

Vaughn Lawrence Naturopath & Herbalist

Partnering with God in Health and Wellness Series

Class Eight

Heart Disease

HEART FUNCTION AND HEART DISEASE STATISTICS

- A. The heart is about the size of your fist and designed to pump blood throughout your entire body. The cardiovascular system is a network of over 100,000 miles of vessels. These vessels include veins, arteries and capillaries. Many capillaries in the body are so small that red blood cells must flow through single file.
- B. Heart disease statistics in America are alarming. The two major killers are heart attacks and stroke. A stroke happens when blood flow to the brain is stopped and a heart attack is when blood flow to the heart is stopped.
- According to the American Heart Association approximately 60,800,000 people in America suffer from some type of heart disease. Remember these are diagnosed statistics, so the actual number would likely be much higher.
- One of every 2.5 deaths in the United States is from heart disease
- Every 29 seconds an American will suffer a coronary event, and every minute, someone will die
- 34% of cardiovascular deaths happen before the age of 75
- Stroke is the #1 cause of serious, long-term disability
- In 2007, heart disease cost Americans \$286 billion
- In 1900, heart disease killed 1 in 7 Americans. By 1963 it was almost 1 in 2 Americans
- Why is heart disease is called the "silent killer?" Most of the time, there are no signs or symptoms until it is too late!

II. HOW DOES THE CARDIOVASCULAR SYSTEM GET DAMAGED?

A. The heart is required to pump blood to the extremities of the body. To perform this function, the heart must be strong and healthy; veins, arteries and capillaries must be clean and clear; the blood vessels must have adequate water for transportation; and the cardiovascular system must be free of obstructions.

- B. What weakens, blocks and breaks down the cardiovascular system?
- High sugar and insulin levels from processed sugars and other highly refined foods
- Dehydration
- Stagnation. Lack of exercise or movement
- High levels of rancid fats and oils
- Deficiency in nutrients required for a strong heart and blood vessel system
- Other toxic chemicals such as smoking (atherosclerosis), alcohol, etc.
- C. The most critical factor in the majority of cases of heart disease is INFLAMMATION. Inflammation is caused by a variety of factors prevalent in today's American lifestyle. The combination of high stress, lack of exercise, toxicity, poor diet and chronic dehydration causes thickened blood and constant inflammation of the arterial walls which creates damage. *This is high blood pressure*.
- D. Endothelial cells line the entire circulatory system. As these cells are damaged and inflamed, damage occurs to the blood vessels. It is critical to repair this damage at all costs. *The repair creates the blockage...*
- E. When the heart is forced to work extra hard, when the blood vessels are blocked and damaged, when the blood is too thick and when the body is dehydrated, this river of life starts to break down. This triggers a cascade of negative events. When the heart wears out, it leads to congestive heart failure. When the blood is clotting, clots can break loose leading to pulmonary embolism (lung), stroke (brain), or heart attack (blood supply feeding the heart muscle).

III. THE ROLE OF CHOLESTEROL

- A. Chole = bile. Stereos = solid. Ol = alcohol. Cholesterol is a waxy steroid of fat. Cholesterol is a critical, life saving substance. There is a reason your body produces cholesterol on a daily basis. All doctors learn in school the importance of cholesterol in the human body. So why are we waging war on cholesterol?
- B. Cholesterol is a tool the body uses for various functions. What are the functions of cholesterol in the human body?
- Your brain is made mostly from fat and cholesterol is an important component. Cholesterol is necessary for the creation of brain synapses, or the communication cells of the brain.
- Cholesterol is required to properly synthesize and utilize Vitamin D and other fat soluble vitamins like A, E and K. If your brain needs some Vitamin D, it can't get there without cholesterol.
- Cholesterol makes up the membrane of every cell in the human body. It is what makes sure the cell isn't too stiff or too flexible. It is literally the brain of the cell that provides communication between cells and to the rest of the body. Cholesterol also provides a protective coating around the blood vessel walls.
- Cholesterol is needed to create bile for digestion.
- Cholesterol is critical in repairing your arterial walls due to inflammation and damage

