

THE MYTHS OF VEGETARIANISM

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Originally published in the *Townsend Letter for Doctors & Patients*,
July 2000.

Revised January 2002

"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 alleged 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. Just before 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. In November 2000, Bill and Tanya happily gave birth to their first child, a girl.

THE EVOLUTION OF A MYTH

Along with the unjustified and unscientific 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 is associated with sickness and death. Several 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 vegetarians and 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 paper.

MYTH #1: Meat consumption contributes to famine and depletes the Earth's natural resources.

Some vegetarians have claimed that livestock require pasturage that could be used to farm grains to feed starving people in Third World countries. It is also claimed that feeding animals contributes to world hunger because livestock are eating foods that could go to feed humans. The solution to world hunger, therefore, is for people to become vegetarians. These arguments are illogical and simplistic.

The first argument ignores the fact that about 2/3 of our Earth's dry land is unsuitable for farming. It is primarily the open range, desert and mountainous areas that provide food to grazing animals and that land is currently being put to good use (1).

The second argument is faulty as well because it ignores the vital contributions that livestock animals make to humanity's well-being. It is also misleading to think that the foods grown and given to feed livestock could be diverted to feed humans:

"Agricultural animals have always made a major contribution to the welfare of human societies by providing food, shelter, fuel, fertilizer and other products and services. They are a renewable resource, and utilize another renewable resource, plants, to produce these products and services. In addition, the manure produced by the animals helps improve soil fertility and, thus, aids the plants. In some developing countries the manure cannot be utilized as a fertilizer but is dried as a source of fuel.

"There are many who feel that because the world population is growing at a faster rate than is the food supply, we are becoming less and less able to afford animal foods because feeding plant products to animals is an inefficient use of potential human food. It is true that it is more efficient for humans to eat plant products directly rather than to allow animals to convert them to human food. At best, animals only produce one pound or less of human food for each three pounds of plants eaten. However, this inefficiency only applies to those plants and plant products that the human can utilize. The fact is that over two-thirds of the feed fed to animals consists of substances that are either undesirable or completely unsuited for human food. Thus, by their ability to convert inedible plant materials to human food, animals not only do not compete with the human rather they aid greatly in improving both the quantity and the quality of the diets of human societies." (2)

Furthermore, at the present time, there is more than enough food grown in the world to feed all people on the planet. The problem is widespread poverty making it impossible for the starving poor to afford it. In a comprehensive report, the Population Reference Bureau attributed the world hunger problem to poverty, not meat-eating (3). It also did not consider mass vegetarianism to be a solution for world hunger.

What would actually happen, however, if animal husbandry were abandoned in favor of mass agriculture, brought about by humanity turning towards vegetarianism?

"If a large number of people switched to vegetarianism, the demand for meat in the United States and Europe would fall, the supply of grain would dramatically increase, but the buying power of poor [starving] people in Africa and Asia wouldn't change at all.

"The result would be very predictable -- there would be a mass exodus from farming. Whereas today the total amount of grains produced could feed 10 billion people, the total amount of grain grown in this post-meat world would likely fall back to about 7 or 8

billion. The trend of farmers selling their land to developers and others would accelerate quickly." (4)

In other words, there would be less food available for the world to eat. Furthermore, the monoculture of grains and legumes, which is what would happen if animal husbandry were abandoned and the world relied exclusively on plant foods for its food, would rapidly deplete the soil and require the heavy use of artificial fertilizers, one ton of which requires ten tons of crude oil to produce (5).

As far as the impact to our environment, a closer look reveals the great damage that exclusive and mass farming would do. British organic dairy farmer and researcher Mark Purdey wisely points out that if "veganic agricultural systems were to gain a foothold on the soil, then agrochemical use, soil erosion, cash cropping, prairie-scapes and ill health would escalate." (6)

Neanderthin author Ray Audette concurs with this view:

"Since ancient times, the most destructive factor in the degradation of the environment has been monoculture agriculture. The production of wheat in ancient Sumeria transformed once-fertile plains into salt flats that remain sterile 5,000 years later. As well as depleting both the soil and water sources, monoculture agriculture also produces environmental damage by altering the delicate balance of natural ecosystems. World rice production in 1993, for instance, caused 155 million cases of malaria by providing breeding grounds for mosquitoes in the paddies. Human contact with ducks in the same rice paddies resulted in 500 million cases of influenza during the same year."(7)

There is little doubt, though, that commercial farming methods, whether of plants or animals produce harm to the environment. With the heavy use of agrochemicals, pesticides, artificial fertilizers, hormones, steroids, and antibiotics common in modern agriculture, a better way of integrating animal husbandry with agriculture needs to be found. A possible solution might be a return to "mixed farming," described below:

"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." (8)

The "mixed farm" is also healthier for the soil, which will yield more crops if managed according to traditional guidelines. 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 (9). Which farm is producing more food for the world's peoples? Purdey well sums up the ecological horrors of "battery farming" and points to future solutions 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." (10)

It does not appear, then, that livestock farming, when properly practiced, damages the environment. Nor does it appear that world vegetarianism or exclusively relying on agriculture to supply the world with food are feasible or ecologically wise ideas.

