CA, ATC Concentrate provides a blend of herbs that are rich in calcium and other minerals known to enhance calcium absorption and utilization and promote bone health, including manganese, silicon and zinc. Manganese and zinc are essential cofactors for enzymes utilized in bone synthesis, while silicon promotes collagen formation and works with calcium to strengthen bones and increase bone mineral density. In addition to bone health, calcium is also essential for nervous system support—calcium deficiency has been associated with anxiety, irritability, mania, and PMS symptoms such as depression and fatigue. Calcium deficiency has also been linked to hypertension (high blood pressure) and neurodegenerative diseases.1-6

ATC stands for "Ancient Traditional Concept" and indicates that this proprietary blend of herbs has been concentrated and enhanced. CA, ATC Concentrate contains:

**Alfalfa** (*Medicago sativa*) is a rich source of protein, vitamins (A, B1, B6, B12, C, E and K) and minerals, including calcium, iron, magnesium, manganese, phosphorous, potassium, silicon and zinc, as well as plant enzymes that enhance the digestion and absorption of nutrients. Alfalfa also contains high amounts of phytoestrogens and saponins that may be beneficial for preventing cardiovascular disorders. Individuals with a history of systemic lupus erythematosus (SLE) should avoid using alfalfa, as it contains the amino acid L-canavanine, which may aggravate symptoms. Excessive doses of alfalfa may also interfere with anticoagulant medications and hormonal therapy, including birth control and hormone replacement therapy, due to the herb's oestrogenic activity.7-12

**Marshmallow** (*Althaea officinalis*) contains minerals necessary for calcium absorption and utilization, including magnesium and phosphorous. Magnesium transports calcium into the cells and is necessary for calcium to function properly, while phosphorous works with calcium to build and maintain healthy bones and has been shown to speed the healing process in bone fractures. Marshmallow also contains calcium, iron, manganese, potassium, silicon and zinc. Marshmallow is well-known for its ability to soothe inflammation and pain and aid in the healing of minor wounds, bruises and abrasions. In addition, marshmallow's anti-inflammatory properties may prove beneficial for arthritis and joint pain.7,11,13-18

**Slippery elm** (*Ulmus fulva*) - The dried inner bark of slippery elm, known as the bast, contains a high amount of mucilage, which accounts for the herb's soothing effect. Slippery elm bark is also a rich source of calcium, as well as other nutrients, including vitamin A, vitamin C, iron, magnesium, manganese, phosphorous, potassium, silicon and zinc. Slippery elm's rich nutrient content supports historical use of the herb as a nourishing food during times of famine or illness, especially if digestion is weak. However, slippery elm is most commonly used as a soothing, healing remedy for inflammation and irritation. Slippery elm also demonstrates antioxidant activity.7,13,15,19-22

**Oatstraw** (*Avena sativa*) contains calcium, magnesium and high levels of silicon. Oatstraw is also a rich source of iron, manganese, phosphorous, potassium and zinc. In addition, oatstraw contains the amino acid tryptophan, which is a metabolic precursor to serotonin—a neurotransmitter that plays an important role in mood, behavior and sleep. The presence of these nutrients may help explain oatstraw’s common use as a tonic and nervous system restorative for anxiety, depression, insomnia, nervous exhaustion, and an over-stimulated nervous system.8,14,20,21,23-25

**Irish moss** (*Chondrus crispus*) is a red algae found along the Atlantic coasts of Europe and North America. Irish moss contains high levels of calcium, magnesium and iodine, as well as iron, magnesium, phosphorous, potassium, silicon, zinc, vitamin A, vitamin C and some B-vitamins. Irish moss is also a rich source of amino acids, including arginine and taurine. Research indicates that arginine may help maintain bone density and expedite bone healing, while taurine appears to enhance the formation of bone tissue and inhibit bone loss.13,15,20,26-31

**Horsetail** (*Equisetum arvense*) contains more silicon than any other herb, in a form that is highly absorbable. Horsetail’s rich silicon content explains the herb’s use for strengthening the skeletal system, healing broken bones, and speeding the healing of damaged connective tissue. Such actions contribute to horsetail’s use for relieving arthritic conditions and reducing menopausal bone loss, which can lead to osteoporosis. Horsetail is also a rich source of calcium and other minerals, including iron, magnesium, manganese, phosphorous, potassium and zinc.7,13,14,20,32,33
Passion flower (Passiflora incarnata) contains calcium, iron and phosphorous, as well as the amino acid proline. Proline is found in abundance in collagen, connective tissue and bone, and is essential for bone collagen. Passion flower is well-known for its central nervous system sedative properties and has been approved by the German Commission E for nervous restlessness. Passion flower is primarily used in the United States and Europe to relieve anxiety, insomnia and nervous stress. Passion flower is contraindicated during pregnancy and lactation. Excessive doses of passion flower may cause sedation and may potentiate the action of prescription anti-depressants (MAO inhibitors) and other central nervous system depressants. [11,13-15,34-36]

References:
