



## Combination Potassium

Stock #3673-1 (180 capsules)

The modern "Westernized" diet, which is typically high in sodium and processed foods and lacking in fruits and vegetables, provides substantially less dietary potassium compared with traditional food habits. As a result, a large amount of the population likely has suboptimal potassium intake.<sup>1-3</sup>

Adequate potassium intake is associated with a lower risk of cardiovascular and other chronic diseases. In fact, it is well-established that a high potassium intake provides protective effects against hypertension (high blood pressure), stroke, cardiac dysfunctions, kidney stones, and osteoporosis. Thus, the consumption of a variety of potassium-rich foods is recommended and strongly contributes to the rationale of recommending 5-10 servings of fruits and vegetables per day, as outlined in the *Dietary Guidelines for Americans 2005*.<sup>1-7</sup>

Potassium is an essential mineral required for healthy energy metabolism and cellular functions. Potassium is also necessary for maintaining proper alkalinity (pH) of body fluids, which leads to more effective excretion of toxins from the body. In addition, potassium plays a vital role in blood pressure regulation, muscle contractions, nervous system activity, and fluid and mineral balance, and works in conjunction with sodium to normalize the heartbeat.<sup>3,8-14</sup>

Potassium deficiency can be caused by prolonged vomiting, diarrhea, caffeine or use of potassium-depleting diuretics which increase urinary excretion of potassium. Chronic stress can also deplete potassium stores. Excessive potassium intake should be avoided in the presence of renal (kidney) disease.<sup>8,10-15</sup>

Epidemiologic studies have confirmed a strong inverse association between potassium intake and blood pressure, with substantial evidence showing that potassium exerts an anti-pressor (blood pressure-lowering) effect. Given that hypertension is considered the most important risk factor for stroke, numerous studies have been conducted showing that both low potassium intake and low serum potassium levels are associated with higher stroke mortality (death). Fortunately, a high potassium diet has clearly been shown to reduce the risk of stroke. Potassium intake has also been shown to be inversely associated with mortality from coronary heart disease and total cardiovascular disease.<sup>2,6,15-22</sup>

Potassium is also connected with various other disease conditions. For example, patients with rheumatoid arthritis have been found to have significantly lower serum potassium levels than healthy subjects. A recent pilot study found that potassium supplementation appeared to decrease pain intensity in such patients, with potassium values in the treatment group inversely associated with pain assessment.<sup>23</sup>

Epidemiologic studies also indicate that potassium contributes to the maintenance of bone density and may reduce the risk of osteoporosis, even in elderly women aged 70 to 80 years. Research shows that low potassium intake increases urinary calcium excretion, whereas high potassium intake reduces calcium loss and also plays an important role in the management of kidney stones. Likewise, high sodium intake has been shown to increase bone resorption in postmenopausal women, yet high potassium intake counteracts this adverse effect.<sup>2,3,6,24,25</sup>

Furthermore, an epidemiologic study of over 84,000 U.S. women found that high potassium intake was associated with a lower risk of developing type 2 diabetes. Since research indicates that low serum potassium is strongly related to glucose intolerance, dietary potassium may play a preventive role against diabetes.<sup>2,3</sup>

**Combination Potassium** contains a unique blend of herbs and botanicals that are a rich source of potassium, along with numerous other vitamins, minerals, essential amino acids, and plant enzymes. Each capsule of Combination Potassium provides 42mg of elemental potassium in a base of:

**Kelp** (*Macrocystis pyrifera*) is best-known for its rich iodine content; however, kelp also contains a high concentration of minerals, including potassium and magnesium, as well as vitamins, essential amino acids, protein and dietary fiber. Kelp has been shown to promote thyroid function and improve a sluggish metabolism.<sup>8,12,13,26-31</sup>

**Dulse** (*Rhodymenia palmata*) is a relatively unknown red seaweed that is, like most seaweeds, a rich source of protein, vitamins and minerals, including potassium, calcium, magnesium and silicon, which contribute to the health of the hair, skin and nails. Dulse is also prized for its exceptionally concentrated iodine content and contains one of the highest concentrations of iron of any known food source, as suggested by its rust-red color.<sup>10,29,32-34</sup>

**Alfalfa** (*Medicago sativa*) is a rich source of protein, vitamins and minerals, including potassium, calcium and

magnesium, as well as plant enzymes that enhance the digestion and absorption of nutrients. Alfalfa also contains high amounts of phytoestrogens and saponins, both of which are useful in preventing cardiovascular disorders. Animal studies have shown that alfalfa is also capable of reducing serum cholesterol levels.<sup>13,35-38</sup>

**Horseradish** (*Armoracia rusticana*) contains various vitamins and minerals, including potassium, calcium and magnesium. Horseradish has a long history of use treating bronchial congestion and infections and has been used as a diuretic for tissue inflammation and swelling. Research has also confirmed that horseradish exhibits antimicrobial activity against both gram-positive and gram-negative bacteria. The German Commission E has approved horseradish for the treatment of respiratory tract infections, coughs, bronchitis and urinary tract infections.<sup>39-42</sup>

**White cabbage** (*Brassica oleracea*) contains high amounts of vitamin C, as well as other vitamins and minerals, including potassium, calcium and magnesium. White cabbage is also an excellent source of dietary fiber. White cabbage has been shown to effectively heal peptic ulcers, as well as promote the growth of healthy intestinal flora. In addition, epidemiological studies indicate that high intake of white cabbage may be associated with a reduced risk of various cancers, including lung cancer.<sup>41,43-48</sup>

**Horsetail** (*Equisetum arvense*) contains a high concentration of silica, along with potassium, magnesium and 15 different types of bioflavonoids. Horsetail bioflavonoids are believed to be responsible for the herb's mild diuretic action, while its silica content is reported to provide connective tissue-strengthening and anti-arthritis actions. Horsetail is approved by the German Commission E for post-traumatic and static edema (fluid retention), bacterial infections and inflammation of the lower urinary tract, and kidney gravel.<sup>13,26,40,49</sup>

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