

The Myths of Vegetarianism

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"An unflinching determination to take the whole evidence into account is the only method of preservation against the fluctuating extremes of fashionable opinion"--
Alfred North Whitehead

Bill and Tanya sat before me in my office in a somber mood: they had just lost their first baby in the second month of pregnancy. Tanya was particularly upset: "Why did this happen to me? Why did I miscarry my baby?" The young couple had come to see me mostly because of Tanya's recurrent respiratory infections, but also wanted some advice as to how they could avoid the heartache of another failed pregnancy.

Upon questioning Tanya about her diet, I quickly saw the cause of her infections, as well as her miscarriage: she had virtually no fat in her diet and was also mostly a vegetarian. Because of the plentiful media rhetoric about the supposed dangers of animal product consumption, as opposed to the supposed health benefits of the vegetarian lifestyle, Tanya had deliberately removed such things as cream, butter, meats and fish from her diet. Although she liked liver, she avoided it due to worries over "toxins."

Tanya and Bill left with a bottle of vitamin A, other supplements and a dietary prescription that included plentiful amounts of animal fats and meat. Upon leaving my office, Tanya looked at me and said ruefully: "I just don't know what to believe sometimes. Everywhere I look there is all this low-fat, vegetarian stuff recommended. I followed it, and look what happened." I assured her that if she and her husband changed their diets and allowed sufficient time for her weakened uterus to heal, they would be happy parents in due time. As they left, I shook my head in disbelief and concern: I knew they were not the only ones.

Along with the saturated fat and cholesterol scares of the past several decades has come the notion that vegetarianism is a healthier dietary option for people. It seems as if every health expert and government health agency is urging people to eat fewer animal products and consume more vegetables, grains, fruits and legumes. Along with these exhortations have come assertions and studies supposedly proving that vegetarianism is healthier for people and that meat consumption causes sickness and death. Several medical authorities, however, have questioned these data, but their objections have been largely ignored.

As we shall see, many of the vegetarian claims cannot be substantiated and some are simply false and dangerous. There are benefits to vegetarian diets for certain health conditions, and some people function better on less fat and protein, but, as a practitioner who has dealt with several former vegans (total vegetarians), I know full well the dangerous effects of a diet devoid of healthful animal products.

It is my hope that all readers will more carefully evaluate their position on vegetarianism after reading this article. It is important to note that there are different types of vegetarianism, including lacto-vegetarian diets (dairy products included) and lacto-ovo-vegetarian diets (dairy products and eggs included). The nutritional caveats that follow are primarily directed at veganism, or a diet totally lacking in animal products.

MYTH #1:

Meat consumption contributes to famine and depletes the Earth's natural resources.

Some have argued that cows and sheep require pasturage that could be better used to raise grains to feed starving millions in Third World countries. Additionally, claims are made that raising livestock requires more water than raising plant foods. Both arguments are illogical and simplistic. The pasturage argument ignores the fact that a large portion of our Earth's dry land is unsuited to cultivation. The open range and desert and mountainous areas yield their fruits to grazing animals (1).

Unfortunately, the bulk of commercial livestock are not range fed, but stall-fed. They do not ingest grasses and shrubs (like they should), but are fed an unnatural array of grains and soybeans. It is true that these foods could be fed to humans. The argument here, then, is not that eating meat depletes the Earth's resources, but that commercial farming methods do. Such methods also subject livestock to deplorable living conditions where infections, antibiotics, steroids and synthetic hormones are common. These all lead to an unhealthy animal and, by extension, an unhealthy food product. Organically raised livestock, then, is a healthier and more humane choice (see myth #15 for more on this topic).

As for the claims that raising livestock requires more water than raising plant foods, water that livestock drink would be drunk by them anyway, even if they were not being raised for food. Additionally, the urine of grazing animals, which mostly comprises water, is rich in nitrogen, which helps replenish the soil. Much of the water used in commercial livestock farming, however, is used up in growing the various grains and soybeans fed to the animals. If a concerted effort were made to return to the ecologically sound "mixed farm," (described below), then such huge expenditures of water would be unnecessary.

A far more serious threat to humanity, and the Earth, is the monoculture of grains and legumes, advocated by some vegetarian groups, which depletes the soil and requires the heavy use of artificial fertilizers and dangerous pesticides; pesticides that must first be tested on animals for safety (2). The solution? Astute writers on this dilemma have pointed out:

The educated consumer and the enlightened farmer together can bring about a return of **the mixed farm, where cultivation of fruits, vegetables and grains is**

combined with the raising of livestock and fowl in a manner that is efficient, economical and environmentally friendly. For example, chickens running free in garden areas eat insect pests, while providing high-quality eggs; sheep grazing in orchards obviate the need for herbicides; and cows grazing in woodlands and other marginal areas provide rich, pure milk, making these lands economically viable for the farmer. **It is not animal cultivation that leads to hunger and famine, but unwise agricultural practices and monopolistic distribution systems.** (3)

