

TWENTY MINUTES TO A HEALTHY HEART: AND A HEALTHY LIFE

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Preamble

Reading this article will take about the same amount of time that it takes to have a heart attack (15-20 minutes). The difference is one can save your life, and the other could take your life. You may think you have already read enough about heart health, but maybe you haven't. This article will cover the following critical healthy heart items you may not have read anywhere else:

- 1. Tests that are more important than cholesterol tests.*
- 2. The actual cause of heart disease (have you ever heard of endothelial dysfunction?)*
- 3. Why the USDA Food Pyramid is not your best nutrition guide.*
- 4. How exercise impacts insulin receptors on your cells to help prevent heart disease, diabetes and other illnesses.*
- 5. Why it is impossible to get all the nutrients you need from food alone.*
- 6. Why many heart operations and drugs are unnecessary and unsafe. (Statins reduce levels of CoQ10)*
- 7. Which supplements have been proven to prevent and even reverse heart disease. (If you have not heard about the cardio-protective effects of resveratrol, L-carnitine and CoQ10, then you will definitely want to read this article).*
- 8. How to make healthy heart lifestyle changes quickly and easily.*

Perhaps one of the biggest benefits of reading this article will be the realization that the healthy heart strategies it contains will also help you to avoid other chronic disorders such as cancer, diabetes, arthritis, depression and many more. That's right . . . one lifestyle strategy can do all of this and we don't just tell you what you should do, we explain why. When you understand how the body works and the impact that everything you do has on your future health, it will be very difficult to resist making the lifestyle changes you may need to make.

Introduction

There have been thousands of articles written over the past 20 years about how to prevent and even treat heart disease using diet, exercise and supplements. What good are all of these studies and articles if only a few people read them and pay attention to the advice in them? Heart disease is still the number one killer in the United States, claiming over 700,000 victims every year. A vast majority of the medical establishment still treats a majority of heart patients with drugs and/or surgery in spite of overwhelming scientific evidence that there are better, safer and more effective natural ways to treat this disease.

Is it just the medical establishment that is to blame for this inability to more fully integrate natural strategies into heart disease prevention and treatment protocols? Of course not: resistance to change and the refusal to take responsibility for correcting this problem be shared by the food industry, health professionals, hospitals, insurance companies and the individual citizen.

There have been hundreds of books and articles written about the reasons why more advanced diet, exercise and supplementation programs have not been more fully embraced by the above-mentioned institutions or groups. In the final analysis it boils down to financial interests and reluctance to change existing standards of care. Medical schools resist changes in their curriculum. Governments refuse to mandate natural protocols due to the money politicians get from the food and drug industries. Insurance companies and hospitals can't change without a mandate from the medical establishment or the government.

It is a true "Catch 22" that results in an unbelievable number of unnecessary deaths and a staggering financial burden on our country. There are primarily two groups with a real interest in addressing this situation. Employers are one of the keys to this reversal because they are being asked to bear a lion's share of the cost for this inability to adopt scientifically proven prevention and natural treatment protocols for heart disease. Employees or the individual citizen is the other half of this potential reform strategy. It is these two groups who have the most to gain by adopting the healthy heart strategies that will be highlighted in this article.

This article is a little different than previous articles written on the topic of heart disease because it will not only discuss the best diet, exercise and supplement strategies, but it will also discuss the barriers to adopting these logical and proven strategies as well as how to overcome these barriers. From the standpoint of employers and employees/individuals, there are definitely excellent ways to improve the evaluation of risk factors to heart disease. There are better ways to educate people about the ways to make important lifestyle changes. And, there are better ways to seriously calculate the costs and benefits of making these changes.

It's time for employers and employees/individuals to take back the responsibility for their own health. Doctors, hospitals, insurance companies and food companies need to be pushed towards these vitally important natural prevention and treatment strategies by an informed and concerned public.

I. Who is at risk for heart disease?

A recent Canadian study may provide the best possible insight concerning who is at risk for heart disease. This study, based on a national survey, found that 87 per cent of Canadians are aware that eating vegetables and fruits help prevent cancer and heart disease, but only 24 percent are eating the recommended 5-10 servings of vegetables and fruits each day. In case there is any doubt about this connection between heart disease and the consumption of fruits and vegetables, here are some common nutritional deficiencies found in people who have some form of heart disease. ¹

Nutrient Deficiency

- Vitamin A
- Vitamin C
- Vitamin B
- Vitamin E
- Folic Acid

- Magnesium
- Potassium
- Chromium

Fruit and Vegetable Sources

- Carrots, spinach, pumpkins, cantaloupe
- Broccoli, oranges, peppers, strawberries
- Beans, dates, asparagus, turnip greens
- Spinach, nuts, seeds
- Brussel sprouts, navy beans, green vegetables
- Bananas, avocados, lima beans, apples
- Dried apricots, bananas, potatoes
- Grape juice, broccoli, mushrooms, potatoes

There are other sources for some of these nutrients which are not fruits and vegetables, but there is a very clear connection between people who don't eat enough of the foods shown above and the incidence of heart disease. These deficiencies don't cause heart disease over night, rather they lead to a gradual progression of this disease over many years until symptoms finally surface. Perhaps that is a big part of the problem. People cannot see what is going on in their arteries and their heart. By the time these deficiencies lead to high blood pressure, high cholesterol or some other indicator, a lot of damage has already occurred.

Exercise is another contributing factor to the incidence of heart disease. Over 60 percent of Americans do not achieve the recommended amount of exercise. A study by Columbia University found that 5 hours of exercise per week reduces the risk of stroke by 70 per cent. Stroke and heart disease are very similar in terms of the impact of exercise.

Stress is yet another factor which can contribute to heart disease. In fact, stress plays a role in about 80 per cent of all diseases, and it is a very silent factor. Most people experience some

stress in their lives, but some people like police and fire personnel experience much higher levels of stress than the average person.

And finally, it must be stated that free radicals play a very significant role in the development of heart disease. Free radicals are molecules with an unpaired or missing electron. Free radicals are caused by chemical pollution, electro-magnetic exposure (computers, cell phones, television, etc.), foods such as red meat and dairy products, and stress, just to mention a few sources.

