

A Natural Approach to Cardiovascular Wellness

NUTRITIONAL AND OTHER STRATEGIES FOR MANAGING PRE-HYPERTENSION

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Heart disease and stroke are the first and third causes of death, respectively, in the United States.

[Hypertension](#) is the major risk factor for heart disease and stroke.¹ According to the American Heart Association's [Heart Disease and Stroke Statistics, 2005 Update](#), high blood pressure killed nearly 50,000 Americans in 2002 and was listed as a primary or contributing factor in 261,000 deaths.

The guidelines issued in 2003 by the [National Heart, Lung and Blood Institute](#) state that nearly half of all American adults have blood pressure readings that are too high! Fifty percent of these have hypertension, meaning greater than 139 (systolic) over 89 (diastolic) mmHg. The other half of us have pre-hypertension, a condition which makes high blood pressure and its sequela, cardiovascular and renal disease, more likely. Any patient with a systolic reading higher than 119 or a diastolic reading above 79 has [pre-hypertension by definition](#).² For chiropractors truly interested in wellness care and services designed to promote longevity, it is clear that any "wellness care approach" that does not at least monitor and counsel on blood pressure is inadequate.

Risky Business

Above 115/75, the risk of heart attack and stroke doubles for every 20-point jump in systolic blood pressure or every 10-point rise in diastolic blood pressure. People with pre-hypertension, blood pressure greater than 119/79 (levels once considered normal), face twice the risk of heart disease as those with normal blood pressure. People with frank hypertension (blood pressure greater than 139/89) have [four times the risk of heart disease as people with low blood pressure](#).³

According to NaturalStandard.com's "[Monograph on High Blood Pressure](#)," evidence suggests that reduction of the blood pressure by 5-6 mmHg can decrease the risk of stroke by 40 percent, of coronary heart disease by 15 percent to 20 percent, and reduces the likelihood of dementia, heart failure, and mortality from vascular disease.⁴

What to Do?

Unless there are other predominant risk factors, such as diabetes or kidney disease, heavy smoking, alcoholism, a personal history or strong family history of heart and kidney disease, many doctors are reticent to prescribe medications for pre-hypertension, usually diuretics, [given their potential for side effects](#).⁵ However, lifestyle factors *should* be addressed. [The Mayo Clinic provides lifestyle guidelines](#), some of which include the following:⁶

- Eating a diet that is rich in whole grains, fruits, vegetables and low-fat dairy products, and skimps on saturated fat, sodium and cholesterol, can lower your blood pressure by up to 14 mmHg. This eating plan is known as the [DASH \(Dietary Approaches to Stop Hypertension\) diet](#). Regular physical activity of at least 30 to 60 minutes most days of the week can lower

your blood pressure by 4-9 millimeters of mercury (mmHg). Even moderate activity for 10 minutes at a time, such as walking and light strength training, can help.

- Losing just 10 pounds can help reduce your blood pressure significantly and makes any blood pressure medications (and presumably nutraceuticals) more effective. Carrying too much weight around your waist, a sign of metabolic syndrome, increases your risk of high blood pressure. In general, men are considered at risk if their waist measurement is greater than 40 inches (102 cm) and women if greater than 35 inches (88 cm). For Asians, guidelines are 36 inches (90 cm) and 32 inches (80 cm), respectively.
- Alcohol in small amounts can help prevent heart attacks and coronary artery disease, and potentially lower your blood pressure by 2.5 to 4 mmHg. But that protective effect is lost if you drink too much alcohol - generally more than one drink a day for women and more than two a day for men.
- On top of all the other dangers of smoking, the nicotine in tobacco products can raise your blood pressure by 10 mmHg or more for up to an hour after you smoke.
- The role caffeine plays in blood pressure is still debatable. Drinking caffeinated beverages can temporarily cause a spike in sensitive people. Regardless of your sensitivity to caffeine's effects, the Mayo Clinic recommends you drink no more than 200 milligrams a day - about the amount in two cups of coffee.

Though not mentioned by the Mayo Clinic in its guidelines as such, [the need for adequate deep sleep and correction of sleep apnea](#) has become more apparent.⁷ Of course, all these concerns are also basic to the anti-aging and wellness lifestyle, regardless of blood pressure.

Nutraceutical Potential

Fortunately for chiropractors, there are also many OTC nutraceuticals that show potential in [significantly lowering blood pressure](#).⁹ These include phytonutrients (grape seed extract, quercetin, cocoa, green tea extracts, hawthorne berries, hibiscus tea, lycopene extracts, soy isoflavones), zoonutrients (milk and whey peptides and even peptides formed in fried eggs!) and fats (olive oil, flax oil, fish oil), though the latter to a lesser degree.¹⁰⁻²¹

John Zhang, MD, PhD of Logan Chiropractic College, has authored two human studies on physician strength nutraceuticals and pre-hypertension and hypertension.²²⁻²³ These studies included testing a multi-ingredient phytonutrient "greens" powdered drink mix, a multi-ingredient whey- and colostrum-based zoonutrient powdered drink mix, and the two nutraceutical powders together. In 90 days, the phytonutrient formula lowered blood pressure 12.4 systolic and 7.1 diastolic. The zoonutrient formula lowered blood pressure 13.4 and 8.2, respectively. The combined group lowered blood pressure 10.9 and 13.9, systolic and diastolic. These preliminary studies showed an average decrease in systolic blood pressure of 12.6 points and a decrease in diastolic blood pressure of 9.7. Results match the DASH diet plus a low sodium diet combined (DASH II diet) and the effect of any one commonly prescribed blood pressure medication.²⁴⁻²⁵

Most of these nutraceuticals will show efficacy in essential pre-hypertension in 60 days. If not, as there are several different mechanisms by which they are proposed to work, and there are different genetic phenotypes in any patient population, trying another nutraceutical approach or two it is likely worth a try, considering the potential morbidity of high blood pressure.

Testing for High Blood Pressure

First, know that one study showed that almost half the [sphygmomanometers in a teaching hospital group had defects in the control valve](#), which interfered with accurate blood-pressure reading.⁸

Second, "white coat syndrome" describes individuals who become nervous about their blood pressure test. They tend to get higher readings at the office as compared to readings taken at home.

Have patients empty their bladder before the test if needed. They should not drink coffee or smoke cigarettes 30 minutes before having their blood pressure taken. Also, it is best if they get to sit and rest for five minutes before the test. The arm should be at heart level. Bare arm is best. Two readings should be taken. If high blood pressure is found, secondary causes need to be eliminated before essential or primary hypertension is diagnosed.

Check for Medications

Researchers at Boston's Brigham and Women's Hospital found that older men using NSAIDs or acetaminophen (Tylenol) daily were at a 38 percent and 34 percent higher risk for hypertension, respectively. According to Joe Graedon, a pharmacologist, and Tera Gordon, PhD, co-authors of *The Best Choices from The People's Pharmacy*, both HRT and decongestants can be culprits. Also, many headache pain pills contain caffeine. Decongestants that contain pseudoephedrine, like Sudafed, need to be considered. The side effects panels on any prescription medications should be reviewed to see if hypertension is a possible side effect.

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