

## It's the Beef

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With the exception of butter, no other food has been subjected to such intense demonization in recent years as red meat, particularly beef. The juicy hamburger, that delicious marbled steak and the Sunday roast have been accused of terrible crimes. Beef causes heart disease, say the Diet Dictocrats. Beef causes cancer, particularly colon cancer, beef causes osteoporosis, beef causes autoimmune diseases like asthma, beef harbors E. coli leading to food-borne illness, beef causes Creutzfeldt Jakob disease.

Recently a vegetarian group called People for the Ethical Treatment of Animals placed billboard ads warning men not to eat beef because it causes impotence! Red meat is an acid-forming food, say the vegetarians, which putrefies in the gut because humans can't digest meat. Beef production destroys the environment, according to the zealots, and takes away land that could be dedicated to grain for starving millions. Let's examine these accusations one at a time.

### Does beef cause heart disease?

First is the notion that beef causes heart disease. This actually dates back to the 1950's when the lipid hypothesis was taking hold on the American consciousness. At that time, scientists were grappling with a new threat to public health - a steep rise in heart disease, especially myocardial infarction (MI)- a massive blood clot leading to obstruction of a coronary artery and consequent death to the heart muscle. MI was almost nonexistent in 1910 and caused no more than three thousand deaths per year in 1930. By 1960, there were at least 500,000 MI deaths per year in the US.

Many scientists believed that the culprit was cholesterol and saturated fats found in animal foods like butter, eggs and beef. They reasoned that saturated fat and cholesterol raised the level of cholesterol in the blood which in turn caused the deposition of cholesterol as plaques in the arteries, leading to obstructions and heart disease. This, in a nutshell, is the lipid hypothesis.<sup>1</sup>

This theory was tested in 1957 when Dr. Norman Jolliffe, Director of the Nutrition Bureau of the New York Health Department, initiated the Anti-Coronary Club. With great media fanfare, a group of businessmen, ranging in age from 40 to 59 years, were placed on the so-called Prudent Diet. Prudent Dieters used corn oil and margarine instead of butter, cold breakfast cereals instead of eggs and chicken and fish instead of beef. Anti-Coronary Club members were to be compared with a "matched" group of the same age who ate eggs for breakfast and had meat three times a day. Jolliffe, an overweight diabetic confined to a wheel chair, was confident that the Prudent Diet would save lives, including his own.

The results of Dr. Jolliffe's Anti-Coronary Club experiment were published in 1966 in the *Journal of the American Medical Association*.<sup>2</sup> Those on the Prudent Diet of corn oil, margarine, fish, chicken and cold cereal had an average serum cholesterol of 220, compared to 250 in the meat-and-potatoes control group. However, the study authors were obliged to note that there were eight deaths from heart disease among Dr. Jolliffe's Prudent Diet group, and none among those who ate meat three times a day. Dr. Jolliffe was dead by this time. He succumbed in 1961 from a vascular thrombosis, although the obituaries listed the cause of death as complications from diabetes.

The truth is that in spite of all the propaganda you have heard, the lipid hypothesis has never been proved. In fact, inadequate protein intake leads to loss of myocardial muscle and may, therefore, contribute to coronary heart disease.<sup>3</sup>

There are many societies where the populace consumes high levels of animal food and saturated fat but remains free of heart disease. Dr. George Mann, who studied the Masai cattle herding peoples in Africa, found no heart disease, even though their diet consisted of meat, blood and rich milk.<sup>4</sup> Butterfat consumption among Masai warriors, who consider vegetable foods as fodder for cattle, can reach one and one half pounds per day. Yet these people do not suffer from heart disease. Mann called the lipid hypothesis "the greatest scam in the history of medicine." It is a scam that has been used to convince millions of healthy people that they are sick and must take expensive drugs with serious side effects, a falsehood that has persuaded Americans to adopt a bland, tasteless diet simply because their cholesterol has been defined as being too high.

It is true that beef consumption in the United States has gone up during the last eighty years, the period of huge increases in heart disease. Today we consume 79 pounds of beef per person per year versus 54 in 1909, a 46% increase, but poultry consumption has increased a whopping 280%, from 18 pounds per person per year to 70. Consumption of vegetable oils, including those that have been hydrogenated, has increased 437%, from 11 pounds per person per year to 59; while consumption of butter, lard and tallow has plummeted from 30 pounds per person per year to just under 10. Whole milk consumption has declined by almost 50%, while lowfat milk consumption has doubled. Consumption of eggs, fresh fruits (excluding citrus), fresh vegetables, fresh potatoes and whole grain products has declined; but consumption of sugar and other sweeteners has almost doubled. Why, then, do today's politically correct dietary gurus continue to blame beef consumption for our ills? Is it because it is the one wholesome food that has shown an increase over the past ninety years?