MYTH #2: Vitamin B12 can be obtained from plant sources.

Of all the myths, this is perhaps the most dangerous. While lacto and lacto-ovo vegetarians have sources of vitamin B12 in their diets (from dairy products and eggs), vegans (total vegetarians) do not. 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; most, if not all, vegans have impaired B12 metabolism and every study of vegan groups has demonstrated low vitamin B12 concentrations in the majority of individuals (11). Several studies have been done documenting B12 deficiencies in vegan children, often with dire consequences (12). Additionally, claims are made in vegan and vegetarian literature that B12 is present in certain algae, tempeh (a fermented soy product) and Brewer's yeast. All of them are false as vitamin B12 is only found in animal foods. Brewer's and nutritional yeasts do not contain B12 naturally; they are always fortified from an outside source.

There is not real B12 in plant sources but B12 analogues--they are similar to true B12, but not exactly the same and because of this they are not bioavailable (13). It should be noted here that these B12 analogues can impair absorption of true vitamin B12 in the body due to competitive absorption, placing vegans and vegetarians who consume lots of soy, algae, and yeast at a greater risk for a deficiency (14).

Some vegetarian authorities claim that B12 is produced by certain fermenting bacteria in the lower 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 (15).

It is true that Hindu 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 feces, 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 vegan Indian Hindus later migrated to England, they came down with megaloblastic anaemia within a few years. In England, the food supply is cleaner, and insect residues are completely removed from plant foods (16).

The only reliable and absorbable sources of vitamin B12 are animal products, especially organ meats and eggs (17). Though present in lesser amounts than meat and eggs, dairy 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 foods is one of the strongest arguments against veganism being a "natural" 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.

MYTH #3: Our needs for vitamin D can be met by sunlight.

Though not really a vegetarian myth per se, it is widely believed that one's vitamin D needs can be met simply by exposing one's skin to the sun's rays for 15-20 minutes a few times a week. Concerns about vitamin D deficiencies in vegetarians and vegans always exist as this nutrient, in its full-complex form, is only found in animal fats (18) which vegans do not consume and more moderate vegetarians only consume in limited quantities due to their meatless diets.

It is true that a limited number of plant foods such as alfalfa, sunflower seeds, and avocado, contain the plant form of vitamin D (ergocalciferol, or vitamin D2). Although D2 can be used to prevent and treat the vitamin D deficiency disease, rickets, in humans, it is questionable, though, whether this form is as effective as animal-derived vitamin D3 (cholecalciferol). Some studies have shown that D2 is not utilized as well as D3 in animals (19) and clinicians have reported disappointing results using vitamin D2 to treat vitamin D-related conditions (20).

Although vitamin D can be created by our bodies by the action of sunlight on our skin, it is very difficult to obtain an optimal amount of vitamin D by a brief foray into the sun. There are three ultraviolet bands of radiation that come from sunlight named A, B, and C. Only the "B" form is capable of catalyzing the conversion of cholesterol to vitamin D in our bodies (21) and UV-B rays are only present at certain times of day, at certain latitudes, and at certain times of the year (22). Furthermore, depending on one's skin color, obtaining 200-400 IUs of vitamin D from the sun can take as long as two full hours of continual sunning (23). A dark-skinned vegan, therefore, will find it impossible to obtain optimal vitamin D intake by sunning himself for 20 minutes a few times a week, even if sunning occurs during those limited times of the day and year when UV-B rays are available.

The current RDA for vitamin D is 400 IUs, but Dr. Weston Price's seminal research into healthy native adult people's diets showed that their daily intake of vitamin D (from animal foods) was about 10 times that amount, or 4,000 IUs (24). Accordingly, Dr. Price placed a great emphasis on vitamin D in the diet. Without vitamin D, for example, it is impossible to utilize minerals like calcium, phosphorous, and magnesium. Recent research has confirmed Dr. Price's higher recommendations for vitamin D for adults (25).

Since rickets and/or low vitamin D levels has been well-documented in many vegetarians and vegans (26), since animal fats are either lacking or deficient in vegetarian diets (as well as those of the general Western public who routinely try to cut their animal fat intake), since sunlight is only a source of vitamin D at certain times and at certain latitudes, and since current dietary recommendations for vitamin D are too low, this emphasizes the need to have reliable and abundant sources of this nutrient in our daily diets. Good sources include cod liver oil, lard from pigs that were exposed to sunlight, shrimp, wild salmon, sardines, butter, full-fat dairy products, and eggs from properly fed chickens.

MYTH #4: The body's needs for vitamin A can be entirely obtained from plant foods.