The "mixed farm" is also healthier for the soil, which will yield more crops if managed according to traditional guidelines. British organic farmer and dairyman Mark Purdey has accurately pointed out that a crop field on a **mixed farm will yield up to five harvests a year, while a "mono-cropped" one will only yield one or two** (4). Which farm is producing more food for the world's peoples? Purdey well sums up the ecological horrors of "battery farming" by saying:

Our agricultural establishments could do very well to outlaw the business-besotted farmers running intensive livestock units, battery systems and beef-burger bureaucracies; with all their wastages, deplorable cruelty, anti-ozone slurry systems; drug/chemical induced immunotoxicity resulting in B.S.E. [see myth # 13] and salmonella, rain forest eradication, etc. Our future direction must strike the happy, healthy medium of mixed farms, resurrecting the old traditional extensive system as a basic framework, then bolstering up productivity to present day demands by incorporating a more updated application of biological science into farming systems. (5)

MYTH #2:

Vitamin B12 can be obtained from plant sources.

Of all the myths, this is perhaps the most dangerous. Vegans who do not supplement their diet with vitamin B12 will eventually get anemia (a fatal condition) as well as severe nervous and digestive system damage (6). Claims are made that B12 is present in certain algae, tempeh (a fermented soy product) and brewer's yeast. All of them are false.

Like the niacin in corn, the B12 analogues present in algae and tempeh are not bioavailable. We know this because studies done on people's blood levels of B12 remained the same after they ate spirulina and tempeh; there was no change, clearly indicating no absorption by the body (7). Further, **the ingestion of too much soy increases the body's need for B12** (8). Brewer's yeast does not contain B12 naturally; it is always fortified from an outside source.

Some vegetarian authorities claim that B12 is produced by certain fermenting bacteria in the intestines. This may be true, but it is in a form unusable by the body. B12 requires intrinsic factor from the stomach for proper absorption in the ileum. Since the bacterial product does not have intrinsic factor bound to it, it

cannot be absorbed (9).

It is true that vegans living in certain parts of India do not suffer from vitamin B12 deficiency. This has led some to conclude that plant foods do provide this vitamin. This conclusion, however, is erroneous as many small insects, their eggs, larvae and/or residue, are left on the plant foods these people consume, due to non-use of pesticides and inefficient cleaning methods. This is how these people obtain their vitamin B12. This contention is borne out by the fact that when Indian Hindus migrated to England, they came down with pernicious anemia within a few years. In England, the food supply is cleaner, and insect residues are completely removed from plant foods (10). The only reliable and absorbable sources of vitamin B12 are animal products, especially organ meats and eggs (11). Though present in lesser amounts, milk products do contain B12. Vegans, therefore, should consider adding dairy products into their diets. If dairy cannot be tolerated, eggs, preferably from free-run hens, are a virtual necessity.

That vitamin B12 can only be obtained from animal products is one of the strongest arguments against veganism being a "normal" way of human eating. Today, vegans can avoid anemia by taking supplemental vitamins or fortified foods. If those same people had lived just a few decades ago, when these products were unavailable, they would have died.

In my own practice, I recently saved two vegans from death from anemia by convincing them to eat generous amounts of dairy products. Both of these sickly gentlemen thought their B12 needs were being met by tempeh and spirulina. They weren't.

MYTH #3:

The body can convert omega-6 fatty acids into omega-3 fatty acids as it needs.

This falsehood is akin to myth number two. Omega 3 and 6 fatty acids are polyunsaturated fats of which two, linolenic (an omega-3) and linolenic (an omega 6), are essential to human life and must be obtained from food as the body cannot synthesize them. Although very small amounts of omega 3 linolenic acid are found in whole grains and dark green leafy vegetables, it is principally found in animal foods (especially fish and eggs), as well as flax seed oil. Omega 6 linolenic acid is mostly found in vegetables, but small amounts are present in certain animal fats. To assuage vegans who fear they may not get enough omega 3 linolenic acid, some vegetarian sources assert that the body can simply convert excess omega 6 linolenic acid into omega 3 linolenic acid, and other omega 3 fatty acids such as EPA and DHA, two fatty acids intimately involved in the health of the brain and immune system.

Renowned lipid biochemist Dr Mary Enig, of the University of Maryland, and other authorities have shown that the body **cannot change the omega number of fatty**

acids. The body can change the fatty acid's degree of saturation and also its molecular length, but not its omega number (12). In other words, omega 6 fatty acids can only be converted into other omega 6 fatty acids; omega 3s only into other omega 3s.

Again, I have seen the results of this misinformation in my practice. I've had several patients of Northern European descent with severe mental and immune problems caused by a lack of EPA and DHA, two omega-3 fatty acids not found in plant foods (DHA is found in small amounts in some algae). People native to warmer climates in the world can manufacture these fatty acids from other omega-3s, but those of Northern European or Inuit descent cannot. Since their ancestors ate so much EPA- and DHA-rich fish, their bodies eventually lost the ability to manufacture these fatty acids (13). For these people, vegetarianism is impossible; they must consume either eggs or fish in order to survive.

