BECOMING VEGAN

EXPRESS EDITION

the everyday guide to plant-based nutrition

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CHAPTER 1

Widening the Circle of Compassion

It takes immense inner strength and courage to oppose the status quo. Yet if people hadn't risen up against social injustice, women wouldn't have the vote, the poor would have remained uneducated, and slavery would be legal. What does social justice have to do with a vegan lifestyle? Nothing, if you regard animals as resources; everything, if you recognize them as sentient beings.

It is possible that the greatest social injustice of our time is committed not against our fellow human beings but against our fellow nonhuman beings. Becoming vegan is about taking a stand against this injustice.

Vegan Awakenings

The seeds of vegan ethics were sown by philosophers and spiritual leaders in the East and spread in the West by the sixth-century Greek philosopher and mathematician Pythagoras, who shunned the consumption of animal flesh and directed his followers to do the same. While many other legendary thinkers, including Plato, Plutarch, Seneca, Ovid, and Socrates, followed suit, it wasn't until the mid-1800s that the moral roots of vegetarianism were firmly established in Western culture. The epicenter was England, and the driving forces were moral leaders of select Christian churches. While the movement was becoming well-grounded in the West, its influence was limited when contrasted with the practices and teachings of the East, where Buddhism, Jainism, and Hinduism emphasized compassion toward animals and vegetarianism as a part of their core doctrines.

The word *vegetarian* was coined by the founders of the British Vegetarian Society in 1842. The word has nothing to do with vegetables and actually comes from the Latin word *vegetus*, which

means "lively, fresh, and vigorous." The ethics of consuming dairy products were hotly debated within the burgeoning UK vegetarian movement, but there is good evidence that the first people to call themselves vegetarians were actually what we now call vegans. It wasn't until 1944 that a small, like-minded group of individuals decided to branch off and promote an entirely new breed of vegetarians, then called nondairy vegetarians.

The father of the contemporary vegan movement, Donald Watson, and his British compatriots recognized that the flesh food industry and dairy product industry were inextricably linked. They contended that the case against the dairy industry rivaled that against the meat industry, and that the use of dairy products was no longer justifiable for ethical vegetarians. Their intent was to eliminate the exploitation of both animals and humans and move closer to a truly humane society. Together, they founded the first vegan society in 1944 with only twenty-five members. Watson coined the word *vegan* (pronounced "VEE-gun") to describe vegetarians who exclude all animal products from their diet and lifestyle. In the 1950s, London physician Frey Ellis joined their ranks, significantly strengthening the scientific understanding of vegan health.

In 1948, Dr. Catherine Nimmo and Rubin Abramowitz established the first vegan society in the United States in Oceano, California. The group continued until 1960, when a national organization, the American Vegan Society, was founded by H. Jay Dinshah. The society has consistently encouraged the active practice of *ahimsa*—a Sanskrit word meaning "dynamic harmlessness"—as a part of a vegan lifestyle. Ahimsa, which is embraced as an urgent, worldwide necessity, advocates six pillars, one for each letter of the word:

Abstinence from animal products

Harmlessness, with reverence for life

Integrity of thought, word, and deed

Mastery over oneself

Service to humanity, nature, and creation

Advancement of understanding and truth

In 1987, veganism was catapulted into the mainstream by author John Robbins with the release of his groundbreaking book *Diet for a New America*. Robbins's book provided the first hard-hitting exposé of the consequences of factory farming on food animals, the environment, and human health. Today, vegan groups and societies exist in more than fifty countries.

More Than Diet

Many people believe that being vegan is about eschewing hamburgers and ice cream. It is not. Being vegan is about making an ethical decision to widen your circle of compassion and take a stand against deeply rooted customs and traditions—customs 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 ultimately prevails.

Being vegan is about including those who are commonly excluded, be they human animals or nonhuman animals. It's about understanding that our choices have consequences for ourselves and beyond ourselves and 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.