- Cholesterol is a precursor to all of your sex hormones. You cannot build healthy hormone levels without cholesterol. Men cannot create testosterone and women cannot create estrogen or progesterone. Without cholesterol, we are infertile and unable to pro-create.
- C. What is HDL and LDL?
- LDL stands for Low Density Lipoprotein. It is what ships cholesterol to your entire body. If your brain needs some cholesterol, it is the LDL's job to get it there.
- HDL stands for High Density Lipoprotein. It is what takes used cholesterol out of the blood stream and brings it back to the liver. It recycles cholesterol.
- Remember cholesterol is a critical molecule to the human body. LDL is not "bad."
- HDL and LDL are not cholesterol. They are proteins that carry cholesterol.
- D. Cholesterol is NOT the enemy. In fact, it is critical to human existence and reproduction. Why the confusion? LDL's are less dense and therefore found in damaged blood vessels.

IV. DOES CHOLESTEROL CAUSE HEART DISEASE?

- A. The answer is no. Again, cholesterol is a critical life saving substance, required by every cell of the human body and necessary for numerous functions.
- B. Why was cholesterol ever implicated as a cause for heart disease? When surgeries were performed, surgeons would notice a build-up of cholesterol blocking the arteries. Cholesterol was assumed to be the "cause" of heart disease. LDL was found, so it got nicknamed "bad" cholesterol. When it was discovered that you could lower natural cholesterol levels with a synthetic pharmaceutical drug, sales of statins increased dramatically.
- C. Over 50% of people who have heart attack and stroke do not have high cholesterol levels. This alone puts huge holes in the theory that cholesterol causes heart disease.
- D. Eskimos, who eat very large amounts of fat, have regular levels of cholesterol between 200-240. They have very low levels of heart disease within their culture. This creates a paradox. Does the food we eat really affect our cholesterol levels?
- E. Cholesterol, the hero? When your blood vessels are damaged from the effects of poor lifestyle, your body uses cholesterol to REPAIR the damage being done! Cholesterol is saving your life. When you have a bad scar with tissue build-up, that is a fatty cholesterol deposit.

V. THE INTRODUCTION OF STATIN DRUGS

- A. Statin drugs were introduced in the 1980's. Statins stop the liver from producing cholesterol, therefore lowering your cholesterol numbers. We are stopping the body from producing one of the most critical components needed by the human body.
- B. The side effects of stopping your body's natural supply of cholesterol include:
- Loss of cognition and memory. Statins are knows as the "memory eraser" or "memory zapper"
- Neuropathy (nerve damage), anemia, cataracts, fatigue
- Muscle pain and weakness. Statins block the ability of skeletal muscle to repair and regenerate
- Loss of CoQ10. Statins remove coQ10 from the body, a critical nutrient for the heart and all cells
- Loss of sexual function. (Statins are being marketed heavily to children and it has been proposed that all children be given statin drugs as "preventative medicine.")
- C. There are well over 900 studies showing the side effects and dangers of taking statin drugs

VI. WHAT REALLY CAUSES HEART DISEASE?

- A. Genetics play a minimal role, although weakness passed down from past generations may make you more vulnerable. However, heart disease in the family is something that can be reversed with proper diet and lifestyle changes.
- B. The main cause of heart disease is oxidation and inflammation. Oxidation and inflammation comes down to what we do, or do not, put in our mouth every single day. It is also dependent on your daily lifestyle choices like exercise and the amount of stress on your system. In other words, heart disease is not inevitable; you have control over the health of your own body based on your daily choices.
- C. The two most damaging "foods" that go into the human body that causes heart disease, diabetes and cancer are SUGAR and BAD FATS.
- D. Alcohol consumption, smoking, chronic stress and lack of exercise are all implicated in heart disease as well

VII. THE DAMAGING EFFECTS OF SUGAR

- A. Understand that we are talking about processed sugars mainly, not fruits, honey or maple syrup. Although in excess, these can be a problem for many people. High Fructose Corn Syrup, now called "corn syrup" is the worst. Don't believe the commercials!
- B. The Glycemic Index (GI) of the foods you eat is more important than the calories. A calorie is not just a calorie. If you spend your time eating 100 calorie snack packs, you will become very unhealthy. In other words, the actual food you are consuming is always more important than calories, carbohydrate or fat grams. The Glycemic Index will determine how quickly sugar gets into your bloodstream. When eating processed foods without fiber, the effect is immediate. Even though you may eat foods high on the GI scale like dates or sweet potatoes, they are naturally bound by fiber to slow the release of sugars into the bloodstream.

