

As I mentioned in my last column, in the United States, blood pressure is typically controlled via medication. While medication can successfully lower blood pressure, in doing so it also reduces the blood flow. This can in turn, reduce the oxygen and nutrients that reach our brain and other tissues. A healthier way to reduce blood pressure is to reduce the underlying cause of high blood pressure.

Experts can't agree on the exact cause or causes of high blood pressure, but there are a number of areas of agreement. Our diet is likely the number one cause of high blood pressure. Poor diet results in deterioration of the tissues in the body including the lining of the blood vessels. Blood vessel walls are normally very smooth and slippery, but when the cells are damaged, they become more rough and sticky.

One culprit that may be responsible for this damage is a byproduct of protein metabolism called homocysteine (homo-sis-teen). When we consume protein, the body breaks down the protein into amino acids, which the body then recombines to make other proteins that it needs. In this process homocysteine is produced as well.

Homocysteine is toxic to the cells lining the walls of our blood vessels, so the body works hard to convert homocysteine into a harmless substance. This conversion process requires folic acid. Many of us are deficient in folic acid because our diets are not rich in vegetables. Folic acid deficiency can cause an elevation of homocysteine in the blood which damages the blood vessels. This causes cholesterol to be deposited, which narrows the blood vessels and increases the blood pressure.

If that wasn't enough, high insulin levels have also been shown to cause an increase in homocysteine. High insulin levels are related to carbohydrate consumption and obesity.

My recommendations for this week to lower blood pressure are to lose weight, reduce carbohydrate consumption (sugars and food made from grains), and to take a folic acid supplement. If you are over 50, also consider taking a B12 supplement.

Next week I will continue the discussion of other methods of reducing high blood pressure.