

THE MCDUGALL NEWSLETTER | *It's the food.*

Favorite Five Articles from Recent Medical Journals

Calcifications of Mummies' Arteries Due to Meat in Their Diet

"Atherosclerosis across 4000 years of human history: the Horus study of four ancient populations," by Randall C. Thompson in the April 6, 2013 issue of the medical journal the *Lancet*, found that, "Atherosclerosis was common in four pre-industrial populations including pre-agricultural hunter-gatherers. Although commonly assumed

to be a modern disease, the presence of atherosclerosis in pre-modern human beings raises the possibility of a more basic predisposition to the disease."¹ The article ends with an erroneous statement: "The presence of atherosclerosis in pre-modern human beings suggests that the disease is an inherent component of human ageing and not characteristic of any specific diet or lifestyle."

Using high-tech computer technology with x-rays, a method called Computed Tomography (CT) scanning, investigators examined the preserved remains of mummies from Egyptian, Peruvian, Puebloan (from the southwest US), and Unangan (Inuit Eskimos from Aleutian Islands of modern day Alaska) populations. Mummies from all four regions showed disease. Of 137 bodies examined, 47 (34%) had probable or definite atherosclerosis; over an estimated age of 40, half had atherosclerosis.

Investigators provided information in this article about the diets of all four populations. Note that all, as hunter-gatherers, consumed animal foods:

Egyptians: Cattle, sheep, goats, pigs, hyenas, ducks, geese, quails, pheasants, and fish.

Peruvians: Alpaca, guinea pigs, ducks, Andean deer, birds, crayfish, and fish.

Puebloans: Rabbits, mice, big horn sheep, mule deer, and fish.

Unangans: Seals, sea lions, sea otters, whales, shellfish, sea urchins, eggs, and fish.

Except for the Unangans, the diets of these ancient people also contained important amounts of starches, vegetables, and fruits.

Finding calcium with CT scanning is considered *pathognomonic* for atherosclerosis, the most common kind of artery damage. (Pathognomonic means a sign or symptom of a disease that is so characteristic that it can be used to make a diagnosis.) Among modern people who follow the high-meat Western diet, calcification is ubiquitous in men by the age of 60 years and in women by 70 years.

Comment: People love to hear good news about their bad habits, and publication of this headline-grabbing article put the roast-beef sandwich back on the "guilt-free foods" list for many. These investigators reached a commonly held belief that dying from complications of atherosclerosis is an inevitable consequence of natural aging (with a little bad luck and genetics). Although with advancing age artery damage does become more common and severe, this disease also affects the very young. Autopsy data from American casualties of the

Korean and Vietnam wars found atherosclerosis in 77% and 45%, respectively, of young men, with severe disease in 5%.^{2,3} A large autopsy study in the US of accident victims, aged 15–19 years, found atherosclerosis in the aortas in all of the remains, with heart (coronary artery) lesions in more than half.⁴ This extent of disease is typically only found in people following a diet high in meat. Similar examinations of the arteries of populations following diets with much less meat (and more starch), such as the Japanese, show healthier arteries at all ages.⁵ (Dairy, which I refer to as “liquid meat,” and synthetic trans-fats, also play a major role in modern day atherosclerosis.)

[All four ancient populations](#), whose remains were reported on in the current *Lancet* study, consumed animal foods. Accurate written records of actual dietary habits are available only for the Egyptians. Hieroglyphic inscriptions on temple walls indicate that the royalty regularly consumed beef, sheep, goats, wild fowl, bread, and cake. A conservative estimate is that the diet of the privileged few who were mummified—the kings, queens, priests, and priestesses—was more than 50% fat, with a significant portion being saturated fat (from meat)—these fat figures are the same as those for the diets of modern Western people.

The diet of the people living in what is now known as Alaska was undoubtedly almost exclusively from animal foods—little else was available in their harsh winter environment for seven months of the year. What exactly the inhabitants of ancient Peru and those of southwestern US (Puebloans) ate centuries ago is up to speculation. However, meat must have been present at some periods of their lives in amounts sufficient to cause inflammation of their arteries, leaving the fingerprints of calcification.