So how does a philosophy of reverence for life and compassion for all living things translate to diet and lifestyle? In terms of diet, the primary approach is excluding meat, poultry, fish, dairy products, eggs, gelatin, and other foods of animal origin, while allowing all foods of plant origin, including vegetables, fruits, legumes, grains, nuts, and seeds. But a vegan *lifestyle* takes it a few steps further.

A vegan lifestyle also excludes—as far as possible and practical—animal exploitation. A vegan avoids all products derived from animals—not just meat, eggs, and dairy products, but also certain consumer products. A vegan doesn't wear clothing produced from fur, leather, wool, or silk or use personal care or cleaning products that contain animal-derived ingredients. A vegan also avoids products and activities that involve the mistreatment or misuse of animals, including research conducted on animals and entertainment that exploits animals.

There are degrees of veganism. A *pure vegetarian* or *dietary vegan* is someone who consumes a vegan diet but doesn't lead a vegan lifestyle. Pure vegetarians may use animal products, support the use of animals in research, wear leather shoes or wool clothing, or have no objection to the exploitation of animals for entertainment. They are generally motivated by personal health concerns rather than by ethical objections. Some may adopt a more vegan lifestyle as they are exposed to vegan philosophy.

You may wonder how vegan you have to be to call yourself a vegan. Essentially, if you identify as a vegan and strive to avoid animal products and activities that exploit animals, you are vegan, even if you slip on occasion. There are no vegan police scrutinizing your diet and lifestyle habits. Being vegan isn't about personal purity or moral superiority. It's about making a conscious choice to widen your circle of compassion by avoiding animal exploitation as much as possible and practical.

In today's world, it is virtually impossible to be 100 percent cruelty-free. Traces of animal products lurk almost everywhere—as red dye in candy, as filters in the processing of wine, and in phones, matches, sandpaper, theatrical lighting, photographic film, cars, bicycles, planes, computers, and the list goes on. Our efforts to live with compassion far exceed our ability to eliminate the trace amounts of animal products that permeate our culture. Besides, there are instances in which the use of a nonvegan product can result in a reduction in animal suffering. Think back to the time before digital cameras. Had we avoided photography because film utilizes animal products, thousands of people moved by graphic images of exploited animals would have continued to exploit them. The vegan lifestyle is a means to an end—which is to reduce animal suffering—and not the end itself.

Vegans on Trial

Prior to the 1990s, chronic diseases such as cardiovascular disease, diabetes, cancer, and lung disease were commonly known as "diseases of affluence" because they occurred among people who had the luxuries of eating too much and exercising too little. The term has since become obsolete as rates of these diseases are rising most rapidly in poorer countries. In 2008, 63 percent of global deaths were due to such conditions. It's estimated that, by 2020, lifestyle-related chronic diseases will be responsible for almost three-quarters of deaths globally. This shift has created a major public health threat with catastrophic implications for struggling economies throughout the world. The four primary causes of this epidemic, according to the World Health Organization, are poor diet, lack of exercise, smoking, and alcohol consumption. Simply put, the majority of deaths globally are self-inflicted.

Governments, health organizations, and nutrition authorities are acutely aware of the connection between diet, lifestyle, and chronic disease, and of the health benefits associated with plant-based diets. Nutrition education materials consistently reflect this knowledge. For instance, in 2010 the Dietary Guidelines Advisory Committee recommended four steps to help reduce the risk of chronic disease. In simple terms, they advised consumers to eat less, exercise more, eat a more plant-based diet, and eat fewer refined grains and foods with added sugar, solid fats, and salt.

The 2010 Dietary Guidelines for Americans state that vegetarian diets are associated with lower levels of obesity, reduced risk of cardiovascular disease, lower blood pressure, and lower total mortality. According to the 2010 guidelines, vegetarians typically eat less fat, fewer calories, and more fiber, potassium, and vitamin C than nonvegetarians.

But here's the rub: Although health authorities agree that eating mostly whole plant foods makes good sense, few suggest eating *only* plant foods. Many who urge a shift toward a more plant-centered diet also advocate increases in what are considered "healthful animal products," such as fish and low-fat dairy products. The healthiest, longest-living populations on the planet consume whole-foods, plant-based, or mostly plant-based diets, but none of these groups is entirely vegan. Vegan diets are essentially on trial in the eyes of the world. Fortunately, as the evidence unfolds, vegan diets are not only being vindicated, they are increasingly being recognized as rising stars in the arsenal against many chronic diseases.