True vitamin A, or retinol and its associated esters, is only found in animal fats and organs like liver (27). Plants do contain beta-carotene, a substance that the body can convert into vitamin A if certain conditions are present (see below). Beta-carotene, however, is not vitamin A. It is typical for vegans and vegetarians (as well as most popular nutrition writers) to say that plant foods like carrots and spinach contain vitamin A and that beta-carotene is just as good as vitamin A. These things are not true even though beta-carotene is an important nutritional factor for humans.

The conversion from carotene to vitamin A in the intestines 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 (altogether, a significant portion of the population) 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 roughly 6 units of carotene to make one unit of vitamin A. What this means is that a sweet potato (containing about 25,000 units of beta-carotene) will only convert into about 4,000 units of vitamin A (assuming you ate it with fat, are not diabetic, are not an infant, and do not have a thyroid or gall bladder problem) [28].

Relying on plant sources for vitamin A, then, is not a very wise idea. This provides yet another reason to include animal foods and fats in our diets. Butter and full-fat dairy foods, especially from pastured cows, are good vitamin A sources, as is cod liver oil. Vitamin A is all-important in our diets, for it enables the body to use proteins and minerals, insures proper vision, enhances the immune system, enables reproduction, and fights infections (29). As with vitamin D, Dr. Price found that the diets of healthy primitive peoples supplied substantial amounts of vitamin A, again emphasizing the great need humans have for this nutrient in maintaining optimal health now and for future generations.

MYTH #5: Meat-eating causes osteoporosis, kidney disease, heart disease, and cancer.

Oftentimes, vegans and vegetarians will try to scare people into avoiding animal foods and fats by claiming that vegetarian diets offer protection from certain chronic diseases like the ones listed above. Such claims, however, 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 many thousands of years. Further, as Dr. Price's research showed, there were/are several native peoples around the world (the Inuit, Maasai, Swiss, etc.) whose traditional diets were/are very rich in animal products, but who nevertheless did/do not suffer from the above-mentioned maladies (30). Dr. George Mann's independent studies of the Maasai done many years after Dr. Price, confirmed the fact that the Maasai, despite being almost exclusive meat eaters, nevertheless, had little to no incidence of heart disease, or other chronic ailments (31). This proves that other factors besides animal foods are at work in causing these diseases.

Several studies have supposedly shown that meat consumption is the cause of various illnesses, but such studies, honestly evaluated, show no such thing as the following discussion will show.

OSTEOPOROSIS

Dr. Herta Spencer's research on protein intake and bone loss clearly showed that protein consumption in the form of real meat has no impact on bone density. Studies that supposedly proved that excessive protein consumption equaled more bone loss were not done with real meat but with fractionated protein powders and isolated amino acids (32). Recent studies have also shown that increased animal protein intake contributes to stronger bone density in men and women (33). Some recent studies on vegan and vegetarian diets, however, have shown them to predispose women to osteoporosis (34).

KIDNEY DISEASE

Although protein-restricted diets are helpful for people with kidney disease, there is no proof that eating meat causes it (35). Vegetarians will also typically claim that animal protein causes overly

acidic conditions in the blood, resulting in calcium leaching from the bones and, hence, a greater tendency to form kidney stones. This opinion is false, however. Theoretically, the sulphur and phosphorous in meat can form an acid when placed in water, but that does not mean that is what happens in the body. Actually, meat contains complete proteins and vitamin D (if the skin and fat are eaten), both of which help maintain pH balance in the bloodstream. Furthermore, if one eats a diet that includes enough magnesium and vitamin B6, and restricts refined sugars, one has little to fear from kidney stones, whether one eats meat or not (36). Animal foods like beef, pork, fish, and lamb are good sources of magnesium and B6 as any food/nutrient table will show.

HEART DISEASE

The belief that animal protein contributes to heart disease is a popular one that has no foundation in nutritional science. Outside of questionable studies, there is little data to support the idea that meat-eating leads to heart disease. For example, the French have one of the highest per capita consumption of meat, yet have low rates of heart disease. In Greece, meat consumption is higher than average but rates of heart disease are low there as well. Finally, in Spain, an increase in meat eating (in conjunction with a reduction in sugar and high carbohydrate intake) led to a decrease in heart disease (37).

CANCER

The belief that meat, in particular red meat, contributes to cancer is, like heart disease, a popular idea that is not supported by the facts. Although it is true that some studies have shown a connection between meat eating and some types of cancer (38), its important to look at the studies carefully to determine what kind of meat is being discussed, as well as the preparation methods used. Since we only have one word for "meat" in English, it is often difficult to know which "meat" is under discussion in a study unless the authors of the study specifically say so.

The study which began the meat=cancer theory was done by Dr. Ernst Wynder in the 1970s. Wynder claimed that there was a direct, causal connection between animal fat intake and incidence of colon cancer (39). Actually, his data on "animal fats" were really on vegetable fats (40). In other words, the meat=cancer theory is based on a phony study.

