THE WAR ON DIETARY CHOLESTEROL:

HOW CORPORATE MEDICAL QUACKERY
IS RAPIDLY DEGRADING AMERICA'S HEALTH

A DISCUSSION OF FAT, OIL, CHOLESTEROL AND HEART DISEASE

A few years ago, my Grandmother, Gertrude Jacobson "the Terror," finally died dead. She was one month shy of being 106 years old. She was born in Nebraska in 1894 and breastfed by a mama who ate nothing but fats, eggs, lots of liver and other meat, whole dairy products such as butter and cream, whole "non-enriched" grains, nuts and whole fruits and vegetables. (Remember, truly toxic imitation foods like margarine, and Diet Pepsi were not yet popular). Gertrude was dragged to the rest home around age 104 where I suspect the doctors and dieticians put her on a restricted diet of junk food and "low fat." She soon stopped winking at the younger interns, and quit the planet shortly thereafter. As it appears the average medical doctor in the United States only lives to about age 60, Gertrude outlived the average "Health Specialists" (who are telling you to avoid animal fat) by 40 to 45 years! Do an experiment. When you encounter very old people with strong bones and sharp minds who still tell off-color jokes, ask them what foods they were raised on as children. Their bright eyes will light up, and they will invariably tell you with great pride, "fresh eggs, whole milk, butter, cheese, whole meats with lots of organ meats like liver and tripe, blood sausage and lots of food deep-fried in lard and tallow." Like their ancestors, they were not paranoid about real saturated fat or shy about eating whole, organic nutrient-dense "actual" food.

My favorite survival story is that of the Irish Sea Captain Ernest Shackleton, and his crew of the sailing ship "Endurance," back in 1915. On the way to Antarctica, the ship became trapped in the ice and was slowly crushed. The around 120 men were on their own, stranded on the ice, with the Antarctic winter coming. For two years they lived first on sled dog meat, then seal fat and organs, with whatever other seafood they could find. All the men survived, and all were healthy when they were rescued two years later. Obviously, cholesterol-dense, saturated animal fat was not a health problem. If the men had eaten margarine, low-fat milk, refined bread, soybean "imitation" meat,

and "enriched and fortified" cereals like Wheaties, the "Breakfast of Champions," the story would have had a tragic ending.

Back when gullible indigenous peoples still rescued sick, starving, incompetent, early white explorers, the first food they fed them to bring back health was high-cholesterol animal fats mainly liver. This saturated animal fat, high in cholesterol, gave the grateful white men the tremendous energy they needed to push spears and swords into the bodies of the indigenous peoples, and carry off their women.

The longest-lived people on this planet are currently the Okinawans. They eat plenty of cholesterol and saturated animal fat. Their main cooking oil is lard. Pig fat! For thousands of years, people have lived on saturated animal fat and high cholesterol.

The greatest nutrition book ever written, Nutrition and Physical Degeneration by Weston A. Price, discusses the absence of degenerative disease and tooth decay in societies still eating whole traditional foods, and not yet exposed to industrial processed devitalized "imitation food"—particularly refined sugars and hydrogenated oils. He found that the healthiest societies had the highest saturated animal fat, as well as high daily intake of fermented foods such as vogurts and sauerkrauts. Dr. Price established that the epidemic of degenerative illness in this country is NOT from eating the foods that have been eaten for thousands of years such as grass-fed whole milk, butter, cheese, yogurt, all meat fats, liver, other organ meats and eggs. Degenerative illness comes from eating synthetic versions and substitutes for these real, whole, nutrient-dense foods. A simplistic but quite effective way of looking at food is to ask whether this food was eaten in its current form two hundred years ago on this planet. If the answer is NO there is an excellent chance that this particular "imitation" food is not good for you, and will lead you to various health problems. Unfortunately, the medical profession has no interest in looking at traditional, healthy societies in order to gain valuable information on health and well being. It is too busy breaking diseases into tiny components to then justify further research into the development of yet more drugs and treatment. Doctors can't get perks from drug companies to go to seminars in Hawaii if they simply tell their patients to change their diet and eat real food and breastfeed their babies. Doctors give "real" medicine!

Saturated fats of animal origin—the cornerstone of traditional diets—have taken the biggest hit from "organized" industrial slander that utilizes the "cholesterol myth." Since corporations that manufacture imitation food constantly seduce us away from this cornerstone of traditional diets, we will start by learning about fats and oils.

¹ These two recent studies were mentioned to me by a patient which was fortuitous because there was not one mention of them in the mainstream press. Surprise, surprise. These two scientific studies help prove that saturated fats don't cause heart disease but in actual fact, protect us from heart disease and strokes. The March 2010 American Journal of Clinical Nutrition did a mega analysis of saturated fat in the diet of over 350,000 people whose diet and health have been studied in twenty one studies for 5 to 25 years. Their conclusion: "There is no significant evidence for concluding that dietary saturated fat is associated with an increased risk of CHD (Coronary Heart Disease) or CVD (Cardio Vascular Disease)." The second study in the European Journal of Clinical Nutrition, April 2010, described an Australian study over 15 years long, which showed that people who ate the most full fat dairy products had a 69% lower risk of CVD death than those who ate the least. People who mostly avoided dairy foods or consumed low fat dairy had 3 times the risk of dying of CHD or stroke compared to people who at the most full-fat dairy. Surprise, surprise.

EARLY SIDE NOTE: This essay does not go into short-chain, medium chain, long-chain, Omega 3 versus Omega 6 oils as it tends to put people to sleep, including me. Suffice it to say that the "good" oils your body needs, mainly the Omega 3 oils, are found predominately in animal fats and fish liver oils. Flax seed oil is only a precursor to Omega 3, so avoid the hype, and stick with the organic, pasture-fed, saturated animal fatty acids. Omega 6, the "harmful in high-ratio amounts" oils, are found in plant oils such as corn, soy and canola. To learn the fine details of oils, check out the references at the end of this essay. You will learn much more than you need to know, or can remember, and may possibly need to go out and get drunk after reading even a few.

Keep in mind that in general, "fats" come from animals, and "oils" come from plants. Generally, olive oil is not called fat, and butter and lard are not called "oil." Animal fats contain large amounts of Vitamins A and D, and remain "stable" after they are cooked, thus retaining most health benefits. Plant/vegetable oils contain virtually no Vitamins A or D. Heating plant oils, particularly polyunsaturated oils, makes them not just worthless (processed plant oils contain *NO* vitamins or minerals), but harmful due to excessive free radicals (to be discussed shortly). For example, if you deep-fry in lard or tallow, no problem. But if you deep-fry with processed plant oils, as most restaurants do, you are taking a risk, and should start a savings account now for the cardiologist's Mercedes.

There are basically three kinds of fatty acids found in foods. Hang on tight. Off we go.

THE THREE KINDS OF FATS

#1 SATURATED FATTY ACIDS

These are the fats found predominately in animal products. Examples are whole milk, egg yolk, lard, butter, tallow, chicken fat, buffalo fat, sheep fat, squirrel fat, and all animal fat. Saturated fatty acids are also found in "tropical oils" such as palm oil and coconut oil. (Coconut oil is an excellent oil because it contains loric acid, which is found only in coconut oil and breast milk. It works wonderfully as an anti-fungal, because fungus does not like fat.) Your body also manufactures saturated fats from excess carbohydrates such as large amounts of rice. Saturated fats are also found in small amounts in all vegetable oils. Saturated fats are called "saturated" as all the carbon bonds in their molecules are already filled up to the brim with hydrogen atoms. These molecules are very stable, and "straight" in shape. Thus, they pack together well like a deck of playing cards. Because their molecules are stable, saturated fats are solid at room temperature, and are much less likely to go rancid during cooking. Thus, they do not form the dangerous "free radicals" that cause the heart disease and cancer that polyunsaturated oils do. (We will discuss this free radical business shortly). Saturated fats are the body's main source of antioxidants that fight free radicals to keep you young, and are loaded with Vitamins A and D. Remember that the most important of all vitamins is Vitamin A. However, it is sadly deficient outside of animal products.

#2 MONOUNSATURATED FATTY ACIDS

Monounsaturated oils are structured with one double bond. Their molecules can bend more than the molecules of saturated fats, and are thus like a "sloppy deck of cards." They do not pack together as well as saturated fats, and tend to be liquid at room temperature, and solid when refrigerated. Similar to saturated fats, monounsaturated oils are basically stable, and do not go rancid easily. Thus, like all saturated oils they can be used in cooking.

The most common of these is oleic acid—the main ingredient of olive, sesame, almond, pecan, cashew, peanut, and avocado oil. When your body needs to, it can also manufacture monounsaturated fatty acids from saturated fatty acids. Keep in mind that, unlike saturated fats, monounsaturated and polyunsaturated oils contain almost zero Vitamins A and D.

#3 POLYUNSATURATED FATTY ACIDS

Polyunsaturated fatty acids have two or more double bonds in their molecules. The two most common polyunsaturated acids found in our foods are linoleic acid, with two double bonds (called Omega 6), and linolenic acid, with three double bonds (called Omega-3). Get out your chemistry books you wise guys! Everyone else keep reading. As the multiple double bonds make the molecules all bendy and twisty, polyunsaturated oils molecules do not pack together well. They are like a scattered deck of cards. Thus, as they can't get together, polyunsaturated oils remain liquid, even when they are refrigerated. The unpaired electrons located at the double bonds lack four or more hydrogen atoms, and make polyunsaturated oils highly reactive. When they are subjected to heat, or oxygen, as in extraction, processing, and cooking, "free radicals" are formed. It is these free radicals in processed polyunsaturated oils, NOT SATURATED ANIMAL FATS, that can actually initiate cancer, heart, and neurological disease. More on this later. As your body cannot make its own polyunsaturated fatty acids, they are called "essential," and can only be obtained from proper foods.