Now the cycle is complete in terms of who is at risk for heart disease. People who are exposed to free radicals, don't eat enough fruits and vegetables, are more stressed, or don't exercise enough are all vulnerable. That includes almost 100 per cent of the population. Some people are more at risk than others, so it is important to measure these risks with the use of self-tests on lifestyle factors, as well as some specific medical tests. Taking these tests can be very helpful in the early identification of the indicators of risk for heart disease. .

Healthy Heart Self-Test

This test does not take the place of medical tests or examinations. It is intended as a starting point, especially for people who have few or no heart risk indicators, such as high blood pressure or high cholesterol. It may provide the incentive necessary to make healthy heart lifestyle changes sooner than might otherwise have been the case.

1. Is there a history of heart disease in your family? The more blood relatives with some heart related problems, the higher your score should be.

None	One	A few	Several	Most
5	4	3	2	1

2. Have you ever used tobacco in any form? This can include exposure to second-hand smoke as a child or in the workplace.

Never	Mild exposure	Medium exposure	Heavy Exposure	Very Heavy Exposure
5	4	3	2	1

3. Have you ever used alcohol or drugs in any form? This can include recreational as well as prescription drugs.

never	Mild exposure	Medium exposure	Heavy exposure	Very heavy exposure
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5	4	3	2	1

4. How healthy is your body weight? A lean body with a low percentage of body fat would deserve the best score.

Ideal	5% over ideal	10% over ideal	15% over ideal	20% over ideal
5	4	3	2	1

5. How much stress do you have in your life? This includes at home and at work, including work pressure, domestic strife, health concerns or other worrisome situations.

Very low	Low	Average	High	Very high
5	4	3	2	1

6. How much serious exercise do you get every week? This means exercise where your heart rate increases for at least 20-30 minutes.

5 hours	3-4 hours	1-2 hours	Less than 1 hour	none
5	4	3	2	1

7. How heart healthy is your current diet? The best diet would include no junk food, very little saturated fat, 5-10 helpings of fruits and vegetables, whole grains, nuts, seeds, fish and spring water consumed in small meals throughout the day.

Ideal	90% ideal	60-80% ideal	40-60% ideal	Less than 40% ideal
5	4	3	2	1

8. Do you take any supplements to augment your diet? Heart healthy supplements such as Omega-3 oils, magnesium, CoQ10, Vitamin E, Vitamin B, Folic acid, L-carnitine and Vitamin C get the best scores.

Several heart	Some heart	Regular multi-	Occasional	never
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supplements	supplements	vitamin		
5	4	3	2	1

9. How would you rate your exposure to pollution? This includes air pollution, chemicals in water, pesticides in foods, radiation from cell phones and computers or chemicals at work (i.e., dry cleaning).

Very low	Low	Average	High	Very high
5	4	3	2	1

10. How often do you take time-out to relax using heart healthy techniques such as meditation, yoga or deep breathing?

2-3 times/day	once a day	a few times/week	seldom	never
5	4	3	2	1

SCORECARD

41-50 Points Excellent – You have very good heart health at this time. Look for any scores below 4 for possible improvements.

31-40 Points Good – You have fairly good heart health, but there are likely some areas where improvement is very necessary at this time.

21-30 Points Fair - Your heart health is not very good. You should meet with a holistic medical doctor for tests and to review your survey.

10-20 Points Poor – Your heart health is very poor and needs immediate attention. See a cardiologist for a few necessary tests.

Delusion: The Biggest Risk of All

If 87 per cent of people realize that eating fruits and vegetables can prevent disease, why do only 24 per cent actually eat the recommended amount of 5-10 servings per day? Do they think it's just a recommendation and not a requirement? Do they think that there will be no consequences for them and only for other people? Isn't it amazing that after someone survives a heart attack, they are much more interested in eating healthier and going for a walk than they

were before their heart attack? Some people may call this kind of thinking rationalization, but I believe it should really be labeled *delusional* due to the potentially negative consequences.

The information is all around us about the benefits of adopting a healthier lifestyle, and yet very few people are actually making the necessary changes. The proof of this can be seen in the fact that nearly 65 per cent of the population is overweight, a figure that has doubled in the last 40 years. ² At that time, in the 1960's, only 10 per cent of the population was suffering from some type of chronic illness and now the Center for Disease Control tells us that over 40 per cent of the population has a chronic illness.

By the time people reach the age of sixty years of age, nine out of every ten will have arthritis. We are told that the survival rate has gone up for breast cancer, but in reality it has not. The death rate has actually gone up. The survival time has increased mostly because of earlier diagnosis, not better treatment. ³ We know there is a connection between what we eat and our probability of becoming ill, but most people just ignore this fact.

Many surveys have confirmed that most people think they are eating a fairly healthy diet. They think they are eating enough fruits and vegetables to get by and that their indulgences of ice cream, donuts or red meat are at acceptable levels. People think they are eating much healthier than they really are. Are you one of those people? To confirm the quality of your diet, maybe you should take the following short survey and use the results intelligently.

NUTRITION SURVEY

1. The human body is designed to take in nutrition every 3 to 4 waking hours. How often do you eat nutritious meals or snacks during the day?

5-6 times/day	4 times/day	2 to 3 times	2 times	1 time
5	4	3	2	1

2. How many helpings of fruits and vegetables do you eat everyday?

7 to 8	5 to 6	3 to 4	1 - 2	none
5	4	3	2	1

3. Red meat, or meat from four legged animals, is high in fat and difficult to digest. How often do you eat meat in a typical week?

Never or rarely	1 or 2	3 or 4	5 or 6	7 or more
5	4	3	2	1

4. Whole grains are the grain products that still have the shell on them such as whole grain wheat, rice or oats. No refining has occurred. How often do you eat whole grain products?

