

Blood Pressure

And Natural Strategies for Optimizing Blood Pressure

What is Blood Pressure?

As the heart beats, it pumps blood throughout the body carrying nutrients and oxygen to the cells and removing wastes. The blood travels through a network of vessels: known as arteries, capillaries and veins. Arteries carry oxygen and nutrient rich blood away from the heart; capillaries enable the exchange of fluids and nutrients between the blood and the tissues; and the veins carry deoxygenated blood from the capillaries back to the heart.

As blood travels through the arteries, it pushes against the sides of these vessels and the strength of this pushing is what is measured as blood pressure.

As the heart muscle contracts and pushes blood through the arteries, blood pressure rises. As the heart relaxes, blood pressure decreases. With each heartbeat, blood pressure will rise to a maximum level and then drop to a minimum level.

When your blood pressure is taken the result is given as two numbers, the maximum and minimum levels: such as 110/70 mm Hg.

The number on the top is called the systolic blood pressure level. It represents the highest level your blood pressure reaches when your heart is contracting. The number on the bottom is called the diastolic blood pressure level. It represents the lowest level your blood pressure reaches when your heart is relaxing.

Blood pressure usually ranges between 90-250 for the top number (systolic blood pressure) and between 60-140 for the bottom number (diastolic blood pressure).



CONTENTS

2

Why Blood Pressure is Important

3

Causes of Hypertension

5

Correcting Hypertension

Why is Blood Pressure Important?



**Optimal:
120/80 mm Hg**

**Normal Systolic:
120-129 mm Hg
Normal Diastolic:
80-85 mm Hg**

**Borderline High:
130-139/85-89 mm Hg**

**Mildly High:
140-159/90-99 mm Hg**

**Moderately High:
160-179/100-109 mm Hg**

**Severely High:
180+/110+ mm Hg**

One of the main reasons we pay attention to blood pressure is that elevated blood pressure (hypertension) is a risk factor for heart attack and stroke.

Genetic factors can play a role in elevating blood pressure, however the most influential factors are diet, lifestyle, mental state and one's environment.

More than 80% of people with high blood pressure are in the borderline-to-moderate range, and most cases of high blood pressure can be brought under control simply through changes in diet and lifestyle.

A low-carb diet, abundant in nutrient dense whole foods is very beneficial to lowering blood pressure naturally.

The standard modern diet of processed foods, high in sodium-to-potassium ratio, high in sugar, low in fiber and low in omega-3 fatty acids increases blood

pressure.

A high stress lifestyle, lack of exercise and smoking all increase blood pressure. The more fit a person becomes, the less likely they are to develop high blood pressure. Additionally, relaxation techniques such as breathing exercises, biofeedback, meditation, yoga and hypnosis have all been shown to reduce blood pressure.

Exposure to environmental toxins can also increase blood pressure, especially exposure to heavy metals such as lead, mercury, cadmium and arsenic. When heavy metals become concentrated in the kidneys, they disrupt the kidneys ability to regulate the body's fluid volume, leading to fluid retention and an increase in blood pressure.



Causes of High Blood Pressure

STRESS – acute or chronic stress from any source: physical, emotional, financial, work related, relationships, fatigue, structural misalignments, infections, illness, pain, anger, etc.

OVERWEIGHT – being overweight forces the heart to pump blood further, as a result, the body raises blood pressure to move the blood the extra distance

SYSTEMIC INFLAMMATION – from any source: nutrient deficiencies, toxicity, chronic infection, arthritis, gastrointestinal disorders, food allergies, etc.

DIABETES – insulin resistance and diabetes damage small arteries contributing to elevated blood pressure

EXCESSIVE ARTERIAL MUSCLE TONE - caused by hyper adrenal function or thyroid dysfunction can cause too much sympathetic nervous system tone that constricts the arteries

(continued)

The most common causes are smoking, being overweight, lack of physical activity and a poor diet of nutrient depleted processed foods.

LOSS OF ARTERIAL ELASTICITY - due to zinc deficiency or toxic metals causing the arteries to become brittle instead of soft and flexible

ARTERIAL PLAQUES – arteriosclerosis and atherosclerosis are disease conditions where the arteries become inflamed and brittle and the body coats them in plaque to prevent them from rupturing. More pressure is required to force the blood through the smaller diameter arteries.

KIDNEY DYSFUNCTION – toxic metal accumulation in the kidneys, pharmaceutical drugs that inhibit kidney function, and chronic kidney/urinary tract infections can reduce the kidneys' ability to regulate water balance in the body contributing to high blood pressure

POOR DIET – standard diet

of nutrient depleted, processed foods

WATER RETENTION for reasons other than kidney dysfunction – like excessive renin or aldosterone, magnesium deficiency, allergic reactions to anything from food to a wasp sting can highly elevate blood pressure.

TUMORS – less common, but possible

GENETIC DEFECT – quite rare, but possible

FAMILY HISTORY of high blood pressure

SMOKING - tobacco

BIG ARM SYNDROME – if your arms are extremely muscular or you are very overweight and carry a lot of fat in the arms, this can cause a false high blood pressure reading if an unsuitable blood pressure cuff was used to take the reading

Most diagnosed cases of high blood pressure are deemed to be “essential hypertension” – meaning that the underlying cause is unknown.

Correcting Hypertension

High blood pressure responds very well to nutritional balancing, with resolution occurring within a few months to several years, depending on how quickly the individual makes changes to their diet and lifestyle and how well they adhere to their new program.

1. LIFESTYLE – identify stressors, employ regular stress reduction techniques (tai chi, yoga, meditation, EFT, contemplative prayer, etc.), exercise appropriately and regularly, get adequate rest and sleep for proper regeneration
2. DIET & SUPPLEMENTATION – use blood chemistry analysis to ascertain

the needed nutritional supplements, eat a diet of organic, nutrient dense whole foods

3. DETOXIFICATION – utilize blood chemistry and other testing to assess for toxicities and work closely with a naturopath or nutritional therapy practitioner to undergo an appropriate detoxification program to support the colon, liver and kidneys. Infrared

sauna therapy is extremely beneficial. Near-infrared rays are particularly helpful in reducing high blood pressure.

4. BODYWORK – receive regular chiropractic, osteopathic, naturopathic, structural integration, myofascial or other modality to optimize structural alignment and reduce tension



What About Meds?

Drug therapy is helpful if blood pressure is above 160/100. Use medication until your nutritional balancing program begins to reverse the underlying cause, lowering blood pressure naturally. Work closely with your prescribing physician to lower the medication dosage as you no longer need it, you

may experience episodes of low blood sugar if the medication is not reduced

The adverse effects of blood pressure medications can be unpleasant. Become fully informed when you begin using them.

For mild hypertension, you can begin using nutritional balancing immediately to reverse the underlying causes.



Biotics Bio-CardioSirt BP supplies a unique (patent pending) combination of seven (7) key micronutrients that support normal, healthy blood pressure levels. These include the vitamins C, D and B6, along with Biotin, Magnesium, Taurine and Grape Seed Extract.