Polyunsaturated fatty acids are found in almost all whole foods including fish, meat, eggs, dairy products, fruits, vegetables, grains and legumes. Thus, mankind has always consumed small amounts of "unprocessed" polyunsaturated fatty acids, as they are found naturally in the food supply. However, in nature, as they are not heated and processed, they are still quite healthy. Processed soy, corn, canola, safflower, cottonseed and sunflower oils are the most common dangerous polyunsaturated oils, and should be avoided. They should also never be heated due to free radical production and consequent heart disease. The worst of the lot is soy oil, which makes up about 80% of all hydrogenated oils. Industrial oils, margarines, and shortenings should all be replaced with naturally grown animal fats, unprocessed tropical oils such as palm and coconut, and high quality olive oils.²

TRANS FATS—"THE BAD BOYS"

The fact that polyunsaturated fats such as soybean, corn, sunflower, safflower and canola oils are liquid, even at cold temperatures, has always been a problem for oil

² Strange but true. Beef fat (tallow) is 54% unsaturated, lard (pig fat) is 60% unsaturated, and chicken fat (cluck cluck) is about 70% unsaturated. That makes all these fats less than half saturated, and are in fact actually monounsaturated by definition. Indeed no naturally occurring fat or oil is made up of only all saturated or all unsaturated fatty acids. They are all mixtures. If a fat found in nature was a totally saturated fat it would be as hard as wax and inedible. There are no totally unsaturated fats found in nature either. Sorry, white power fat people, but all fats in nature are mixtures. Live with it.

manufacturers in countries where butter and lard (not vegetable oils), were traditionally used in the diet. Vegetable oils cannot be spread on bread, are lousy for baking, and produce burnt and rancid smells when used for frying. Thus, oil producers had to do something to generate profits. Around 1900, French and German rascals invented a method for converting liquid vegetable oil into solid fat. They heated oil to about 400 degrees in large reactors, mixed the oil with nickel powder (a deadly poison), that acted as a catalyst, and then forced hydrogen through this unappetizing mush. This method, which is still used today, changes the chemical structure of the polyunsaturated fatty acids, and creates something called trans fatty acids. Trans fats are also unsaturated, but the hydrogen molecules in the double bonds have been rearranged so that the resulting molecules behave like the more stable solid saturated fatty acids. The final product, which is a mixture of various polyunsaturated, saturated, and trans fatty acids, is called "partially bydrogenated oil." It is used in thousands of processed, "imitation" foods including margarine, crackers, cookies, doughnuts, French fries ("Freedom Fries," if you haven't read American history), potato chips, pastries, candies, salad dressings, cereals, and even the meats in fast food restaurants. Vegetable oil company folks will say that there are also tiny amounts of trans fats in animal fats. However, if they had integrity, they would also tell you that these natural fats are quite different from those trans fats created by industrial hydrogenation. Unfortunately, our bodies do not recognize the unnatural trans fats in commercial foods as foreign. Instead of rejecting them, our body builds these "manufactured" fats with their misplaced electrons (free radicals), into our cell walls, and other parts of our cells and "hardens" them. This leads to disturbances in cellular function and subsequently, to disease.

Trans fats, particularly margarines, are perhaps the most dangerous commercial "imitation" foods you can buy. Hydrogenation of oils makes the normally twisty-turny innocent polyunsaturated acids get in line, straighten out, and behave like saturated fats. As a result of this straightening, hydrogenated oils have a longer shelf life. Their molecules pack together easily, so they are unnaturally solid at room temperature. Thus, they can be used as spreads and shortenings, and can sit on your kitchen counter for months, as no intelligent life form will eat them. Trans fats can be made incredibly cheaply compared to the expensive processing of animal fats, and because their shelf life is so long the food industry prefers to use cheap trans fats made from soy, canola, corn, and cottonseed oil rather than "unprocessed" tropical oils and animal fat.

The steps in commercial processing from the seed or nut to the oil include crushing the seeds, extracting the oil by mechanical means or using industrial solvents (such as hexane, a cancer-causer), degumming, neutralization, dewaxing, bleaching, filtration, and deodorization. Some oils such as canola are also cooked before their oils are extracted.

Traditional societies have used unprocessed, non-hydrogenated palm and coconut oil for thousands of years. Both oils are quite "heart-healthy." However, "hydrogenated" palm and coconut oil are extremely dangerous to your arteries and your health. Did you know that the original MacDonald's used animal fat rather than hydrogenated oil? Then, "health authorities," particularly the National Academy of Sciences (in order to please their sponsors, like Proctor and Gamble), recommended that McDonalds use hydrogenated (trans fatty acid) oils, and stop using "dangerous" animal fats.

Then, guess what? In 2002 the Institute of Medicine of the National Academy of Sciences concluded that there is NO safe level of trans fat in the diet. Their review of studies have shown that partially bydrogenated oils are the most likely major cause of heart disease in the U.S., and that trans fats should be phased out of the nation's food supply as rapidly as possible. Unlike the FDA, the Academy of Sciences is to be commended for finally allowing honest scientists to speak out and publish.

HOW MARGARINE AND SHORTENING ARE MADE

Manufacturers start with the cheapest vegetable oils (soy, corn, canola, safflower, and cottonseed oils), and then extract the oils under very high temperature and pressure. The last portion of oil is removed with Hexane, a solvent that causes cancer. The oil, already rancid (from free radicals, which we will learn about shortly), from the extraction process, is then steam-cleaned. This destroys all the vitamins and minerals that survived the extraction process. The oil is now a "dead" food. However, the pesticides and solvents remain. The dead oil is then mixed with a finely ground nickel catalyst, although nickel is extremely poisonous to humans. The oil is then put in a reactor, where at high temperatures and pressure it is flooded with hydrogen gas. This "hydrogenation" changes the molecular structure of the oil making it very hard for humans to digest. The liquid oil that went into the reactor comes out as a very lumpy, very stinky, grey semi-solid. At this point, soap-like emulsifiers are mixed in to remove all the lumps. To get rid of the amazingly stinky smell, the goop is again steam-cleaned. The goop is then bleached to get rid of the grey color, and synthetic vitamins and artificial colors made from coal tars, etc. are added and mixed in. To make the goop pretty, a "natural" yellow color is added to margarine. Since the government wants desperately to protect the public against any health scam, synthetic colorings are not allowed. What a joke! The mixture is then packaged in blocks or tubs, and promoted to the public as a health food. This final goop, with absolutely no nutritional value of any kind, and now a cell-hardening "trans fat," proceeds to give your body a heavy bombardment of free radicals to start cancer growth, while it breaks down your arteries and clogs them with "oxidized" cholesterol so you can have a stroke or heart attack. Doctors and nutritionists, who have been fed "industrial ideas" of nutrition, will tell you to eat toxic margarines and shortenings (which are chemically almost identical to Styrofoam) instead of "dangerous" butter.

SIDE NOTE: The Europeans have been making a "non-hydrogenated" margarine out of coconut and palm oils for years, but because it is more expensive to produce, U.S. companies are not yet interested in marketing it.

ARTERY AND HEART DISEASE

A few years ago I had an opportunity to go over to my old man's house to fix a leaking pipe. As he had buried the one-inch in diameter metal pipe back in 1954, it was not in optimum condition. In fact, there was so much crud on the inside of the pipe that only a pinhole opening about an eighth of an inch wide remained. It reminded me of the mind of a religious fundamentalist. It was amazing that water even got through the pipe to the house. The old rusted pipe had little ruptures in the sides, similar to what happens to arteries in strokes. Now, when most people think of hardening of the

arteries—"arteriosclerosis"—they think of this sort of "clogging" in their own arteries. Interestingly enough, this is *NOT* the way arteriosclerosis of arteries works.

Arteriosclerosis actually starts when we are babies. Autopsy studies show that early changes in blood vessels associated with arteriosclerosis begin in infancy, and obvious fatty streaks are evident in the major arteries by early childhood. These changes occur and can be seen in 50% of children between ten and fourteen years old. The fatty streaks, which tend to accumulate in areas of high arterial stress, continue to grow, collecting fatty debris and other scuzz. Over time the fatty deposits start to narrow the artery, but not actually block it.

Arteries have three layers, the innermost being the very smooth slick layer of epithelial cells. It is so slick, like Teflon, that blood can pass along with minimal friction. The middle layer of the artery is smooth muscle to help pump the blood. Now, here is what you need to understand so you can explain it to your doctor. Arteriosclerotic fat streaks are not on the inside of the "tunnel" of the artery that can close down and block the hole's diameter. It is not like my old man's metal water pipe where the scuzz was on the "inside" of the pipe blocking the water going by. Arteriosclerosis fat is embedded deep between the smooth layer and the muscle layer. It is inside the pipe wall itself! Think about this. If you have a garden hose going to your rose plant, and the hose has scuzz-like glue balls going through it, and the scuzz sticks to the inside of the opening, the scuzz narrows the inside diameter of the hose. When the opening is finally too narrow, water cannot get through, and the rose plant gets very discouraged, depressed, and dies dead. However, if the glue ball scuzz is "inside" the wall of the artery, in the "inner lining of the hose" only, the inside of the artery will still be silky and smooth. Water will go through it—no problem. The garden hose may look lumpy and bumpy, like a boa constrictor snake that has eaten several small animals, but the water will still go successfully through, as the hole is still open. Arteriosclerosis is not arterial plaque! Plaque is "on the inside wall" of the artery. Arteriosclerosis is inside the layers of the walls of the arteries themselves. Get it?

Natural saturated animal fats do not irritate your artery walls, creating inflammation, plaque formation and coronary beart disease. The cholesterol from animal fats does not "stick" to your inner artery walls and block them. Sorry. False alarm. Saturated animal fat molecules keep the smooth layer of your artery nice and smooth. It is only "Oxidized Cholesterol" that destroys your arteries, and belps deposit plaque on the "inside wall" of your artery, not inside the wall, where it is less barmful. The only "bad" cholesterol, "oxidized cholesterol" comes primarily from commercially processed vegetable oils; particularly hydrogenated soy, corn, palm, canola, and cottonseed oils, Crisco and from the homogenization of milk. (Remember xanthine oxidase? If not, please re-read the essay on industrial-processed factory milk, particularly page 71.)

This "oxidized cholesterol" business is the answer as to why many cultures that eat much more animal cholesterol and animal fat than we do, such as the French, Swiss, Eskimos, Masai, mountain Tibetans and others have much less coronary heart disease than we do. This in spite of the fact that they have much higher amounts of arteriosclerosis than we do. Japanese between the age of 65 and 90 have more arteriosclerosis than Americans of the same group, but much less coronary heart disease. Their secret is that they do not eat "hydrogenated" oils and processed, low-fat

milk, and other products that contain toxic "oxidized cholesterol." This fact concerning where the fat is deposited on the artery explains why there is NO correlation between the amount of arteriosclerosis and coronary heart disease. Furthermore, there is almost no statistical correlation between the level of blood cholesterol and coronary heart disease. Older people with the highest cholesterol levels live the longest! Read that sentence again. Explain this to your doctor if he threatens you with a cholesterol-lowering "statin" drug for the wrong reason. There are some conditions for which statins appear to have some statistical benefit, like preventing a second heart attack. (They don't prevent the first heart attack, to any degree of statistical relevance, but we can discuss that later.)

Addendum: There are about one million deaths a year in the U.S. from arterial problems, and one and a half million heart attacks a year. Millions more people do not know that their arteries are 80-90% occluded, because they have had no gross symptoms yet. For one third of these people, a heart attack is their first symptom of artery disease. Thus, for many people their first symptom of poor diet is death. Currently 40 million people in the U.S. suffer from cardiovascular disease, and 500,000 coronary bypasses are performed every year. The estimated cost of heart disease in the U.S. alone is 260 billion dollars a year. This is near the amount of money we need per year to continue the war in Iraq, so we will soon need to choose either war or heart disease. We can't afford both! I vote for war on hydrogenated oil, and homogenized milk.