2/day	1/day	3-4/week	1-2/week	Rarely or never
5	4	3	2	1

5. How often do you eat fried foods in a typical week?

Never	Rarely	1-2/week	3-4/week	5+/week
5	4	3	2	1

6. How often do you eat sweets or junk food, such as donuts, soft drinks, cookies, potato chips or ice cream?

Never or rarely	1-2/week	3-4/week	1/day	2+/day
5	4	3	2	1

7. A small amount of coffee, tea or alcohol may be good for you, but too much can be harmful to your liver, your heart and your pancreas. How many servings of these stimulants do you consume each day?

None or 1	2/day	3/day	4/day	5+/day
5	4	3	2	1

8. There are good fats, omega 3-6-9, and bad fats, saturated and trans fats. Omega fats come from cold water fish like salmon, flax seeds and olive oil, while saturated and trans fats come from dairy products and fast food. How would you rate your intake of good versus bad fats?

Excellent	Good	Fair	Poor	Very Poor
5	4	3	2	1

9. Your food is only beneficial if the nutrients actually reach your cells. This depends on whether you chew your food thoroughly, have enough enzymes in your system and enough friendly bacteria in your intestines. If you are eating the right food and your digestion is working properly, you should have 2 to 3 bowel movements everyday, your

energy level should be high, and your immune system should be strong. How good is your digestive system?

Excellent	Good	Fair	Poor	Very Poor
5	4	3	2	1

10. Clean water is a vitally important element of our nutritional health. Tap water is not as healthy for you as spring water or water that has been through reverse osmosis. How many glasses of clean water do you consume each day?

8-10/day	6-7/day	4-5/day	2-3/day	1 or less/day
5	4	3	2	1

SCORECARD Add up your score and compare to the rating system below

- 41-51 Points Excellent – You have very good nutrition patterns. Check your low scores to see where you can do better
- 31-40 Points Fair/Good – Your nutritional patterns are satisfactory, but there is definitely room for improvement
- 21-30 Points Poor - Your nutritional patterns are not very good, and you need to make significant changes
- 10-20 Points Very Poor – Your nutritional patterns are dangerous, and you may need professional help to make necessary changes.

* * *

If you were honest in completing the previous survey, you now are less likely to be delusional about your personal eating habits. Keep in mind that some of the previous question categories are more significant than others, and thus may deserve a little more weight (i.e. fruits and vegetables). However, each category is important enough that a low score could lead to possible health problems in the future. Our bodies are very forgiving, but eventually bad habits do catch up with us.

The Bottom Line: Everyone is at risk

A 1998 study reported in the *New England Journal of Medicine* found that nearly everyone was at risk for atherosclerosis, or hardening of the arteries, even children. The study shows that this disease affects about 30 per cent of adolescents between the ages of 16 and 20 years of age. It affects 50 per cent of young adults between the ages of 21 to 25, and over 75 per cent of adults between the ages of 25 and 39.⁴

The prevalence of this disease has only occurred in the past 100 years as can be seen in a study of the American Medical Association in 1912, when cardiovascular disease was nearly non-existent.⁵ The primary reasons for the dramatic increase in cardiovascular disease are well known and include a deterioration in the quality of our nutritional intake, the decline in physical activity, the increase in environmental toxicity and the dramatic increase in the levels of stress experienced by our population.

Heart disease is the number one killer in the United States with over 700,000 people dying every year and millions more being diagnosed with the disease or surviving their heart attack. All of the 65 per cent of the population who are overweight are at risk. Any child that was overweight at birth is at risk. People in high stress jobs or those that smoke or used to smoke are at risk. People who are over 50 years of age are at risk simply due to aging factors that can contribute to heart disease.⁶ There is not one person who should not be following the healthy heart strategies in this article, and yet very few are. We must find ways to reverse this costly, even deadly, behavior.

II. Common Myths and Misconceptions About Heart Disease

One of the driving forces behind the public's apathy and lack of understanding about the threat of heart disease are the many myths and misconceptions that exist and persist. Knowing the truth about these myths and misconceptions is a good beginning point for changing behavior.

Myth #1 – I don't have any history of heart disease in my family, so I won't have that problem.

Response – While genes do play a role, they can easily be overridden by poor lifestyle decisions as Dr. J Bland has pointed out in his book *Genetic Nutritioneering*. Dr. Bland also points out that bad or faulty genes can also be minimized, especially by our food choices since food greatly influences genetic expression.⁷

Myth #2 – I get tested every year and as long as my cholesterol is in a safe range, I won't have a problem.

Response – Studies have found that 80 per cent of people who have heart attacks did not have elevated levels of blood cholesterol.⁸ Cholesterol is one of at least six indicators that should be monitored but only cholesterol is routinely tested due to the expense of the other tests and the money that drug companies make from cholesterol-lowering drugs.

Myth #3 – Heart disease is a man’s disease, so as a woman I don’t have to worry very much.

Response – Heart disease kills more women every year than breast, lung, colon cancer, stroke and diabetes combined.⁹ There has been an alarming increase of heart disease of 30 per cent in women aged 15 to 34.¹⁰ This startling fact was reported in a March 2001 report from the U.S. Centers for Disease Control and Prevention.

Myth #4 – With state of the art medical care, most people can survive a heart attack.

Response – Unfortunately over 250,000 heart attack victims every year die before they make it to the hospital.¹¹ Angioplasty, an inflated balloon placed in the artery, is performed on over 200,000 people every year, but studies indicate that one-third of these arteries will clog up again within four to six months. By-pass surgery works on extreme cases, but is questionable on most others. Reports from Harvard Medical School found that one-fourth of all by-pass surgeries were unnecessary.¹²

Myth #5 – Heart disease only affects older people.

Response – The alarming increase of heart disease among younger people was covered earlier in this article. There is a direct correlation between this increase in heart disease in young people and the reduction of physical activity as well as poor eating habits, which have also contributed to an epidemic of childhood diabetes. Most people under the age of 40 probably don’t even think about being tested for the presence of heart disease.

Myth #6 – There will be plenty of signs that will tell me if I am having a heart attack long before it happens.

Response – Many people cannot tell the difference between indigestion and a heart attack. About 25 per cent of all heart attacks produce no symptoms that would adequately warn the victim.¹³

Myth #7 – If I do get some indicators of heart disease, I know there are medicines that can help me.

