## James L. Holly, M.D.

"Managing Cardiac Risk Factors" Your Life -- Your Health The Examiner December 14, 2000 by Mark A. Wilson, M.D. Medical Director Southeast Texas Medical Associates, LLP

Cardiac disease is still the number one killer in America. 50% of the people that have their first heart attack die before they get to the hospital. Prevention is the only treatment. You have heard it before, and you are going to hear it again: prevention is your only chance for survival. If you can lessen your chance to develop coronary artery disease, you can lessen your chance for heart attack. The first two things every person who wants to prevent coronary artery disease can do is:

- Quit smoking. The greatest cause of heart attacks is smoking. I cannot say enough about quitting smoking. Everyone knows it. Do whatever it takes. Talk to your doctor; get Zyban; take the Nicotine patches, but pick a stop date and "Quit Smoking." On the other hand, if you want to help some cardiologist put his kids through school; keep on smoking. Eat Healthy. It is time that you treated your body like a temple. If you fed a dog what you eat, you would probably be put in jail for cruelty to animals. You should eat like an athlete: low fat, plenty of fruits and vegetables, at least 5 least five servings a day. Avoid large quantities of carbohydrates, unless you are doing lots of aerobics.
- Eating health will naturally result in losing weight. But losing weight is a state of mind that you have to maintain every day, not just Monday through Friday, after which, you pig out on the weekends. You should not eat to reward yourself. If you are eating to reward yourself, you may be treating depression with food. Food is a reward you give to dogs, not people. Unfortunately, we have associated all forms of entertainment with food: the backyard barbecue, celebrations, power lunches, etc. Since food always seems to be the center of our social life, we have to be very careful what kinds of food we pick. Be careful you don't poison yourself everyday with foods high in cholesterol.

To eat healthy, you must also understand what a "Lipid Profile" is. A "Lipid Profile" consists of a total cholesterol, high density lipids, low density lipids and Triglyceride. Our

goal is for the high density lipids to be above 40 and the low density lipids to be under 160. If you have coronary artery disease, we want the low density lipids to be 100 or less.

Imagine the wall of your room as the wall of an artery in your body. Imagine high density lipids are the same as a baseball. If you throw a baseball against the wall, it will bounce off. Imagine low density lipids to be putty. If you throw putty against the wall, it will stick. This is what happens when you get too much low density lipids in your bloodstream, they stick to the walls of your arteries causing narrowing of the artery. Eventually, these plaques become ulcerated and break loose, causing acute obstruction of blood flow. Subsequently, the lack of blood flow causes muscle injury to the heart resulting in a heart attack. Remember, if you eat grease, it will flow in your blood stream and attach to the walls of your arteries of your heart.

In America, we are happy if we reach the average cholesterol risk of HDL / Cholesterol ratio of 1:4. For example an HDL of 50 and a total Cholesterol of 200. This gives us the same risk as the average dumb American who eats pork chops, chilidogs, and barbecue. In Japan, the average HDL/Cholesterol ratio is 1:2 or 1:2.5. Aerobics and high fiber foods lower your cholesterol and raise your HDL, thus lowering your risk of coronary artery disease.

Unfortunately, we can't pick foods that have high HDL and low LDL, but soybean is probably the closest food with the ideal ratio. Tofu has proven to lower the risk of cardiovascular disease. Tofu is essentially soybean. Soybean is a protein which is proven to lower cholesterol by 20 points. Every point of cholesterol lowering, accounts for 2-3 percent decrease in risk of cardiovascular disease. Tofu is also proven to be helpful in lowering the risk of cancer.

Vitamins have proven to be helpful in addition to over-the-counter medications in the prevention of cardiac disease. If you are 45 or above, check with your doctor as to whether you should be on a baby aspirin a day. If you don't have an allergy to aspirin or a stomach ulcer, you can start today. Aspirin prevents a "blood clot" from forming and those blood clots can cause a heart attack. 400 units of Vitamin E twice a day has proven to be protective of your heart, also. 800 mcg of folic acid a day has proven to lower homocystine levels. Homocystine causes atherosclerotic plaque generation in the vascular system. Aspirin, Vitamin E and Folic Acid are medications you can get over-the-counter to lower your risk of cardiovascular disease.

The third thing you can do to help reduce your risk of heart disease is to Exercise. My partner, Dr. Larry Holly, has lost over 50 lbs by walking and staying on a low carbohydrate diet. If he can do it, you can, too. If you are walking less than 9 miles a week, you never get your motor revved up enough to do you any good. If you walk over 25 miles a week you probably are going to hurt your hips or your knees. Walking is 80% as effective as running and is associated with far fewer exercise-limiting injuries.

Unless you are just crazy about running, focus on walking. Get a good pair of tennis shoes to protect your feet. Your tennis shoes will probably last 6 months before they will

need to be replaced, if you are serious about walking. Start slow. I usually recommend that people start walking 3 miles a week and after the first month go up 10-20% every month. For example, if you are walking 4 miles a week for the first month, you can walk 4.4 miles to 4.8 miles a week the second month; the third month you will walk approximately 5-6 miles a week and so on.

The key is to avoid an injury. If you try to do too much too soon, you will hurt your ankle or your knee and you will quit walking, which will put you back to ground zero. First, check with your doctor to make sure that you are capable of doing a walk. We all know stories of people who got back into exercise programs and were later found on the side of the road with a stroke or heart attack. They had pushed themselves too fast and too hard. Do not get frustrated about trying to walk everyday. Count the number of miles you walk in a week. Like everything else in life, you will have good days and bad days. There will be days when it rains, and there will be days when you work late. There will be some days that you get off early and you have time on your hands, and the sun is shining.

What you want to do is average out the number of miles you walk in a week. Some days you will have long walks, some days you will have short walks. Be sure you walk in a protected environment and in a well-lighted area. For example, do not walk on busy thoroughfares at night during times of high traffic, unless you like to live dangerously.

If you do have a family history of cardiac disease:

- Make sure you have a routine check up with your doctor to check your B/P and Lipid Profile.
- Get a stress test, if necessary.
- Avoid fatty foods and smoking.
- Keep your weight down.
- Start a walking program.
- Don't take chances.
- Control your environment.
- Don't smoke.
- Eat high fiber.
- Take your aspirin, Vitamin E, and Folic acid.
- Walk everyday.
- Treat your body like a temple.

The fourth thing you can do to prevent cardiac disease is to Reduce your stress. Everyone has heard about avoiding stress. It is easier said than done. The better thing to do is to figure out how to deal with stress. 20 minutes of exercise works to reduce the neurohormonal transmitters in the brain such as norepinephrine. It would normally take your body 2 hours to reduce these neuro transmitters. Exercise is a proven way to reduce stress. Do not eat if you are stressed. You should exercise instead. Maybe you need to change your lifestyle if stress causes you to do unhealthy things.

The classic example of a walking heart attack is an overweight 45-year-old male, high stressed, who smokes, has diabetes, hypertension, and elevated cholesterol, with a strong family history of heart disease. If you meet all of these criteria you better get your stress test and do it now before you have chest pain. You may not make it to the hospital if you wait too long.

If you are lucky, if you are extremely lucky, you have not inherited the gene for coronary artery disease. Remember, heredity is only 50% of the problem, environment is the remainder. Heredity is the trigger on a gun and the environment is the finger that pulls the trigger.

At SETMA, we are prepared to help you achieve the health which you have determined to have. Remember, it's Your Life and it's Your Health.