THE LIPID HYPOTHESIS

The word "hypothesis" comes from the Greek dudes who hypothesized that the word "thesis" meant "a proposition maintained by argument," and that the word "hypo" meant "under." You take it from there. A hypothesis is not a fact, and to become fact must be proven. That's a fact. Please keep in mind that if a scientific hypothesis is correct it must agree with ALL observations. Even one measly observation that does not support the hypothesis is enough to disprove and blow up the hypothesis. It can then no longer be considered "scientific." One little teeny tiny platypus disproves the theory that all mammals don't lay eggs. The opponents of a hypothesis do not even have to provide an alternative idea. They just need to show one contradictory observation. A scientific hypothesis is not like a football game where the greatest number of points wins. No matter how much the "scientific" cheerleaders jump and shout, and no matter how much the crowds go wild, the "games hypothesis" must be proven with no contradictions. With one little contradiction the whole game is lost. Albert Einstein, the smart, hairy dude, said, "No amount of experimentation can ever prove me right; but, a single experiment can prove me wrong." I love Thomas Huxley's great observation: "The great tragedy of Science is the slaying of a beautiful hypothesis by an ugly fact!"

Since the nineteen-fifties, in the search for the cause of artery disease, coupled to an incessant requirement of corporate profits, medical researchers have focused on a single idea, or hypothesis, *already proven false, as we shall see in the research section*, called the "Diet-Heart" idea, or, the "Lipid Hypothesis." The diet-heart hypothesis religious liturgy considers coronary heart disease to be the third and final step of a three-step process, as follows:

Step 1: Believers claim that the amount and type of mainly saturated animal fat, and the tropical oils—palm and coconut—in your diet, determines the level of cholesterol in your blood. **Step 2:** if you eat a saturated fatty acid, high-cholesterol diet from animal fat your blood cholesterol will be high. **Step 3:** Cholesterol sticks to your arteries, clogs them and makes you prone to heart disease and stroke.

Simply put, eat animal fat which crawls into your arteries and clogs them-like beaver dams clog rivers-so your arteries blow up, and you have a heart attack, or stroke.

The lipid hypothesis sounds quite logical, and certainly is very simple to understand. It implies that artery disease and coronary death can be prevented by not eating animal fats, or better yet, by taking drugs. The end financial result of creating this "mythical lipid hypothesis" is that the medical profession, drug companies, and imitation food making corporations have made billions of dollars while increasing human malnutrition and suffering. Keep in mind, just one cholesterol-lowering drug, Lipitor, created 12 billion dollars in revenue in 2004. That's not just chopped liver. Twelve billion dollars could keep the Iraqi war going for almost one month, and if there are still 20 million Iraqis left, my kids (who do math, not arithmetic!) figure that's about 60 dollars for each Iraqi. That's enough to buy a few cases of Diet Coke or Pepsi, and some "People" magazines! OK, back to work.

True science is not a democracy! Sorry. Here are a few teeny tiny contrary observations that negate the lipid hypothesis: The people of Okinawa currently have the longest life span in the world. The average life span for Okinawan women is 84 years—longer than in Japan, which is number two in longevity. Okinawans eat huge amount of pork and seafood, both high in cholesterol, and their main cooking oil is lard / pig fat. If they used industrial vegetable oils like soy and canola, they would become as sick as we are. Though the Japanese eat less animal fat than we do, they eat much larger amounts of cholesterol in the form of eggs, pork, chicken, beef, seafood, organ meats, and meat broths. Traditional Japanese women have a very low incidence of cervical and breast cancer, but when they move to the U.S. - in 1 generation their cervical and breast cancer matches ours which is number one in the world. Yay, winners! The Swiss, Austrians, and Greeks are tied for the third longest-lived people on the planet. All three countries consume more saturated animal fat than we do. The French diet is loaded with saturated animal fat. Yet, the French have lower rates of coronary heart disease than most western countries. In the United States, 315 of every 100,000 middle-aged men die of beart attacks each year. In France the rate is 145 per 100,000. In the Gascony region of France, where the staple part of the diet is goose and duck liver, the rate is 80 per 100,000. Do you remember the story of the French farmer, José Bové, who in 1999 destroyed the new McDonalds in his town by reducing it to rubble with his tractor? He should be an international hero, and nominated for a Nobel Prize in Health and Nutrition!

People in Northern India eat seventeen times more animal fat than the people in Southern India. However, they have seven times lower coronary heart disease. The Masai tribes in Africa subsist mainly on meat, raw blood, and raw milk. Usually the men drink over a gallon of raw milk a day, and yet they are free of coronary disease, and have excellent cholesterol levels. Native Eskimos (not junk-food-eating Eskimos), live on saturated animal fats as their main food source, and are almost free of coronary heart and other degenerative disease. The regions in China that have the largest amounts of

whole milk and saturated animal fat consumption have one half the coronary heart disease rate of the regions with low saturated animal fat consumption. Several Mediterranean cultures, particularly in Crete and Italy, have low rates of coronary heart disease, though saturated animal fats make up about 70% of their diet. Jews who live in Yemen, whose diet is almost completely saturated animal fat, have very low rates of coronary heart disease, whereas Jews who live in Israel and eat vegetable oils and margarines have very high incidences.

Healthy human breast milk runs from 50 to 70% cholesterol. Saturated "animal fat" and cholesterol are essential for proper human development, particularly of the brain and nervous system. Yet, the American Heart Association (in cahoots with the drug companies and with the compliance of most pediatricians), recommends that children eat a low-cholesterol, low-fat diet, in spite of the obvious studies showing negative effects—for example, failure to thrive, and increased aggressive behavior in kids with low cholesterol.

For years now, the lipid hypothesis has been shown to be bogus and "unscientific." Even the original studies thought to "prove it," particularly the Framingham study, actually showed that the saturated animal fat eaters remain the healthiest, and the synthetic low fat vegetable oil eaters remain the sickest. However, the medical, drug and processed vegetable oil professions still cling to the old false hypothesis for dear financial life and professional ego. (Unlike chiropractors, M.D.s can "bury" their mistakes). This, in spite of the fact that they have ruined, and are currently ruining countless millions of people in the process.

Our great grandparents would be amazed and disgusted if they saw the "imitation food," low-fat diets their great-grandchildren are feeding their babies and infants. Commercial baby formulas are very low in saturated fats, and soymilk contains no cholesterol. Healthy human milk is 60 to 70% saturated "animal fat." When was the last time you heard of an obstetrician recommending that pregnant woman eat high fat? Or a pediatrician recommending nice high-fat goat milk, sheep milk, or cod liver oil for a baby who was not being breastfed? Consider that more people in the world (many of whom are more physically and mentally healthy than we are), drink high-fat goat, yak, reindeer, buffalo, horse, and sheep milk rather than cow milk, and also feed it to their kids and babies. Why do you think we have more and more wacky kids with aggressive behavior and abnormal neurological development? Kids, and adults, and especially babies and old people, need large amounts of saturated fat and cholesterol to be healthy. In fact, in many traditional societies the first food given after breast-feeding is raw liver. But, you watch as it is already happening! The drug companies are already campaigning to start millions of children on statin drugs, so they can start kids on antidepressant and Ritalin type drugs sooner. It is criminally insane.

The history of science, particularly in the medical realm, has entertained many now discredited theories though they sounded quite reasonable and obvious at the time. In a few years, the whole lipid theory, cholesterol lowering statin drugs, and the current slander of organic, wholesome, high-cholesterol foods, will be looked upon with the same amazement that we now look upon the concept that the earth is flat, man can never survive traveling thirty miles per hour or go to the moon, or talk to one another across oceans. The history of medicine is like the history of religion. Both are histories of "enforced fads" for financial gain. For example, if you "belong" to Kaiser,

and are prescribed a statin drug, and choose not take it, you are considered to be "non-compliant," and may lose your membership. You crazy heretic! However, if you continue to drink alcohol, take drugs, smoke, and eat hydrogenated oils, Kaiser stays cool, and you are in with the "in crowd." Who says that drug companies rule the medical profession? Now, let's learn a bit about cholesterol and its so-called "dangers."

(But first, yet another distraction. This ninety-six-year-old guy who I have been seeing as a patient for 30 years came in to see me. All trembling with excitement, he said, "Dr. J., my eighteen-year-old wife is expecting and I'm going to have a baby." I said, "Let me tell you a story. A man went hunting, but instead of a gun, he picked up an umbrella by mistake. When the bear suddenly charged at him, he pointed his umbrella at the bear, shot at it, and killed it on the spot." The old guy said, "That's impossible. Somebody else must have shot that bear." I said, "Exactly my point."

WHAT IS CHOLESTEROL?

The word "Cholesterol" comes from the Greek words "chole" meaning bile, and "stereos" meaning solid. Contrary to popular belief, it is not merely a yellow, waxy substance that sticks to the walls of your arteries to help give you heart attacks. Also contrary to popular belief, cholesterol is not a fat. It is a heavyweight alcohol that behaves like a fat. Cholesterol is actually a fine, pearly-white, chalky, powder-like substance that is a monatomic alcohol, C27H45OH, crystallizing in the form of acicular crystals. Duh. Cholesterol is manufactured in your cells, and mainly (80+%) in your liver. When your body needs more cholesterol your liver makes more. Like the livers of other mammals, our livers produce cholesterol day and night. When you eat lots of cholesterol, or animal fat, the production of cholesterol in your liver decreases. When you don't eat cholesterol, your liver's cholesterol production goes up. This mechanism keeps the cholesterol levels in your blood fairly constant. Your body's cholesterol control is similar to the control of your core body temperature of 98.6. It is quite constant even if you are in a cold or hot room. Your body makes saturated fats, and your body, particularly your liver, makes cholesterol-about 2000mg every day. This "natural regulation" is the main reason it is so difficult (like lowering your core body temperature), to lower your body cholesterol with diet as opposed to drugs. Your body produces it naturally. The cholesterol that the average American absorbs every day from food only amounts to about 100 mg per day. Your body is already making 2000 mg per day! Thus, even if you ate NO cholesterol foods at all, there would only be a 5% decrease in the total amount of cholesterol available to your blood and tissues. In actual fact, it is estimated that blood cholesterol levels will increase from eating foods high in cholesterol in only one out of 500 people, and that "one" is considered to be, as in inherited hypercholesterolemia, a genetic anomaly.