Response – Over the past 50 years there have been many valuable medicines and drugs developed that have saved lives. Unfortunately the drug industry sometimes pushes medications into the marketplace before they have been adequately tested. Also, we are the only developed country where prescription drugs can be advertised to the public. The profit motive has caused many premature deaths and illness from unsafe drugs.¹⁴ A good example is the stain drugs used to lower cholesterol which can actually cause heart attacks in some cases because they deplete the body of CoQ10, a key nutrient needed by the heart.¹⁵

One of the main reasons that these myths and misconceptions are allowed to persist is the fact that so much money is being made by the drug companies and the medical establishment.

The health care system has created a protective shield around the tools, techniques and products produced or used by cardiologists and drug companies. If the science behind the value of nutrition, exercise and supplements was given the emphasis that it should be given, the income and profits of these participants would be at great risk.

III. What Really Causes Heart Disease?

Heart disease, like cancer, is not a single disease, but rather many diseases or factors that all contribute to cause a single life-threatening event. Genes can certainly play a role, but as Dr. Jeffrey Bland has pointed out in his book *Genetic Nutritioneering*, Genes only account for about 10 per cent of the primary risk factors for heart disease.¹⁶ Only 10 per cent of the population is genetically predisposed to have elevated blood cholesterol as a result of dietary intake of cholesterol. Also, only 10 per cent of the population is predisposed genetically to high levels of homocysteine, another marker for potential heart disease.¹⁷ Several studies have now confirmed that cholesterol is like a fire alarm; it doesn't cause the fire, it just alerts us that there is one, and we need to find the cause.

Cholesterol and homocysteine are not the only markers of the potential for heart disease. Each of the following indicators has also been shown to have a significant correlation to the risk of cardiovascular disease:

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|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <ul style="list-style-type: none">• High blood pressure• Elevated triglycerides• Elevated C-reactive protein• High fibrinogen levels• Low testosterone levels• Chlamydia infection | <ul style="list-style-type: none">• High glucose levels• High insulin levels• High iron levels• Low levels of antioxidants• Elevated serum amyloid• Helicobacter pylori infection |
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The two primary causes of heart disease would appear to be biochemical imbalances in the body brought on by nutritional deficiencies and free radical damage caused by exposure to chemicals, toxins and radiation.

The Steps of Endothelial Dysfunction

Many heart attacks are caused by the formation of plaque in the arteries but how does that plaque begin to form in the first place? The previously mentioned influence of free radicals and nutritional deficiencies play a key role in the formation of this plaque. The endothelial lining is the innermost lining of our arteries that protects the soft muscle underneath it and provides the smooth slippery surface that facilitates the easy flow of blood to our organs and muscles. The following steps represent one theory about the formation of arterial plaque which is backed by many scientists.

1. The endothelial lining becomes damaged by exposure to free radicals caused by environmental pollutants, cigarette smoke, stress, high blood pressure, elevated levels of oxidated serum cholesterol or other oxidizing agents traveling in the blood stream. If there were sufficient antioxidants and other nutrients circulating in our arteries and present in our cells, this damage would be greatly minimized.
2. Lipids (such as cholesterol) accumulate at the torn or broken endothelial, perhaps as an initial effort to seal the damaged area.
3. These lipids oxidize and macrophages (white blood cells) are dispatched by the body to consume these fat cells (lipids).
4. Smooth muscle cells behind the endothelial move towards the damaged area to also scavenge fat cells and seal off the area.
5. Inflammation occurs due to the irritation to the area and the accumulation of white blood cells.
6. The smooth muscle cells produce collagen to help create a cap or strong cover for the injury.
7. Calcium circulating in the blood attempts to harden this cover because that is calcium's job.
8. This accumulation of lipids (cholesterol), collagen and calcium begins to form a bump or protrusion in the artery which is not as smooth as the original endothelial lining.
9. Pressure builds on either side of the plaque that can cause further ruptures and the formation of more plaque that can eventually create a blockage.
10. If this blockage becomes large enough, it can obstruct the flow of blood to the heart causing a heart attack or to the brain causing a stroke.

This formation of plaque can begin when we are teenagers and grow very gradually over many years. Since inflammation is one of key factors in this plaque formation process, one of the best markers that damage may be occurring would be the level of C-reactive protein in our blood, since that is a marker for inflammation. A blood test with all of previously mentioned risk markers would be the best way to measure any risk of cardiovascular disease. However, given the restrictions on cost, many progressive cardiologists are opting for the following test profile:

- Blood pressure ▪ Cholesterol ▪ C-reactive protein ▪ Homocysteine ▪
▪ Triglycerides ▪

While there is currently no full-proof risk test, these five tests should be the new minimum standard for the testing of every male over the age of 40, and every female over the age of 50.

A Prevention Strategy for Cardiovascular Disease

Nutrition

Everyone agrees that nutrition plays a critical role in preventing as well as treating cardiovascular disease. A majority of people seem to know what they should eat but are unable to change their existing eating habits. There are reasons for this, and successful ways to overcome these eating behavior barriers. However, the first step is to identify the best and worst foods for cardiovascular health. The following specific lists are based on foods that have the highest level of nutrient density, which means high in fiber, protein, vitamins, minerals and healthy fats while being low in unhealthy fats, sugar and processed ingredients.