Based on current evidence, vegans come closer to meeting recommendations for intake (or avoidance) of total fat, saturated fat, cholesterol, trans-fatty acids, and fiber than people of other dietary persuasions. In addition to being low in saturated fat, free of cholesterol, and high in fiber, well-planned vegan diets provide abundant antioxidants and protective phytochemicals, so they may be useful in the prevention and treatment of numerous chronic diseases, including asthma, cancer, cardiovascular disease, cataracts, diverticular disease, fibromyalgia, gallbladder disease, gastrointestinal disorders, kidney disease, overweight and obesity, rheumatoid arthritis, and type 2 diabetes.

Many vegan diets have been touted as healthiest: low-fat, macrobiotic, Mediterranean, nutrient-dense, raw, starch-based, whole-foods, fruitarian, and the list goes on. While there are pros and cons to each, most can be designed to be nutritionally adequate. The greater challenge is teasing out the factors that provide an advantage in terms of disease prevention or treatment.

The following sections examine some common vegan diets, outlining their strengths and weaknesses and summarizing how to make each variation work for your health.

Diet: **Conventional** (combination of cooked and raw foods; about 30% fat)

Strengths: It isn't difficult to achieve nutritional adequacy on a conventional vegan diet, and key foods are easily accessible. It also allows greater flexibility socially. Foods are relatively accessible.

Weaknesses: With poor food choices, a conventional vegan diet may be low in foods rich in protein, iron, and zinc, such as legumes, or in calcium-rich foods.

Making it work: Eat a balance of cooked and raw foods, and use convenience foods in moderation.

Diet: **Fast and Easy** (high use of convenience and fast foods)

Strengths: This diet is practical and simple, and with its reliance on prepared foods, it typically includes fortified foods that boost intakes of iron and vitamins B_{12} and D.

Weaknesses: Convenience foods are high in added fats, sugars, and sodium and lower in protective phytochemicals, antioxidants, and fiber. These foods also may be expensive.

Making it work: Choose foods with short ingredient lists and less sodium, fat, and sugar. Use nutritious convenience foods such as hummus, lentil soup, and fortified nondairy milks, yogurts, and breakfast cereals.

Diet: **Fruitarian**

Strengths: A fruitarian diet is low in calories and fat and high in phytochemicals and antioxidants. It also avoids common allergens.

Weaknesses: Fruit may not provide enough protein, essential fatty acids, or important vitamins and minerals. It's also unsuitable for children.

Making it work: Include organic greens, nuts, seeds, and sprouted or cooked legumes. Ensure that you're getting enough iodine and vitamins B_{12} and D.

Diet: **Low-Fat** (15% fat)

Strengths: A low-fat vegan diet minimizes harmful fats and is effective for weight loss and for treating cardiovascular diseases and type 2 diabetes.

Weaknesses: Such diets may be low in essential fatty acids and vitamin E, and absorption of minerals. However, they may increase triglycerides if refined carbohydrates are emphasized. Absorption of some vitamins, and phytochemicals may be impaired. In addition, a low-fat diet may not provide enough calories for children or those who are underweight.

Making it work: Eat vegetables, fruits, legumes, and whole grains and at least 1 ounce (30 g) of nuts and seeds per day, including a source of omega-3 fatty acids.

Diet: Macrobiotic

Strengths: A macrobiotic diet is focused on whole foods and low in processed foods, including flour products.

Weaknesses: Such diets may not provide enough iron, zinc, lysine, essential fatty acids, or vitamins B_{12} and D. They also have a lower nutrient density due to their heavy reliance on grains.

Making it work: Include generous amounts of vegetables, fruits, legumes, nuts, and seeds. Ensure that you're getting enough iodine and vitamins B_{12} and D.

Diet: Mediterranean

Strengths: A Mediterranean diet includes generous amounts of legumes, vegetables, fruits, whole grains, nuts and seeds and limits processed foods.

Weaknesses: Such diets may be too high in fat for those who are overweight or have high cholesterol. If wine is emphasized, it may increase cancer risk.

Making it work: Rely on nuts, seeds, avocados, and olives for fat rather than oil. Ensure that you're getting enough iodine and vitamins B_{12} and D.

Diet: Nutrient-Dense

Strengths: A nutrient-dense diet emphasizes vegetables and other whole foods and provides abundant vitamins and minerals while minimizing processed foods and oil.

Weaknesses: This diet doesn't necessarily take into account harmful factors such as environmental contaminants and free radicals.

Making it work: Ensure that you're getting enough iodine and vitamins B_{12} and D. Factor in all protective dietary components as well as the potentially harmful ones (see table 8.1).

Diet: Raw

Strengths: A raw diet minimizes processed foods and avoids common allergens. It's also low in damaging dietary components, high in protective components, and avoids problems related to cooking, such as loss of nutrients and phytochemicals and formation of carcinogens.

The Paleo Diet: Facing the Facts

High-protein, low-carbohydrate diets often attract athletes, dieters, and health seekers of all stripes, and the "paleo" diet is an example. Its basic premise is simple—the diet humans ate in preagricultural, Paleolithic times is best suited for human health. While we can't blindly assume that what our relatively short-lived ancestors ate was necessarily optimal for human health, nutritional anthropologists have studied true Paleolithic diets extensively.

That diet essentially consisted of wild plants and wild animals, which varied with location, season, hunting and gathering skills, available tools, and so on. We know that preagricultural peoples didn't consume oil, sugar, salt, anything from a box or bag, or the milk of other mammals. Today's new paleo devotees attempt to copy the diet of our ancestors by eating meat, poultry, fish, vegetables, fruits, nuts, and seeds and avoiding processed foods, grains, legumes, and dairy products.

Followers apparently imagine that the nutrient intake of the new paleo diet approximates that of our Paleolithic ancestors, but they're wrong. As it turns out, vegan diets have more in common with true Paleolithic diets than the new paleo diets. This may sound like a bit of a stretch, so we did the math for you: We compared three days of recommended paleo menus from a popular paleo website with three days of recommended vegan menus from chapter 14 in this book. We also compared the average daily intakes offered by the diet true Paleolithic people ate. The results are summarized in table 8.1, which also provides dietary reference intakes (DRIs, the nutrient intake recommendations from the US National Academy of Sciences). The DRI values are for adult males and adult women 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 (dark gray for the new paleo diet and light gray for the vegan diet).

As you can see, new paleo intakes of protein, vitamin A, and zinc are closer to amounts in a true Paleolithic diet than in the vegan diet, but cholesterol intake is almost triple that of a true Paleolithic diet. However, vegan intakes of carbohydrate, fat, saturated fat, fiber, riboflavin, thiamin, vitamin C, vitamin E, iron, calcium, sodium, and potassium are all closer to levels in a true Paleolithic diet than in a new paleo diet.

More than 50 percent of calories in the new paleo diet come from fat, and 20 percent of calories come from saturated fat. In other words, today's paleo wannabes may be consuming twice the fat and more than three times the saturated fat of true Paleolithic people. Fiber intakes of the new paleo diet are about 30 grams per day in a 3,000-calorie diet, whereas the vegan menu provides about 80 grams of fiber. However, even the 100 percent plant-based vegan diet falls short when compared to the 104 grams of fiber consumed by our Paleolithic ancestors, who clearly ate plenty of plant foods.

Why does the new paleo diet fall flat on its face when compared to the true Paleolithic diet? The reason is that the meat and vegetables consumed today are very different from those eaten by true Paleolithic people. The wild animals eaten in Paleolithic times were far leaner than even the leanest domestic animals, and the wild plants were more concentrated in fiber and other nutrients than most of the crops commercially raised today. In addition, new paleo eaters tend to rely far more heavily on meat than did their ancestors.