C. The GI of processed table sugar is about 68. The GI of white bread is about 78, even higher than table sugar. The GI of "whole wheat" bread is about 76. "Whole grains" in bread, cereal, pizza, crackers, pasta and all other processed foods in America are very high on the GI scale. These processed sugars are like shards of glass, cutting and damaging your blood vessels, creating inflammation. When consumed, the body must produce insulin as quickly as possible to remove the offending invade before too much damage is done.

Again, cholesterol now must come in to repair the damage, which eventually builds up a thick layer of plaque as you can continue to feed the problem.

VIII. THE DAMAGING EFFECTS OF HYDROGENATED FATS AND OILS

A. Hydrogenated fats and oils are rancid because of the processing they endure, and create oxidation in the body, leading to blood vessel damage. Oxidation comes from the creation of free radicals. Free radicals are unstable molecules that react quickly, attacking the nearest cell. You can look for these on labels under terms such as hydrogenated, partially hydrogenated, fractionated, trans fats, etc. This also includes all fried foods and all vegetable cooking oils such as soy, corn and canola (the worst). Hydrogenated fats like those found in margarine are one molecule away from being plastic. Imagine pouring a soda on your keyboard; that is what is happening to your arteries.

B. Have you ever found an old potato chip or french fry under your couch or in your car a year or two later? What does it look like? This is because it is not real!

IX. THE CONVENTIONAL APPROACH TO HEART DISEASE

- A. There is not a better system of care in the entire world at saving lives than the American medical system. For heart attack victims and strokes, the ability to save people who would otherwise be killed is absolutely phenomenal. The problem is that bypasses are temporary. Bypasses create a lot of damage and scar tissue build-up. Many bypasses can eventually fail. It could be in 6 months or 20 years.
- B. Regarding long-term heart care, however, this is one subject we cannot be silent about. There are too many lives at stake. Lifestyle changes are rarely recommended beyond "exercise and lose weight." The role of diet is rarely addressed which is the reason we have so much heart disease. Cholesterol is not what is causing heart disease. Cholesterol medications are not lowering heart disease risk and their own studies show this.
- C. Not only is cholesterol not the original cause of heart disease, but the statin medications (which are the #1 selling and most profitable drug on the market right now) cause complete weakness and degeneration of the human body.
- D. Pre-1984, dangerous cholesterol numbers were anything over 240, and the person was obese and/or a smoker. In 1984 the number changed to 200. Now doctors are prescribing cholesterol medications with numbers as low as 180. This is incredibly profitable to pharmaceuticals companies.
- E. What about aspirin? Aspirin is not heart disease prevention. Numerous studies showed aspirin to have little to no effect at preventing heart attacks. Since aspirin is also a synthetic chemical, it can lead to internal bleeding, kidney damage, liver damage and death. Aspirin kills 10,000 people annually and sends 100,000 more to the emergency room.

Four early studies using aspirin to prevent heart attacks had shown no benefit (*British Medical Journal* 1974 vol. 1 p. 436, *Lancet* Vol. 2 p. 1313, R. Levy JAMA Feb 15, 1980, R. Peto *British Medical Journal* 1988 vol. 296 pg. 313-6). Then along came a study on U.S. physicians which used *Bufferin* (aspirin and magnesium). This study showed no reduction in fatal heart attacks and no improvement in survival rate but there was a 40 % decrease in the number of non-fatal heart attacks.

The magnesium was ignored and there was a prompt extensive institution of aspirin for prevention of heart attacks.

- E. Statin drugs take a perfectly healthy individual, and leads them towards future drug side effects and illness. The side effects from the medication will quickly lead to more side effects, more problems in the body, and eventually more medications to "fix" each new problem. Cholesterol is not a disease.
- F. Quotes from other medical doctors about cholesterol.
- * "The truth, were it known, would send pharmaceutical stocks plunging. In most studies, the increased risk is present only above a level of cholesterol that includes just a small percentage of the total population."