There is also a very real danger from consuming too many omega-6 fatty acids, principally found in vegetables. The body requires both omega-6 and omega-3 fatty acids. However, when the body's cells are overloaded with omega-6s, their ability to utilize the omega-3 is inhibited (14). Chronically low levels of omega-3 fatty acids are associated with higher cancer rates and immune dysfunction. Excessive levels of omega-6 fatty acids are also strongly correlated with a high incidence of cardiovascular disease (as is excessive consumption of refined sugar and trans-fatty acids) [15].

MYTH #4:

The body's needs for vitamin A can be entirely obtained from plant foods.

Vitamin A is principally found in animal products. Plants do contain beta-carotene, a substance that the body can convert into vitamin A. The impression given by some vegetarian sources is that beta-carotene is just as good as vitamin A. This is not true.

Firstly, the conversion from carotene to **vitamin A can only take place in the presence of bile salts.** This means that **fat must be eaten with the carotenes to stimulate bile secretion.** Additionally, infants and people with hypothyroidism, gall bladder problems or diabetes either cannot make the conversion or do so very poorly. Lastly, the body's conversion from carotene to vitamin A is not very efficient: **it takes 46 units of carotene to make one unit of vitamin A.** What this means is that the sweet potato (containing about **25,000 units of beta-carotene**) **you just ate will only convert into about 4,000 units of vitamin A (assuming you ate it with fat and do not have a thyroid or gall bladder problem)** [16].

Relying on plant sources for vitamin A, then, is not a very wise idea. This is why good-old-fashioned butter is a virtual must in any diet. Butter from pasture-fed cows is rich in vitamin A and will provide the intestines with the fatty material needed to convert vegetable carotenes into active vitamin A. **Vitamin A is all-**

important in our diets, for it enables the body to use proteins and minerals (17).

MYTH #5:

Meat-eaters have higher rates of heart and kidney disease, cancer, obesity and osteoporosis than vegetarians.

Such stupendous claims are hard to reconcile with historical and anthropological facts. All of the diseases mentioned are primarily **20th century occurrences**, yet people have been eating meat and animal fat for thousands of years. Further, there are several native peoples around the world (the Innu, Masai, Swiss, Greeks, etc.) whose traditional diets are very rich in animal products, but do not suffer from the above-mentioned maladies (18). This shows that other factors besides animal foods are at work in these diseases.

Several studies have supposedly shown that meat consumption is the cause of heart disease, cancer and bone loss, but such studies, honestly evaluated, show no such thing (19). For example, the studies that supposedly proved that meat consumption among the Innuit caused high rates of osteoporosis, failed to note other dietary factors that contributed to bone loss (and to the other chronic diseases listed in myth #5). ***Things such as refined sugar consumption, alcoholism and a junk food consumption equaled more bone loss were not done with real meat but with fractionated protein powders*** (20).

Certainly, **when protein is consumed in such an unnatural fashion, separated from the fat-soluble nutrients required for its absorption and assimilation, it will lead to problems.** Because of this, the current use of fat-free protein powders as "food supplements", and low-fat or non-fat dairy products should be avoided. Trimming off visible fat from meats and removing duck and chicken skin before eating should also be discouraged.

Despite claims that studies have shown that meat consumption increased the risk for heart disease (21); their authors actually found the opposite. For example, in a 1984 analysis of a 1978 study of Seventh Day Adventists (who are largely vegetarian), H. A. Kahn concluded, "Although our results add some substantial facts to the diet-disease question, we recognize how remote they are from establishing, for example, that men who frequently eat meat or women who rarely eat salad are thereby shortening their lives" (21). A similar conclusion was reached by D.A. Snowden (21). Despite these startling admissions, the studies nevertheless concluded the exact opposite and urged people to reduce animal foods from their diets.

Further, both of these studies threw out certain dietary data that clearly showed no connection between eggs, cheese, whole milk, and fat attached to meat (all high fat and cholesterol foods) and heart disease. Statistician Dr. Russel Smith concluded, "In effect the Kahn [and Snowden] study is yet another example of

negative results which are massaged and misinterpreted to support the politically correct assertions that vegetarians live longer lives." When all of the data are taken into account, the actual differences of heart disease between vegetarians and non-vegetarians in these studies was less than 1%: hardly a significant amount (22).

It should be noted here that Seventh Day Adventists are often studied in population analyses to prove that a vegetarian diet is healthier and is associated with a lower risk for heart disease and cancer (but see the last paragraph in this section). While it is true that most members of this Christian denomination do not eat meat, they also do not smoke, drink alcohol, or drink coffee or tea, all of which may be factors in promoting cancer and heart disease (23).

