

Women and Heart Disease

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Heart disease is the number one killer of women. More than 50% of women over the age of 50 will die from this disease. Heart disease in the younger population is primarily considered to be a problem for men, not for women, however by the age of 50 women's death rate escalates to that of men's and then surpasses it.

It is well accepted that female hormones play a protective role for women's hearts. In other words, the same hormones that make women different from men appear to be the most beneficial to their health. Estrogen and progesterone, the female sex hormones that govern the female cycle of ovulation and menstruation are considered the major catalysts in good cardiovascular health. Estrogen and Progesterone in their proper balance protect the female heart during childbearing years by:

- Controlling the amount of fat in the body
- Managing cholesterol levels - high cholesterol levels contribute to building of fatty deposits in the arterial wall, which in turn obstruct blood flow. Acting as vasodilators which act on muscles in arterial walls thus making the arteries wider. Constricted arteries lessen the flow of blood thereby increasing blood pressure.
- Keeping the arterial walls elastic - arterial elasticity permits for compensation, the less elastic the more stringent, increasing the risk for a rupture, otherwise known as a stroke.

Hormonal Imbalance and Heart Disease

Men's cardiovascular problems generally appear to be caused by fatty deposits in the arterial wall, whereas women's arteries are usually clear until menopause. Women's cardiovascular problems are mostly caused by constriction of blood vessels.

During perimenopause, the production of estrogen and progesterone in women starts to decline, this is the same time that cardiovascular problems begin to appear in women. It is common to see a cholesterol spike in women 5 to 3 years before going into menopause. Of course, during and after menopause the production of these hormones declines further, and as a result, the amount of LDL (bad cholesterol) in the blood stream increases. High LDL levels can result in the thickening of arteries and an increase in blood pressure. Reduced amounts of these sex hormones can also increase the number of blood clots, clog arteries, and impair the heart's ability to pump. It is well known that women who enter menopause due to surgical intervention have a much higher risk of heart disease than those who enter menopause naturally or slowly. The major difference here is the slow decrease in hormone production versus a rapid or sudden drop.

Research found that HRT (Hormone Replacement Therapy) does not protect women from heart disease, but actually increases the risk. In fact, The American Heart Association has warned women not to seek hormone replacement as a means of preventing heart disease. Interesting though, when we use the term HRT we mean conventional (synthetic) hormone therapy. However, natural bio-identical hormones can become an invaluable therapy for many patients in the prevention and active treatment of heart disease. The beneficial effects of female sex hormones like estrogen and progesterone on blood vessels is that they help in opening the blood flow to the heart, this effect also serves the same purpose in the brain and protects against stroke. For more expert advice on bio-identical hormones, please visit www.drpettle.com. Hormonal imbalance is one of the major contributors to heart disease and overall health, and should be considered in the prevention of heart disease.

Let's look at other contributing factors of heart disease.

Emotional Quotient : We are all social creatures, the quality of our relationships play a dominant role in our health. The emotional health and a sense of belonging have a great impact on heart disease. People who are unable to effectively manage their stress have a much higher death rate. Close family ties, extended family and support structures all affect our well being, the importance of which are naturally understood by women. Sudden and prolonged emotional stress can and often does result in severe heart muscle weakness. Patients with stress cardiomyopathy (inflammation and weakness of the heart muscle) suffer a sustained surge in stress hormones that temporarily stun the heart.

The connection of the Mediterranean diet to a low incidence of heart disease may actually have more to do with the family connection than it does to the food portion of the diet. The extended family or "immigrant experience" versus the North American suburban sedentary, car oriented lifestyle may be a huge factor in heart health. In an extended family situation, the immediate as well as the extended family gather together for dinner, sharing not only their meals together, but also talking together, making jokes, laughing, sharing their problems, even consoling

each other on their misfortunes. After dinner, they tend to go out for strolls together. Eventually, as people become more affluent they tend to move to the suburbs and become more isolated, eating alone or watching TV as they eat.

They have no one to stroll with anymore, and tend to drive to the nearest grocery store, rather than walk to the local market. This type of a lifestyle leads to more alienation to the point that they now need to pay to a therapist just to have someone listen to their problems. Obviously, it's not just the diet anymore it's the lifestyle that kills people.

Obesity – Now, it's the same lifestyle that leads to obesity as well. The more abdominal fat one has the higher the heart disease risk. There is a simple explanation – the more adipose (fat) tissue, the higher the estrogen production. It is well known that estrogen dominance will interfere with thyroid function; low thyroid function causes weight gain leading to more estrogen and thus the cycle continues. In addition, estrogen dominance and low functioning thyroid will increase the chances of inflammation which is another contributing factor in heart disease. On the other hand, lean muscle tissue does not have the same estrogen causing effect as fat does.