Cholesterol is found in all animal fats and oils including milk, egg yolk, and lard. It is found in bile salts, blood, brain tissues, the sheathing of nerve fibers, the liver, kidneys, and adrenal glands. The myelin sheathing, the "white insulation" of the entire nervous system, and approximately 60% of the brain, is made up almost purely from cholesterol and other fats. The most common organic molecule in your brain is cholesterol. All cell membranes of every cell in your body are made out of cholesterol. All hormones including the sex hormones, thyroxin, insulin, cortisone, etc. are made from cholesterol. Cholesterol adjusts the fluid level of cells, and controls the rigidity of all cell membranes. Cholesterol makes the cells "waterproof." As cholesterol is lowered in your cells, you dehydrate and get wrinkly. "Aging" is basically the deterioration of

cholesterol in your cells. Cholesterol makes your bile salts to digest fats, and your Vitamin D. Your axon and dendrite connections of all nerve synapses depend on cholesterol for proper nerve function. Cholesterol helps patch wounds, and deal with inflammation. All bealing and repair in the body is dependent on proper cholesterol.

It is an interesting side note that the anti-inflammatory drug Cortisone can work miracles by more quickly liberating extra cholesterol from cells around a wound to "patch" it faster than normally occurs. Cortisone also enlarges fat cells in order to obtain more cholesterol for healing. It is this "extra" cholesterol that actually speeds your healing by more rapidly "patching" your torn tissue. Cholesterol is also necessary for healing all wounds in artery walls. It is essential for proper function of serotonin receptors in the brain. Remember, the neurotransmitter "serotonin" is the body's "feel good" chemical. This helps explain why current cultural changes indicating more aggressive and violent behavior, depression, and suicide may be linked to the "corporate" assault on dietary cholesterol. Dietary cholesterol also plays an important role in maintaining the health of the intestinal wall, which is why low-cholesterol vegetarians—particularly vegans—have more "leaky gut" syndrome, and other intestinal problems. Seventh Day Adventist Doctors, who avoided red meat, had more bowel cancer than non-Seventh Day Adventist Doctors. Face it- without cholesterol in your body, you are in trouble with a "capital T." Statin drugs like Lipitor and Zocor lower ALL cholesterol in your body-not just in your arteries. Hence, the number of serious side effects—particularly cancer and depression. Think about it, and talk to your doctor if you are being recommended a statin drug.

"GOOD AND BAD CHOLESTEROL"

Cholesterol molecules need to travel around in your body to wherever they are needed, which is pretty much everywhere. However, like fat molecules—not being water soluble—cholesterol molecules can't get around in your blood by themselves. Thus, they attach themselves like "little hitchhikers" to the insides of your lipid-carrying proteins, called lipoproteins. ("Lipo" means fat, as in "Lippopotomus").

There are three dominant types of lipoproteins that carry cholesterol around in your body. The predominant one that carries two thirds of the cholesterol around is called "low-density" lipoprotein, or "LDL." Even though LDL is essential for all body repairs and "patches," particularly in the artery walls, and is your body's main antioxidant, LDL is considered by most rank and file health "professionals" to be "bad" cholesterol. Most of the other third of cholesterol molecules are carried by "highdensity" lipoproteins, called "HDLs." These are called "good cholesterol." HDLs carry old, used, and injured cholesterol molecules back to the liver for recycling. The rarely mentioned third type is called "very-low-density lipoprotein," or "VLDL," and carries a very small amount of cholesterol, as well as another lipid called triglyceride. (When you eat excess sugars your body stores them as Triglycerides). Many doctors currently tend to bad-mouth the low-density LDLs, as they are involved in the process that accumulates plaque in the artery walls. High-density cholesterol, HDLs, on the other hand, collects old and injured LDL cholesterol molecules from artery walls, and other tissues, and take them back to the liver to be broken down and recycled into fresh LDL. Thus, HDLs are called "good cholesterol."

When your doctor measures the cholesterol in your blood she first measures the "total" cholesterol in a deciliter of blood. A deciliter is smaller than a breadbox. Until they are told differently by drug company researchers, doctors will consider anything below 200 milligrams per deciliter to be OK. If your blood has over the *quite arbitrary and not supported by research* 200 total cholesterol level, your doctor will then measure your HDLs and LDLs separately. She likes to see your LDLs below 130. 130-160 is considered borderline high, and over 160 is considered "high risk" for coronary disease and heart attack. The HDLs should be 45 or higher, and the higher the better. In determining your risk, your doctor calculates your LDL / HDL level by dividing your total cholesterol by your HDL. She likes a ratio that is less than 4.5. For example, if your total cholesterol is 220 and your HDL level is 55, then your ratio is 4.0. This is considered low risk, and she assumes you are a good-hearted person.

OXIDATION—FREE RADICALS

All living organisms must produce energy to stay alive. The human organism ingests food which is then "burned up" in the body for energy. To aid in this burning up of food we need oxygen to help heat things up. Imagine you have a smoldering leaf pile and you blow air on it. The flame increases dramatically. In the same way, the more oxygen you bring into your body the easier your food is burned and digested. 95% of the oxygen that enters your body cells goes into your mitochondria. Your mitochondria are the "powerhouse and brains" of your cells. Your DNA, the "genetic code" of your body, is in the cell nucleus of your mitochondria. The other 5% of oxygen entering your body escapes in the form of "free radicals." Free radicals are molecules that need electrons, and steal them from your innocent molecules. These free radicals act like "hot sparks," and can damage any part of the cell they come in contact with. Free radicals "catch fire" to other structures within your cells. Better yet, think of Piranha. Piranha are darling little fish in the Amazon Rivers who have huge razor-sharp teeth, and take little and medium size bites out of you. They can be inconvenient, and quite a nuisance. Piranha are similar to sharks, once you have a cut. If there are thousands and thousands of piranhas, they take thousands and thousands of chunks out of you. If you are a large cow-even with your hide completely on-and you wander into a river with many piranha, you will be stripped clean to a white skeleton in a matter of seconds. Thus, if you are a cow, keep your mind sharp, and pay attention to where you are wandering. Don't be spaced out regarding where your next calf is coming from. If you consider my example of piranha to be unfair to innocent fish and thereby politically incorrect, consider "meat" bees instead. Regular old boring honeybees just insert their one stinger in you, then go away and die. A meat bee, on the other hand, will bite a chunk out of you and leave a hole. She will keep biting chunks out of you until her jaws are tired, or her tummy is too full. If millions of meat bees come to help her finish her job, you are in big trouble. Even if you are a twelve-hundred-pound person with a twofoot-long lucky rabbit's foot, thousands of bee stings can still kill you. In the same way, a few free radicals taking chunks out of your cells by stealing electrons is no big deal. Free radicals are like piranha that eat your cells. Free radicals pull electrons away from the molecules in your cells in the same way that piranha pull chunks out of your body. If enough electrons are eaten, your cells are done for. In the same way, if there is constant bombardment of free radicals to your cells, for example, being exposed to

radiation at the meltdown of the nuclear reactor at Chernobyl, or constantly eating hydrogenated oils and homogenized milk—thereby creating excessive free radicals, your cells can get in big trouble and can die dead. Consider free radicals to be the equivalent of piranha and meat bees to your cells. As we will see, "excessive biting" or "burning" of your artery walls by free radicals initiates the initial inflammation of your artery walls that can progress to coronary heart disease, and the inappropriate badmouthing of low-density cholesterol. Excessive LDL is simply the body's "healing" response to meat bees and piranha, and is "normal." LDL cholesterol is not "bad" cholesterol. It is the substance your body produces for "all" healing in your body. LDLs are the ambulances and firemen coming to the fire that has been set in injured tissues by free radicals. The firemen and trucks should not be blamed for starting the fire! God gave you LDL cholesterol so you could fight inflammation and infection in your body and heal. When you hear someone say "LDL cholesterol," get up on your feet and shout, "Hallelujah!"

Free radicals can "take chunks" out of your cell walls, your DNA molecules, your proteins, and basically anything within your cells. Your body is thought to be able to repair over 99% of the free-radical cell damage with repair enzymes. However, if the bombardment of free radicals is constantly consistent or consistently constant to your cell proteins and enzymes, your cells finally weaken, and become sick. When free radical "hot bullets" hit your cell membranes, it is like putting red-hot pokers into piles of dry paper. The papers burn. All the structures within your cell have protective membranes, and as these are damaged your cell becomes sick. Cell membranes are composed of rows of fatty acid molecules in two layers. When the free-radical reaction happens, it is these layers of fatty acids that are "bitten," and damaged by the "hot bullets." This destructive "oxidation" of fatty acids is called "lipid peroxidation." It happens in most diseases we know of—particularly the inflammatory diseases such as heart disease, cancer, diabetes, arthritis's, and degenerative brain diseases such as Parkinson's and Multiple Sclerosis. Lipid peroxidation especially affects organs with high fat composition. Because your brain is composed of 60% fat, it is very vulnerable to free radical damage. When there is enough free radical damage to the nucleus of your cell your DNA is affected, and your genetic code can be altered. Then, malignant changes can happen and cancers can start rolling. (Remember, it takes seven to eight years for a breast tumor to become the size of a pencil eraser). Simply put—the end effect of excessive free radical damage is hardening of your cell walls. (Remember, cholesterol controls the stiffness of your cell walls). Stiff cell walls—from "oxidized" cholesterol from free radical damage—do not allow normal "food in / poop out." When a cell can't get food in and poop out (as in diabetes), it gets diseased and can die. If a cell can get a lot of food in, but no poop out, it goes into politics.

We only age physically as our cells become stiff. We die when too many cells become too stiff. Indeed, the current main rationale for aging is more free radical damage to the fatty portion of your cells (lipid peroxidation), than you have the necessary "oxidizing enzymes" to repair them. The more free radical damage you have (the more chunks the piranha bite out of you), the more "burned" you become. The more shrinkage and wrinkles you have, the more "cell stiffness" from free radical damage you have. As you age, you are dealing with more free radical damage. Thus, you need more LDL cholesterol, as it is an excellent antioxidant. *This is the reason it is*

normal for your cholesterol levels to increase as you get older. LDL cholesterol patches the holes in your cell membranes made by the piranha. LDL is the fire trucks and firemen coming to the fire. Stop blaming innocent LDL! Now you know why old people with the highest cholesterol live the longest!

P.S. So, last week I told a new blond patient that I wanted to discuss antioxidants and free radicals with her. She looked at me and said, "I'm really not interested in talking about politics!"