TABLE 8.1. New paleo, true Paleolithic, and vegan diets compared

	DRI	NEW PALEO DIET	TRUE PALEOLITHIC DIET	VEGAN DIET
ENERGY (CAL/D)	**2,200–2,900**	**3,000**	**3,000**	**3,000**
MACRONUTRIENTS				
Protein (%)	10–35	32	30	15
Carbohydrate (%)	45–65	15	45–50	60
Fat (%)	15–30	53	20–25	25
Saturated fat (%)	<10	19	6	5
Cholesterol (mg)		1,308	480	0
Ratio of omega-6: omega-3		11:1	4:1–1:1	3:1
Fiber (g/d)	25–38	31	104	81
VITAMINS				
Riboflavin (mg)	1.3–1.7	2.6	6.5	4
Thiamin (mg)	1.1–1.2	2.7	3.9	3.9
Vitamin C (mg)	75–90	226	604	491
Vitamin A (mcg RAE)	700–900	2,436	3,797	1,966
Vitamin E (mg)	15	24	32.8	27
MINERALS				
Iron (mg)	8–18	25	87.4	37
Zinc (mg)	8–11	33	43.4	25
Calcium (mg)	1,000–1,200	643	1,956	2,633
Sodium (mg)	<2,300	4,193	768	1,958
Potassium (mg)	4,700	4,762	10,500	8,153

Sources of data: New paleo data is based on the average of three days (Wednesday, Thursday and Friday) of recommended menus from the Paleo Plan website (paleoplan.com/resources/sampler-menu-meal-plan/), adjusted to 3,000 calories. True Paleolithic data is from Eaton, S. B., et al., "Paleolithic Nutrition Revisited: A Twelve-Year Retrospective on Its Nature and Implications," *European Journal of Clinical Nutrition* 51, no. 4 (1997):207–216. Vegan data is based on the average of three days (1,600, 2,000 and 2,500 calorie) of menus from chapter 14, adjusted to 3,000 calories.

Bottom Line: The new paleo diet is a very pale imitation of the diet of early humans. The focus tends to be on consuming large quantities of meat. Plus, this dietary pattern ignores the environmental crisis that makes eating lower on the food chain an ecological imperative, the ethical issues associated with an increased demand for food animals, and the numerous health risks associated with the consumption of meat. If people want to move closer to a true Paleolithic diet, they might turn their attention to becoming vegan—it's as close to a true Paleolithic diet as most modern-day people can achieve.

TABLE 14.1. Food groups and serving sizes

FOOD GROUP AND SERVINGS PER DAY	FOODS IN THIS GROUP WITH SERVING SIZE	CALCIUM-RICH FOODS WITH SERVING SIZE	NOTES
Vegetables: 5 or more servings	½ c (125 ml) raw or cooked vegetables 1 c (250 ml) raw leafy vegetables ½ c (125 ml) vegetable juice	1 c (250 ml) cooked bok choy, broccoli, collard greens, kale, mustard greens, napa cabbage, or okra 2 c (500 ml) raw bok choy, broccoli, collard greens, kale, or napa cabbage ½ c (125 ml) calcium-fortified tomato or vegetable juice	Include at least 2 daily servings of calcium-rich greens. Choose from the full rainbow of colorful vegetables: purple, blue, green, yellow, orange, red, and white.
Fruits: 4 or more servings	½ c (125 ml) fruit or fruit juice ¼ c (60 ml) dried fruit 1 medium fruit	½ c (125 ml) calcium-fortified fruit juice ¼ c (60 ml) dried figs 2 oranges	Fruits are excellent sources of potassium. Enjoy the full spectrum of colorful fruits, and make them your sweet treats.
Legumes: 3 or more servings	½ c (125 ml) cooked beans, peas, lentils, tofu, or tempeh 1 c (250 ml) raw peas or sprouted lentils or peas ¼ c (60 ml) peanuts 2 tbsp (30 ml) peanut butter 1 oz (30 g) vegan meat	1 c (250 ml) black or white beans ½ c (125 ml) fortified soy milk or soy yogurt ½ c (125 ml) calcium-set tofu (look for calcium on the ingredient list), cooked soybeans, or soy nuts	Legumes are great sources of protein, iron, and zinc with an average of 7 to 9 grams of protein per serving. Include a selection from this group at most meals.
Grains: 3 or more servings	½ c (125 ml) cooked cereal, pasta, quinoa, rice, or other grain 1 oz (30 g) bread ½ c (125 ml) raw corn or sprouted quinoa, buckwheat, or other grain 1 oz (30 g) cold cereal	1 oz (30 g) calcium-fortified cereal or bread 1 calcium-fortified tortilla	Select whole grains as often as possible. Adjust the number of grain servings to suit your energy needs; some need many more servings. Some fortified cereals and tortillas are particularly high in calcium.
Nuts and seeds: 1 or more servings	¼ c (60 ml) nuts or seeds 2 tbsp (30 ml) nut or seed butter	¼ c (60 ml) almonds 2 tbsp (30 ml) almond butter or sesame tahini	Seeds and nuts contribute copper, selenium, other minerals, vitamin E, and fat; choose some that are rich in omega-3s.