### **What's the likely cause of heart disease?**

The most likely causes of increased heart disease in America are the other changes in our diets - huge increases in consumption of refined carbohydrates and vegetable oils, particularly hydrogenated vegetable oils; and the decline in nutrient levels in our food, particularly minerals and fat soluble vitamins - vitamins found only in animal fats.

The only claim that can be made against beef as a cause of heart disease is that *some* studies have shown beef consumption to temporarily raise cholesterol levels in short term feeding experiments. Other studies have shown that beef consumption, including beef fat consumption, lowers cholesterol levels. But even if *all* studies show that beef consumption raises cholesterol levels, the only conclusion you can draw is - so what? There is no greater risk of heart disease at cholesterol levels of 300 than at 180, and people with cholesterol levels below 180 are at greater risk of death from other causes, such as cancer, intestinal diseases, accidents, violence and suicide.<sup>5</sup> In other words, it's much more dangerous to have cholesterol levels that are too low than cholesterol levels that are too high.

### **Cholesterol is your best friend**

The truth is that cholesterol is your best friend. It is vital for the function of the nervous system and the integrity of the digestive tract. Steroid hormones that help the body deal with stress are made from cholesterol. Sex hormones like estrogen and testosterone are made from cholesterol. Bile salts that the body uses to digest fats are made from cholesterol. Vitamin D, needed for thousands of biochemical processes, is made from cholesterol.

Cholesterol is a powerful antioxidant that protects us against cancer. It is vital to the cells because it provides waterproofing and structural integrity. And, finally, cholesterol is the body's repair substance. When our arteries are weak and develop fissures or tears, cholesterol is sequestered and used for repair. When cholesterol levels in the blood are high, it's because the body needs cholesterol. Blaming heart disease on cholesterol is like blaming a fire on the firemen who arrive to put out the flames.

## Does beef cause cancer?

What about the accusation that beef causes cancer, in particular cancer of the colon? The genesis of this myth involves more than just muddied thinking, but actual skulduggery. In 1965 an influential physician, Ernst Wynder, took the data for the mostly processed vegetable oils, called them animal fat (which they were not) and compared them with worldwide colon cancer mortality.<sup>6</sup> The table he produced showed high rates of colon cancer in European countries and low rates of colon cancer in Japan, and concluded that there was a positive effect, in other words, that saturated fat, the kind found in beef, caused colon cancer. What the data actually showed was that consumption of polyunsaturated vegetable oils, not saturated animal fats, was associated with the incidence of colon cancer. And Wynder forgot to mention that Asians have much higher rates than Americans of other types of cancers, particularly cancers of the liver, pancreas, stomach, esophagus and lungs.

Then in 1973, William Haenszel and his colleagues from the National Cancer Institute reported the findings from a study that relied on dietary recall and lacked matched controls - in other words, a very poorly designed study.<sup>7</sup> The researchers stated that they found a relationship between beef and colon cancer that fit the earlier work of Wynder. Actually, what they really found was that among westernized Japanese Americans, those who said they consumed lots of macaroni, green beans and peas, as well as beef, had the highest rates of colon cancer; while among traditional Japanese Americans, those who said they consumed lots of dried cuttlefish, Chinese peas, bamboo shoots, rice and fermented soy products had the highest rates of colon cancer. Thus, the researchers singled out beef as the culprit from a choice of several foods associated with cancer in Westerners and ignored politically correct foods like soy products, fish and vegetables as a potential cause of cancer in Japanese Americans. Instead, this second-rate and inconclusive study has become firmly fixed in the consciousness of the scientific community as providing evidence for the assertion that beef causes colon cancer.

Two American studies conducted in the 1990's have found a higher risk of colon cancer among those who eat red meat.<sup>8</sup> However, no study done in Europe has ever shown an association between meat consumption and cancer.<sup>9</sup> This suggests that European sausage and luncheon meat, included in the rubric of "meat consumption," are prepared by traditional methods that require few additives, while the similar products in the United States contain many carcinogenic preservatives and flavorings. Unfortunately, the American Cancer Society's 1996 recommendation that Americans cut down on their consumption of meat - particularly fatty meat - in order to avoid cancer makes no distinction between fresh meats and those that have been embalmed with modern chemicals.

