

Vitamin D and Hypertension

One in three American adults has high blood pressure, a condition that increases the risk of heart disease (the number one cause of death in the U.S.) and stroke (the number three cause of death) as well as aneurysm, metabolic syndrome, impaired vision, kidney disease, and mental deficits.

Risk factors for hypertension include the following:

- Age (For men risk increases about age 45; for women risk increases after age 65.)
- Race (African Americans are at greater risk of developing hypertension and serious complications are more common)
- Family history of hypertension
- Obesity or overweight
- Inactive
- Tobacco use (Including second hand smoke)
- Alcohol use (Heavy drinking)
- Diet (Poor nutrition, high salt intake, low potassium and low vitamin D)
- Kidney Disease
- Sleep apnea
- Pregnancy
- Diabetes
- Stress

Hypertension places increased force on arteries, stretching them. Stretching results in scar tissue that becomes a rough patch on the arterial wall. This creates a spot that will be prone to accumulate plaque and cholesterol, narrowing the artery and setting up perfect conditions to create blood clots.

There seems to be a definite link between vitamin D deficiency and hypertension though conventional medicine is slow to admit

the cause and effect. Instead, of course, allopathic doctors prescribe blood pressure medications. The list includes:

- Angiotensin-converting enzyme (ACE) inhibitors
- Angiotensin II receptor blockers
- Beta blockers
- Calcium channel blockers
- Renin inhibitors

If these medications do not work, singularly or in combination, doctors are likely to prescribe an alpha blocker or vasodilator.

Vitamin D and Blood Pressure

Why do so many Americans develop high blood pressure? There are many factors including the standard American diet (so aptly nicknamed SAD), obesity rates, and high stress lifestyles. Chronic, rampant vitamin D deficiency is likely to be a vital factor.

Studies have shown that those with higher levels of vitamin D in their system have lower blood pressure. Unfortunately, outcomes from studies designed to prove whether supplementation with vitamin D lowers blood pressure have been inconsistent. Those showing benefits from supplementation have been small studies. But as often happens, the flaw in a large study was easy to spot. In the 7-year double-blind study of 36,282 postmenopausal women no evidence was found to support the idea that vitamin D supplementation reduces blood pressure. However, the dose given was too low (400 IU/day), half of the normal dose (700-800 IU/day) used for clinical purposes.

Why Supplement Vitamin D?

Draw a line on a map from Los Angeles, California to Atlanta, Georgia. According to Dr. Michael Holick, one of the world's

leading authorities on vitamin D, those living above this line are likely in need of vitamin D supplementation, especially in the winter.

The more our lives revolve around indoor pursuits, indoor technology, and indoor occupations, the more we remove ourselves from daily exposure to the sun and the benefits we gain from its rays.

If you choose to supplement with vitamin D, choose a good source and do not exceed 10,000 IU per day. Remember the body needs vitamin D needed to absorb calcium and magnesium. It is essential for healthy bones and teeth and a strong immune system.

Hypothyroidism has also been recognized as a cause of hypertension. Previous studies regarding hypertension in subjects with hypothyroidism have demonstrated elevated blood pressure values. Increased peripheral vascular resistance and low cardiac output, known causes of hypertension, are believed to be the possible link between hypothyroidism and diastolic hypertension.

Further Reading:

- *Understand Hypothyroidism – Prevention and Natural Remedies*
- *Hypertension – How To Lower Your Blood Pressure Quickly and Naturally*
- *Sunlight and Vitamin D*

Sources:

- Gaby, Alan R., M.D., *Nutritional Medicine*
- *High Blood Pressure Frequently Asked Questions (FAQs) – CDC*
- *Hypertension – Vitamin D Council*
- *Choosing Blood Pressure Medications – Mayo Clinic*
- *Sunlight and Vitamin D – Organic Lifestyle Magazine*