The Mormons are a religious group often overlooked in vegetarian studies. Although their Church urges moderation, Mormons do not abstain from meat. Mormonism's founder, Joseph Smith, declared a diet devoid of animal products as "not of God." As with the Adventists, Mormons avoid tobacco, alcohol, and caffeine. Despite being meat eaters, a study of Utah Mormons showed they had a 22% lower rate for cancer in general and a 34% lower mortality for colon cancer than the US average (24). A study of Puerto Ricans, who eat large amounts of fatty pork, nevertheless revealed very low rates of colon and breast cancer (25). Similar results can be adduced to demonstrate that meat consumption by itself does not correlate with cancer, heart disease, osteoporosis, kidney disease, or obesity (26). Obviously, other factors are at work.

It is usually claimed that vegetarians have lower cancer rates than meat-eaters, but a 1994 study of California Seventh Day Adventists (who are largely vegetarian) showed that, while they did have lower rates of some cancers (e.g., breast), they had significantly higher rates of several others (brain, skin, uterine, cervical and ovarian)! (27)

MYTH #6:

Saturated fats cause heart disease and cancer, and low-fat, low-cholesterol diets are healthier for people.

Despite claims that primitive societies are/were largely vegetarian, diets of native peoples the world over are rich in saturated fats and animal foods (28) and, as noted above, heart disease and cancer are primarily modern diseases. Saturated fat consumption, therefore, cannot logically cause these diseases. As with the poorly done studies of the Inuit, modern-day researchers fail to take into account other dietary factors of people who have heart disease and cancer. As a result, the harmful effects of eating refined sugar, nutrient-poor "foods," trans-fats (found in margarine and hydrogenated oils) and vegetable oils get mixed up with animal fat consumption. It is commonly believed that saturated fats and cholesterol "clog arteries", but such ideas have been shown to be false by such scientists as Linus Pauling, George Mann, John Yudkin, Abram Hoffer, Mary Enig and others (29). On the contrary, **studies have shown that arterial plaque is**

primarily composed of UNsaturated fats, particularly polyunsaturated ones, and not the saturated fat of animals, palm or coconut (30).

Trans-fatty acids, as opposed to saturated fats, have been shown by researchers such as Enig, Mann and Fred Kummerow to be causative factors in atherosclerosis, coronary heart disease, cancer and other assorted diseases (31).

A recent study of thousands of Swedish women showed no correlation between saturated fat consumption and increased risk for breast cancer. However, the study did show a strong link between vegetable oil intake and higher breast cancer rates (32).

The Framingham Heart Study is often cited as proof that dietary cholesterol and saturated fat intake cause heart disease and ill health. Involving about 6,000 people, the study compared two groups over several years at five-year intervals. One group consumed little cholesterol and saturated fat, while the other consumed high amounts. Surprisingly, Dr William Castelli, the study's director, is quoted in the Archives of Internal Medicine (July 1992) as saying:

In Framingham, Mass., the more saturated fat one ate, the more cholesterol one ate, the more calories one ate, the lower the person's serum cholesterol ... we found that the people who ate the most cholesterol ate the most saturated fat, ate the most calories, weighed the least and were the most physically active.

It is true that the study did show that those who weighed more and had higher serum cholesterol levels were more at risk for heart disease, but weight gain and cholesterol levels had an inverse correlation with dietary fat and cholesterol intake. In other words, there was no correlation at all (33).

In a similar vein, the US Multiple Risk Factor Intervention Trial, sponsored by the National Heart and Lung Institute, compared mortality rates and eating habits of 12,000+ men. Those who ate less saturated fat and cholesterol showed a slightly reduced rate of coronary heart disease (CHD), but had an overall mortality rate much higher than the other men in the study (34).

The few studies that indicate a correlation between saturated fat reduction and a lower CHD rate also clearly document a sizeable increase in deaths from cancer, suicide, violence and brain hemorrhage (34). Like the bone density experiments, such things are not told to the public.

Low-fat/cholesterol diets, therefore, are decidedly not healthier for people. **Studies have proven over and over that such diets are associated with depression, cancer, psychological problems, fatigue, violence and suicide (35).**

Children on low-fat diets suffer from growth problems, failure to thrive, and

learning disabilities (36). Despite this, sources from Dr. Benjamin Spock to the American Heart Association recommend low-fat diets for children! One can only lament the fate of those unfortunate youngsters who will be raised by unknowing parents taken in by such misinformation.

There are many health benefits to saturated fats, depending on the fat in question. Coconut oil, for example, is rich in lauric acid, a potent antifungal and antimicrobial substance. Coconut also contains appreciable amounts of caprylic acid, also an effective antifungal (37). Butter from free-range cows is rich in trace minerals, especially selenium, as well as all of the fat-soluble vitamins and beneficial fatty acids that protect against cancer and fungal infections (38).

In general, however, saturated fats provide a good energy source for the vital organs, **protect arteries against damage by the atherogenic lipoprotein (a)**, are rich in fat-soluble vitamins, help raise HDL levels in the blood, and make possible the utilization of essential fatty acids. They are excellent for cooking, as they are chemically stable and do not break down under heat, unlike polyunsaturated vegetable oils. Omitting them from one's diet, then, is ill advised (39).

