

# BP Control

by ChiroNutraceutical



CHIRO  
NUTRACEUTICAL



Specifically selected and synergistically blended all-natural ingredients make BP Control the natural choice for patients with high blood pressure or a family history of high blood pressure. It is an effective and easy to take blood pressure support and regulation formula. Pressure Down is the right choice for your patients at a price they can afford!

Ingredients Include: Vitamin C, Vitamin B6, Niacin, Folic Acid, Vitamin B12, Garlic, Hibiscus Flower Powder, Olive Leaf Extract, Coleus Forskholii, Hawthorne Berry, Buchu Leaves, Uva Ursi, and Green Tea Extract.

## Garlic

Garlic is an herb. It is best known as a flavoring for food. But over the years, garlic has been used as a medicine to prevent or treat a wide range of diseases and conditions. The fresh clove or supplements made from the clove are used for medicine.

Garlic is used for many conditions related to the heart and blood system. These conditions include high blood pressure, high cholesterol, coronary heart disease, heart attack, and “hardening of the arteries” (atherosclerosis). Some of these uses are supported by science. Garlic actually may be effective in slowing the development of atherosclerosis and seems to be able to modestly reduce blood pressure.<sup>1</sup>

## Hibiscus Flower Powder

Hibiscus Flower Powder research has focused on hypertension and dyslipidemia, with several clinical trials emerging in the last 3–4 years. A randomized, controlled, double-blind clinical comparison study was conducted on H. sabdariffa extract vs lisinopril (control) on patients with stage I or II hypertension. Results showed that the Hibiscus extract decreased blood pressure from 146/98 mmHg to 130/86 mmHg ( $P < 0.05$ ). Based on the study data, the authors concluded that the hibiscus extract did have a significant antihypertensive action through at least 2 mechanisms of action: diuretic effects (likely as an aldosterone antagonist) and ACE inhibitory effects. The study authors also noted that the diuretic activity did not alter plasma potassium levels and did not have mineralocorticoid effects.<sup>2</sup>

## Hawthorne Berry

The principle active components in hawthorn leaves, berries, and blossoms are flavonoids. One of these flavonoids, proanthocyanidin, has especially important cardiovascular effects.

Two randomized, controlled trials found decreases in blood pressure measures. Ninety-two men and women with mild hypertension achieved a significant decrease in both systolic and diastolic blood pressure after 3 months with *C. curvisepala*.<sup>2</sup> Individuals suffering from angina may also benefit from hawthorn. In one small study, 100 mg 3 times daily of crataegus extract or placebo was given for 4 weeks.<sup>19</sup> Angina decreased in 91% of patients in the hawthorn group vs only 37% in the placebo group; 45% of the patients in the hawthorn group completely stopped their nitroglycerine, compared with 25% in the placebo group. Hawthorn preparations are modestly effective in reducing blood pressure, preventing and treating atherosclerosis, lowering cholesterol, and preventing the oxidation of low-density lipoprotein (LDL).<sup>4</sup> Hawthorne preparations may improve the blood supply to the heart by dilating the coronary arteries, increase the force of contraction of the heart muscle, and regulate cardiac rhythm.<sup>5</sup>

## Olive Leaf Extract

Olive fruit's array of beneficial compounds includes hydroxytyrosol, oleacein, ursolic, and oleanic acids. However, it is oleuropein, found in high concentrations in the leaf of the olive tree, that is largely responsible for the beneficial effect on high blood pressure.<sup>6-11</sup>

A multitude of causative factors underlies uncontrolled blood pressure. Many cases of hypertension involve increased arterial stiffness.<sup>11</sup> This stiffness, or lack of elasticity, usually begins in the arterioles—tiny peripheral arteries most distant from the heart—and eventually spreads to larger arteries.

Oleuropein has been shown to specifically target arterial resistance and stiffness, improving endothelial function and bringing blood pressure under control. It accomplishes this in part by modulating calcium channel flow—with an excellent tolerability profile.<sup>12,13-16</sup>

### **Coleus Forskholii**

One of the most beneficial aspects of *Coleus* appears to be relating to its use in conditions such as hypertension, congestive heart failure, and angina. *Coleus* has been shown to reduce blood pressure along with improving the contractility of the heart. This improvement in function appears to be mainly due to the increase in cAMP. *Coleus* is also noted for its effects on reducing platelet aggregation and acting as a direct cerebral vasodilator.<sup>17</sup>

### **Buchu Leaves**

Buchu contains both diosmin and hesperidin, which indicates it may have anti-inflammatory, hypolipidemic (blood cholesterol lowering), and vasoprotective actions.<sup>19</sup>

### **Uva Ursi**

*Uva Ursi* has a history of medicinal use dating back to the 2nd century. It has been widely used as a diuretic, astringent, and antiseptic. Folk medicine around the world has recommended *Uva Ursi* for nephritis, kidney stones, and chronic cystitis. The herb has also been used as a general tonic for weakened kidneys, liver or pancreas. Native Americans used it as a remedy for headaches, to prevent and cure scurvy and to treat urinary tract infections.<sup>18</sup>

### **Green Tea Extract**

A dietary supplement of green tea has now been shown to help lower multiple factors associated with the metabolic syndrome in overweight adults. The 56 participants in this study were classified as obese, insulin resistant, and hypertensive, meaning they already had multiple difficult metabolic issues similar to millions of Americans. Amazingly they took a relatively small daily amount of green tea extract standardized for 208 mg of the most potent antioxidant catechin, epigallocatechin gallate (EGCG). After three months of supplementation they had statistically significant reductions in both systolic and diastolic blood pressures, fasting serum glucose, LDL cholesterol, and triglycerides. Additionally, there were significant reductions in inflammation in both TNF $\alpha$  and CRP.<sup>20</sup> Although this double-blind, placebo-controlled trial is relatively small; these are dramatic health benefits in a difficult patient population.

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