Inflammation – It is well known that inflammation is one of the most important contributing factors in the build up of plaque. C Reactive Protein (CRP) levels are measured by a blood test to verify inflammation, with high levels being a predictive indicator of developing a heart attack. An inflammatory response is generated when undigested proteins enter the bloodstream. The body's immune system reacts which results in an inflammatory response and histamine release (ie, an allergic reaction).

Hypertension – Anyone can develop high blood pressure, but some people are more at risk than others. Men have high blood pressure more often than women in early and middle adult years, but that changes once a woman reaches menopause since there is a decrease in estrogen and progesterone levels. The consequences of high blood pressure may be great, however this condition may not be easily recognized, as there are often no symptoms. The only way to find out is to have blood pressure checked. High blood pressure makes the arteries stiffen, in turn stiff arteries become more susceptible to fatty deposits on them in addition to becoming narrow. This process contributes to high risk of potential blockage or rupture that may affect the heart, brain and kidneys. In turn, the thickening of the arterial wall (arteriosclerosis) further contributes to high blood pressure. However, the primary cause of hypertension, in my view, is the psycho-emotional state of the person. The more stress, depression, unhappiness, and tension, the more hypertension.

Dietary Factors – It is well known that meat and cheese contain high levels of unhealthy saturated fat, but other risks are also associated with meat and cheese consumption. Commercially fed animals are often given growth hormones and antibiotics, the residue of which accumulates in our bodies thus affecting our hormonal balance. Further, most commercially raised animals such as cattle and chicken are grain fed irrespective of their natural diet. Just as grain often produces an inflammatory reaction in the gut of humans, grain also can produce the same reaction in animals, which in turn causes inflammation of their muscle tissue. The effect is passed on to us as we eat this inflamed animal tissue. A high fiber diet has been shown to be protective against atherosclerosis. Dietary fibers, particularly from legumes are very effective in lowering cholesterol levels.

Proactive Prevention of Heart Disease

There are many other contributing factors to heart disease such as genetic predisposition, common medications such as birth control pills, decongestants and many others. However, as with many things this is a multifactorial problem and may require a multifactorial solution. The most important thing is to assess one's risk factors and to devise a plan of action working proactively on preventing heart disease.

Here are some of the things the reader should be aware of:

1. **Balanced Hormones** - making sure that your hormones are balanced is an excellent starting point in the prevention of heart disease.
2. **Cholesterol control** – High cholesterol is one of the major risk factors of heart disease. The use of plant sterols is very effective in reducing cholesterol levels since they inhibit absorption of cholesterol in the small intestine. Extract of citrus flavonoids (polymethoxylated flavonoids) will address high cholesterol as well as inflammation. Common foods like grapefruit, especially red grapefruit contain antioxidants. Red yeast rice is a natural plant statin that works very effectively in lowering cholesterol and triglyceride levels. Check your thyroid levels, very often by correcting the function of your thyroid you will bring your cholesterol levels down as well. The connection is quite obvious - the higher the metabolic rate the better you will function. Regular physical activity every day will reduce the level of stress, provide more lean muscle mass, lower your triglyceride and cholesterol levels and tone up your arterial wall. A sedentary lifestyle on the other hand will most likely kill you. We are designed for motion and action! The more you move the better you will function.
3. **Fish and Fish Oils** – The concept of eating fish to prevent heart disease has been around for a long time. It is well documented that Eskimos (as long as they kept their traditional diet of fish and seafood) have a very

low incidence of heart disease. However, as most indigenous people have changed their traditional diets to highly processed western diets, which are over abundant in wheat, sugar and dairy, their incidence of heart disease and diabetes have skyrocketed. One of the most important nutritional supplements for preventing heart disease is a pharmaceutical grade fish oil. Diets that include a high intake of fish oil reduce the risk of heart disease roughly by fifty percent compared to those that do not eat fish or supplement with fish oils. Cold water ocean fish with its protective layer of fat full of Omega 3 oils is most beneficial when it comes to inflammation and heart disease. Just make sure that it is not farmed fish, it should be wild caught.

I would also recommend the following:

As you can see there are many contributing factors to heart disease. The purpose of this article is to raise the level of awareness that will lead to proactive measures. If you suspect that you may be having a heart attack, do not hesitate to go to your nearest emergency department.

The protective factors in women's earlier years should be wisely deployed during and after menopause. Lifestyle, healthy dietary choices, stress reduction, and proper use of supplements and natural medicines make a lot of sense. This is something that women have intuitively understood for ages, now it's time to empower yourself with knowledge and information on how to take care of yourself.