MYTH #7:

Vegetarians live longer and have more energy and endurance than meat-eaters.

Surprising as it may seem, some prior studies have shown the annual all-cause death rate of vegetarian men to be slightly more than that of non-vegetarian men (0.93% vs 0.89%). Similarly, the annual all-cause death rate of vegetarian women was shown to be significantly higher than that of non-vegetarian women (0.86% vs 0.54%). (40)

Russell Smith, PhD, referred to in myth # 5, in his authoritative study on heart disease, showed that as animal product consumption increased among some study groups, death rates decreased! Such results were not obtained among vegetarian subjects. For example, in a study published by Burr and Sweetnam in 1982, analysis of mortality data revealed that, although vegetarians had a slightly (.11%) lower rate of heart disease than non-vegetarians, the all-cause death rate was much HIGHER for vegetarians (41).

It is usually claimed that the lives of predominantly meat-eating peoples are short-lived, but the Aborigines of Australia, who traditionally eat a diet rich in animal products, are known for their longevity (at least before colonization by Europeans). Within Aboriginal society, there is a special caste of the elderly (42). Obviously, if no old people existed, no such group would have existed. In his book Nutrition and Physical Degeneration, Dr. Price has numerous photographs of elderly native peoples from around the world (42). Explorers such as Vilhjalmur Stefansson reported great longevity among the Inuit (again, before

colonization). (43)

Similarly, the Russians of the Caucasus mountains live to great ages on a diet of fatty pork and whole milk products. The Hunzas, also known for their robust health and longevity, eat substantial portions of goat's milk, which has a higher saturated fat content than cow's milk (44). In contrast, **the largely vegetarian inhabitants of southern India have the shortest life spans in the world** (45). Dr Weston Price, DDS, traveled around the world in the 1920s and 1930s investigating native diets. Without exception, he found a strong correlation among diets rich in animal fats, with robust health and athletic ability. Special foods for Swiss athletes, for example, included bowls of fresh, raw cream! In Africa, Dr Price discovered that groups whose diets were rich in fatty fish and organ meats, like liver, consistently carried off the prizes in athletic contests, and that **meat-eating tribes always dominated peoples whose diets were largely vegetarian** (42).

It is popular in sports nutrition to recommend "carb loading" for athletes, to increase their endurance levels. But recent studies done in New York and South Africa show that the opposite is true: **athletes who "carb loaded" had significantly less endurance than those who "fat loaded" before athletic events** (46).

MYTH #8:

The "cave man" diet was low-fat and/or vegetarian.

Our Neolithic ancestors were hunter-gatherers, and two schools of thought have developed as to what their diet was like. One group argues for a high-fat and animal-based diet supplemented with seasonal fruits, berries, nuts, root vegetables and wild grasses. The other argues that primitive peoples consumed small amounts of lean meats and large amounts of plant foods. Once again, such notions of a "low-fat diet" are hard to reconcile with what we know of modern-day hunter-gatherer societies. Present-day African tribes readily consume the fatty portions of animals, especially organs such as the brain, liver and tongue. The Aborigines, another hunter-gatherer society, also have a diet rich in saturated animal fats (47).

Explorers such as Stefansson reported that the Inuit and North American Indian tribes would worry when their caches of caribou were too lean: **they knew sickness would follow if they did not consume enough fat** (48).

Canadian Indians would deliberately hunt older male caribou and elk, for these animals carried a 50-pound slab of back fat on them, which the Indians would eat with relish. Native Americans would also refrain from hunting bison in the springtime (when the animals' fat stores were low, due to scarce food supply during the winter), preferring to hunt, kill and consume them in the fall when they were fattened up.

More interesting is the way political prisoners are sometimes tortured in South and Central America: they're fed a diet of lean meat and they die quickly. Why? Without the fat-soluble vitamins contained in animal lipids, the body is unable to utilize and synthesize the proteins and other nutrients present in the meat (49).

On his journeys, Dr Price never once found a totally vegetarian culture. Anthropological data support this: throughout the globe, all societies show a preference for animal foods and fats and people only turn to vegetarianism when they have to (50). Nutritional anthropologist H. Leon Abrams Jr. has shown that prehistoric man's quest for more animal foods spurred his expansion over the Earth, and that he apparently hunted certain species to extinction (50).

Price also found that those peoples, who, out of necessity consumed more grains and legumes, had higher rates of dental decay than those who consumed more animal products (51). Archaeological evidence supports this finding: skulls of prehistoric peoples who were largely vegetarian have teeth containing caries and abscesses and show evidence of tuberculosis (50, 51).

Based on all of this evidence, it is certain that the diets of our ancestors, the progenitors of humanity, ate a very NON-vegetarian diet that was rich in saturated animal fat.

