levels increase risk of gout. The richest dietary sources of purines are organ meats and small fish (internal organs are eaten with the fish). Diets rich in plant foods are not associated with increased risk of gout, even when higher purine plant foods are consumed. Generally, plant foods are less concentrated in purines than meat and seafood. Dairy products are low in purines and have not been found to increase risk, although high fat dairy products may contribute to cardiovascular disease and diabetes, so low or skim milk products are preferable to higher fat options.

Common Myth – Beans and Gout

It is commonly believed that beans are high purine foods and should be avoided by people who are at risk for gout, have high uric acid levels, or who have active gout. This is because most tables listing the purine content of foods list the amount of purines found in 100 grams (just over a half cup) of dried beans. When 100 grams of beans are cooked, the yield is about 1 1/2 cups of beans. A typical serving of

cooked beans is about a half cup, thus the figures shown in most tables are triple the usual serving size. Using a one-half cup serving size, the purine content of beans ranges from about 20-75 mg per serving. See the chart below for the purine content of specific legumes.

Dietary Guidelines for Gout Prevention and Treatment

1. Avoid very high purine foods and limit high purine foods to not more than a serving per day (see chart below). Avoid meat extracts, broths, bouillon and gravy.
2. Avoid rich, high-fat, meat-centered meals. Rely on plant foods as your primary sources of protein.
3. Eat several servings of fiber-rich plant foods such as whole grains, vegetables, fruits, each day.
4. Minimize intake of refined carbohydrates, including both starches (white flour products) and sugar. Concentrated fructose can increase uric acid levels and increase insulin resistance.
5. Drink 2-3 L of fluids each day. Most of this should be water.
6. Avoid alcohol, as it tends to interfere with uric acid excretion.
7. Maintain a healthy body weight. If you are overweight, aim for a slow gradual weight loss of $\frac{1}{2}$ -1 kg (1-2 lbs) per week. Rapid weight loss from fasting or severely calorie-restricted diets is not recommended as this can raise uric acid levels and aggravate gout.
8. Increase your physical activity. (Check with your doctor first if you are currently not active).

Purine Content of Common Foods

Avoid very high purine foods (>200 mg purine per serving)

Minimize high purine foods (>100 mg purine per serving)

Moderate medium purine foods (50-100 mg/serving)

Enjoy low purine foods (< 50 mg/serving)

Food	Serving Size	Purines (mg)
Anchovies, fresh	100 g (3.5 oz)	411
Sardines, canned	100 g (3.5 oz)	399
Herring, canned	100 g (3.5 oz)	378
Sardines, fresh	100 g (3.5 oz)	345
Kidney, pig	100 g (3.5 oz.)	334
Anchovy fish, canned	100 g (3.5 oz.)	321
Liver (pork)	100 g (3.5 oz.)	289
Salmon, fresh	100 g (3.5 oz)	260
Mackerel, canned	100 g (3.5 oz)	246
Liver, chicken	100 g (3.5 oz.)	243
Red fish (ocean perch)	100 g (3.5 oz.)	241
Chicken heart	100 g (3.5 oz)	223
Mackerel, fresh	100 g (3.5 oz)	194
Shrimp, brown	100 g (3.5 oz.)	147
Tuna, canned	100 g (3.5 oz.)	142
Clams, fresh	100 g (3.5 oz)	136
Squid, fresh	100 g (3.5 oz)	135

Chicken meat	100 g (3.5 oz.)	130
Lamb	100 g (3.5 oz)	128
Steak, broiled	100 g (3.5 oz.)	121
Haddock, broiled	100 g (3.5 oz.)	119
Pork	100 g (3.5 oz)	119
White fish	100 g (3.5 oz)	116
Lentils, cooked	$\frac{1}{2}$ cup (99 g)	74
Oats, dry	$\frac{1}{2}$ cup (78 g)	73
Great northern beans, cooked	$\frac{1}{2}$ cup (88.5 g)	71
Small white beans, cooked	$\frac{1}{2}$ cup (89.5 g)	68
Tofu	100 g (3.5 oz)	68
Split peas, cooked	$\frac{1}{2}$ cup (196 g)	64
Soybeans, cooked	$\frac{1}{2}$ cup (172 g)	64
Pinto beans, cooked	$\frac{1}{2}$ cup (85.5 g)	57
Red beans, cooked	$\frac{1}{2}$ cup (85.5 g)	55
Select fruits and vegetables*	100 g (3.5 oz)	51-81
Large lima beans, cooked	$\frac{1}{2}$ cup (94 g)	49
Sunflower seeds	28 g (1 oz)	40
Flaxseeds	28 g (1 oz)	28
Peanuts	28 g (1 oz)	22
Garbanzo beans, cooked	$\frac{1}{2}$ cup (82 g)	19
Almonds	28 g (1 oz)	10
Yogurt (dairy)	4 oz (113 g)	9
Walnuts	28 g (1 oz)	7

Most other vegetables and fruits	100 g (3.5 oz)	10-49
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* Fruits and vegetables with moderate purine content: broccoli, peas, artichokes, apricots, mushrooms, spinach, bananas and green peppers.