YET MORE ON OXIDATION AND "FREE RADICALS"

I am going to harp more on this free radical business, as free radicals are much more important than I think they are. Please bear with me here. Go back in your minds to your intense, diligent, quite undistracted study of molecules and atoms when you were in the sixth grade. Recall that molecules are made up of atoms that have electrons floating around their nuclei like planets orbiting around our sun. Remember that the nucleus is in the center of the atom, like the sun, and has a positive (+) charge. The planets—the electrons—have a negative (-) charge. If the correct number of electrons is present, the charge of the atom is zero. A molecule with no charge is considered stable. If some form of high energy hits that molecule, for example, X-rays, ultraviolet light, smog, cigarette smoke, alcohol, synthetic polyunsaturated oils, trans fatty acids, or homogenized milk, electrons can be knocked out of their orbits, and "turned loose" so to speak. Electrons don't like to be alone. They like to be paired and bonded with other electrons, so they can stay stable and secure. If an electron is all alone, it is called a "negatively charged electron," and is considered highly reactive. Like a burglar, it will sneak around your house and steal a "positive electron" from you. Imagine that a little kid is with his mama. He is "paired and stable." Now, imagine that kid getting lost from his mama. Similar to the unpaired electron, the kid gets quite agitated and negative. The kid will be quite unhappy until he is "paired" again. If an atom has a missing electron it will go out and steal one from another atom. This changes the normal function of the "victim" molecule. The "lost kid" becomes a thief, a meat bee or a piranha and will go find a "mama." Your choice. If this "hungry" electron is created from the burning of oxygen molecules, the stealing process is called "oxidation." Rust destroying metal is an example of this "thieving" oxidation. Rust is simply free radicals biting and burning chunks out of metal molecules. Only "oxidized" cholesterol free radicals take chunks out of your artery walls. "Healthy" cholesterol molecules do not.

Although all healthy cells actually require small amounts of free radicals, excessive bombardment of these cells' molecules by free radicals damages their cellular DNA and other genetic material. Human cells (which are exposed to dozens of free radical attacks a day), have protective enzymes that repair 99% of oxidative damage. As I mentioned, oxidative damage can happen from X-rays, ultraviolet rays, tobacco smoke, smog, and various foods—particularly processed hydrogenated vegetable oils like soy and corn, and from homogenized and low fat milks. When your cells are "bitten" and mutated from excessive free radical action, your immune system seeks out your immune system does this in the same way that it eliminates invading bacteria, and other foreign organisms. We can say that most all sickness, including cancer and diabetes, is simply your body fighting free radicals in whatever form. The more you win the war by

neutralizing free radicals with antioxidants like LDL cholesterol, apple and grape juice, the healthier you are. If your immune system is finally overwhelmed, as you bit off more free radicals than you could chew, you get progressively sicker, and you die. The End.

Keep in mind that saturated animal fats from properly fed animals have the exact amount of carbon and hydrogen molecules needed to be quite stable. Saturated animal fat molecules are grounded, happy and not harmful to human health, as they are not obsessed, like lost unpaired small children, with being coupled. Hence, they don't come and "bite you." However, monounsaturated fatty acids are missing two atoms, and polyunsaturated fatty acids are missing four atoms or more. They are "hunters." The "hunger" of these "loose free radicals," in processed polyunsaturated oils, makes the processed oil molecules "unstable," and prone to doing nasty things to your cells. The main nasty consequence relevant to our discussion here is artery wall bites. LDL cholesterol "doctors" come to patch the bites. If the bites are excessive, and too many doctors and ambulances come to spray scar tissue on the fire, arterial plaque is created. If the fire keeps on keeping on, coronary heart disease ensues, with perhaps a grand finale: A heart attack or stroke.

ANTIOXIDANTS

Fortunately, in nature, God in her wisdom created "antioxidants" to fight the oxidative damage of free radicals. Antioxidants are "positively" charged molecules that neutralize the negatively charged free radicals, thus making them harmless. Guess what our favorite and most important antioxidant is? You are correct. Low-density LDL cholesterol, the so-called "bad" cholesterol, is the "doctor" to your injured cell. Other good examples of antioxidants are Vitamins C and E, bioflavonoid, beta-carotene, and raw fresh vegetables, and raw fresh fruits—particularly organic apples and grapes. Remember to eat your apple a day!

LDL cholesterol has its own internal antioxidant protection system. The key to this protection is Vitamins E, a very powerful and efficient antioxidant, especially in protecting fats from oxidation. Normally, there are 6 molecules of Vitamins E incorporated in LDLs molecular structure. The LDL molecule also contains other antioxidants including Vitamin C, the carotenoids, and plant-based flavonoids. People have been kept in the dark regarding the fact that substances in saturated fats and LDL are our most important antioxidants. You don't need to go out and buy bottles of antioxidants!

There are plenty of studies done by honest scientists showing that people who eat large amounts of antioxidant foods have less cancer, heart disease, diabetes, autoimmune disease, etc. If you eat lots of antioxidant foods such as saturated animal fats, apples and whole organic yoghurts, your body is better protected from bad trans fats, nicotine, smog, etc. Thus, you can die much healthier.

As a side note—it is not recommended that you take high-dosage antioxidant supplements because they many times backfire, and end up creating more free radicals. Stick with honest to goodness real antioxidant foods. Trust me—it is OK for you to eat organically grown nutrient dense antioxidant foods even though you have to chew them all by yourself. Just lie down on the floor, close your eyes, and try to relax. Say to yourself the following affirmations... "I am a big boy or girl now." "I can do it." "I really really can." "I can eat organically grown fruits." "I can eat organically grown vegetables."

"I can eat whole naturally grown dairy products." "I can eat naturally grown grass-fed saturated animal fats." "I can use common sense based on tried and true traditional diets." "I can start to question what I hear on TV, and read in magazines." "I can think." "I can, I can, I can!"

Then, little by little, start to make improvements in your diet and life style. Eat an organic apple when none of your friends are looking. Eat some real organic straight peanut butter not loaded with free radical-creating hydrogenated soy oil. Eat some liver from grass-fed, healthy cows that are not eating refined, genetically modified soy and corn in the darkness of confinement. Just do it! There are way too many "optimum health-related" shysters out there driving Mercedes and Humvees at the expense of your health and wealth.

"OXIDIZED" CHOLESTEROL— THE REAL "BAD CHOLESTEROL"

"Oxidized cholesterol" is cholesterol that has been altered, as in the hydrogenation of vegetable oil or the homogenization of milk. It is very irritating to your cells, particularly the cells lining your artery walls. Oxidized cholesterol's free radicals steal electrons from innocent smooth artery-wall cells. (Meat bees bite!) This "burning" of the artery wall triggers an inflammatory response involving numerous chemicals and immune cells. The wall of your artery attracts specialized white blood cells from your immune system, called "macrophages." (If you are a Greekophile, "big eaters"). Normally, these white "soldier" cells slide right on by the smooth walls of your arteries, but when your smooth epithelial cells are hurt and irritated (bitten by the meat bees), the macrophages then "attach" to your artery wall. They can then go through it, and interact with the oxidized cholesterol "burglar" molecules that previously snuck inside your outer artery wall. (They sneaked through the "meat bee and piranha bite holes," if you will). A series of complex events is then triggered, leading to a localized intense inflammatory reaction. More white blood cells are drawn to the area of macrophage attachment that then react as they would to a virus or other foreign body. The inflammation of your artery wall increases.

When any infection occurs in your body, white blood cells paddle through your blood to the site of the invasion and attempt to kill the invader by "spraying" it with a "hot" barrage of destructive free radicals. (Some free radicals are very helpful to us.) Remember free radicals steal. They "bite" electrons from other molecules thus harming them. Our own immune cells pump out free radicals to kill invaders. These are the free radicals that we like, as they are good for us. This same series of events happens along the lining of your blood vessels. Blood flowing past areas of intense inflammation (areas of meat bee bites), contains cholesterol carried by low-density lipoproteins (LDL), which normally slip and slide past the smooth walls of your blood vessels. Remember, LDL cholesterol also comes to help patch up your insulted artery, so it is not "bad." It is initially a blessing. The other type of fatty molecule in the "war zone," called highdensity lipoprotein, HDL, also carries cholesterol. In general, it is removing damaged cholesterol molecules that have accumulated in your blood as a result of cellular breakdown. When LDL cholesterol enters the battle at the site of a macrophage attack, it too comes under attack by free radicals (meat bee attacks), and becomes "oxidized." This intensifies free radical activity, and further increases inflammation in your blood vessel wall. In an effort to contain this irritation, your macrophages gobble up the now (somewhat debatably) "bad" oxidized LDL cholesterol. Soon, the martyred macrophages look like bloated blimps filled with foam—hence their new designation, "foam cells." As even more oxidized cholesterol accumulates, the inflammatory reaction becomes more intense. In an attempt to "contain the fire" on the artery wall, your body attempts to shut off the inflamed area with scar tissue. The second coat of the artery, the muscle layer, then reacts by overgrowing, thus further aggravating the problem. The inflammation on your artery wall soon grows from a small fatty streak to a thick, crusty, overgrowth that protrudes out into the lumen (opening) of your artery. This chunk of crud we call a "plaque." In English, a plaque is something we hang on the wall. Never mind. Over time, calcium enters this plaque (though calcium is not bad-mouthed yet), which further stiffens and weakens the wall of your artery, and makes it look like the banks of Mono Lake. Not infrequently, an ulcer crater forms in the center of this plaque crud, like a hole in a volcano. This now bleeding ulcer can trigger platelets, and consequently clot the blood flowing by. This can result in a sudden occlusion of the blood vessel as occurs in a heart attack or stroke. A clot can also break free and travel to a smaller vessel further down the line causing an "embolism." An embolism is a moving blood clot that can get stuck and clog an artery. Sometimes, a "shower" of emboli produces numerous smaller blood vessel occlusions. If this occurs in the carotid artery of your neck, for example, the torrent of clots can enter the tiny arteries of your eye resulting in a loss of vision on the side of the arterial plaque. Hemorrhages can also occur in the plaques themselves, which can result in sudden vessel occlusion. This is usually the "final event" in cases of heart attacks and strokes. The more narrow the openings of your blood vessels due to plaque, the more likely a heart attack will occur. An ounce of your prevention—avoiding trans fats and oxidized cholesterol—is worth a pound of your finest heart operation.

GOOD THINGS ABOUT CHOLESTEROL

People with high cholesterol levels live the longest. This statement sounds ridiculous based on what we have been told by the industrial "diet geniuses," but it is true. Dr. Harlan Krumholz of the Department of Cardiovascular Medicine at Yale University reported in 1994 that old people with low cholesterol died twice as often from a heart attack as did people with high cholesterol. To be more specific, the majority of studies of old people have shown that high cholesterol is not a risk factor for coronary beart disease. Also, consider that the majority of studies find that high cholesterol does not predict all-cause mortality either. "All cause mortality," is death from all causes. For example, a study on a diabetic drug might show that the people on the drug have less diabetes, but ten times more cancer and suicide. It is now known, for example, that people who lower their cholesterol with statin drugs have more cancer. Now consider, that more than 90% of all cardiovascular disease is seen in people above age 60, and the majority of studies find that bigh cholesterol is not a risk factor for women at any age. This means that high cholesterol is a risk factor for fewer than 5% of those who die from a heart attack. If you are old, and want to be very old, and you have high cholesterol, be happy! The majority of studies find that total mortality is inversely associated with either total or LDL cholesterol or both. People with the highest cholesterol simply live the longest!