While two US studies have implicated meat consumption as a cause of colon cancer, there are several that contradict these findings. In 1975, Rowland Philips compared Seventh-Day Adventists physicians, who do not eat meat, with non-Seventh Day Adventist physicians, and found that the vegetarian doctors had higher rates of gastrointestinal and colon-rectal cancer deaths.<sup>10</sup> National Cancer Institute data show that Argentina, with very high levels of beef consumption, has significantly lower rates of colon cancer than other western countries where beef consumption is considerably lower.<sup>11</sup> A 1997 study published in the *International Journal of Cancer* found that increased risk of colon and rectal cancer was positively associated with consumption of bread, cereal dishes, potatoes, cakes, desserts and refined sugars, but not with eggs or meat.<sup>12</sup> And a 1978 study published in the *Journal of the National Cancer Institute* found no greater risk of colon cancer, regardless of the amounts of beef or other meats ingested.<sup>13</sup> The study also found that those who ate plenty of cruciferous vegetables, such as cabbage, Brussels sprouts and broccoli, had lower rates of colon cancer. So just because it's all right to eat beef doesn't mean you shouldn't eat your broccoli.

Actually, we know one of the mechanisms whereby colon cancer is initiated, and it does not involve meat *per se*. Colon cancer occurs when high levels of dietary vegetable oils and hydrogenated fats, along with certain carcinogens, are acted on by certain enzymes in the cells lining the colon, leading to tumor formation.<sup>14</sup> This explains the fact that in industrialized countries, where there are many carcinogens in the diet and where consumption of vegetable oils and carcinogens is high, some studies have correlated meat-eating with colon

cancer; but in traditional societies, where vegetable oils are absent and the food is free of additives, meat-eating is not associated with cancer.

Riding piggy back on the alleged association of beef with colon cancer are supposed links with other cancers, such as breast cancer. Here the evidence shows a similarly inconsistent pattern. Cancer is a disease of rich countries where numerous factors can be fingered - altered fats, fabricated foods, low levels of protective nutrients, high levels of carcinogens - and rich countries consume lots of beef. But association is not the same as cause. Countries where there are more telephones have more cancer, but that does not mean that telephones cause cancer. Fat consumption in general also gets the blame for high rates of breast cancer. But a recent survey showed that women on lowfat diets have just as much breast cancer as those on high fat diets.<sup>15</sup>

High protein diets are said to cause osteoporosis and Americans are now being advised to avoid beef in order to protect their bones. Once again, it's important to look at the studies carefully. Research that showed a link with bone loss and protein consumption was done with purified protein powders.<sup>16</sup> With meat, a natural protein food, there was no negative calcium balance. New evidence indicates that women who eat lots of meat had fewer hip fractures compared to those who avoided it.<sup>17</sup>

High protein diets are said to contribute to kidney problems but, again, the evidence is contradictory. Although protein restriction can be helpful for those who are suffering kidney failure, there is no evidence that eating meat causes kidney disease.<sup>18</sup> The fat-soluble vitamins found exclusively in animal fats are very important for healthy kidney function.

### **Does beef cause autoimmune diseases or asthma?**

What about the accusation that meat contributes to autoimmune diseases and asthma? This hypothesis is predicated on the fact that meat contains arachidonic acid, a fatty acid from which the supposedly pro-inflammatory Series Two prostaglandins - "local tissue hormones" - are formed. This is one of the nuttiest notions to take hold in the scientific community for a long time. It was promulgated by Barry Sears, author of *The Zone*, and taken up with a vengeance by the anti-meat forces. These people know nothing about prostaglandins. Some of the prostaglandins that the body makes from arachidonic acid do indeed promote inflammation - which is a very important protective response when you have injured yourself. But the same arachidonic acid also forms the basis of anti-inflammatory prostaglandins that the body uses, when appropriate, to reduce inflammation.<sup>19</sup> And besides, the amount of arachidonic acid in beef is very low - less than half a percent of total fat content. It is much lower than the amount of omega-3 fatty acids, the current darlings of the nutritional community, yet none of the voices promoting omega-3 fatty acids ever tell us that we can get them from beef.