The Healthiest Foods

- Green leafy vegetables
- Broccoli
- Cabbage
- Peppers
- Sprouts
- Onions
- Cauliflower
- Asparagus
- Carrots
- Red grapefruit
- Curry
- Cod
- Sole
- Tuna
- Trout
- Salmon
- Haddock
- Sardines
- Navy beans
- Soybeans
- Cinnamon
- Wheat germ
- Whole grain
- Oats
- Buckwheat
- Wholegrain rice
- Split pea
- Tomato
- Pumpkin
- Beets
- Flax
- Garlic
- Oranges
- Berries
- Apples
- Kiwi
- Cherries
- Apricots
- Cantaloupe
- Yogurt
- Seeds
- Pears
- Mustard

Good-Acceptable Foods

- Turkey/chicken
- Walnuts/almonds
- Zucchini
- Watermelon
- Pineapple
- Banana
- Grapes
- Celery
- Eggs
- Squash
- Papaya
- Avocado
- Low-fat milk/cheese
- Cottage cheese
- Pasta
- Red wine

Less Healthy Foods

- Canned vegetables
- Dried fruit
- Canned fruit
- Olives
- White potato
- Catfish
- Shrimp
- Lobster
- Clams
- Beef
- Duck
- Coffee
- Chocolate
- Peanuts/cashews
- Raisins
- Butter
- Corn chips
- Crackers
- Regular milk/cheese
- Peanut butter

Unhealthy Foods

- Bacon
- Pizza
- Commercial cereals
- White rice
- White wheat
- Mayonnaise
- Smoked ham
- Prime rib
- Sausage
- Hot dogs
- BBQ ribs
- Honey/molasses
- Soft drinks
- Cake/cookies
- Ice cream
- White wine
- Beer
- Desserts
- Sweet corn
- Pancakes/waffles
- Salami
- Bologna
- Pickles

While every food is not covered on these lists, there are enough to establish clear guidelines for healthy eating. These suggestions are also suitable for people who want to avoid nearly any other disease, including cancer, diabetes, arthritis, digestive problems and brain related problems. In terms of healthy oils, preference should be given to olive oil, sesame oil, borage oil, flax oil, fish oil, primrose oil, hemp oil and lecithin oil.

As a general rule it is advisable to eat approximately 80 per cent of your diet from the healthy or acceptable food lists. In those situations when someone has a serious cardiovascular challenge (i.e. a previous heart attack, or high risk numbers) it would be advisable to eat 100% of your diet from the healthy food list if possible.

Barriers to Eating Healthier

It is not easy to follow the nutritional guidelines just outlined as we know from surveys and deteriorating health status. There are significant barriers to eating right that need to be addressed if people are going to make and sustain changes in their eating habits.

1. You think you are already eating healthy. The Centers for Disease Prevention and Control reports that only one per cent of the population gets all of the nutrients they need everyday. You can't afford to take the chance that you are not eating as healthy as you should. Earlier in this article there were two tests you can take to determine if could eat better and live a healthier life. Start by taking these tests. There were also lists of healthy

and unhealthy foods provided. Review them and determine if you are eating 80 per cent from the healthy lists.

2. You grew up eating and liking certain foods and find it difficult to change. Taste preferences can be altered in about 2 weeks. You need to find healthy and tasty replacements for the less healthy foods you eat. For example, switching from whole milk to 2 per cent milk should take about 2 weeks to get used to. Switching from beef burgers to turkey burgers (use dark meat) would be about the same timeframe. If you like ice cream at night, switch to low fat yogurt with fruit or walnuts in it. Everything you are eating has a potentially healthy replacement. Find these replacements and make them one at a time.
3. You suspect that you may have a food addiction. If you are addicted to sugar or caffeine, the answer may be in your brain. Your neurotransmitters may need to replace these negative stimulants with some positive ones. You need to eat more tryptophan rich foods like turkey, almonds, cottage cheese and scrambled eggs. The tryptophan will convert to serotonin which will replace the cravings for sugar or caffeine gradually. Exercise also produces endorphins that help the brain with cravings.
4. You don't have very healthy foods around you at work. This is a common problem which is usually resolved by taking your food to work with you. It takes time, but not as much time as a heart attack will take from you. Five or ten minutes at night or in the morning is all you need to make a healthy sandwich, a salad or some snacks (fruit, veggies, nuts, seeds). Eating 3 healthy meals and 2 snacks will give you energy, help you lose weight if you need to, and keep your immune system strong.
5. You just don't like certain foods that you know are good for you. Some people have a resistance to certain foods, such as vegetables. One way to resolve this is to learn how to cook vegetables in different ways to make them tastier. As a last resort, buy a good green drink or powder that you can drink everyday. You must get the nutrients available from vegetables and food based sources like powders and drinks are a good way to do this.
6. You love your beef and you just don't want to give it up. This is not uncommon, especially among men. One answer is to buy leaner cuts of meat and eat them less frequently. Another is to take supplements such as digestive enzymes to help with digestion and lecithin to help with the neutralizing of fats. Cutting back is still the most desirable strategy.

The Importance of Exercise

Exercise is also something that everyone agrees is vitally important to the prevention of and the recovery from cardiovascular disease. And yet, like nutrition, many people find it very difficult to find enough time and motivation to exercise on a regular basis. There are many

reasons why exercise is important for anyone who wants to reduce their risk of cardiovascular disease:

1. Blood flow Exercise, especially aerobic exercise, helps to prevent the formation of blood clots and blockages by pushing blood through the arteries under increased pressure.
2. High blood pressure Exercise helps to reduce the chance of high blood pressure by keeping arteries strong and flexible due to the periodic expansion necessary to increase blood flow.
3. Good cholesterol Exercise helps the body to produce more HDL Cholesterol which is the good cholesterol that removes fat from the body
4. Stronger heart Exercise is necessary for every muscle in the body and the heart is the most important muscle of all. Regular aerobic exercise and strength training ensures that the heart muscle is strong enough to pump blood efficiently for many years.
5. Stress and depression Exercise produces endorphins in the brain which help to counteract the cortisol produced by stress and emotional fluctuations. Cortisol is a hormone that acts like a free radical in the body and is especially harmful to arteries.
6. Weight control Exercise helps to burn calories, especially during aerobic exercise. In the case of strength training, more muscle is formed and muscle burns 400% more calories than fat does.
7. Glucose control Exercise increases the number of insulin receptors on our cells as well as the sensitivity of these receptors. That means that circulating glucose is taken into the cell to be used as energy instead of circulating in the arteries, where it can cause damage, or being stored as fat.
8. Cravings and addictions People who exercise regularly are less inclined to smoke, drink alcohol or be addicted to food because they are producing endorphins which help to control the cravings in our brain.
9. Metabolism People who exercise regularly usually have a faster metabolism which means waste products are moved more quickly through the intestines. Keeping these toxins to a minimum allows the immune system to focus on dealing with the free radicals that inevitably enter our bodies in the air we breathe, the food we eat, the water we drink or through the exposure to radiation from computers, cell phones and televisions.
10. Detoxification The skin is our second most important detoxification organ after the liver. Exercise causes toxins to leave the body through our skin, thus reducing the amount of toxins that need to be processed by the liver.