If one looks closely at the research, however, one quickly sees that it is processed meats like cold cuts and sausages that are usually implicated in cancer causation (41) and not meat per se. Furthermore, cooking methods seem to play a part in whether or not a meat becomes carcinogenic (42). In other words, it is the added chemicals to the meat and the chosen cooking method that are at fault and not the meat itself.

In the end, although sometimes a connection between meat and cancer is found, the actual mechanism of how it happens has eluded scientists (43). This means that it is likely that other factors besides meat are playing roles in some cases of cancer. Remember: studies of meat-eating traditional peoples show that they have very little incidence of cancer. This demonstrates that other factors are at work when cancer appears in a modern meat-eating person. It is not scientifically fair to single out one dietary factor in placing blame, while ignoring other more likely candidates.

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 cancer (but see a later paragraph in this section). While it is true that most members of this Christian denomination

do not eat meat, they also do not smoke or drink alcohol, coffee or tea, all of which are likely factors in promoting cancer (44).

The Mormons are a religious group often overlooked in vegetarian studies. Although their Church urges moderation, Mormons do not abstain from meat. As with the Adventists, Mormons also 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 (45). A study of Puerto Ricans, who eat large amounts of fatty pork, nevertheless revealed very low rates of colon and breast cancer (46). Similar results can be adduced to demonstrate that meat and animal fat consumption do not correlate with cancer (47). Obviously, other factors are at work.

It is usually claimed that vegetarians have lower cancer rates than meat-eaters, but a 1994 study of vegetarian California Seventh Day Adventists showed that, while they did have lower rates for some cancers (e.g., breast and lung), they had higher rates for several others (Hodgkin's disease, malignant melanoma, brain, skin, uterine, prostate, endometrial, cervical and ovarian), some quite significantly. In that study the authors actually admitted that:

"Meat consumption, however, was not associated with a higher [cancer] risk."

And that,

"No significant association between breast cancer and a high consumption of animal fats or animal products in general was noted." (48)

Further, it is usually claimed that a diet rich in plant foods like whole grains and legumes will reduce one's risks for cancer, but research going back to the last century demonstrates that carbohydrate-based diets are the prime dietary instigators of cancer, not diets based on minimally processed animal foods (49).

The mainstream health and vegetarian media have done such an effective job of "beef bashing," that most people think there is nothing healthful about meat, especially red meat. In reality, however, animal flesh foods like beef and lamb are excellent sources of a variety of nutrients as any food/nutrient table will show. Nutrients like vitamins A, D, several of the B-complex, essential fatty acids (in small amounts), magnesium, zinc, phosphorous, potassium, iron, taurine, and selenium are abundant in beef, lamb, pork, fish and shellfish, and poultry. Nutritional factors like coenzyme Q10, carnitine, and alpha-lipoic acid are also present. Some of these nutrients are only found in animal foods--plants do not supply them.

MYTH #6: Saturated fats and dietary cholesterol cause heart disease, atherosclerosis, and/or cancer, and low-fat, low-cholesterol diets are healthier for people.

This, too, is not a specific vegetarian myth. Nevertheless, people are often urged to take up a vegetarian or vegan diet because it is believed that such diets offer protection against heart disease and cancer since they are lower or lacking in animal foods and fats.

Although it is commonly believed that saturated fats and dietary cholesterol "clog arteries" and cause heart disease, such ideas have been shown to be false by such scientists as Linus Pauling, Russell Smith, George Mann, John Yudkin, Abram Hoffer, Mary Enig, Uffe Ravnskov and other prominent researchers (50). 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 (51).

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 accelerated atherosclerosis, coronary heart disease, cancer and other ailments (52). Trans-fatty acids are found in such modern foods as margarine and vegetable shortening and foods made with them. Enig and her colleagues have also shown that excessive omega-6 polyunsaturated fatty acid intake from refined vegetable oils is also a major culprit behind cancer and heart disease, not animal fats.

A recent study of thousands of Swedish women supported Enig's conclusions and data, and showed no correlation between saturated fat consumption and increased risk for breast cancer. However, the study did show, as did Enig's work, a strong link between vegetable oil intake and higher breast cancer rates (53).

The major population studies that supposedly prove the theory that animal fats and cholesterol cause heart disease actually do not upon closer inspection. 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, said:

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, [and] ate the most calories, weighed the least and were the most physically active. (54)

The Framingham data did show that subjects who had higher cholesterol levels and weighed more ran a slightly higher chance for coronary heart disease. But weight gain and serum cholesterol levels had an inverse correlation with dietary fat and cholesterol intake. In other words, there was no correlation at all (55).

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 heart disease, but had an overall mortality rate much higher than the other men in the study (56).

Low-fat/cholesterol diets, therefore, are not healthier for people. Studies have shown repeatedly that such diets are associated with depression, cancer, psychological problems, fatigue, violence and suicide (57). Women with lower serum cholesterol live shorter lives than women with higher levels (58). Similar things have been found in men (59).