### **What about "Mad Cow Disease"?**

Beef consumption in England plummeted recently with the "Mad Cow Disease" scare. Mad cow disease, or bovine spongiform encephalopathy (BSE), is a wasting disease of cattle characterized by nervous disorders and weakness, said to be related to Creutzfeldt-Jakob disease (CJD) in humans. Scientists have not been able to link a virus to this disease, so they theorize that an abnormal protein particle called a prion, found in the brains of cattle with BSE and humans with CJD, is the cause. The theory is that these prions are infectious agents, passed along to cows through the practice of animal part feeding and then to humans who eat infected meat, particularly meat from the nervous system, like brain.

There's a lot wrong with this theory. For one thing, BSE is nonexistent in the USA, where animal part feeding has been going on for almost one hundred years. Another is recorded cases of CJD among vegetarians; yet another is the absence of CJD in the Shetlands where scrapie, a disease similar to BSE, is common in sheep and where potted sheep's brain is a national dish.

The research of Mark Purdey, a dairy farmer in England, indicates that the mad cow disease epidemic in England occurred in areas where farmers were forced to treat their cattle with organophosphate pesticides in a warble fly eradication program.<sup>20</sup> The warble fly makes holes in the cows' backs - not dangerous in itself, but it reduces the value of pelts sold to leather manufacturers. These holes are open doors to the spinal cord and organophosphate pesticides are very toxic to the nervous system. By a complex process, these compounds seem to cause certain proteins to fold in pathological ways - these are the prions that are found in the brains of animals with BSE and humans with CJD. Mineral deficiencies are also involved, particularly magnesium, which is a mineral that protects the nervous system. Finally, a similar disease occurs among wild animals living in areas of volcanic soils, whose diets are high in aluminum and manganese, minerals known to be toxic to the nervous system. Clusters of human CJD cases are also found in areas where the soil has mineral imbalances, where there are cement factories and where high levels of organophosphate insecticides have been used.

So the answer to CJD and BSE is good soil management and the elimination of neurotoxic compounds in farming - but it's easier to just blame it on beef. By the way, now that animal part feeding has been outlawed, feedlot operators are turning to soy feeds as a protein substitute. Soy is very toxic to cows' livers. Does the use of soy in cattle feeding explain why beef - lean beef - has become politically correct again? After all, the other politically correct meats - chicken and salmon - use up vast quantities of soybean meal in battery feeding and fish farms.

### **What about *E.Coli*?**

A final slur against beef is that beef is a vector for pathogenic *E. coli* and therefore a major cause of foodborne illness. Nevermind that *E. coli* shows up in plant foods like apple juice and salad dressings; and never mind that *E. coli* is relatively benign and never caused foodborne illness in small amounts until recently. Once again, it's easier to just blame it on beef.

Charles Walters of Acres USA points out that old fashioned all-meat hamburgers, when handled with reasonable care, did not formerly pose a foodborne illness problem. Why, then, are we getting outbreaks of foodborne illness from fast food outlets, where food handling techniques are rigidly controlled - from frozen patty to the grill? He believes that the problem lies in the fact that hamburgers are now bulked out with hydrolyzed soybeans, also called textured vegetable protein, much of it made from genetically modified soybeans. With modern processing, 100 pounds of ground meat can be bulked out to 124 pounds.

*E. coli* DNA is used as a vector in genetically modified soybeans. The *E. coli* causing problems in fast food hamburgers is called *facultative* bacteria, which means that it operates with or without air. Does this bacteria come from the genetically modified soy and is it more dangerous than *E. coli* that occurs in the guts of cattle? It's a question that needs answering. Says Walters: "This *E. coli* the news releases keep talking about is not a consequence of slaughterhouse personnel not washing their hands enough, involved is the negative spin, which is what it lives on. It is in the tissue. It is not errant *E. coli* leaving the intestinal tract and infecting the product. The scientists know this and this is why they're trying to fall back on irradiation and heavy cooking."<sup>21</sup>

There are studies that support Walter's theory. One found that spoilage was greater and most rapid in "extended" than in "nonextended" (meaning pure) ground beef.<sup>22</sup> Another study showed that coliform counts were significantly higher in beef mixed with textured soy protein after one day of storage in comparison to the 100% ground beef.<sup>23</sup>

### **Does beef cause impotence?**

The accusation that beef causes impotence is a tactic that can definitely be described as "below the belt." Beef causes impotence by "clogging arteries, limiting blood flow to the extremities." So goes the argument proffered by People for the Ethical Treatment of Animals. Nothing could be more unethical than the implied suggestion that vegetarianism is good for your sex life. We know that vegetarianism - the practice of not eating animal foods - can

lead to many deficiencies that directly contribute to impotence, infertility and reproductive difficulties - deficiencies in protein, zinc, vitamins B<sub>6</sub> and B<sub>12</sub>, and fat-soluble vitamins A and D.

