

INTEGRATIVE CARDIOLOGY

Joel B. Klein

Integrative medicine is the practice of blending the best of alternative and complimentary medicine with conventional medical therapies to maximally benefit the patient and minimize the side effects of treatment. It also includes looking at each person holistically to optimize wellness in body mind, emotion, and spirit. In this article, we will examine ways to optimize heart health as well as discuss potentially useful complimentary therapies for common cardiovascular problems.

Modern science is just now demonstrating the connection between the physical health of the heart and the health of the emotional heart that we find even referred to in our language through figures of speech that have been passed down from ancient times. Dying from a “broken heart” may be more real than people realize. Numerous studies have shown that people who are happier and feel more socially connected have less heart disease than those who are socially isolated. The classic example of this is the town of Roseto, PA, which was settled by a close-knit group of Italian immigrants in the 1880’s. In 1961, it was noted that, despite their high fat diets, being overweight, significant financial stress and smoking, they had significantly less heart disease than the surrounding towns. Within twenty years, the heart attack rate doubled approaching that in the neighboring communities and did not improve despite programs aimed at decreasing dietary fat and smoking. What had happened? Researchers noted that after 1960, the social fabric of the community deteriorated with many of the young people abandoning the Old World customs that had previously held the community together. Other studies have shown that married men die less frequently of heart disease than single men when all other risk factors are equal. Interestingly, the same is not true for women, which may speak to the relative happiness of men and women in marriage.

Additional fascinating research is being done in this area by an organization called Heart Math. They have found that cultivating a sense of loving appreciation optimizes a key cardiac health indicator called the beat-to-beat variability pattern and have developed biofeedback mechanisms to teach people how to do this. Even more, they have found that being in this optimal state has a positive effect on brain wave patterns; not only for us but also for those we are in close contact with, presumably through electromagnetic fields. Thus, giving and receiving love helps our heart stay healthy and has positive physical effects on the world around us.

A key area of integrative cardiology is nutrition, however the dietary advice that has typically been given appears incomplete. For many years now, people have been instructed in low fat diets to help their hearts. This was based on an erroneous conclusion made almost 50 years ago that saturated fat was the main dietary cause of heart disease. Although, Dr. Dean Ornish has proven that a very low fat, vegetarian diet, combined with meditation and stress reduction support programs, can reverse heart disease; only the complete program has been studied and some nutritionists have suggested that the positive outcomes may have as much or more to do with the stress reduction and social support than the diet. On closer examination, it appears that fat by itself may not necessarily be bad. While saturated fat appears to have some effect, the main culprit appears to be the “trans” fat that comes in margarine and all of the partially hydrogenated oils in vegetable shortening that are used in most of our processed foods. Even more important may be sugar. The average American eats 160 pounds of sugar a year. This increases body acidity and insulin levels, both of which promote inflammation. Newer research is confirming that inflammation is a major

factor in the development of heart disease. There is some evidence that the fructose that is now being used to sweeten soft drinks, juices, etc. may have an even stronger effect than regular sugar. Processed carbohydrates (breads, cookies, crackers, chips, cereals, etc.) have a similar unhealthy effect. Thus, processed carbohydrates made with hydrogenated oils produce a double whammy for the heart. Likewise, so do French fries since regular white potatoes act almost like sugar in the body and the fats that are used for frying become bad with repeated use.

Not only are we eating things that are bad, we are not eating things that are good. There is growing evidence that unprocessed polyunsaturated fats, particularly what are called omega-3 oils found in fatty fish (salmon, herring, sardines, etc.), fish oils and flax seeds, as well as the compounds found in such foods as nuts, seeds, olive oil and avocados are very important for heart health and in balancing blood levels of fat and cholesterol. These are in short supply in the typical American diet. To get them, most people should take a 1000-2000 mg a day of a good quality fish or cod liver oil. Care must be taken, however, to make sure it is fresh and not contaminated. You can also use ground flax seeds or flax oil. Another crucial ingredient for good heart health that most of us don't get enough of is magnesium. This is found also in nuts and seeds as well as leafy greens and seafood. To be sure, I recommend a daily magnesium supplement, usually around 400 mg., in the form of magnesium glycinate, citrate, ascorbate or amino acid chelates. Many brands contain magnesium oxide because it is cheaper but it is not absorbed well. The other general compound I want to mention is vitamin E. Even the conventional medical literature is showing its importance in treating and preventing heart disease. A dose of around 400 I.U. daily will maximize the benefit and will also help prevent the good oils from oxidizing in your body. It will also help prevent the damage of inflammation to the blood vessels. Fish oil and vitamin E together may help thin the blood as well or better than aspirin without the stomach side effects.

Other nutritional supplements have been shown to be helpful for specific conditions. If you are under medical care, you should discuss these with your physician before taking them, particularly if you are on medication. Those with high blood pressure can benefit from increased doses of the amino acids taurine and L-arginine, a compound called Co(enzyme) Q10, and the herb hawthorn (*Crataegus oxyacantha*) in addition to the magnesium, omega-3 fats and vitamin E discussed above. These compounds have also been found to be helpful in the treatment of congestive heart failure, especially the CoQ10, along with another nutrient called L-carnitine. Those with stable angina can also benefit from magnesium, CoQ10, L-carnitine and L-arginine. Benign rhythm disturbances, such as PVC's, can respond to magnesium, omega-3 oils, taurine, CoQ10, and hawthorn as well.

About ten percent of people have a mutation in a gene that codes for an enzyme that breaks down the B vitamin folic acid. This causes a compound called homocysteine to build up in the blood. Some experts feel that high homocysteine levels are more predictive of heart disease than high cholesterol. I recommend anyone with a family history of heart disease have a blood homocysteine test. If the level is above 8, they should take extra folic acid, with vitamins B6 and B12, to get it down. Some people may need to take a special form of folic acid called 5-MTHF to get a good enough response.

The last, and most frequently overlooked, risk factor in heart disease is too much iron. Because of all the extra iron added to processed foods, especially cereals, men and post-menopausal women are at the greatest risk for iron overload and should have a blood ferritin level tested. This is an indicator of how much iron is stored in your body. It has been shown that levels of 200, which the lab considers "normal," will double your risk of a heart attack.

For that reason, I recommend that anyone with a level in that range donate blood periodically to one of the local hospitals or the Red Cross to get your ferritin between 50 and 75.