Children on low-fat and/or vegan diets can suffer from growth problems, failure to thrive, and learning disabilities (60). 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 genocidal 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 (61). 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 (62).

In fact, the body needs saturated fats in order to properly utilize essential fatty acids (63). Saturated fats also lower the blood levels of the artery-damaging lipoprotein (a) (64); are needed for proper calcium utilization in the bones (65); stimulate the immune system (66); are the preferred food for the heart and other vital organs (67); and, along with cholesterol, add structural stability to the cell and intestinal wall (68). 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.

With respect to atherosclerosis, it is always claimed that vegetarians have much lower rates of this condition than meat eaters. The International Atherosclerosis Project of 1968, however, which examined over 20,000 corpses from several countries, concluded that vegetarians had just as much atherosclerosis as meat eaters (69). Other population studies have revealed similar data. (70) This is because atherosclerosis is largely unrelated to diet; it is a consequence of aging. There are things which can accelerate the atherosclerotic process such as excessive free radical damage to the arteries from antioxidant depletion (caused by such things as smoking, poor diet, excess polyunsaturated fatty acids in the diet, various nutritional deficiencies, drugs, etc), but this is to be distinguished from the fatty-streaking and hardening of arteries that occurs in all peoples over time.

It also does not appear that vegetarian diets protect against heart disease. A study on vegans in 1970 showed that female vegans had higher rates of death from heart disease than non-vegan females (71). A recent study showed that Indians, despite being vegetarians, have very high rates of coronary artery disease (72). High-carbohydrate/low-fat diets (which is what vegetarian diets are) can also place one at a greater risk for heart disease, diabetes, and cancer due to their hyperinsulemic effects on the body (73). Recent studies have also shown that vegetarians have higher homocysteine levels in their blood (74). Homocysteine is a known cause of heart disease. Lastly, low-fat/cholesterol diets, generally favored to either prevent or treat heart disease, do neither and may actually increase certain risk factors for this condition (75).

Studies which conclude that vegetarians are at a lower risk for heart disease are typically based on the phony markers of lower saturated fat intake, lower serum cholesterol levels and HDL/LDL ratios. Since vegetarians tend to eat less saturated fat and usually have lower serum cholesterol levels, it is concluded that they are at less risk for heart disease. Once one realizes that these measurements are not accurate predictors of proneness to heart disease, however, the supposed protection of vegetarianism melts away (76).

It should always be remembered that a number of things factor into a person getting heart disease or cancer. Instead of focusing on the phony issues of saturated fat, dietary cholesterol, and meat-eating, people should pay more attention to other more likely factors.

These would be trans-fatty acids, excessive polyunsaturated fat intake, excessive sugar intake, excessive carbohydrate intake, smoking, certain vitamin and mineral deficiencies, and obesity. These things were all conspicuously absent in the healthy traditional peoples that Dr. Price studied.

MYTH #7: Vegetarians live longer and have more energy and endurance than meat-eaters.

A vegetarian guidebook published in Great Britain made the following claim:

"You and your children don't need to eat meat to stay healthy. In fact, vegetarians claim they are among the healthiest people around, and they can expect to live nine years longer than meat

eaters (this is often because heart and circulatory diseases are rarer). These days almost half the population in Britain is trying to avoid meat, according to a survey by the Food Research Association in January 1990." (77)

In commenting on this claim of extended lifespan, author Craig Fitzroy astutely points out that:

"The ' nine-year advantage ' is an oft-repeated but invariably unsourced piece of anecdotal evidence for vegetarianism. But anyone who believes that by snubbing mum's Sunday roast they will be adding a decade to their years on the planet is almost certainly indulging in a bit of wishful thinking." (78)

And that is what most of the claims for increased longevity in vegetarians are: anecdotal. There is no proof that a healthy vegetarian diet when compared to a healthy omnivorous diet will result in a longer life. Additionally, people who choose a vegetarian lifestyle typically also choose not to smoke, to exercise, in short, to live a healthier lifestyle. These things also factor into one's longevity.

In the scientific literature, there are surprisingly few studies done on vegetarian longevity. Russell Smith, PhD, in his massive review study on heart disease, showed that as animal product consumption increased among some study groups, death rates actually decreased! (79) 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 (80).

Despite claims that studies have shown that meat consumption increased the risk for heart disease and shortened lives, the authors of those studies actually found the opposite. For example, in a 1984 analysis of a 1978 study of vegetarian Seventh Day Adventists, HA 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." (81)

A similar conclusion was reached by D.A. Snowden (82). 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. Dr. Smith commented,

"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." (83)

It is usually claimed that meat-eating peoples have a short life span, 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 (84). 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. Explorers such as Vilhjalmur Stefansson reported great longevity among the Inuit (again, before colonization). [85]

Similarly, the Russians of the Caucasus Mountains live to great ages on a diet of fatty pork and whole raw 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 (86). In contrast, the largely vegetarian Hindus of southern India have the shortest life-spans in the world, partly because of a lack of food, but also because of a distinct lack of animal protein in their diets (87). H. Leon Abrams' comments are instructive here:

"Vegetarians often maintain that a diet of meat and animal fat leads to a pre-mature death. Anthropological data from primitive societies do not support such contentions." (88)

With regards to endurance and energy levels, Dr Price traveled around the world in the 1920s and 1930s, investigating native diets. Without exception, he found a strong correlation between diets rich in animal fats, 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 meats and fish, and organ meats like liver, consistently carried off the prizes in athletic contests, and that meat-eating tribes always dominated tribes whose diets were largely vegetarian. (89)

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 (90).