11. Temperature Exercise produces heat in the body which helps to reduce the number of germs because they are sensitive to heat and die off at a faster rate.
12. Sleep Exercise helps the body and the brain to relax better and achieve a deeper level of sleep. The body needs adequate sleep to restore itself in a process known as homeostasis.

Exercise is not something to be undertaken without forethought and planning. If you have an existing health condition, you need to get your doctor's approval before beginning any exercise program. Some medications do not respond to exercise so that is another reason to proceed with caution if you are under a doctor's care.

Even if you are in generally good health, you should be careful about developing an exercise program that is right for you. For people who can afford it, a personal trainer is often an excellent idea because they can help you to exercise safely and ensure that you get the best results. If you cannot afford a personal trainer, read up on exercise or get some advice at your gym. You need to make sure you have the right equipment, eat the right foods, do your exercises in the correct sequence and change your routine periodically. Exercise can be more powerful than any vitamin if it is done correctly.

Why supplements are Critical in Preventing and Treating Cardiovascular Disease

Conventional medicine uses a variety of strategies to treat cardiovascular disease, including bypass surgery, angioplasty and drugs such as beta blockers, calcium channel blockers, ACE inhibitors, vasodilators and diuretics. These strategies have had some success but have been increasingly challenged on the basis of long term effectiveness. The primary flaw, as seen by medical researchers, is that many of these strategies are based on very limited scientific evidence.¹⁸ One of the reasons that these conventional strategies don't work can also be traced to the fact that they do not address the actual cause of the health problem, but rather the quick relief from prevalent symptoms.¹⁹

Fortunately orthomolecular medicine (based on nutritional science) has found several nutritional strategies that address both the symptoms and the causes of cardiovascular disease. They sometimes take a little longer to get the desired results, but they are usually much less expensive, have dramatically fewer negative side effects and often address other health issues at the same time. In this section we will cover the nutritional supplements which have the scientific or clinical evidence, as well as the actual results proven in hospitals and medical practices.

CoEnzyme Q10 – Has been shown to lower systolic blood pressure up to 25 points²⁰ and nonfatal infarction by 50 per cent²¹. In other studies, CoQ10 has been shown to strengthen the heart muscle producing improved breathing and reduced edema and palpitations.²² (50-120 mg/day was used in these studies)

Omega 3 – Fatty Acids – These healthy fats can have a significant impact on lowering several important markers for cardiovascular disease. In the case of triglycerides, one study confirmed an average 64 per cent reduction. This same study showed a reduction of fibrinogen by 23 per cent, blood pressure by 9 per cent, and total cholesterol by 8 per cent. The upside for cholesterol was the increase in HDL cholesterol (the good one) of 21 per cent.²³ Dr. William Davis achieved an astounding reduction in cholesterol in one patient from 594 to 144 in just a few months using 2700 mg of fish oil per day.²⁴

Vitamin E – A study that used 100-250 IU of vitamin E in a group of nurses and doctors realized a 30-40 per cent reduction in heart disease over a four- to eight-year period.²⁵ It achieves this benefit by reducing platelet aggregation, LDL cholesterol oxidation and hypertension.

Vitamin B (folic acid, B6, B12) – A reduction of homocysteine levels of 35 per cent has been achieved when using these three types of vitamin B in combination.²⁶ These B vitamins help the body to metabolize homocysteine to a useful substance. Dr. Victor Herbert has petitioned the FDA to require bread makers to supplement their flour with higher levels of these B vitamins with an estimated result of 20 per cent reduction in heart attacks, 40 per cent reduction in thrombotic strokes, and a 60 per cent reduction in venous thromboses.²⁷

Vitamin C – A very significant study of vitamin C was done at UCLA in 1992. In this study, men who took 800 mg of vitamin C daily, lived 6 years longer than the men who took the FDA's recommended amount of 60 mg/day. The study evaluated 11,348 participants over a 10 year period and also showed a 42 per cent reduced mortality from cardiovascular disease. The study was published in the *Journal of Epidemiology*.²⁸

Magnesium – This mineral is involved in over 300 biochemical reactions in the body and plays an important role ensuring that the heart muscle and the arterial muscles are able to relax and dilate properly. Magnesium has been shown to be able to lower blood pressure by about 10 per cent, as well as reduce cholesterol and triglycerides.²⁹

Selenium – This essential trace mineral helps to reduce the oxidization of lipid hydroperoxides, thus protecting the endothelial cells in our artery lining. Selenium has been shown in studies to reduce LDL cholesterol levels by as much as 50 per cent.³⁰

L-Carnitine – This amino acid plays a crucial role in protecting the function and health of endothelial cells which make up the lining of our arteries. In one study, researchers found that 22 per cent of angina patients given L-carnitine became angina free during the study.³¹ A special form of L-carnitine called propionyl-L-carnitine appears to be even stronger than regular L-carnitine.³²

Curcumin – This yellow pigment of the spice turmeric reduces cholesterol by interfering with intestinal cholesterol uptake. It also prevents abnormal blood clot formation. In one

study, total cholesterol was reduced by 11.6 per cent and HDL cholesterol (good cholesterol) was increased by 29 per cent in just 11 days. The study appeared in the *Indian Journal of Physiology* in 1992. Curcumin also has very strong anti-inflammatory properties.

Policosanol (with a blend of hawthorne, garlic, grapeseed extract, N-acetylcysteine, and alpha lipoic acid) – This proprietary formula from Enzymatic Therapy reduced triglycerides by 30 per cent while increasing HDL cholesterol by 11 per cent. It is even more effective on people with low HDL cholesterol, increasing HDL cholesterol by 23 per cent and reducing triglycerides by 40 per cent.³³

Pantethine – At 200 mg/day, pantethine was able to lower LDL cholesterol by 20 percent while increasing the ratio of HDL to LDL cholesterol by 25 percent.³⁴

Guggelipid *The Indian Journal of Medical Research* reported on a placebo group study where serum cholesterol levels were lowered by 21.75 per cent and triglyceride levels by 27.1 per cent in just 3 weeks using guggelipid. (1988, 87: 356-60).