Uffe Ravnskov, M.D., Ph.D. **The Cholesterol Myths:** Exposing the Fallacy that Saturated Fat and Cholesterol Cause Heart Disease

* "Your fear of dying – if you happen to be one of the great many people who suffer from this morbid preoccupation – may well have made you a victim of the cholesterol controversy. For, if you have come to believe that you can ward off death from heart disease by altering the amount of cholesterol in your blood, whether by diet or by drugs, you are following a regime that still has no basis in fact. Rather, you as a consumer have been taken in by certain commercial interests and health groups who are more interested in your money than your life."

Dr. Edward R. Pinckney

* "The public is so brainwashed, that many people believe that the lower your cholesterol, the healthier you will be or the longer you will live. Nothing could be further from the truth."

"A massive crusade has been conceived to "lower your cholesterol count" by rigidly restricting dietary fat, coupled with aggressive drug treatment. Much of the impetus for this comes from speculation, rather than any scientific proof."

Dr. Paul J. Rosch

X. HOW TO PREVENT AND REVERSE HEART DISEASE

A. Heart disease can be prevented through basic lifestyle changes. Many cultures exist throughout the world today where heart disease is a very rare occurrence. If you look at pre-1900 medical journals even within the United States, you will find relatively minimal mention of heart disease, nowhere near the epidemic that has been created just within the last century.

B. We must immediately stop eating or severely limit processed sugars, white flour products, white rice and other processed foods. We must eliminate bad fats, rancid fats, trans fats, fried foods. The worst offenders will be the combination of the two; processed sugars dipped in rancid fats. This would include french fries & donuts.

- C. We must adopt a whole foods, mostly plant based diet. I recommend eating quality meats only, what fits in the palm of your hand no more than once daily. I also recommend consuming raw milk when possible over processed dairy from the grocery store. It is difficult to reverse the damaging effects of blocked arteries while eating a diet high in meat.
- D. Consume healthy fats. Many people with health conditions or the inability to process fats well (removal of gallbladder, lymph congestion for example), must be careful. We must not be scared of healthy saturated fat (coconut oil for example). We must not be scared of other healthy fats (fish, olive, avocado, nuts, seeds, hemp, etc.). The best fats for reducing inflammation are fish oils, krill oil and other algae like Astaxanthin.
- E. We must move our body. Exercise is critical to get the blood oxygen circulating and begin the repair process on those damaged blood vessels. Exercise actually changes the physical structure of the heart. Nothing drops blood sugar levels and insulin levels faster than exercise!
- F. Water. Dehydration is a major contributing factor to poor cardiovascular health. Coffee, soda, milk and energy drinks do not count as water, and cause dehydration instead.
- G. What about salt?

XI. SPECIFIC NUTRITION FOR HEART DISEASE AND PREVENTION

- A. Magnesium. Magnesium is the miracle mineral and the most common deficiency in existence today. Magnesium displaces calcium that is trapped in the wrong places. Magnesium relaxes the blood vessels and opens them up for better blood flow. Magnesium also regulates insulin levels in the bloodstream. I firmly believe that if magnesium were prescribed instead of drugs, tens of thousands of lives would be saved every single year in America.
- * Coronary artery disease begins with inflammation in the inner lining of the coronary arteries. Plaque inside the arteries is a necessary and inevitable response to this inflammation. Plaque is a "scab" so to speak, the body's, albeit ill-fated, attempt to "mend" the inflammation. Magnesium can reduce inflammation in the coronary arteries, and therefore stabilize and reduce plaque, better than statins. Magnesium is better than statins because magnesium allows the body to produce other fatty acids from dietary omega-5 and omega-3 fatty acids. These fatty acid "metabolites" are necessary not only to heal the coronary arteries but also play an essential role in overall health. Journal of the American College of Nutrition 2004 Oct; 23(5):501S-505S
- B. Can you clear blocked blood vessels? Absolutely! Along with proper diet changes, the main components needed to clear blockages in the blood vessels (takes 3-6 months depending on the severity) are:
- Systemic Enzymes
- Magnesium Oil
- Vitamin C
- L-Arginine
- C. What other nutrients are essential for a healthy heart? Vitamin E and coQ10 are also very heart health nutrients. Resveratrol is well known for its anti-oxidant capabilities and therefore, heart health benefits. There are many amazing herbs such as cayenne pepper, jiaogulan, hawthorn berry, bamboo, ginger, garlic, white willow, and ginkgo biloba to name a few.