MYTH #9:

Meat and saturated fat consumption have increased in the 20th century, with a corresponding increase in heart disease and cancer.

Statistics do not bear out such fancies. **Butter consumption has plummeted from 18 lb (8.165 kg) per person a year in 1900, to less than 5 lb (2.27 kg) per person a year today** (52). Additionally, Westerners, urged on by government health agencies, have reduced their intake of eggs, cream, lard, beef and pork. Chicken consumption has risen in the past few decades, but chicken is low in saturated fat (chicken skin contains primarily polyunsaturated fat).

Furthermore, a survey of cookbooks published in the last century shows that people of earlier times ate plenty of animal foods and saturated fats. For example, in the Baptist Ladies Cook Book (Monmouth, Illinois, 1895), virtually every recipe calls for butter, cream or lard. Recipes for creamed vegetables are numerous as well. A scan of the Searchlight Recipe Book (Capper Publications, 1931) also has similar recipes: creamed liver, creamed cucumbers, hearts braised in buttermilk, etc. British Jews, as shown by the Jewish Housewives Cookbook (London, 1846), also had diets rich in cream, butter, eggs, and lamb and beef tallows. One recipe for German waffles, for example, calls for an entire pound of butter! A recipe for Oyster Pie from the Baptist cookbook calls for a quart of cream and a dozen eggs, and so forth and so on.

It does not appear, then, that meat or saturated fat consumption has risen in this century. What has gone up, however, is consumption of margarine and other

trans-fatty acids, lifeless, packaged "foods," processed vegetable oils, pasteurised/homogenised milk, commercially raised livestock and plant foods, and refined sugar. These, along with exposure to a growing number of environmental poisons, are our real culprits in the modern epidemics of cancer and coronary heart disease (and other chronic illnesses) [53].

MYTH #10:

Soy products are adequate substitutes for meat and dairy products.

The billion-dollar soy industry has profited immensely from the anti-cholesterol, anti-meat gospel of current nutritional thought. Whereas, not so long ago, soy was an Asian phenomenon (**Soy was once only a tasteless, meat-substitute sold at health food stores**)*, now soy products proliferate in the North American market. While the traditionally fermented soy products of miso, shoyu, tempeh and natto are definitely healthful in measured amounts the hyper-processed soy "foods" are not.

Non-fermented soybeans are extremely high in phytic acid (54), an anti-nutrient that binds to minerals in the digestive tract and carries them out of the body. Vegetarians are known for their high rates of iron and zinc deficiencies (55).

Soybeans are also rich in trypsin inhibitors, which hinder protein digestion. **Textured vegetable protein (TVP), soy "milk" and soy protein powders, and popular vegetarian meat and milk substitutes are entirely fragmented foods made by treating soybeans with high heat and various alkaline washes to extract the beans' fat content or to neutralize their potent enzyme inhibitors. These practices completely denature the beans' protein content, rendering it very hard to digest. MSG, a neurotoxin, is routinely added to TVP to make it taste like the various foods it imitates** (56).

On a purely nutritional level, soybeans, like all legumes, are deficient in cysteine and methionine, vital sulphur-containing amino acids (56). Soybeans are also lacking in tryptophan, another essential amino acid (56).

Furthermore, **soybeans contain no vitamins A or D, required by the body to assimilate and utilize the beans' proteins** (56). **It is probably for this reason that Asian cultures that do consume soybeans usually combine them with fish or fish broths**, The New Zealand government is considering removing soy formula from the market and making it available only by prescription (58).

Though research is still ongoing, some recent studies have indicated that soy's phyto-oestrogens could be causative factors in breast cancer and infantile leukemia (59). Regardless, soy's phyto-oestrogens, or isoflavones, have been shown to depress thyroid function and cause infertility in some animals (60). As a practitioner, I have seen more than my share of vegetarians with hypothyroidism. They invariably rely on soy foods to get their protein.

MYTH #11:

The human body is not designed for meat consumption.

Some vegetarian groups claim that since humans possess grinding teeth like herbivorous animals and longer intestines than carnivorous animals, this proves the human body is better suited for vegetarianism (61). This argument fails to note several human physiological features, which clearly indicate a design for animal product consumption.

First and foremost is our stomach's production of hydrochloric acid, something not found in herbivores. HCL activates protein-splitting enzymes. Further, the human pancreas manufactures a full range of digestive enzymes to handle a wide variety of foods, both animal and vegetable. While humans may have longer intestines than animal carnivores, they are not as long as herbivores; nor do we possess multiple stomachs like many herbivores, nor do we chew cud. Our physiology definitely indicates a mixed feeder, or an omnivore, much the same as our relatives, the mountain gorilla and chimpanzee (who have been observed eating small animals and, in some cases, other primates) [62].

MYTH #12:

Eating animal flesh causes violent, aggressive behavior in humans.