MYTH #8: The "cave man" diet was low-fat and/or vegetarian. Humans evolved as vegetarians.

Our Paleolithic ancestors were hunter-gatherers, and three 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 second argues that primitive peoples consumed assorted lean meats and large amounts of plant foods. The third argues that our human ancestors evolved as vegetarians.

The "lean" Paleolithic diet approach has been argued for quite voraciously by Dr.'s Loren Cordain and Boyd Eaton in a number of popular and professional publications (91). Cordain and Eaton are believers in the Lipid Hypothesis of heart disease--the belief (debunked in myth number six, above) that saturated fat and dietary cholesterol contribute to heart disease. Because of this, and the fact that Paleolithic peoples or their modern equivalents did/do not suffer from heart disease, Cordain and Eaton espouse the theory that Paleolithic peoples consumed most of their fat calories from monounsaturated and polyunsaturated sources and not saturated fats. Believing that saturated fats are dangerous to our arteries, Cordain and Eaton stay in step with current establishment nutritional thought and encourage modern peoples to eat a diet like our ancestors. This diet, they believe, was rich in lean meats and a variety of vegetables, but was low in saturated fat. The evidence they produce to support this theory is, however, very selective and misleading. (92) Saturated fats do not cause heart disease as was shown above, and our Paleolithic ancestors ate quite a bit of saturated fat from a variety of animal sources.

From authoritative sources, we learn that prehistoric humans of the North American continent ate such animals as mammoth, camel, sloth, bison, mountain sheep, pronghorn antelope, beaver, elk,

mule deer, and llama (93). "Mammoth, sloth, mountain sheep, bison, and beaver are fatty animals in the modern sense in that they have a thick layer of subcutaneous fat, as do the many species of bear and wild pig whose remains have been found at Paleolithic sites throughout the world." (94) Analysis of many types of fat in game animals like antelope, bison, caribou, dog, elk, moose, seal, and mountain sheep shows that they are rich in saturates and monounsaturates, but relatively low in polyunsaturates. (95)

Further, while buffalo and game animals may have lean, non-marbled muscle meats, it is a mistake to assume that only these parts were eaten by hunter-gatherer groups like the Native Americans who often hunted animals selectively for their fat and fatty organs as the following section will show.

Anthropologists/explorers such as Vilhjalmur Stefansson reported that the Inuit and North American Indian tribes would worry when their catches of caribou were too lean: they knew sickness would follow if they did not consume enough fat (96). In other words, these primitive peoples did not like having to eat lean meat.

Northern Canadian Indians would also 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. This "back fat" is highly saturated. 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 (97).

Explorer Samuel Hearne, writing in 1768, described how the Native American tribes he came in contact with would selectively hunt caribou just for the fatty parts:

"On the twenty-second of July, we met several strangers, whom we joined in pursuit of the caribou, which were at this time so plentiful that we got everyday a sufficient number for our support, and indeed too frequently killed several merely for the tongues, marrow, and fat." (98)

While Cordain and Eaton are certainly correct in saying that our ancestors ate meat, their contentions about fat intake, as well as the type of fat consumed, are simply incorrect.

While various vegetarian and vegan authorities like to think that we evolved as a species on a vegan or vegetarian diet, there exists little from the realm of nutritional anthropology to support these ideas.

To begin with, in his journeys, Dr Price never once found a totally vegetarian culture. It should be remembered that Dr. Price visited and investigated several population groups who were, for all intents and purposes, the 20th century equivalents of our hunter-gatherer ancestors. Dr. Price was on the lookout for a vegetarian culture, but he came up empty. Price stated:

"As yet I have not found a single group of primitive racial stock which was building and maintaining excellent bodies by living entirely on plant foods." (99)

Anthropological data support this: throughout the globe, all societies show a preference for animal foods and fats and our ancestors only turned to large scale farming when they had to due to increased population pressures (100). Abrams and other authorities have shown that prehistoric man's quest for more animal foods was what spurred his expansion over the Earth, and that he apparently hunted certain species to extinction. (101)

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. In his papers on vegetarianism, Abrams presents archaeological evidence that supports this finding: skulls of ancient peoples who were largely vegetarian have teeth containing caries and abscesses and show evidence of tuberculosis and other infectious diseases (102). The appearance of farming and the increased dependence on plant foods for our subsistence was clearly harmful to our health.