Examination of the few hunter-gatherer populations surviving into modern times further establishes the “meat connection” to atherosclerosis. Researchers find that recently living, primitive-people who base their diets on animal flesh, such as the Inuits (Eskimos), suffer from heart disease and other forms of atherosclerosis; whereas those, such as the Tarahumara Indians of Mexico and numerous rural pastoral societies in Africa, who base their diets on plant foods (starches), are free of these diseases.⁶

CT scanning of modern-day people worldwide demonstrates dramatic differences in artery health, which can only be due to their eating habits and not due to their genetics. For example, the Japanese living in Japan, who consume a starch (rice)-based, low-meat diet, show calcification of the aorta half as often (36% vs. 69%) as do Japanese-Americans, whose diet is much more meat-based.⁶ Furthermore, calcification of the coronary (heart) arteries is strikingly lower among the native Japanese compared to Americans (13% vs. 47%).⁷

Most importantly, this *Lancet* study of atherosclerosis across 4000 years of human history of four ancient populations proves that “it’s the food.” You have heard the phrase “diet and lifestyle” in reference to the cause of common modern diseases, such as atherosclerosis. “Lifestyle” specifically refers to lack of exercise, the habit of cigarette smoking, and the burdens of various stresses associated with present-day living. These ancient people had none of these negative “lifestyle” factors affecting them, which leaves only their diet. “Lifestyle” is the scapegoat for people wanting to avoid the truth about the meat on their dinner table.

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Macular Degeneration Is Due to Western Diet

"Cholesterol-enriched diet causes age-related macular degeneration-like pathology in rabbit retina," by Bhanu Dasari published in the August 18, 2011 issue of the journal *BMC Ophthalmology*, found that, "... cholesterol-enriched diets cause retinal degeneration that is relevant to age-related macular degeneration (AMD)¹. Furthermore, our data suggests high cholesterol levels and subsequent increase in the cholesterol metabolites as potential culprits to AMD."

Comment: AMD is the leading cause of blindness in people age 64 or older living in Western countries. The severe form, with impairment of vision, affects 1.7 million people in the United States, with 200,000 new cases annually. Characteristically, this is a disease of progressive, but painless, loss of the central vision in the macula of both eyes simultaneously. The macula is the part of the retina that provides our most acute and detailed vision, and is used for visual activities like reading, driving, recognizing faces, watching television, and other fine work.

Supplements and medications are not a savior. The popular belief that vitamins and minerals slow AMD comes from a single large trial in the United States (the Age-Related Eye Disease Study), funded by the eye care product company Bausch & Lomb, which also manufactured the supplements used in the study.³ However, a 2012 Cochrane Database Review found that the use of vitamin and mineral supplements, alone or in combination, by the general population had no effect on AMD.⁴ Most importantly, [vitamin supplements](#) should be avoided because they increase the risks of overall mortality, heart disease, and cancer. Omega-3 (fish) fats have also been suggested as a means to prevent or slow the progression of AMD. Not yet true according to another Cochrane Review.⁵

Multiple Studies Find Shared Risk Factors for Heart Disease and AMD:

- * Overweight people have more than twice the risk of progression over the next five years of this disease from the mild form, which affects nearly 8 million people in the United States, to the severe, blinding form. Other common risk factors shared by both diseases are cigarette smoking, lack of exercise, high cholesterol, and hypertension. (Note, however, that cholesterol-lowering statin medications do not benefit AMD.²⁾
- * A diet high in all kinds fats, including animal, trans-fats (margarines, shortenings), monounsaturated fats (olive oil), and other vegetable fats, increases the risk of developing AMD by two to three times compared to a diet low in fat.
- * A diet low in fruits and vegetables is associated with an increased risk of AMD.
- * Vigorous physical activity decreases the risk of AMD.
- * As people in non-Western countries, for example Japan, Taiwan and China, switch from their native diets based on starches (like rice) to Western diets (meat and dairy foods) their risk of AMD increases parallel to their risk of heart disease.

Age-related macular degeneration (AMD) is a progressive condition that is untreatable by any commonly practiced means—unless diet-therapy were to be included. I view this condition as being similar to other vascular diseases, like heart attacks, strokes, and impotence—all due to the Western diet high in meat, dairy products and other junk food. A healthy starch-based diet is the only hope to prevent and slow the progression towards blindness from this disease. Unfortunately, vision already lost cannot be recovered, even with a healthy diet. Now, when you can still read this newsletter, would be a good time to switch to a starch-based diet (if you haven't already done so).