Contrary to what you may have heard from the innocent and the guilty, LDL cholesterol is not the cause of heart disease, but is rather, a potent antioxidant weapon against free radicals in your blood. Naturally produced in our body and present in the foods we eat, LDL cholesterol is a repair substance that actually helps heal arterial damage, as well as ALL damage to our body. "Oxidized" cholesterol (the only "bad" cholesterol), on the other hand, irritates and inflames your artery walls leading to plaques and death. That's why highly intelligent people recommend that you avoid foods that contain damaged (oxidized) cholesterol, such as powdered eggs, powdered milk, margarine, vegetable shortening, hydrogenated oils, and homogenized and low fat milk. Powdered milk, which has oxidized cholesterol, and is thus toxic is added to reduced-fat milks, yogurts, and ice creams without being listed on the label. It is ironic, and comic to some people, that when you choose a low-fat milk to reduce heart disease, you are actually consuming the very form of "bad" cholesterol—"oxidized cholesterol"—that causes heart disease in the first place as well as causing other maladies, such as faster osteoporotic change. When the mindless TV ads ask you if you "Got Milk?" the milk they are talking about will harm your arteries, and give you faster bone demineralization and diseased arteries. (Please read my essay "What About Milk?" on page 69). When your doctor tells you to start eating low-fat foods, be alert as to what is in such products, because she obviously is not trained adequately to discuss such matters. It is quite probable that it was eating such imitation, unhealthy foods in the first place that gave you the symptoms you came in to see your doctor for.

RESEARCH ON HIGH CHOLESTEROL

The best-known study of the "lipid hypothesis," which you may have heard quoted by your doctor or read in a statin drug ad, was the Framingham Study, done in Massachusetts over a forty-year period. Many doctors cite this study as proof of the dangers of saturated animal fats and high cholesterol. Investigators initially claimed that there was a 240% increase of "risk" of coronary heart disease between cholesterol levels of 182 and 244. However, when the study is analyzed objectively, the actual rate of increase is .13%. Thirteen hundredths of one percent! Not impressive. Sorry. Also, in people with cholesterol levels between 244 and 294, the rate of coronary heart disease actually went down! The Framingham investigators found virtually no difference in heart disease for serum cholesterol levels between 182 and 294—which is the vast majority of the U.S. population. Even for those with extremely high cholesterol levels—up to almost 1200 mg / dL!—the difference in heart disease compared to the "normal" group was not statistically relevant. Yet, due to the drug company's presentation of "twisted research," many doctors still consider a level of 200 too high and start pushing statin drugs to make people more sick, forgetful and depressed.

Indeed, when the whole cholesterol scam was started, the average American had cholesterol at a level between 220 and 240. The Framingham investigators did not find that diets high in animal fat predisposed a person to heart disease. Dr. William Castelli, the current director of the Framingham project, admitted in a 1993 article that: "In Framingham, Massachusetts, the more saturated fat one ate, the more cholesterol one ate, the more calories one ate, the lower people's serum cholesterol... We found that the people who ate the most cholesterol, ate the most saturated fat, ate the most calories weighed the least and were the most physically active." Castelli, William,

"Concerning the Possibility of a Nutrit" Archives of Internal Medicine, Jul. 1992, 152:(7):1371-1372).

An even more alarming finding of the Framingham Study was that for men and women over age fifty, the risk of death from all causes—particularly cancer—increases significantly with lower total cholesterol levels. If your doctor recommends you take a statin drug for your "high cholesterol," ask him if he is basing the prescription on the actual findings of the Framingham Study, or the twisted hype of the drug companies.

A brand new article in Annals of Internal Medicine Oct. 3, 2006 stated that using Statin drugs to get your LDL-cholesterol (your "bad cholesterol") as low as possible, does not lower your risk of heart disease. The researchers found no evidence to suggest that "the degree to which LDL-cholesterol responds to a statin independently predicts the degree of cardiovascular risk reduction." If relevant, have your doctor read it immediately, as the myth of bad cholesterol / LDL is slowly being exposed.

The second large government-funded study on cholesterol was the Multiple Risk Factor Intervention Trial (MRFIT) for 362,000 men. Researchers found that the annual heart disease deaths increased from about 1 per thousand for cholesterol levels of 180 to slightly less than 2 per thousand for cholesterol levels of 300. If you understand bow to twist statistics for abstracts in journals to get what you want, this 1 death to 2 deaths is a 100% change in "risk." However, the actual difference in rate increase is less than 1%! Get it? A further finding of this study that was kept quiet was an increase in total deaths, particularly cancer, for cholesterol levels below 160. The lower people's serum cholesterol, the more deaths.

The third large government funded study done by the National Health Institute was the Lipid Research Clinics Coronary Primary Prevention Trial (LRC), a project that cost taxpayers \$150 million and received intense media coverage. All subjects were put on a low-cholesterol, low-saturated-fat diet. One group received a cholesterol-lowering drug, and the other a placebo. Average cholesterol reduction for the drug group was 8.5% who had, according to "bought" researchers, a 17% reduction in rate of heart disease. This led industry shills to say, "For each 1% reduction in cholesterol we can expect a 2% reduction in cardiac heart disease." However, when independent honest statisticians tallied the LRC data they found *no* difference between the two groups. Instead what they found (but which was never publicized) was a significant increase in deaths from cancer, violence, and suicide in the group taking the cholesterol-lowering drugs. Nonetheless, the popular press and the medical journals portrayed the LRC study as the long sought, "Holy Grail" proof that animal fats and dietary cholesterol are the cause of heart disease.

When the twisted statistics of the LRC study were published, the vegetable oil companies quickly got together with the drug companies, and a huge "Cholesterol Consensus Conference" was called. The result was a call for mass cholesterol screening, and to define *all* Americans with cholesterol levels over 200 as "at risk." Participating scientists recommended the "Prudent Diet" of low saturated animal fat, low-cholesterol diet, and quite interestingly (unless you understand scams and the "manufacturing of consent"), recommended people eat margarine instead of butter. The annual cost of annual cholesterol screening is now about 70 billion dollars, which is not bad for simply sticking needles in people and drawing out some blood.

Like the ALLHAT study, the PROSPER study (Pravastatin in elderly individuals at risk of vascular disease), funded by Bristol-Myers Squibb, and published in Lancet in 2002, showed that for people between the age of 70 and 82, statins did not reduce the incidence of beart disease and strokes. It did, however, show that the incidence of cancer was increased in the statin taking group (p=.02). If your doctor doesn't believe this, have her read the article in JAMA in 1996 entitled "Carcinogenity of Lipid-Lowering Drugs" as its doubtful she is aware of it.

The application of a bit of common sense, and an itsy bitsy look at traditional American diets before the advent of hydrogenated oils, might have prevented the mass hysteria created by the lipid hypothesis over the last 40 years. The lipid hypothesis implies that animal fat consumption must have increased dramatically since 1920 to correlate with the rise in heart disease. Remember, in 1900 cardiac deaths were 8% of total deaths compared to over 30% in 1950, and around 40% now. However, in actual fact, the consumption of saturated animal fats went steadily down from 1920, while use of liquid plant / vegetable oils steadily increased from 2 grams a day in 1910 and to over 30 grams a day in 1993. A 1500% increase in "bad" oil! It is interesting to note that autopsy studies of vegetarians show that although they have lower serum cholesterol levels (which, remember, is unrelated to heart disease), they have the same atherosclerosis as non-vegetarians. The International Atherosclerosis Project, which analyzed 31,000 autopsies from 15 countries, found no correlation between animal fat intake and the degree of atherosclerosis or serum cholesterol level. Dr. Michael DeBakey, the famous beart surgeon, surveyed 1,700 patients with atherosclerosis and found no correlation between levels of serum cholesterol and degree of hardening of the arteries. Other U.S. studies the drug companies ignore with no comment—the Veterans Clinical Trial, the Minnesota State Hospital Trial, the Honolulu Heart Program, and the Puerto Rico Heart Health Study—found no significant correlation between diets high in saturated animal fat and coronary heart disease. These studies receive minimal press as they contradict what "leading health experts" of corporate America prefers you to believe. One of the main scientists speaking against the lipid hypothesis, Dr. George Mann stated, "The diet-heart hypothesis has been repeatedly shown to be wrong, and yet, for complicated reasons of pride, profit, and prejudice, the hypothesis continues to be exploited by scientists, fund-raising enterprises, food companies, and even governmental agencies. The public is being deceived by the greatest health scam of the century." I agree with Dr. Mann of course, as that's the kind of crazy guy I am.

Michael Gurr, Ph.D., world-renowned expert on lipids, and author of the authoritative textbook on lipid biochemistry, stated, "Whatever causes coronary heart disease, it is not primarily a high intake of saturated fat." Doctor Gurr also criticized "the degree of self delusion in research workers wedded to a particular hypothesis despite the contrary evidence."

In 2001, the Expert Panel on Detection, Evaluation, and Treatment of High Blood Cholesterol in Adults issued perhaps the *most influential document in the bistory of American medicine*. Written as part of the National Cholesterol Education Program, it stated that to achieve their heart-health goals, the number of Americans taking statin drugs should be increased from 13 to 36 million people! (The JAMA summary did not mention that the ALLHAT study in 1994, published in JAMA in 2002, tried to show the very same thing by expanding statin drug use. However, the ALLHAT

study did not show relevant improvement in heart health, which is obviously why the study was omitted). Anyway, an "executive summary" of the report and new recommendations were printed in the May 16, 2001 issue of JAMA, stating that the summary was "an evidence-based and extensively referenced report that provides the scientific rationale for the recommendations contained in the executive summary." This "leading" comment was added to make doctors assume the report was relevant and accurate, and thus not look too closely at the whole report. However, when the actual 284-page report is read and analyzed with "proper statistical analysis," a picture of deceit becomes apparent. If you want to pursue the actual findings of the report, check out Dr. John Abramson's book, Overdosed America—The Broken Promise of American Medicine, as this essay is already too long, and I am getting tired and running out of words. 14 "experts" wrote the report. Five of the experts disclosed financial relationships with statin drug companies, and four of the experts, including the chairman of the panel, had relationships with all three manufacturers of the top-selling statin drugs. The cardiologist, Dr. Richard Pasternak (who wrote the editorial in JAMA), disclosed nine financial relationships with drug companies. Increasing fiber was mentioned five times in the report, as one of the authors and two of the reviewers did research on fiber funded by Proctor and Gamble, the manufacturer of Metamucil, a highly-processed form of fiber. At any rate, the actual data from the study showed quite the opposite of what the panel recommended about taking statin drugs. The data showed that total cholesterol is not significantly related to mortality from coronary heart disease beyond the age of 60 and doctors should be very cautious about giving statins to men and women over age 60. There is NO increase in the risk of heart attack associated with higher cholesterol levels once the age of 65 is reached! None of the nine references quoted in the paper recommending statins to people between ages 65 and 80 showed any benefit at all. The deceitful "big business" authors of the study were obviously hoping "thinking doctors" would not read it. Unfortunately, their "hope" came true. It is quite silly to claim that American medicine upholds its standards of excellence by adhering to "strict scientific evidence" and takes the idea of "First do no Harm" at all seriously. Thus, there is an excellent chance that your current medical doctor is using this "scientific study" as her current rationale for talking you into taking a statin drug and believing your "high cholesterol" is evil. If relevant, please talk to your doctor about the rationale for prescribing a statin, as I cannot legally advise you to stop taking real drugs, as I am only a chiropractor who is extremely untrained in these matters. I can only advise you to get off of illegal drugs. But, then the drug lords will put me in their jails. I can't win.