The notion that beef is an "acid-forming" food is another favorite vegetarian argument. Beef contains lots of sulphur and phosphorus, which technically form an acid when dissolved in water, but that does not mean that eating meat causes the body to be too acid. Actually, meat provides both high-quality protein and vitamin D (if you eat the fat and organ meats, that is), both of which are needed to maintain proper acid-alkaline balance in the body.

Meat does not putrefy in the gut. Humans are admirably equipped to digest meat. That is the main job of the human stomach, which - unlike the stomach of the cow or rabbit - contains millions of cells that secrete hydrochloric acid. Our intestinal tract is much shorter than that of the vegetarian animals, but somewhat longer than that of purely carnivorous animals. Man is an omnivore - with teeth, stomach, intestines and bowel all designed to handle both animal and plant foods.

### **Do cattle use land that should be planted with grain?**

Vegetarians argue that cows and sheep require pasturage that could be better used to raise grains for starving millions in third-world countries. This argument ignores the fact that a large portion of our earth's land is unsuited to cultivation. The open range, desert and mountainous areas yield their fruits in grazing animals. Grasslands perfectly suited to grazing cover an area in China's interior equal to three times the entire amount of land under cultivation in the rest of the country.<sup>24</sup> Citing the arguments of vegetarians, the Chinese government has opted for more intense cultivation of existing agricultural lands rather than development of these untapped regions in order to supply much-needed animal products to the Chinese diet.

A far more serious threat to humanity is the monoculture of grains and legumes, which tends to deplete the soil and requires the use of artificial fertilizers and pesticides. The educated consumer and the enlightened farmer together can bring about the return of the mixed farm, where cultivation of fruits and vegetables is combined with the raising of livestock and fowl in a manner that is efficient, economical and environmentally friendly. Cattle providing rich manure are the absolute basis for healthy, sustainable farming. On marginal land, wise grass feeding practices can actually improve soil quality and restore pasture land. It is not animal cultivation that leads to hunger and famine but unwise agricultural practices and monopolistic distribution systems.

### **Do vegetarians live longer than meat eaters?**

Since we're talking about vegetarianism, let's examine the claim that vegetarians live longer than meat eaters. The late Dr. Russell Smith, who was a statistician, took a close look at the studies purporting to show that vegetarianism was a healthier life-style.<sup>25</sup> In a review of some 3,000 articles in the scientific literature, he found only two that compared mortality data for vegetarians and nonvegetarians. One was a 1978 study of Seventh Day Adventists (SDA's). Although published analyses of this study claim that it showed that the vegetarians lived longer, Smith's analysis of total mortality rates as a function of the frequencies of consuming cheese, meat, milk, eggs and fat attached to meat found that the total death rate *decreased* as the frequencies of consuming cheese, eggs, meat and milk *increased*.

The second study was published by Burr and Sweetnam in 1982.<sup>26</sup> Once again, although the authors claim that their study showed that vegetarians lived longer, Smith found quite the opposite when he looked carefully at the hard data. He found that the all-cause death rates were slightly greater for vegetarian men compared to nonvegetarian men; and significantly greater for vegetarian women compared to nonvegetarian women.

Vegetarians never mention a study by Dr. Emmanuel Cheraskin who surveyed 1040 dentists and their wives. Those who had the fewest problems and diseases as measured by the Cornell Medical Index had the most protein in their

diets.<sup>27</sup> Yet almost all the treatments for chronic disease found in alternative publications these days begin with the recommendation of a vegetarian diet. Typical is an article by a Dr. Brodie that appeared in Issue #13 of *Alternative Medicine Digest*, published by Burton Goldberg.<sup>28</sup> Dr. Brodie recommends a "balanced vegetarian diet" of raw fruits and vegetables, whole grains and beans with no "refined sugars, red meat, caffeine and chemically preserved foods." This is truly guilt by association!