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Chelation Therapy Found Helpful for Heart Disease

“Effect of Disodium EDTA Chelation Regimen on Cardiovascular Events in Patients with Previous Myocardial Infarction: the TACT Randomized Trial,” by Gervasio A. Lamas published in the March 17, 2013 issue of the *Journal of the American Medical Association*, found that, “Among stable patients with a history of MI, use of an intravenous chelation regimen with disodium EDTA, compared with placebo, modestly reduced the risk of adverse cardiovascular outcomes, many of which were revascularization procedures (heart surgeries).” The trial included 1708 patients treated with either a chelation regimen of 40 infusions of disodium EDTA, ascorbate, B vitamins, and other components or a placebo salt solution (saline). Treatment reduced cardiovascular events (death, recurrent heart attack, stroke, hospitalization for angina, and heart surgery) by 18% compared to a placebo. Patients with diabetes and those with a past history of a heart attack had especially good results, with about a 40% reduction in risk of future cardiovascular events. (EDTA is an abbreviation for ethylenediaminetetraacetic acid. Each infusion takes about three hours and the first 30 infusions are administered at weekly intervals.)

Comment: Since the 1950s, medical doctors have used chelation therapy as a treatment for toxic metal poisoning. Administered intravenously, intramuscularly, or orally, these agents remove mercury, iron, arsenic, lead, uranium, plutonium and other heavy metals from the body. (“Chelation” is derived from the Greek word “chele”—the claws of a crab—referring to how it surrounds and binds metal ions.)

Apparent success in reducing calcium deposits, which are found in artery wall plaques in the later stages of atherosclerosis, led to the treatment of heart patients with EDTA beginning in 1956. This approach was never accepted by traditional medical doctors and was left to a few renegades practicing what is referred to as “alternative medicine.” The American College for Advancement in Medicine, the largest professional organization supporting this approach, estimates that 800,000 patient visits for chelation therapy were made in the United States in 1997. The use of chelation therapy has expanded beyond helping those with heart disease to disorders as divergent as autism, Alzheimer’s disease, Parkinson’s disease, COPD, and diabetes.

Improvements among heart patients undergoing chelation therapy have been attributed to the “placebo effect” and to diet and lifestyle changes, such as quitting smoking, losing weight, eating more fruits and vegetables, avoiding meat and dairy products, and exercising regularly, concurrently encouraged by the chelationists. One of the greatest concerns expressed by traditional medical doctors is that chelation therapy will divert needy patients away from what really works, which they believe to be heart surgery. However, this is faulty reasoning because bypass surgery and angioplasty for chronic coronary artery disease do not save lives. Hopefully, publication of this study will cause more heart patients to pause before undergoing the knife.

In the past I have taken a relatively neutral position on chelation therapy, saying that it rarely does harm, is relatively inexpensive, and is enthusiastically supported by most of the treated patients whom I have met. This article will cause me to be more positive when someone asks my opinion on this conservative approach. However, diet-therapy is by far the most effective, non-toxic, cost-free treatment for heart and other chronic diseases, and remains the only approach that I can unreservedly recommend.

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Does Olive Oil and Eating Nuts Really Prevent Heart Disease?

Common knowledge is that using olive oil (monounsaturated fat) and eating nuts (polyunsaturated fats) protects against heart disease, but there is evidence that questions the purported benefits:

* Serial angiograms of people's heart arteries show that all three types of fat—saturated (animal), monounsaturated (olive oil), and polyunsaturated (omega-3 and omega-6 oils)—were associated with significant increases in new atherosclerotic lesions over one year of study.⁴ Only by decreasing the entire fat intake, including poly- and monounsaturated-oils, did the lesions stop growing.

* Dietary polyunsaturated oils, both the omega-3 and omega-6 types, are incorporated into human atherosclerotic plaques; thereby promoting damage to the arteries and the progression of atherosclerosis.⁵

* A study in African green monkeys found that when saturated fat was replaced with monounsaturated fat (olive oil), the olive oil provided no protection from atherosclerosis.⁶

* One of the most important clotting factors predicting the risk of a heart attack is an elevated blood factor VII. All five fats tested—rapeseed oil (canola), olive oil, sunflower oil, palm oil, and butter—showed similar increases in triglycerides and clotting factor VII.⁷

Most likely, any heart benefits of a Mediterranean diet are due to it being a more vegetarian diet. The Mediterranean diet can be a good diet, in spite of the olive oil and added nuts.⁸

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Mediterranean Diet Study Promotes Nuts and Olive Oil for Industry

“Primary prevention of cardiovascular disease with a Mediterranean diet,” by Ramón Estruch published in the April 4, 2013 issue of the *New England Journal of Medicine*, found that, “Among persons at high cardiovascular risk, a Mediterranean diet supplemented with extra-virgin olive oil or nuts reduced the incidence of major cardiovascular events.”¹ The study, lasting five years and involving about 7,447 people ages 55 to 80 living in Spain compared one group following the olive oil- and nut-supplemented Mediterranean diet to another group on a “low-fat” diet. Two Spanish companies supplied the olive oil (Hojiblanca and Patrimonio Comunal Olivarero), and the nuts came from a producer in Spain (La Morella Nuts) and the California Walnut Commission. Plus, many of the authors have extensive financial ties to food, wine, and other industry groups.