Side note: There are 6 main cholesterol-lowering drugs called "Statins." Lipitor and Zocor are the most commonly prescribed. The newest statin is Crestor, first sold in 2003. Approximately 50% of all patients put on a statin drug quit in the first year due to muscle pain—usually pelvis and lower extremity—and gastrointestinal problems, along with the negative mental changes. Another 25% quit in the second year. It is so toxic that only one out of four people can continue taking it. A good percentage of my older patients with chronic muscle pain are on statin drugs. Remember, statins do not simply reduce the cholesterol in your arteries; they reduce all of your body's cholesterol. Talk

to your doctor and take this essay with you. Remember, it is appropriate to consider your doctor as your adviser and counselor—not your Pope or God.

WHO BENEFITS FROM THE CHOLESTEROL MYTH?

So, who benefits from getting the public away from animal fats, and into margarines, and hydrogenated vegetable oils? Well, lots of people. First of all, "soy people." 80% of all hydrogenated oils are soy, and 70% of all liquid vegetable oils are soy. Who controls soy and the American Soy Bean Association? You got it. Monsanto Corporation. Also DuPont, Cargill, and Archer Daniel Midlands. Other beneficiaries raking in the greenbacks include hospitals, laboratories, drug companies, the vegetable oil industry, growers of seed for soy, corn, rape seed and canola, margarine manufacturers, food processors, and of course, last but not least, medical doctors. As I mentioned, the annual cost of cholesterol screening alone is over 70 billion dollars a year though a positive risk / benefit ratio for such treatment has never been established. Cholesterol screening itself is quite scientific. However, the recommendations based on it remain quite unscientific. I think the definition of "quackery" would be accurate here. Medical doctors however, have certainly seen the benefits of using statin drugs for cholesterol lowering as a way of creating patients out of healthy people. You might have noticed that there is now a huge push to start more children on statin drugs, similar to the successful push to put more kids on Ritalin and anti-depressant type drugs years ago. This, in spite of the fact that they create the neural pathways for cocaine and amphetamine use later. Simply the depression caused by statin drugs has started many a previously normal person on anti-depressant prescriptions. The drug companies also understand quite clearly that if they can figure out a way to lower and market "acceptable" serum cholesterol levels to 190 instead of 200 they will sell 20 to 25% more statin drugs to silly people who thought they were previously quite healthy. Then, not to be forgotten, are the drugs given for the many side effects caused by statin drugs, particularly drugs for cancer treatments later on. It's a win, win, win situation. No wonder Donald Rumsfeld was the CEO of Searls Drugs (that sold out to Monsanto), and Papa Bush was on the board and a major stockholder, of Lilly, Eli and Company (the drug company to which baby Bush gives the "no bid" contracts for war-on-terror drugs like anthrax vaccines). These are just a few of the folks who profit from the "Cholesterol Myth." The loser, clearly, is the American public.

FURTHER CHOLESTEROL RESEARCH

If your pediatrician is trying to put your child on a low-fat diet, tell him about the study in the April, 2005 AMERICAN JOURNAL OF EPIDEMIOLOGY, whereupon children age 6 to 16 with low cholesterol levels were three times more likely to be expelled or suspended from schools than the kids with high cholesterol. The authors concluded that low total cholesterol is a risk factor for aggression. Your doctor may also need to be told that Cholesterol and saturated animal fats do not make you fat! "Imitation / junk foods"—particularly high-fructose corn syrup—make you fat. Animal fat and coconut oil both help to keep your weight normal. Check out the research.

According to *Human Reproduction 2007* women who ate two or more portions of low-fat dairy foods a day increased their risk of ovulation related infertility by 85%.

A report published in the March 2010 issue of the American Journal of Clinical Nutrition (Vol. 91, No. 3, March 2010) states that "There is no significant evidence for concluding that dietary saturated fat is associated with an increased risk of CHD (coronary heart disease) or CVD (cardiovascular disease)."

In a 16-year Australian study involving hundreds of participants, people who ate the most full-fat dairy products had a 69% lower rate of death from heart disease than people who ate the least. Put another way, people who mostly avoided dairy foods or consumed low-fat dairy products had 3 times the risk of dying of heart disease or stroke. The study was reported in the June 2010 issue of the European Journal of Clinical Nutrition.

A study published in the American Journal of Clinical Nutrition (2004; 80:1175-84), found that in 235 postmenopausal women with established coronary heart disease, greater saturated fat intake was associated with *less* progression of coronary thrombosis, whereas carbohydrate intake was associated with more progression. (I suspect that the carbohydrates they are slandering here are "refined industrial" carbohydrates, and not natural carbohydrates such as apples, oranges, figs, dates, oats, barley, and millet).

People who have experienced heart attacks and receive statins have a 25% reduced chance of having an ischemic (thrombotic or spasm) stroke. Here, statins appear to have value. However, for hemorrhagic stroke, statins provide no benefit. In the recent PROSPER trial statins provided no stroke benefit at all to people over age 70, which is the age group at highest risk in the first place.

A study in the JOURNAL OF THE AMERICAN GERIATRICS SOCIETY Feb. 2005 showed that people aged 65 to 90 who had lower total cholesterol and lower LDL (the so-called bad stuff) had a higher risk of death.

A 2001 Honolulu study published in LANCET showed people who had low cholesterol levels over a 20-year period had a higher risk of dying from all causes.

A Harvard study in the AMERICAN JOURNAL OF CLINICAL NUTRITION (2004) showed that higher levels of the "real enemy of blood vessels"—trans fatty acids—are strongly associated with systemic inflammation in people with heart disease. This goes along with a study in the Nov. 2002 New England Journal of Medicine showing that C reactive protein (CRP), a blood marker indicating levels of inflammation in the body, is strongly correlated with proneness to heart disease. (We know this inflammation of the artery wall leading to plaque buildup is caused particularly by trans fats).

A study in the AMERICAN JOURNAL OF MEDICINE Dec. 2004 explains that people taking a test several times, while on the statin drug Simvastatin in "low" doses compared to the control group of people taking the same test several times— for the control group, their test scores improved by 16%, whereas the statin group showed no improvement at all with repeated testing. *This means the statin group could not learn from the first test*! If we translate this to the U.S. statin drug taking population taking even higher dosages, it could mean that millions of people have become unable to learn from their previous experiences due to their cholesterol-lowering drug treatment. At the very least, it indicates that the nasty effects of these drugs are more widespread than we would like to imagine.

The Feb. 2006 JOURNAL OF THE AMERICAN MEDICAL ASSOCIATION published the results of the Women's Health Initiative Trial. The trial clearly showed that a low-fat diet failed to prevent heart disease or cancer in women who were followed for an 8-year period. In women with pre-existing heart disease, a low-fat diet *increased* their risk of cardio vascular disease by 26%.

The Irbarren study in JAMA 1995 showed hemorrhagic strokes occurs at higher rates in people with low levels of cholesterol (below levels of 160).

The June 2006 British Medical Journal published an article critical of American cholesterol standards, stating that if Norway (one of the healthiest-heart countries) followed our crazy cholesterol standards, 85% of all Norwegian men over age forty would be given a statin drug. The author also stated that most of the world's adult population would be on statin drugs if the U.S. recommendations were followed. His conclusion, "As to the risk to benefit ratio for a more drastic lowering of low density lipoprotein cholesterol is unknown, we question the wisdom of this advice. Where have our medical ethics and common sense gone?"

(Citations to these and other studies appear in the Resources section on page 220.)

CONCLUSIONS ON CHOLESTEROL AND ANIMAL FAT SAFETY

For thousands of years humans have eaten more saturated fats than unsaturated. This is because animal fats, and coconut and palm oil, were easier to obtain in their natural state. The unsaturated fats were usually eaten in their natural states, for example, eating the intact leaf, nut, seed, grain, or root, with all the antioxidants intact. Because the food was eaten fresh, its fatty acids were not rancid, and the cholesterol was therefore not damaged or "oxidized." Most all fat was quite healthy and safe. When people say that a particular product, usually a hydrogenated oil or phony soy product, is "safer than animal fat," be sure to ask them to show you any study anywhere that concludes that any animal fat is dangerous, other than large amounts of polar bear liver causing hypervitaminosis. The only thing wrong with their ignorant slander of saturated animal fat is that there is no scientifically documented study of any danger of any natural saturated animal fats anywhere! Why is this even said, as natural animal fats are obviously safer than the bogus imitation food they are selling you, even if their imitation, bogus food is even only a teeny-tiny bit dangerous? To even consider animal fats "less dangerous" has nothing to do with science, and is quite intentionally misleading. It is interesting to note again that heart disease was quite uncommon in the United States and there was no medical specialty of cardiology and heart disease until about 1920. What caused the change? The most obvious answer was the increased use of plant oils and hydrogenation, along with "defatting" and homogenization of commercial milk products, leading to free radical damage, leading to arterial disease. This, in conjunction with the decreased use of animal fat like butter,

cream and lard that are actually "anti-oxidants" and keep your arteries healthy and prevent heart disease. Strange but true, even according to "Science."³

Cholesterol and saturated animal fat have been "framed" and have received a very bum rap at the expense of the public's physical, mental and financial health. Natural organic saturated fat and cholesterol—after breast milk—is the most important food on the planet. Fatty acids are essential for the breakdown of all dietary protein in the body. Undigested protein is a big health problem as it creates conditions that leach nutrients from your body, such as osteoporosis, as well as deplete Vitamin A. Vitamin A is the most important congenital vitamin, and is necessary for just about everything in your body. The supposed "bad" cholesterol, LDL cholesterol, is essential for all body repairs, all cell membranes, all hormones, all proper brain and nerve function, all manufacture of Vitamin D, utilization of all vitamins, and utilization of all minerals. The list goes on and on. It is also interesting that eating cholesterol does not make you fat in any way though people have a hard time believing it due to years of industry propaganda. Eating animal fat does not make you fat! Eating trans fats and high-fructose corn syrup, and diet sodas make you fat!