Red Yeast Rice – In one randomized controlled study, patients were given 2.4 grams of red yeast rice per day, resulting in a reduction of 18 per cent in cholesterol levels in just 8 weeks.³⁵

These are just a few of the nutritional supplements for which there is strong scientific evidence of efficacy in the prevention and treatment of cardiovascular disease. Some additional supplements you may want to consider are:

- Lecithin
- Garlic
- Quercetin
- Green tea
- L-arginine
- Alpha lipoic acid
- N-acetylcysteine
- Flax seed oil
- Chromium
- Lycopene
- Artichoke leaf
- Pomegranate
- Bromelain
- Ginger
- Glutathione
- Zinc
- Cayenne
- Lutein
- Phosphatidyl choline
- Bioflavonoids
- Gingko biloba
- Potassium
- Niacin
- Taurine
- Bilberry
- Pycnogenol

All of these nutritional supplements have scientific evidence behind them, and many have been proven to be more effective than the prescription drugs or surgery used by conventional medicine. You may ask why the medical profession is not using these natural methods of preventing and treating cardiovascular disease? The answer is some doctors are. If you can find a Holistic Medical Doctor who has gone to school beyond medical school to learn about these nutritional supplements, you will get this kind of advice in addition to the conventional medical approaches. If you cannot find such a doctor, then perhaps it is time to ask your doctor why he or she has not informed you about these safe and scientifically proven options.

Why Supplementation is Necessary

Your doctor may tell you that nutritional supplements are not necessary and have not been proven scientifically, but he or she would be terribly wrong on both counts.

- The Need for Supplements – Dr. Bruce Ames one of the world’s leading nutritional scientists has found that when cells fall short of any one of a handful of nutrients, there can be severe genetic damage to those cells. This cellular damage can lead to cancer, heart disease and many other diseases.^{xxxvi} The Centers for Disease Control reports that over 90 per cent of Americans are deficient in at least one key nutrient. To be specific, the U.S. Department of Agriculture’s Dietary Guidelines Scientific Advisory Committee reports that a majority of adults are deficient in vitamin A, vitamin C and magnesium. And, more than half don’t get enough calcium, vitamin E, fiber or potassium.^{xxxvii} It’s certainly not because we don’t have enough to eat. We just aren’t eating the right things and even if we did, there is solid evidence that the food in most stores is deficient by as much as 60-80 per cent of the vitamins and minerals they should have in them due to depleted soil, transportation and storage time, the use of pesticides, processing and cooking.^{xxxviii} The next time someone tells you that you don’t need nutritional supplements, remind him or her of these facts and then make a decision to find the supplements you need and take them on a regular basis,
- Where is the best science? According to an editorial in *The British Medical Journal*, only 15 per cent of medical treatments are supported by solid scientific evidence. Dr. David Eddy, one of the leading medical researchers in the world, confirms that this is true in the United States as well. This percentage may have risen over the past 5-10 years to 20 or 25 per cent, but not much higher.^{xxxix} So the medical profession is guessing most of the time, while ignoring treatments that really work and have the science to prove it.

There are many examples of this unwillingness to accept new evidence and natural treatments.

Case #1 Vitamin E as a way to prevent and treat heart disease was identified by Dr. Evan Shute in 1947. It took about fifty years to accept his findings and they are still disputed in spite of hundreds of validating studies. How many lives have been lost due to this resistance to change?

Case #2 Around 1970, Dr. Kilmer McCully suggested that homocysteine could trigger heart disease. Through additional research in the lab and with patients, he found further connections with homocysteine and spinal bifida, dementia and other illnesses. He started to treat patients with a combination of folic acid, vitamin B6 and vitamin B12 with amazing results. It took the medical profession 30 years to accept his findings with an estimated cost of 1.5 million lives lost unnecessarily.

Case #3 The medical profession treated peptic ulcers for 80 years as if they had been caused by stress, alcohol or a high fat diet. This belief was passed on as science until Dr. Barry Marshall found a connection between the H. pylori bacterium and ulcers. However, it took twelve years before the medical profession bought in to the better science that Dr. Marshall had conducted.^{x1}

These are just a few of cases where the medical community has missed an opportunity to make significant steps forward in the prevention and treatment of serious diseases. While Linus Pauling was trying to show his vast research on the benefits of vitamin C, the drug industry was hastily approving things like Vioxx and Hormone Replacement Therapy, which proved to be less than credible medicines. We can no longer afford to tolerate this resistance to the many nutritional strategies for the prevention and treatment of cardiovascular disease that have outstanding scientific evidence behind them. As patients, employees and taxpayers, we should insist that Orthomolecular Medicine be given its rightful place within our health system.

¹ Canada News Wire, "Diet Affects Heart Attack Risk: An Apple a Day Really Can Keep The Doctor Away." Life Extension Daily News. October 24, 2006.

¹ Balch, J., Balch, P., Prescription for Nutritional Healing. Avery. New York, p. 187, 2000/

¹ Brownell, K.D. Food Fight. Contemporary Books. New York, p. 3, 2004.

¹ Holford, P. The Optimum Nutrition Bible. The Crossing Press. Freedom, California, pp. 2-3, 1999

¹ MacWilliam, L. Comparative Guide to Nutritional Supplements. Northern Dimensions Publishing. Vernon, British Columbia, Canada, p. 10, 2003.

¹ MacWilliam, L. Comparative Guide to Nutritional Supplements. Northern Dimensions Publishing. Vernon, British Columbia, Canada, p. 10, 2003.

¹ A Scribe Newswire, "Study Identifies Basic Link Between Age, Cardiovascular Disease." Life Extension Daily News. November 3, 2006.

¹ Bland, J.S., Genetic Nutritioneering: How You Can Modify Inherited Traits and Live a Longer, Healthier Life. Keats. Lincolnwood, Illinois, p. 33, 1999.

