

By Tracey Wood - Nutritionist

Blood pressure is the force of circulating blood pushing against the blood vessel walls. It is one of the principal vital signs measured by health care professionals in order to assess our general state of health.

Blood pressure is measured in units called millimetres of Mercury (mm Hg). Systolic pressure (the top number) represents the pressure in our arteries as the heart contracts and moves blood into the circulation. Diastolic pressure (the bottom number) occurs as the heart relaxes; it is the minimum pressure to which the arteries are exposed.

Low beats high

Current guidelines identify normal blood pressure as lower than 120/80 (systolic/diastolic). High blood pressure, or hypertension, is defined as exceeding 140/90. Readings higher than this indicate a significantly higher risk of the associated health problems.

A blood pressure reading that is slightly on the lower side is actually desirable as long as it is not low enough to cause symptoms and damage organs in the body. Symptoms of low blood pressure include dizziness or fainting, lack of concentration, blurred vision, nausea, cold and clammy skin and rapid or shallow breathing.

There are actually two different types of high blood pressure - essential and

secondary hypertension. Secondary hypertension occurs when the direct cause of the hypertension can be determined. Possible causes could include kidney disease, adrenal gland tumours, pregnancy and certain medications like birth control pills.

Essential hypertension (by far the more common type) occurs when the exact underlying cause of the individual's high blood pressure cannot be pinpointed. However, many lifestyle factors have been firmly linked to essential hypertension. These include smoking, obesity, a lack of exercise, a diet high in salt and a high consumption of alcohol.

Other causative factors exist which we cannot change. Age, for example, is a factor in hypertension - people over the age of 35 are more likely to develop high blood pressure. Genetics also play a role, as studies indicate that high blood pressure tends to run in families. African or black people also have a far higher chance of developing hypertension when compared to other ethnic groups.

Under pressure

The effect of stress on blood pressure deserves a special mention. The body produces a surge of hormones when you are in a stressful situation. These hormones temporarily increase your blood pressure by causing the heart to beat faster and the blood vessels to narrow. However, according to the Mayo Clinic, there is no proof that these temporary spikes in blood pressure can actually cause long term high blood pressure. It is more likely that other factors that are linked to stress, including overeating, smoking, drinking alcohol and lack of sleep, may actually lead to the development of high blood pressure.

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Exercise is an excellent way of both reducing stress and of lowering your blood pressure. It can lower your systolic blood pressure by an average of 4 to 9mm Hg, as much as some blood pressure medications. Physical activity also makes your heart stronger, and a stronger heart can pump more blood with less effort. If your heart can work less to pump, the force on your arteries decreases, lowering your blood pressure.

AIM products for a healthy blood pressure

Bear Paw Garlic is a cardiovascular health product aimed at individuals who are at risk of heart disease and have related conditions like elevated cholesterol levels and increased blood pressure. γ-glutamyl peptides (GLUT) and ajoene compounds in the garlic (Allium ursinum) result in an increase in the difference across the membrane of the vascular smooth muscle. This in turn results in a widening of blood vessels, which maintains a healthy blood pressure. "I tried 6 or 7 different meds and spent over \$2000 and nothing helped! Taking 2-3 **Bear Paw Garlic** per day, my blood pressure dropped from 219 to 139 at the highest." **Bonita B from Missouri, USA**

Beets have been in the media spotlight lately with regards to lowering blood pressure. Beets contain nitrates, which are compounds that improve blood flow throughout the body. These natural nitrates increase a molecule in the blood vessels called nitric oxide, which in turn helps to open up the vessels and allows more oxygen flow as well as lower blood pressure. Metaanalysis (a quality study that reviewed many past studies) of 254 people between 2006 and 2012 showed clear reductions in blood pressure, with the systolic blood pressure showing the best reduction.

"In April I went in to the doctor to get my blood pressure checked. It was a bit high at 155/93. That day I received a nutrition research report and it stated that if you take 1oz of beet juice, each day, blood pressure will be reduced by an average of 18 points. I started taking an additional teaspoon of **RediBeets** that day. I had my pressure checked one month later. It was recorded at 137/78. Last week I had it checked again, 127/68. The only thing I have done is add one teaspoon of **RediBeets** each day. (I had been taking a little mixed with Just Carrots and BarleyLife previously so I may be getting about 1.5 teaspoons now.)" Ralph Peterson from North Dakota, USA

Quercetin, a plant compound found in **LeafGreens**, promotes vasodilatation (the widening of blood vessels). Similarly, the ginkgo biloba found in AIM's **GinkgoSense** promotes vasodilatation and the subsequent lowering of blood pressure.