Cholesterol does not sneak into your arteries and give you heart disease unless it is "oxidized" cholesterol. (Remember oxidation and the free radical business). Lowering your dietary cholesterol has almost no significance on your serum cholesterol, as your liver simply makes more. Low-density cholesterol (LDL) is not "bad" cholesterol. It is essential for healing wounds of all kinds in your body, and actually helps build your healing tissue. Cholesterol is naturally higher in old people, and old people (like my grandma) with the highest cholesterol, have the least heart disease, are the healthiest, and live the longest. The Scandinavian people who have the healthiest childbirths and best breast milk are the high-fat, high-cholesterol eaters. The only significant health problems regarding cholesterol are with the cholesterol that has "gone bad," and the folks with the genetic scenario of Hypercholesterolemia. Remember, the only real "bad" cholesterol is "oxidized cholesterol." Oxidized cholesterol and free radicals create the initial attack causing the initial irritation of your artery walls that leads to the initial inflammation and consequent initial "scarring" of your artery walls. Of course, lowdensity cholesterol (LDL) comes to the rescue of your arteries in the same way that firemen and fire trucks come to a fire to put it out. Of course, your LDL cholesterol forms part of your healing "burned" tissue. Of course, the irritation of your artery wall continues if you continue eating hydrogenated oils, etc. Of course, your LDL cholesterol will keep forming healing tissue to suppress your inflammation. Of course, if this

³ As noted previously, these two recent studies were mentioned to me by a patient which was fortuitous because there was not one mention of them in the mainstream press. Surprise, surprise. These two scientific studies help prove that saturated fats don't cause heart disease but in actual fact, protect us from heart disease and strokes. The March 2010 American Journal of Clinical Nutrition did a mega analysis of saturated fat in the diet of over 350,000 people whose diet and health have been studied in twenty one studies for 5 to 25 years. Their conclusion: "There is no significant evidence for concluding that dietary saturated fat is associated with an increased risk of CHD (Coronary Heart Disease) or CVD (Cardio Vascular Disease)." The second study in the European Journal of Clinical Nutrition, April 2010, described an Australian study over 15 years long, which showed that people who ate the most full fat dairy products had a 69% lower risk of CVD death than those who ate the least. People who mostly avoided dairy foods or consumed low fat dairy had 3 times the risk of dying of CHD or stroke compared to people who at the most full-fat dairy. Surprise, surprise.

inflammation continues, your artery will clog with plaque. Of course, you may have a heart attack, and you may die dead! But, don't blame cholesterol! Don't blame the wellmeaning firemen and the fire trucks for blocking your artery. They were your body's "proper response" to heal your coronary heart disease—not the cause. Blame the unhealthy, oxidized, free radicalized cholesterol made by the imitation food industry. You do not have to be afraid of naturally created saturated fats and cholesterol, particularly of animal origin, any longer. You should have nightmares only about "ruined oxidized cholesterol." God made saturated fats and cholesterol thousands of years before she reverted to a punitive Old Testament disposition and allowed the devil to make hydrogenated and other "imitation" foods. Also, keep in mind that the main fat in arterial plaque is not saturated fat and cholesterol. It is polyunsaturated fat! The plaque in arteries that can break off and kill you is 41% polyunsaturates compared to only 26% saturated fats. Plaque is not globs of cholesterol like people have been led to think. Think about that! OK, I'm all done. You can wake up now. Lets go find the TV remote, kick back on the armchair, fire up a cigarette, watch the "niners," and holler at the little wimmin to open up some Bud Lights, and bring on the Twinkies, Fritos, and Pizza. Uh-Oh. Busted.

OPTIONAL ASSORTED ABSTRACT STUFF ABOUT CHOLESTEROL, EXERCISE, ETC.

In 1909 Proctor and Gamble bought the patent from the British to make liquid vegetable oils solid at room temperature—in other words, the ability to "hydrogenate." They soon developed "Puritan Oil," which they made very popular as "cholesterol free." Hydrogenated margarines, shortenings like Crisco, which is hydrogenated cottonseed oil, and Puritan Oils, were the early causes of increased heart disease in the United States.

A very short list of the "bad oil" folks: Monsanto, The National Association of Margarine Manufactures, the Institute for Shortening and Edible oils (ISEO). Kraft Foods, Central Soya, DuPont, Lever Brothers, General Mills, General Foods, Nabisco, and Quaker Oats. The International Food Information Council—an arm of the food processing companies—is where most newspapers and other media get their bogus nutritional information.

You should maintain a "low-fat diet" only in terms of not eating processed omega-6 oils, such as corn, safflower, sunflower, peanut, and canola. High intake of these oils inhibits the enzyme that converts alpha-linolenic acid into the omega 3 fatty acid components, EPA and DHA. They also promote inflammation and immune suppression, as well as free radical production and lipid peroxidation.

The main culprit associated with plaque in the arteries is high levels of *oxidized* LDL cholesterol. It is impossible to overstate how important this concept is. Only high levels of oxidized cholesterol are dangerous. *Unoxidized* LDL cholesterol appears to be harmless even if levels in the blood are very high.

When the coronary arteries and aortas of the Masai in Africa who live on milk, blood and meat were studied it was found that they were just as atherosclerotic as people in the U.S. However, severe sclerotic lesions were very rare. The sclerotic changes in the Masai were located "between" the layers of the artery walls, leaving the

"inner" surfaces of the arteries smooth. The researchers found no evidence of beart disease in any of the Masai bearts they studied.

People who have already had a stroke should avoid brain stimulants such as caffeine, nicotine, MSG, and aspartame, all of which increase the likelihood of a seizure due to intense free radical activity creating lipid peroxidation.

Native Eskimos have a diet high in saturated fats but have low incidence of artery disease and autoimmune disease.

LONG SIDE NOTE COMMENTARY:

I wrote this essay cholesterol to stand up for healthy, natural, nutrient-dense, traditionally eaten foods that are high in cholesterol and saturated animal fat. I also write to caution against current "imitation foods," particularly low-fat foods, that are in fact quite dangerous to your physical and mental health. I also hope this essay gives you incentive to shop at farmer's markets, and to buy organic milks, meats and other produce from local organic farmers. If only 5% of American consumers bought organic foods locally, particularly unadulterated pasture-fed dairy products and meats, huge changes would happen in Corporate Food America, and in the mental and physical health of Americans! Eating healthily and demanding organic foods is an incredibly effective way for Americans to just say NO to most of what is bad in this societyincluding the origins of negative influences. If the people lead, the leaders will follow. If the public woke up and demanded it, Monsanto Corporation and their kind would actually end up growing organic food instead of trashing the planet. If people keep eating imitation foods such as hydrogenated vegetable oils, margarine, low-fat foods, homogenized milk, soy protein, and dairy substitutes, big companies will continue to create the stuff. If enough people in Nevada County could get together and eat healthy, nutrient-dense, local food (thereby forcing many doctors to make an honest living), they could be the spark that ignites the whole country back toward dietary and cultural sanity. Think about it for at least a minute.

The American medical profession continues to be down deep in the rear pocket of the pharmaceutical companies. Along with major food corporations and the strict "lock step" compliance and obedience of most politicians, they control the American diet, and thus, American health. Their endeavors are aided by well-paid nutritional "scientists" who help in the manufacturing of public consent through inspiring fear, and are supported by infinite magazine and TV ads. The public does not need more medicine, it need more health. It is high time they went out and got some.

BOOKS AND ARTICLES ON THE MYTHS ABOUT CHOLESTEROL:

- *The Cholesterol Myth* by Uffe Ravnskov, M.D., Ph.D. The best all around in my opinion
- *The Great Cholesterol Con* by Anthony Colpo. Close to the best. Excellent statistical critiques on "industrial" cholesterol studies.
 - Patty W Siri-Tarino, Qi Sun, Frank B Hu, and Ronald M Krauss, Meta-analysis of prospective cobort studies evaluating the association of saturated fat with cardiovascular disease. American Journal of Clinical Nutrition (Vol. 91, No. 3, March 2010). "There is no significant evidence for concluding that dietary saturated fat is associated with an increased risk of CHD (coronary heart disease) or CVD (cardiovascular disease)."
 - M Bonthuis, M.C.B. Hughes, T.I. Ibiebele, A.C. Green and J.C.van der Pols, *Dairy consumption and patterns of mortality of Australian adults*. European Journal of Clinical Nutrition (Vol. 64, pages 569-577 (June 2010) (In this 16-year Australian study involving hundreds of participants, people who ate the most full-fat dairy products had a 69% lower rate of death from heart disease than people who ate the least. Put another way, people who mostly avoided dairy foods or consumed low-fat dairy products had 3 times the risk of dying of heart disease or stroke.).
- "Misleading Recent Papers on Statin Drugs in Peer Reviewed Medical Journals by Joel Kauffman, Ph.D. Journal of American Physicians and Surgeons Spring 2007, Vol. 12
- Statin Drugs-Side Effects and the Misguided War on Cholesterol by Duane Graveline, M.D. (former USAF flight surgeon and NASA astronaut)
- *The Trouble with Medical Journals* by Richard Smith M.D. (Editor in Chief of the *British Medical Journal* for 13 years). Excellent expose of bogus drug company research.
- Overdosed America—The Broken Promise of American Medicine by John Abramson, M.D.—another great "research exposé.
- *The Great Cholesterol Con* by Dr. Malcolm Kendrick—same title! But different author and book.
- Lipitor: Thief of Memory, Statin Drug Side Effects and the Misguided War on Cholesterol by Duane Graveline M.D.
- Fatty Acids in your Food Supply by Mary Enig, Ph.D.
- The Hidden Truth about Cholesterol-Lowering Drugs by Shane Ellison

- Nutrition and Physical Degeneration by Weston A. Price
- Know your Fats by Mary Enig, Ph.D.
- *Eat Fat Lose Fat* by Mary Enig, Ph.D.
- Put your Heart in your mouth by Natasha McBride MD
- *Health and Nutrition Secrets* by Russell Blaylock, M.D.

WEBSITES CONCERNING CHOLESTEROL:

- www.thincs.org An awesome site by the international network of Cholesterol skeptics.
- www.westonaprice.org Phone 202-333-heal (202-333-4325)
- www.ravnskov.nu / cholesterol.htm. An excellent resource with hundreds of references should you wish to broaden your knowledge of scientific studies of cholesterol topics.