But wait! In order to get well, Dr. Brodie recommends certain supplements including vitamin A, vitamin B6, thymus extracts, zinc, cysteine, and bovine cartilage, all of which are largely absent in plant foods and plentifully available in beef! At least they are available if you are eating the whole animal as our ancestors did - meat, organs, cartilage, bones and fat.

### **Is beef good for you?**

What a shame we have demonized red meat because this is one modern food, enjoyed by almost everybody, that is rich in nutrients. Red meat provides complete protein, including sulphur-containing proteins like cysteine. Beef is a wonderful source of taurine and carnitine, needed for healthy eyes and a healthy heart. Beef also provides another key nutrient for the cardiovascular system - coenzyme Q10.

Beef is an excellent source of minerals like magnesium and zinc - you need zinc for clear thinking and a healthy sex life. The fuzzy-headedness that vegetarians mistake for heightened consciousness is really the fog of zinc deficiency. Vitamin B<sub>6</sub> is abundant in meat, especially rare meat. Red meat is one of the best sources of vitamin B<sub>12</sub>, which is vital to a healthy nervous system and healthy blood. Vegetarians are especially prone to vitamin B<sub>12</sub> deficiency. One of the first signs of vitamin B<sub>12</sub> deficiency is a tendency to irrational anger - so much for vegetarian claims that we will have a more peaceful, harmonious world if we all just stop eating meat.

If you use the animal bones and hooves to make stock, and use the stock as our ancestors did in soups, stews and sauces, you will get plenty of calcium and the components of cartilage to give you healthy bones and cartilage. If you eat organ meats, as our ancestors did, you will get vital fat-soluble nutrients like vitamin A and D, both of which are essential for protein utilization and mineral absorption.

### **What about saturated fat?**

In fact, the one warning we could give you about meat is not to eat it lean. In spite of claims to the contrary, the diet of the cave man was not one of lean meat. Paleolithic man always ate his meat with fat.

Vilhjalmur Stefansson, who spent many years living with the Eskimos and Indians of Northern Canada, reports that wild male ruminants like elk and caribou carry a large slab of back fat, weighing as much as 40 to 50 pounds. The Indians and Eskimo hunted older male animals preferentially because they wanted this backslab fat, as well as the highly saturated fat found around the kidneys. Other groups used blubber from sea mammals like seal and walrus.

"The groups that depend on the blubber animals are the most fortunate in the hunting way of life," wrote Stefansson, "for they never suffer from fat-hunger. This trouble is worst, so far as North America is concerned, among those forest Indians who depend at times on rabbits, the leanest animal in the North, and who develop the extreme fat-hunger known as rabbit-starvation. Rabbit eaters, if they have no fat from another source - beaver, moose, fish - will develop diarrhea in about a week, with headache, lassitude, a vague discomfort. If there are enough rabbits, the people eat till their stomachs are distended; but no matter how much they eat they feel unsatisfied. Some think a man will die sooner if he eats continually of fat-free meat than if he eats nothing, but this is a belief on which sufficient evidence for a decision has not been gathered in the north. Deaths from rabbit-starvation, or from the eating of other skinny meat, are rare; for everyone understands the principle, and any possible preventive steps are naturally taken."<sup>29</sup>

Normally, according to Stefansson, the diet consisted of dried or cured meat "eaten with fat," namely the highly saturated cavity and back slab fat that could be easily separated from the animal. Another Arctic explorer, Hugh Brody, reports that Eskimos ate raw liver mixed with small pieces of fat and that strips of dried or smoked meat were "spread with fat or lard."<sup>30</sup> Pemmican, a highly concentrated travel food, was a mixture of lean dried buffalo meat and highly saturated buffalo fat. (Buffalo fat, by the way, is more saturated than beef fat.) Less than two pounds of pemmican per day could sustain a man doing hard physical labor. The ratio of fat to protein in pemmican was 80% to 20%. As lean meat from game animals was often given to the dogs, there is no reason to suppose that everyday fare did not have the same proportions: 80% fat (mostly highly saturated fat) to 20% protein - in a population in which heart disease and cancer were nonexistent.

The beef industry has been forced to be apologetic about its product because it's very difficult to get the fat out of beef. You can reduce the fat content by using hormones, but you end up with a product that is tough and tastes terrible, not to mention full of hormones. Beef producers need to recognize that the fat is the most important part of the beef, rich in components that promote good health and that help you utilize the nutrients in all the other parts of the beef. In addition to vitamins A and D, fat contributes many important fatty acids, including palmitoleic acid, an antimicrobial fat that protects us against pathogens in the gut. If you want to be sure that you don't get foodborne illness from your hamburger, use full fat ground beef.