Finally, it is simply not possible for our prehistoric ancestors to have been vegetarian because they would not have been able to get enough calories or nutrients to survive on the plant foods that were available. The reason for this is that humans did not know how to cook or control fire at that time and the great majority of plant foods, especially grains and legumes, must be cooked in order to render them edible to humans (103). Most people do not know that many of the plant foods we consume today are poisonous in their raw states (104).

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 fatty acids.

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 (105). Additionally, Westerners, urged on by government health agencies, have reduced their intake of eggs, cream, lard, and pork. Chicken consumption has risen in the past few decades, but chicken is lower in saturated fat than either beef or pork.

Furthermore, a survey of cookbooks published in America 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 a dozen egg yolks and 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 people ate leaner diets in the last century. It is true that beef consumption has risen in the last few decades, but what has also risen precipitously, however, is consumption of margarine and other food products containing trans-fatty acids (106), lifeless, packaged "foods", processed vegetable oils (107), carbohydrates (108) and refined sugar (109). Since one does not see chronic diseases like cancer and heart disease in beef-eating native peoples like the Maasai and Samburu, it is not possible for beef to be the culprit behind these modern epidemics. This, of course, points the finger squarely at the other dietary factors as the most likely causes.

MYTH #10: Soy products are adequate substitutes for meat and dairy products.

It is typical for vegans and vegetarians in the Western world to rely on various soy products for their protein needs. There is little doubt that 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 food primarily used as a condiment, now a variety of processed soy products proliferate in the North American market. While the traditionally fermented soy foods of miso, tamari, tempeh and natto are definitely healthful in measured amounts, the hyper-processed soy "foods" that most vegetarians consume are not.

Non-fermented soybeans and foods made with them are high in phytic acid (110), an anti-nutrient that binds to minerals in the digestive tract and carries them out of the body. Vegetarians are known for their tendencies to mineral deficiencies, especially of zinc (111) and it is the high phytate content of grain and legume based diets that is to blame (112). Though several traditional food preparation techniques such as soaking, sprouting, and fermenting can significantly reduce the phytate content of grains and legumes (113), such methods are not commonly known about or used by modern peoples, including vegetarians. This places them (and others who eat a diet rich in whole grains) at a greater risk for mineral deficiencies.

Processed soy foods are also rich in trypsin inhibitors, which hinder protein digestion. Textured vegetable protein (TVP), soy "milk" and soy protein powders, 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 (114). 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 (115).

On a purely nutritional level, soybeans, like all legumes, are deficient in cysteine and methionine, vital sulphur-containing amino acids, as well as tryptophan, another essential amino acid. Furthermore, soybeans contain no vitamins A or D, required by the body to assimilate and utilize the beans' proteins (116). It is probably for this reason that Asian cultures that do consume soybeans usually combine them with fish or fish broths (abundant in fat-soluble vitamins) or other fatty foods.

Parents who feed their children soy-based formula should be aware of its extremely high phytoestrogen content. Some scientists have estimated a child being fed soy formula is ingesting the hormonal equivalent of five birth control pills a day (117). Such a high intake could have disastrous results. Soy formula also contains no cholesterol, vital for brain and nervous system development.

Though research is still ongoing, some recent studies have indicated that soy's phytoestrogens could be causative factors in some forms of breast cancer (118), penile birth defects (119), and infantile leukemia (120). Regardless, soy's phytoestrogens, or isoflavones, have been definitely shown to depress thyroid function (121) and to cause infertility in every animal species studied so far (122). Clearly, modern soy products and isolated isoflavone supplements are not healthy foods for vegetarians, vegans, or anyone else, yet these are the very ones that are most consumed.

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 (123). 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. Further, Dr. Walter Voegtlin's in-depth comparison of the human digestive system with that of the dog, a carnivore, and a sheep, a herbivore, clearly shows that we are closer in anatomy to the carnivorous dog than the herbivorous sheep. (124)

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 all have been observed eating small animals and, in some cases, other primates (125).

MYTH #12: Eating animal flesh causes violent, aggressive behavior in humans.

Some authorities on vegetarian diet, such as Dr Ralph Ballantine (126), claim that the fear and terror (if any, see myth #15) an animal experiences 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 fact that a tendency to irrational anger is a symptom of low vitamin B12 levels which, as we have seen, are common in vegans and vegetarians. Furthermore, in his travels, Dr Price always noted the extreme happiness and ingratiating natures of the peoples he encountered, all of whom were meat-eaters.

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." (127)

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 facts.

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 (128). Salmonella can be transmitted by plant products as well as animal.

It is often claimed by vegetarians that meat is harmful to our bodies because ammonia is released from the breakdown of its proteins. Although it is true that ammonia production does result from meat digestion, our bodies quickly convert this substance into harmless urea. The alleged toxicity of meat is greatly exaggerated by vegetarians.