Some authorities on vegetarian diet, such as Dr Ralph Ballantine in Transition to Vegetarianism (63), claim that the fear and terror (if any, see myth #15) an animal experience at death is somehow "transferred" into its flesh and organs and "becomes" a part of the person who eats it. In addition to the fact that no scientific studies exist to support such a theory, these thinkers would do well to remember the numerous studies that show that low saturated-fat consumption CAUSES violent behavior in people (see notes to myth #7). Furthermore, in his travels, Dr Price always noted the extreme happiness and ingratiating natures of the peoples he encountered, most of who were heavy meat-eaters (see references to Weston Price in notes).

MYTH #13:

Animal products contain numerous, harmful toxins.

A recent vegetarian newsletter claimed the following: "Most people don't realize that meat products are loaded with poisons and toxins! Meat, fish and eggs all decompose and putrefy extremely rapidly. As soon as an animal is killed, self-destruct enzymes are released, causing the formation of denatured substances called ptyloamines, which cause cancer." (64) This article then went on to mention "mad cow disease" (BSE), parasites, salmonella, hormones, nitrates and pesticides as toxins in animal products.

If meat, fish and eggs do indeed generate cancerous "ptyloamines," it is very strange that people have not been dying in droves from cancer for the past million years. Such sensationalistic and nonsensical claims cannot be supported by historical fact.

Hormones, nitrates and pesticides are present in commercially raised animal products (as well as commercially raised fruits, grains and vegetables) and are definitely things to be concerned about. However, one can avoid these chemicals by taking care to consume range-fed, organic meats, eggs and dairy products, which do not contain harmful, man-made toxins.

Parasites are easily avoided by taking normal precautions in food preparations. Pickling or fermenting meats, as is custom in traditional societies, always protects against parasites. In his travels, Dr Price always found healthy, disease-free and parasite-free peoples eating raw meat and dairy products as part of their diets.

Similarly, Dr Francis Pottenger, in his experiments with cats, demonstrated that the healthiest, happiest cats were the ones on the all-raw-food diet. The cats eating cooked meats and pasteurized milk sickened and died and had numerous parasites. Salmonella can be transmitted by plant products as well as animal (65).

Mad Cow Disease is probably not caused by cows eating animal parts with their food, a feeding method that has been done for over 100 years. British organic farmer Mark Purdey has argued convincingly that **cows that get Mad Cow Disease are the very ones that have had a particular organophosphate insecticide applied to their backs (see notes to myth #1) or have grazed on soils that lack magnesium but contain high levels of aluminum. Small outbreaks of "mad cow disease" have also occurred among people who reside near cement and chemical factories and in certain areas with volcanic soils.**

Purdey theorizes that the organophosphate pesticides got into the cows' fat through a spraying program, and then were ingested by the cows again with the animal part feeding. Seen this way, it is the insecticides; via the parts feeding (and not the parts themselves) that caused this outbreak. As noted before, cows have been eating ground up animal parts in their feeds for over 100 years. It was never a problem before the introduction of these particular insecticides (66).

MYTH #14:

Eating meat or animal products is less "spiritual" than eating only plant foods.

It is often claimed that those who eat meat or animal products are somehow less "spiritually evolved" than those who do not. Though this is not a nutritional or

academic issue, those who do include animal products in their diet are often made to feel inferior in some way. This issue, therefore, is worth addressing.

Several world religions place no restrictions on animal consumption; and nor did their founders. The Jews eat lamb at their most holy festival, the Passover. Muslims also celebrate Ramadan with lamb before entering into their fast. Jesus Christ, like other Jews, partook of meat at the Last Supper (according to the canonical Gospels). It is true that some forms of Buddhism do place strictures on meat consumption, but dairy products are almost always allowed. Similar tenets are found in Hinduism. As part of the Samhain celebration, Celtic pagans would slaughter the weaker animals of the herds and cure their meat for the oncoming winter. It is not true, therefore, that eating animal foods is always connected with "spiritual inferiority."

Nevertheless, it is often claimed that, since eating meat involves the taking of a life, it is somehow tantamount to murder. Leaving aside the religious philosophies that often permeate this issue, what appears to be at hand is an understanding of the life force and how it works. Modern peoples (vegetarian and non-vegetarian) have lost touch with what it takes to survive in our world something native peoples never lose sight of. We do not necessarily hunt or clean our meats: we purchase steaks and chops at the supermarket. We do not necessarily toil in rice paddies: we buy bags of brown rice; and so forth, and so on.

When Native Americans would kill a game animal for food, they would routinely offer a prayer of thanks to the animal's spirit for giving its life so that they could live. In our world, life feeds off life. Destruction is always balanced with generation. This is a good thing: unchecked, the life force becomes cancerous. If animal food consumption is viewed in this manner, it is hardly murder, but sacrifice. Modern peoples would do well to remember this.

MYTH #15:

Eating animal foods is inhumane.