World Renown Heart Surgeon Speaks Out On What Really Causes Heart Disease

PreventDisease.com

March 1, 2012

We physicians with all our training, knowledge and authority often acquire a rather large ego that tends to make it difficult to admit we are wrong. So, here it is. I freely admit to being wrong. As a heart surgeon with 25 years experience, having performed over 5,000 open-heart surgeries, today is my day to right the wrong with medical and scientific fact.

I trained for many years with other prominent physicians labeled "opinion makers." Bombarded with scientific literature, continually attending education seminars, we opinion makers insisted heart disease resulted from the simple fact of elevated blood cholesterol.

The only accepted therapy was prescribing medications to lower cholesterol and a diet that severely restricted fat intake. The latter of course we insisted would lower cholesterol and heart disease. Deviations from these recommendations were considered heresy and could quite possibly result in malpractice.

It Is Not Working!

These recommendations are no longer scientifically or morally defensible. The discovery a few years ago that inflammation in the artery wall is the real cause of heart disease is slowly leading to a paradigm shift in how heart disease and other chronic ailments will be treated.

The long-established dietary recommendations have created epidemics of obesity and diabetes, the consequences of which dwarf any historical plague in terms of mortality, human suffering and dire economic consequences.

Despite the fact that 25% of the population takes expensive statin medications and despite the fact we have reduced the fat content of our diets, more Americans will die this year of heart disease than ever before.

Statistics from the American Heart Association show that 75 million Americans currently suffer from heart disease, 20 million have diabetes and 57 million have pre-diabetes. These disorders are affecting younger and younger people in greater numbers every year.

Simply stated, without inflammation being present in the body, there is no way that cholesterol would accumulate in the wall of the blood vessel and cause heart disease and strokes. Without inflammation, cholesterol would move freely throughout the body as nature intended. It is inflammation that causes cholesterol to become trapped.

Inflammation is not complicated -- it is quite simply your body's natural defence to a foreign invader such as a bacteria, toxin or virus. The cycle of inflammation is perfect in how it protects your body from these bacterial and viral invaders. However, if we **chronically expose the body to injury by toxins or foods the human body was never designed to process,a condition occurs called chronic inflammation**. Chronic inflammation is just as harmful as acute inflammation is beneficial.

What thoughtful person would willfully expose himself repeatedly to foods or other substances that are known to cause injury to the body? Well, smokers perhaps, but at least they made that choice willfully.

The rest of us have simply followed the recommended mainstream diethat is low in fat and high in polyunsaturated fats and carbohydrates, not knowing we were causing repeated injury to our blood vessels. This repeated injury creates chronic inflammation leading to heart disease, stroke, diabetes and obesity.

Let me repeat that: The injury and inflammation in our blood vessels is caused by the low fat diet recommended for years by mainstream medicine.

What are the biggest culprits of chronic inflammation? Quite simply, they are the overload of simple, highly processed carbohydrates (sugar, flour and all the products made from them) and the excess consumption of omega-6 vegetable oils like **soybean, corn and sunflower** that are found in many processed foods.

Take a moment to visualize rubbing a stiff brush repeatedly over soft skin until it becomes quite red and nearly bleeding, you kept this up several times a day, every day for five years. If you could tolerate this painful brushing, you would have a bleeding, swollen infected area that became worse with each repeated injury. This is a good way to visualize the inflammatory process that could be going on in your body right now.

Regardless of where the inflammatory process occurs, externally or internally, it is the same. I have peered inside thousands upon thousands of arteries. A diseased artery looks as if someone took a brush and scrubbed repeatedly against its wall. Several times a day, every day, the foods we eat create small injuries compounding into more injuries, causing the body to respond continuously and appropriately with inflammation.

While we savor the tantalizing taste of a sweet roll, our bodies respond alarmingly as if a foreign invader arrived declaring war. Foods loaded with sugars and simple carbohydrates, or processed withomega-6 oils for long shelf life have been the mainstay of the American diet for six decades. These foods have been slowly poisoning everyone.

How does eating a simple sweet roll create a cascade of inflammation to make you sick?