- ¹ Rowland, D.W., *The Nutritional Bypass: Reverse Atherosclerosis Without Surgery*. Rowland Publications. Parry Sound, Ontario, Canada, p. 18, 1999.
- ¹ Garrick, L., "The Road to a Healthy Heart." www.onlinemag.com. Vol. 7, No. 1, p. 55, 2006.
- ¹ MacWilliam, L., *Comparative Guide to Nutritional Supplements*. Northern Dimensions Publishing. Vernon, British Columbia, Canada, p. 10, 2003.
- ¹ Garrick, L., "The Road to a Healthy Heart." www.onlinemag.com. Vol. 7, No. 1, p. 55, 2006.
- ¹ Ornish, D., *Reversing Heart Disease*. Ballantine Books. New York, pp. 52-53, 1990.
- ¹ Garrick, L., "The Road to a Healthy Heart." www.onlinemag.com. Vol. 7, No. 1, p. 55, 2006.
- ¹ Lundberg, G.D., *Severed Trust: Why American Medicine Hasn't Been Fixed*. Basic Books. New York, p. 152, 2000.
- ¹ Faloon, W., "Cardiologists Overlook Lifesaving Discovery". *Life Extension*. February, p. 13, 2004.
- ¹ Bland, J.S., *Genetic Nutritioneering: How You Can Modify Inherited Traits and Live a Longer Healthier Life*. Keats. Lincolnwood, Illinois, p. 146, 1999.
- ¹ Bland, J.S., *Genetic Nutritioneering: How You Can Modify Inherited Traits and Live a Longer Healthier Life*. Keats. Lincolnwood, Illinois, p. 151, 1999.
- ¹ Casey, J., "Medical Guesswork: From Heart Surgery to Prostate Care, the health industry knows little about which common treatments really work". *Business Week*. May 29, 2006.
- ¹ Woolf, S.H., *JAMA*, 282, 2358, 1999/
- ¹ Burke, BE et al. Randomized double-blind, placebo-controlled trial of coenzyme Q10 in isolated systolic hypertension. *South Med J*. 2001 Nov. 94 (11):1112-7.
- ¹ Singh RB et al. *Cardiovasc Drugs Ther* 1998; 12:347-53.
- ¹ Lampertico M, Comis S. Italian multicenter study on the efficacy and safety of coenzyme Q10 as adjunct therapy in heart failure. *Clinical Investig*. 1993; 71(8 suppl): S129-33.
- ¹ Haglund O, Luostarinen R, Wallin R, Saldeen T. Effects of a new fluid oil concentrate, Eskimo-3, on triglycerides, cholesterol, fibrinogen and blood pressure. *J Intern Med*. 1990 May; 227(5): 347-53.
- ¹ Davis, W., "Broad Spectrum Cardiac Protection With Fish Oil". *Life Extension*. September, pp. 38-42, 2006.
- ¹ Bland, J.S., *Genetic Nutritioneering: How You Can Modify Inherited Traits and Live a Longer Healthier Life*. Keats. Lincolnwood, Illinois, p. 150, 1999.
- ¹ Dierkes J, Kroesen M, Pietrzik K; "Folic Acid and Vitamin B6 Supplementation and Plasma Homocysteine Concentrations in Healthy Young Women". *IntJ Vit Nutr Res* 68: 98-103, 1998
- ¹ Bland, J.S., *Genetic Nutritioneering: How You Can Modify Inherited Traits and Live a Longer Healthier Life*. Keats. Lincolnwood, Illinois, P.155, 1999.
- ¹ Segula, M., *Disease Prevention and Treatment: Scientific Protocols That Integrate Mainstream and Alternative Medicine*. Life Extension Foundation. Hollywood, Florida, p. 73, 2000.

- ¹ Altura, B.T. and Altura, B.M., 1995 Scientific American. May/June issue: 28-36.
- ¹ Hussein, O., Rosenblat, M., Refael, G., Aviram, M.: Dietary selenium increases glutathione peroxidase and reduces enhanced susceptibility to lipid peroxidation of plasma and low density lipoprotein in kidney transplant recipients. Transplantation 63: 679-685, 1997.
- ¹ Cherchi A., Lai C., Angelino F., *et al.*, Effects of L-carnitine on exercise tolerance in chronic stable angina. A multi-center, double blind, randomized, placebo-controlled crossover study. Int J Clin Pharmacol Ther Toxicol 1985; 23: 569-572.
- ¹ Brevetti G., Perna S., Sabba C., *et al.*, Superiority of L-propionylcarnitine vs. L-carnitine in improving walking capacity in patients with peripheral vascular disease: an acute, intravenous, double-blind, crossover study. Eur Heart J. 1992 Feb; 13(2): 251-5.
- ¹ Varady, KA, Wang Y, Jones, PJ. Role of policosanols in the prevention and treatment of cardiovascular disease. Nutr Rev. 2003; 61 (11): 376-83
- ¹ Arsenio L, Bodria P, Magnoti G, Strata A, Trovato R. Effectiveness of long-term treatment with pantethine in patients with dislipidemias. Clin Ther. 1986; 8: 537-544/
- ¹ Heber D, Yip I, Ashley J.m., *et al.* Cholesterol lowering effects of a proprietary Chinese red yeast dietary supplement. American Journal of Clinical Nutrition. 69: 231-236, 1999.
- ¹ Jaret, P., "The Ames Prescription". Alternative Medicine. June, p. 76, 2005.
- ¹ Jaret, P., "The Ames Prescription". Alternative Medicine. June, p. 77, 2005.
- ¹ Pace, M., "Vegetables Without Vitamins". Life Extension. March, pp. 28-33, 2001.
- ¹ Casey, J., "Medical Guesswork: From Heart Surgery to Prostate Care, the health industry knows little about which common treatments really work". Business Week. May 29, 2006.
- ¹ Marshal B., Mc Callum R.W., Guerrant R.L. (Ed.). Helicobacter Pylori in Peptic Ulceration and Gastritis. Blackwell Science, Inc. Malden, Mass., 1991.

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