Without question, commercially raised livestock live in deplorable conditions where sickness and suffering are common. Additionally, some prescription drugs are derived from animals (e.g., Premarin) in torturous ways. In America, at least, livestock animals are exempted from anti-cruelty laws and, typically, commercially raised livestock animals are slaughtered in ways that promote adrenaline release, which could have harmful effects on the people who eventually consume them. In countries like Korea, food animals such as dogs are killed in horrific ways, i.e., beaten to death with a club. Our recommendations for animal foods consumption most definitely do not endorse such practices. As noted in our discussion of myth #1, commercial farming of livestock results in an unhealthy food product, whether that product is meat, milk, butter, cream or eggs. Our ancestors did not consume such substandard foodstuffs, and neither

should we.

It is possible to raise animals humanely. This is why organic, "free-range" farming is to be encouraged: it is cleaner and more efficient, and produces healthier animals and foodstuffs from those animals. Each person should make every effort, then, to purchase organically raised livestock (and plant foods). Not only does this better support our bodies, as organic foods are more nutrient-dense, and are free from hormone and pesticide residues, but this also supports smaller farms and is therefore better for the economy (67).

Orthodox Jewish and Muslim slaughtering methods (kosher and hallal, respectively) are similar to those practiced by organic farms, in that the animals are slain in a state of tranquility—unlike their unfortunate battery-farm cousins. Such practices minimize, if not eliminate, the release of harmful stress hormones and are therefore more humane to the animal and more healthful to us. Nevertheless, many people have philosophical problems with eating animal flesh, and these sentiments must be respected. Dairy products and eggs, though, are not the result of an animal's death and are fine alternatives for these people.

THE VALUE OF VEGETARIANISM

As a cleansing diet, vegetarianism is a good choice. Several health conditions (e.g., gout) can often be ameliorated by a temporary reduction in animal products with an increase of plant foods. But such measures must not be continuous throughout life: there are vital nutrients found only in animal products that we must ingest for optimal health. Furthermore, there is no one diet that will work for every person. Some vegetarians and vegans, in their zeal to get converts, are blind to this biochemical fact.

"Biochemical individuality" is a subject worth clarifying. Coined by biochemist Roger Williams, PhD, the term refers to the fact that different people require different nutrients based on their unique genetic make-up. Ethnic and racial backgrounds figure in this concept as well. (The current theory of blood type influencing nutritional needs is false, as discussed below.) A diet that works for one may not work as well for someone else. As a practitioner, I've seen several patients following a low-fat, low-protein, high-carbohydrate diet with severe health problems: obesity, candidiasis, hypothyroidism, leaky gut syndrome, anemia and generalized fatigue. Most of these people have been vegetarians. Because of the widespread rhetoric that a vegetarian diet is "always healthier" than a diet that includes meat or animal products, these people see no reason to change their diet, even though that is the cause of their problems. What these people actually need for optimal health is more animal foods and fewer carbohydrates!

Conversely, some people do very well on little or no meat and remain healthy as lacto-vegetarians or lacto-ovo-vegetarians. The reason for this is because these

diets are healthier for those people, not because they're healthier in general, however, a total absence of animal products, whether meat, fish, insects, eggs, butter or dairy, is to be avoided. Though it may take years, problems will eventually ensue for these people. The reason for this is simple evolution: humanity evolved eating animal foods and fats as part of its diet, and our bodies are suited and accustomed to them. One cannot change evolution in a few years.

When it comes to good nutrition, it's best to stick with the tried and true, rather than the untested and new. Humanity has been consuming animal products and saturated fats for thousands of years as part of its diet. Today's health-conscious person needs to follow humanity's historical example and make ample room for all of the gifts of life provided to us by our animal friends.

NOTE ON BLOOD TYPING THEORIES

There is a nutritional "fad" at the present time, spurred on by the book, ***Eat Right 4 Your Type***, by Peter D'Adamo, ND (Putnam; USA, 1996). The main tenet of the book is that the four major blood types (O, A, B, AB) evolved sequentially as humans colonized the Earth. Anthropologists, however, have disputed this and have produced considerable evidence that all four types were present at the same time. On top of this obvious difficulty is the reality that there are well over 400 blood types found in human beings! Though most of these are confined to small groups of isolated peoples, the fact remains that such diversity argues against the blood type/nutrition theory. Clinically, I have seen patients who have had a lack of stomach acid who were type Os. According to the theory, type Os should produce plenty of HCL acid to handle more meat. Additionally, I have seen blood type A's with no HCL acid deficiencies. According to the theory, type A's should have low HCL levels. Such experiences strongly argue against the blood typing/food theory. For more detail on this subject, I refer readers to the article, "Eat Right 4 Your Type Hype," by Sally Eauclore Osborne, published in *The Price-Pottenger Nutrition Journal*, Winter 1998, link to "Eat Right 4 Your Type Hype," by Sally Eauclore Osborne.

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economies and the environment. Also in this article are the benefits of "free-run," organically raised hogs. You can also check out www.sierraclub.org/chapters/ok/cafo for a horrendous exposé on commercial hog farming.