"Mad Cow Disease," or Bovine Spongiform Encephalopathy (BSE), is most likely not caused by cows eating animal parts with their food, a feeding practice 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 or have grazed on soils that lack magnesium but contain high levels of aluminum (129). 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 (130).

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 or their associated "prions"), that has 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.

Recently, Purdey has gained support from Dr. Donald Brown, a British biochemist who has also argued for a non-infectious cause of BSE. Brown attributes BSE to environmental toxins, specifically manganese overload (131).

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 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 a misunderstanding 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 killed 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, some commercially raised livestock live in deplorable conditions where sickness and suffering are common. In countries like Korea, food animals such as dogs are sometimes killed in horrific ways, e.g., 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 be 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, preferably Biodynamic, 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 (132) and are free from hormone and pesticide residues, but this also supports smaller farms and is therefore better for the economy (133).

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.

It should also not be forgotten that agriculture, which involves both the clearance of land to plant crops and the protection and maintenance of those crops, results in many animal deaths (134). The belief, therefore, that "becoming vegetarians" will somehow spare animals from dying is one with no foundation in fact.

THE VALUE OF VEGETARIANISM

As a cleansing diet, vegetarianism is sometimes 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 foods 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 nutritional 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 background figure in this concept as well. A diet that works for one may not work as well for someone else. As a practitioner, I've seen several clients following a vegetarian diet with severe health problems: obesity, candidiasis, hypothyroidism, cancer, diabetes, leaky gut syndrome, anemia and chronic fatigue. Because of the widespread rhetoric that a vegetarian diet is "always healthier" than a diet that includes meat or animal products, these people saw no reason to change their diet, even though that was the cause of their problems. What these people actually needed for optimal health was more animal foods and fats and fewer carbohydrates.

Further, due to peculiarities in genetics and individual biochemistry, some people simply cannot do a vegetarian diet because of such things as lectin intolerance and desaturating enzyme deficiencies. Lectins present in legumes, a prominent feature of vegetarian diets, are not tolerated by many people. Others have grain sensitivities, especially to gluten, or to grain proteins in general. Again, since grains are a major feature of vegetarian diets, such people cannot thrive on them. (135)

Desaturase enzyme deficiencies are usually present in those people of Inuit, Scandinavian, Northern European, and sea coast ancestry. They lack the ability to convert alpha-linolenic acid into EPA and DHA, two omega-3 fatty acids intimately involved in the function of the immune and nervous systems. The reason for this is because these people's ancestors got an abundance of EPA and DHA from the large amounts of cold-water fish they ate. Over time, because of non-use, they lost the ability to manufacture the necessary enzymes to create EPA and DHA in their bodies. For these people, vegetarianism is simply not possible. They MUST get their EPA and DHA from food and EPA is only found in animal foods. DHA is present in some algae, but the amounts are much lower than in fish oils. (136)

It is also apparent that vegan diets are not suitable for all people due to inadequate cholesterol production in the liver and cholesterol is only found in animal foods. It is often said that the body makes enough cholesterol to get by and that there is no reason to consume foods that contain it (animal foods). Recent research, however, has shown otherwise. Singer's work at the University of California, Berkeley, has shown that the cholesterol in eggs improves memory in older people (137). In other words, these elderly people's own cholesterol was insufficient to improve their memory, but added dietary cholesterol from eggs was.

Though it appears that some people do 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 under such dietary regimes and they will certainly show in future generations. Dr. Price's seminal research unequivocally demonstrated this. 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.

Dr. Abrams said it well when he wrote:

"Humans have always been meat-eaters. The fact that no human society is entirely vegetarian, and those that are almost entirely vegetarian suffer from debilitated conditions of health, seems unequivocally to prove that a plant diet must be supplemented with at least a minimum amount of animal protein to sustain health. Humans are meat-eaters and always have been. Humans are also vegetable eaters and always have been, but plant foods must be supplemented by an ample amount of animal protein to maintain optimal health." (138)

Author's Notes:

The author would like to thank Sally Fallon, MA; Lee Clifford, MS, CCN; and Dr. H. Leon Abrams, Jr., for their gracious assistance in preparing and reviewing this paper.

This paper was not sponsored or paid for by the meat or dairy industries.

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Recommended Further Reading:

The Weston A. Price Foundation
<http://www.westonaprice.org>

Why I am Not a Vegetarian
<http://www.acsh.org/publications/priorities/0902/vegetarian.html>

Beyond Vegetarianism
<http://www.beyondveg.com>

The Cholesterol Myths
<http://www.ravnskov.nu/cholesterol.htm>

The Paleolithic Diet Page
<http://www.panix.com/~paleodiet/>

The Great Fallacies of Vegetarianism
<http://www.vanguardonline.f9.co.uk/00509.htm>

Humans Against Animal Rights Terrorism
http://vicious_kitten.tripod.com/nonvegan.html

PETA Sucks
<http://www.petasucks.cc>

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As yet I have not found a single group of primitive racial stock which was building and maintaining excellent bodies by living entirely on plant foods."

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