Source of data: See *Becoming Vegan: Comprehensive Edition,* by Brenda Davis and Vesanto Melina (Book Publishing Company, 2014).

Whether you're considering going vegan for your health, out of concern for the environment, or to avoid contributing to the suffering of animals, *Becoming Vegan: Express Edition* has all the information you need in order to provide nutritious vegan meals for yourself, your family, and your friends.

Internationally acclaimed vegan dietitians Brenda Davis and Vesanto Melina present the latest findings on the following:

- **using plant foods to protect against cancer, heart disease, and other chronic illnesses**
- **obtaining essential protein without meat, eggs, or dairy products**
- **maintaining a healthy weight and discovering the keys to fitness**
- **designing balanced vegan diets for infants, children, and seniors**
- **incorporating "good" fats and learning where to find them**
- **meeting calcium needs without dairy products**
- **understanding the importance of vitamin B_{12}**
- **ensuring a healthy vegan pregnancy and ample nutrition for breast-feeding**

Completely revised, this seminal classic offers fresh insights into the implications of becoming vegan—for individuals, for animals, and for our fragile planet. It includes new information on the health benefits of vegan diets and a blueprint for clean eating. This streamlined "express" version is extensive yet easily understandable for anyone who wants to construct an optimal plant-based diet.

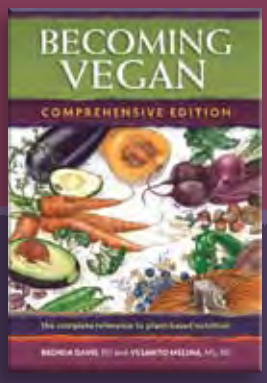
Registered dietitian BRENDA DAVIS is a leader in her field and an esteemed, popular speaker. She is a past chairperson of the Vegetarian Nutrition Dietetic Practice Group of the Academy of Nutrition and Dietetics (formerly the American Dietetic Association) and coauthor of more than seven books, including *Defeating Diabetes*. Brenda is the 2007 inductee into the Vegetarian Hall of Fame.

VESANTO MELINA, a registered dietitian and a sought-after speaker and consultant, has taught nutrition at the University of British Columbia and Bastyr University in Seattle. She coauthored the joint position paper on vegetarian diets for the Academy of Nutrition and Dietetics and Dietitians of Canada and is currently a consultant to the government of British Columbia.

"There's no other book as informative and comprehensive as Becoming Vegan; *it's a treasure trove of facts and helpful hints and it's sure to put you on the path of health and healing."*

KATHY FRESTON, *New York Times* bestselling author of *The Lean, Veganist,* and *The Quantum Wellness Cleanse*

Health professionals and nutrition enthusiasts: Be sure to look for Becoming Vegan: Comprehensive Edition. *Expanding on the more compact "express" version, this indispensable reference sets the standard on vegan nutrition and contains additional topics, in-depth analyses, and full citations of scientific studies.*



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