

Heart Disease and Vascular Inflammation

By

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For the past decade science has been very focused on the notion that cholesterol and other lipids are the primary cause of heart disease. However, some very significant studies have recently come to light pointing to inflammation as just as an important contributor to heart disease as cholesterol is.

Inflammation plays a large part in the development and progression of atherosclerosis. The process of building a plaque is as much due to having excess lipids as it is to having the inflammation to fuel the advancement of that plaque formation. The recent research is convincing enough that even very conservative medical doctors should start accepting the significant role inflammation plays in the cardiovascular disease story.

People at risk for heart disease, or just wanting to know their current risk factors, now need to start considering lab tests other than just cholesterol and triglyceride levels to account for the inflammation factor.

For the time being, one of the most valuable tests for assessing inflammation, especially of the blood vessels, is called C-Reactive Protein. People with elevated lipid levels can have up to a 4-fold increased risk for a heart attack. People with elevated lipid levels and elevated C-reactive protein levels can have up to an 8-fold increase for heart attack. C-Reactive Protein is a marker for inflammation in the entire body, but seems to be of particular importance when looking at cardiovascular health and blood vessel inflammation.

Homocysteine is an amino acid normally produced in small amounts by the body. When homocysteine exceeds certain levels, it begins to destroy the cells that line blood vessels and stimulate the formation of atherosclerotic plaques. Homocysteine may be elevated in some people due to certain genetic anomalies. However, in most of the population high homocysteine levels are due to a poor diet lacking in folic acid and other B vitamins. Eating junk food, fast food, high sugar foods and not eating enough fresh fruits and vegetables will promote excessive homocysteine blood levels.

Eating a diet of healthful foods like leafy greens and fresh vegetables rich in folate and B-vitamins can help reduce levels of homocysteine.

There are several nutritional factors that can help reduce inflammation in the body. Paying attention to the balance between omega-3 and omega-6 fatty acids in the diet is very important. Typical American diets are heavily skewed towards omega-6 fatty acids which are found in animal proteins, trans-fats, grains and refined carbohydrates. Omega-6 acids can be metabolized to arachidonic acid, one of the most inflammatory substances found in our bodies. Omega-3's on the other hand, found in wild fish and wild game, are metabolized to the most anti-inflammatory substances found in the body.

Asking your doctor for C-Reactive protein levels as well as homocysteine levels are an important part of assessing cardiovascular risk factors. Further, consulting a health professional knowledgeable in nutrition and supplements can help you to set a plan geared at combating inflammation and reducing homocysteine levels.