

On Nutrition: by Helayne Waldman, Ed.D., N.E.

The Heart of the Matter

As promised, here is the sequel to “The Cholesterol Story, Part I.” I’ll call it “The Heart of the Matter” because as you will see, the plot (and plaque) thickens as increasing evidence emerges that cholesterol is not the mother of all heart disease we might be likely to think it is.

In fact, “heart disease” is not really about the heart at all. It’s about the miles and miles of blood vessels that flow in and out of the heart, and the toxic proteins, fats, clotting factors and inflammation that puts their well being in jeopardy.

Toxic proteins?

Yes, there’s one in particular that wreaks havoc on our precious arteries when there’s too much of it -- it’s called homocysteine. When we eat a healthy diet, complete with plenty of B vitamins found in whole, unprocessed grains, homocysteine is generally not a problem as it normally converts to a perfectly well behaved amino acid called methionine. But as usual, we get into trouble when we consume the SAD (Standard American Diet) of refined carbohydrates, sugars, and hydrogenated fats.

The medical establishment woke up to the dangers of homocysteine almost a decade ago when both *The New England Journal of Medicine* and *The Journal of the American Medical Association* published articles



touting vitamin supplements to lower high homocysteine levels due to their potential toxicity to the blood vessels. But overt homocysteine toxicity was suggested long before, in 1962, when clinicians noticed a rare, genetic disease in infants that was linked to high levels of this troublemaker. At the time Dr. Kilmer McCully, a research fellow at Harvard, was astonished to see that the arteries of this subgroup of infants resembled those of the elderly population: in other words, they showed a high degree of arteriosclerosis, or hardening of the arteries!

We know today that homocysteine injures and irritates the arteries, “hardening” them and helping to create a chronic inflammatory state. What follows then is a dangerous cascade: inflammation invites repair, and repair comes in the form of clotting factors, excess calcium and cholesterol that attempt to “patch up” the wounded artery. With all of this activity our blood vessels begin to look like a perpetual construction site, trapped in a cycle of demolition with successive layers of attempted restoration.

You won’t hear a whole lot about this complex scenario in the mass media yet, as modern medicine hasn’t come up with a compelling pharmaceutical remedy. But ahhh, nature has.

To keep homocysteine in safe ranges (lab value <8), the B vitamins mentioned earlier are true marvels. A solid combination of B6, B12 and folic acid, present in any reputable multivitamin, should bring dangerous levels down. Another product nutrient has demonstrated some remarkable results as well, when used in combination with a multi-B vitamin complex. Alternately called betaine or TMG (trimethylglycine), this vitamin-like substance helps convert homocysteine to the nontoxic methionine. You can get plenty of betaine from your food if you happen to like eggs and liver.

Controlling inflammation

To control inflammation, diet is once again key. Here’s how.

In the 1980’s we learned that localized pro or anti-inflammatory hormones known as prostaglandins are stimulated by the fats in our diet. That’s right: you can control the degree of inflammation in your body in large part by the fats you choose to eat. Fast food fat, margarines, snack foods and other sources of those trans fatty acids in the news lately will all encourage your body

to produce pro-inflammatory prostaglandins that will seek out your arteries on a search and destroy mission, creating lesions, instability and all that follows. But healthy fats, like those found in cold water fish, flax seeds, walnuts and cod liver oil have just the opposite effect. They quench the fires of inflammation, soothing everything from ailing arteries to arthritic knees.

Common household spices like ginger and turmeric have similar anti-inflammatory effects, as do simple digestive enzymes (eg., bromelain) taken on an empty stomach. Good old Vitamin C, found in abundance in fresh fruit, also ratchets up the repair process by helping to support a normal inflammatory response; in fact Dr. Matthias Rath, a close colleague of the late Linus Pauling made the radical observation that “cardiovascular disease is nothing else than an early form of scurvy.” A provocative theory, indeed!

To keep overzealous clotting factors under control, there are - you guessed it - a host of dietary solutions. The healthy fats and oils listed above help the blood achieve just the right consistency, as do the spices and enzymes mentioned. (Mother Nature does not want this to get too complicated!)

What’s more, the Japanese, famous for healthy hearts, have been eating a fermented soybean product called natto for hundreds of years. We now know that the secret sauce in natto is a special enzyme called nattokinase which in a nutshell, supports normal blood consistency. This translates into healthy circulation, normal blood clotting and of course, a healthier heart. Personally, I have found natto by shopping in Oakland’s Chinatown. I’ve also purchased it from reputable vendors on the Internet. E-mail for details on this.

That’s today’s chapter with some parting food for thought. The next time you go for blood work to assess your heart health, consider talking to your practitioner about testing your levels of homocysteine, c-reactive protein (inflammatory marker) and fibrinogen (clotting factor), in addition to looking at cholesterol and triglyceride levels. That way you and your doctor will have a complete, rather than a partial picture to discuss. And if necessary, you can get busy eating and drinking some of the remarkable remedies that Mother Earth has provided us.

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