Imagine spilling syrup on your keyboard and you have a visual of what occurs inside the cell. When we consume simple carbohydrates such as sugar, blood sugar rises rapidly. In response, your pancreas secretes insulin whose primary purpose is to drive sugar into each cell where it is stored for energy. If the cell is full and does not need glucose, it is rejected to avoid extra sugar gumming up the works.

When your full cells reject the extra glucose, blood sugar rises producing more insulin and the glucose converts to stored fat.

What does all this have to do with inflammation? Blood sugar is controlled in a very narrow range. Extra sugar molecules attach to a variety of proteins that in turn injure the blood vessel wall. This repeated injury to the blood vessel wall sets off inflammation. When you spike your blood sugar level several times a day, every day, it is exactly like taking sandpaper to the inside of your delicate blood vessels.

While you may not be able to see it, rest assured it is there. I saw it in over 5,000 surgical patients spanning 25 years who all shared one common denominator -- inflammation in their arteries.

Let's get back to the sweet roll. That innocent looking goody not only contains sugars, it is baked in one of many omega-6 oils such as soybean. Chips and fries are soaked in soybean oil; processed foods are manufactured with omega-6 oils for longer shelf life. While omega-6's are essential -they are part of every cell membrane controlling what goes in and out of the cell -- **they must be in the correct balance with omega-3's**.

If the balance shifts by consuming excessive omega-6, the cell membrane produces chemicals called **cytokines** that directly cause inflammation.

Today's mainstream American diet has produced an extreme imbalance of these two fats. The ratio of imbalance ranges from 15:1 to as high as 30:1 in favor of omega-6. That's a tremendous amount of cytokines causing inflammation. In today's food environment, a 3:1 ratio would be optimal and healthy.

To make matters worse, the excess weight you are carrying from eating these foods creates overloaded fat cells that pour out large quantities of pro-inflammatory chemicals that add to the injury caused by having high blood

sugar. The process that began with a sweet roll turns into a vicious cycle over time that creates **heart disease**, **high blood pressure**, **diabetes** and finally, **Alzheimer's disease**, as the inflammatory process continues unabated.

There is no escaping the fact that the more we consume prepared and processed foods, the more we trip the inflammation switch little by little each day. The human body cannot process, nor was it designed to consume, foods packed with sugars and soaked in omega-6 oils.

There is but one answer to quieting inflammation, and that is returning to foods closer to their natural state. To build muscle, eat more protein. Choose carbohydrates that are very complex such as **colorful fruits and vegetables**. Cut down on or eliminate inflammation- causing omega-6 fats like corn and soybean oil and the processed foods that are made from them.

One tablespoon of corn oil contains 7,280 mg of omega-6; soybean contains 6,940 mg. Instead, use **olive oil or butter** from grass-fed beef.

Animal fats contain less than 20% omega-6 and are much less likely to cause inflammation than the supposedly healthy oils labelled polyunsaturated. Forget the "science" that has been drummed into your head for decades. The science that saturated fat alone causes heart disease is non-existent. The science that saturated fat raises blood cholesterol is also very weak. Since we now know that cholesterol is not the cause of heart disease, the concern about saturated fat is even more absurd today.

The cholesterol theory led to the no-fat, low-fat recommendations that in turn created the very foods now causing an epidemic of inflammation. Mainstream medicine made a terrible mistake when it advised people to avoid saturated fat in favor of foods high in omega-6 fats. We now have an epidemic of arterial inflammation leading to heart disease and other silent killers.

What you can do is choose **whole foods** your grandmother served and not those your mom turned to as grocery store aisles filled with manufactured foods. By eliminating inflammatory foods and adding essential nutrients from fresh unprocessed food, you will reverse years of damage in your arteries and throughout your body from consuming the typical American diet.

Dr. Dwight Lundell is the past Chief of Staff and Chief of Surgery at Banner Heart Hospital, Mesa, AZ. His private practice, Cardiac Care Center was in Mesa, AZ. Recently Dr. Lundell left surgery to focus on the nutritional treatment of heart disease. He is the founder of Healthy Humans Foundation that promotes human health with a focus on helping large corporations promote wellness. He is also the author of The Cure for Heart Disease and The Great Cholesterol Lie.

5901 Main Street | Grandview, MO 64030 | 816-492-5648 | www.spiritofhealthkc.com