Vegan Junk Food... blessing or curse?

Vegan Junk Food... Blessing or Curse?



Many people assume that becoming vegan means giving up donuts, cheesecake, smores, gummy bears, ice cream bars, cheezies, chicken wings, cheeseburgers and every other favourite treat imaginable. Twenty years ago, they would have been right. Today, they'd be dead wrong. Vegan versions of almost every convenience food, snack food and fast food are now yours for the taking. It is wonderful and horrible all at the same time. On the one hand, it is a bit of a relief to know that you can provide your child with a "reasonable look-alike" when their friends are enjoying ice cream bars on a hot summer day or roasting marshmallows at their highly anticipated class camp out. On the other hand, if you get a little too cosy with these processed foods you could end up with a vegan diet that is as bad as the standard American diet (SAD) that were so determined to avoid.

In this hectic world of multi-tasking, convenience foods have an undeniable attraction. While popping a veggie pie in the microwave is no doubt faster than preparing dinner from scratch, you have to consider the cost of cutting corners with the raw materials used to replace your brain cells (and the rest of your body!). Processed, packaged foods are carefully designed to tantalize your taste buds, and keep you coming back for more. This task is cleverly accomplished with salt, sugar and fat, all of which have a nasty way of coming back to bite you in the butt.

Not so long ago, most people had no clue what the word *vegan* meant. Those that recognized the word associated with extreme, dangerous, vegetarian diets. Today, the word *vegan* is viewed in a far more flattering light. This shift is the direct result of a couple of decades of scientific evidence confirming the safety, adequacy and potential benefits of well-planned vegan diets. You can walk into any mainstream grocery store and find products with the word *vegan* prominently displayed across the label. Producers use the word *vegan* to sell goods because consumers associate this word with wholesome, nutritious, ethical and green. Many assume that foods bearing the “v” word are nutritionally beyond reproach. Don’t be fooled. Just because you see the word *vegan* on a label does not automatically qualify the item as healthful. Nor, does it qualify the food as low-calorie, low-fat, low-sugar or “low” anything. Some of the world’s most unhealthful foods are 100% vegan – soda pop and deep fried salty snacks being two perfect examples.

What does this all mean when it comes to our food choices? Can you afford to eat any of the tempting treats sitting on natural food store shelves? While you don’t have to completely

eschew the tasty convenience foods that are appearing in ever increasing numbers, you best be savvy about where on the health food spectrum these foods really lie. The following guidelines will help you sort the proverbial wheat from the chaff:

1. Eat mainly whole plant foods – vegetables, fruits, legumes, whole grains, nuts and seeds. Make these foods the centerpieces of all your meals. Go for at least 10 servings of vegetables and fruits, with at least 3 servings of leafy greens each day.
2. If you eat vegan convenience foods, do so in moderation. Frozen entrees, veggie meats, frozen whole grain waffles, packaged mixes, and the like can offer variety and enjoyment, but they should not become dietary staples. These foods tend to be high in salt and sugar, and are sometimes exposed to harsh chemicals in their processing.
3. If you eat vegan snack foods and fast foods, do so only on occasion, and in moderation. Foods that fall into this category include vegan hot dogs, ice cream, candy bars and sweet baked goods containing white flour and/or sugar.
4. If you use soyfoods, stick to organic, first generation soy products such as edamame, roasted soybeans, baked soybeans, tofu, tempeh and soymilk. Minimize highly processed soyfoods, especially those based on isolated soy protein or soy oil.

5. Learn to read labels! While the nutrition facts give you a lot of valuable information about salt, sugar, fat and nutrient content, the ingredient list is every bit as important. Ingredients are listed by weight, so whatever appears first is present in the greatest quantity. Take note of the sources of fat, sugar and protein in the product.

6. Make sure you take care of the nutrients of concern – particularly vitamin B12, but also vitamin D, calcium, iron, zinc, iodine and essential fatty acids. Ignoring these nutrients can erode most of the advantages enjoyed on a whole foods vegan diet.