Comment: This article made worldwide headlines by showing how adding olive oil and nuts will reduce the risk of cardiovascular disease compared to a “low-fat diet.” However, a careful read of the article reveals that only the risk of stroke was reduced by the tested Mediterranean diet. The diet had no effect on heart attacks or death rates overall. Most important to note is that participants in the “low-fat” group made no real changes—their total fat consumption decreased insignificantly from 39% to 37% of the calories.

Regardless of any cardiovascular advantages, one major disadvantage of simply replacing one kind of fat with another, i.e., saturated fats (meats and dairy) with olive oil and nuts, is that there will be no weight loss.

When this same group of researchers published their findings from this study in 2006 they found that their olive oil group lost less weight than did the low-fat group (0.19 Kg) and the nut group lost about the same (0.26 Kg) as the low-fat group in three months.² (Remember, the low-fat group was really following a high-fat diet.) For comparison, the McDougall Diet has demonstrated an average weight loss of five times as much: 1.6 Kg (3.5 pounds) in a week, and participants are encouraged to eat as much as they want from the buffet. (The McDougall Diet is based on starches such as rice, corn, potatoes, beans, etc.; olive oil is prohibited and nuts are used very sparingly.)

Olive oil makes people fat. The real-life obesity-causing effects of olive oil are seen in countries in southern Europe. When 54 obese women in a Mediterranean country were studied, they were found to be following a diet low in carbohydrates (35% of calories) and high in fats (43% of calories)...and 55% of total fat calories came from olive oil.³ Overweight and obesity lay the foundation for type-2 diabetes and degenerative arthritis of the lower extremities, as well as cancer, heart disease, and strokes.

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Vegetable Oils Increase Heart Disease and Death

“Use of dietary linoleic acid for secondary prevention of coronary heart disease and death: evaluation of

recovered data from the Sydney Diet Heart Study and updated meta-analysis,” by Christopher E. Ramsden published in the February 4, 2013 issue of the *British Medical Journal*, found that, “... substituting dietary linoleic acid in place of saturated fats increased the rates of death from all causes, coronary heart disease, and cardiovascular disease.” The original data came from the Sydney Diet Heart Study (SDHS), conducted from 1966 to 1973 on 458 men aged 30-59 years with a history of a recent coronary event. Participants replaced animal fats from meat and dairy sources, and margarines and shortenings, with safflower oil. Safflower oil is concentrated source of linoleic acid, also known as an omega-6 fat.

Comment: Advice to replace saturated fats with vegetable oils has been the cornerstone for dietary guidelines for preventing heart disease for the past 60 years. This substitution does lower blood cholesterol levels and this is why scientists believed benefits would be found in terms of real life events (fewer heart attacks, death, and heart surgeries). The traditional “diet-heart theory” predicts lowering cholesterol by any means will diminish the deposition of cholesterol in the arterial wall and slow the progression of atherosclerosis. This was not the case in this major study, as well as in two previous randomized controlled trials, showing similar adverse effects from substituting animal-derived and trans-fats with these pure vegetable fats.

Why is pure vegetable oil, like safflower oil, harmful? Because oil is no longer a food—at best it is a medicine and at worst it is a serious toxin. To get oil from a food (olive, orange, corn, etc.) it must be mechanically extracted. The end product is an isolated ingredient (pure oil). One way that pure oils cause damage is because they are easily oxidized when unprotected by their natural surroundings (the ingredients provided by the rest of the food before the oil was extracted). Oxidized oils contain “free radicals” that donate electrons that damage the arteries and other tissues. With the loss of their protective surroundings, pure oils are also much more fattening than the whole food. In addition, flooding the body’s cells with isolated concentrated oil (oil) creates nutritional imbalances, leading to metabolic derangements as serious as cancer. The McDougall Diet strongly recommends against consuming pure oils of any kind, including the so-called “good fats” like omega-3 fats. Oil, as clearly demonstrated in this major study, would be more accurately classified as a poison, rather than a food.

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