Fat also provides a substance called conjugated linoleic acid or CLA, at least it does if the animals have been on green grass.<sup>31</sup> CLA is a substance that protects us against cancer and that promotes weight loss - that's right, fat can make you thin, if it's the right kind of fat.

And the right kind of fat is also saturated fat which, in spite of what we've been told, plays many important roles in the body chemistry. The scientific literature delineates a number of vital roles for dietary saturated fat - they enhance the immune system,<sup>32</sup> are necessary for healthy bones,<sup>33</sup> provide energy and structural integrity to the cells,<sup>34</sup> protect the liver<sup>35</sup> and enhance the body's use of essential fatty acids.<sup>36</sup> Stearic acid and palmitic acid, found in beef tallow and butter, are the preferred foods for the heart.<sup>37</sup> As saturated fats are stable, they do not become rancid easily, do not call upon the body's reserves of antioxidants, do not initiate cancer, do not irritate the artery walls.

In fact saturated beef fat is one of the most useful fats in the culinary repertoire. As it is very stable and doesn't go rancid when heated to high temperatures, it's perfect for frying. While we don't recommend a lot of fried foods, we know that our children and grandchildren are going to eat them. Fast food outlets used to fry their potatoes in healthy stable beef tallow. They were crisp, tasted delicious and provided many important nutrients. But the phony cholesterol issue has forced these outlets to switch to partially hydrogenated vegetable oil, which is known to cause a host of chronic diseases including cancer, heart disease, bone problems, infertility and autoimmune disease.<sup>38</sup>

### **What about the beef industry?**

The beef industry should know these things but it doesn't. Instead the National Beef Checkoff Board, funded by mandatory payments from cattlemen, officially endorses consumption of only three and one-half ounce servings of lean beef, about the size of a pack of cards, and runs ads that say things like this: ". . . when it comes to lowering - 'bad' cholesterol levels, lean red meat has the same effects as white chicken meat. That means eating lean beef may reduce the risk of heart disease. Since seven cuts of beef fall between a skinless chicken breast and chicken thigh in terms of total fat, consumers can feel good about eating beef."<sup>39</sup> This is damning a good product by faint praise. The Checkoff Board had bought into the phony cholesterol theory and sides squarely with the Diet Dictocrats, calling for irradiation to kill "emerging pathogens" and subsidies to giant processors.

Steve and Jeanne Charter, ranchers from Shepherd, Montana, have refused to make the checkoff payments and are willing to take on the Beef Checkoff Board in court. At preliminary hearings the judge listened while Checkoff

bureaucrats defended the Department of Agriculture's food pyramid, based on seven to eleven servings of grain per day, while the Charters championed the juicy steak - to cheers from fellow ranchers.

We need to stand up and support people like the Charters because beef is not the demon food we've been told it is. Beef does not cause disease. In fact beef contributes to good health by providing many important nutrients. All this can be found in the scientific literature. So what's the beef, then, about beef?

Perhaps it also has to do with the characteristics of cattle-herding peoples. Unlike agriculturists, who require an organized social structure highly susceptible to centralized control, the pastoral way of life favors the independent thinker. And the beef industry, for all its faults, is far less subject to monopolistic control than the grain industry is. And it's easier to manipulate prices on grain, a commodity controlled by just a few families,<sup>40</sup> than it is to control prices on an industry supported by thousands of cattlemen.

While it is not as true today as it was in the days before the barbed wire fence, cattle keeping families enjoy the luxury of greater independence than those who till the soil or tend vines. They inhabit the wide open spaces and are more accustomed to fending for themselves than relying on their neighbors.

This is not to say there is anything wrong with relying on one's neighbor - in fact, to survive and revive, more cooperation in the beef industry will be needed - but democracy needs a critical mass of the kind of free thinking, independent businessman that you find in the cattle industry. This may be the real reason the Chinese decided not to develop their western grasslands - even small numbers of forward thinking Chinese cowboys would be a threat to that totalitarian society.

People who raise beef not only tend to be free thinkers, they are also *good* thinkers, because beef provides many factors needed for the modern equivalent of the quick draw - keen, quick minds - including zinc, B12, cholesterol, omega-3 fatty acids, trace minerals, saturated fat and complete protein. In fact, when it comes to good health - it's the beef.

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