



### **Valerian Root**

Valerian root has been used as a medicinal herb since at least the time of ancient Greece and Rome. Hippocrates, the “father of medicine,” described its beneficial properties as did Galen, an ancient Greek physician. Valerian extracts are often standardized to contain from 0.25% to 1% valerenic acid which is considered to be the predominate constituent responsible for supporting joint health and sleep.

### **Devil’s Claw**

The medicinal part of Devil’s claw is the tuber that contains iridoid glycoside constituents including harpagoside and procumbide, but primarily harpagoside. Devil’s claw is used for joint health because it contains iridoid glycoside (10). Devil’s claw may inhibit COX-2 and nitric oxide synthetase, a modulator of cellular damage (3).

### **Black Cohosh**

Black cohosh is commonly known as snakeroot, bugbane, and rattle weed and has been used by Native Americans for hundreds of years. The triterpene glycosides have been studied and indicate they inhibit cytochrome P450 3A4 (CYP3A4) in vitro up to 44% (4). Black cohosh has activity that acts to reduce joint discomfort after exercise.

### **Bromelain, Protease and Serrapeptase**

These are all powerful proteolytic agents that benefit the body’s systemic response to swelling and discomfort. Bromelain exerts an effect by altering leukocyte migration and activation. Protease and serrapeptase are both potent proteolytic enzymes that work synergistically with bromelain. These two proteolytic enzymes support the synthesis, repair and regeneration of injured cell tissue.

### **Minerals**

Calcium, magnesium, manganese, copper and potassium are body essential minerals included in our MSI Support™ formula, and are all in forms that are shown to be the most bioavailable. For example, calcium citrate is far better absorbed than calcium carbonate (5). Magnesium is responsible for over 300 enzyme reactions and in the production of cellular energy.

### **B vitamins (B3 Niacinamide and B6 Pyridoxine)**

Niacinamide (B3) supports joint mobility and muscle strength and decreases fatigue (6). Exercising increases the need of B6, and magnesium increases the amount of B6 that can enter the cell (7).

### **Jamaican dogwood (Piscidia piscipula)**

The root and bark have been used traditionally for joint and muscle discomfort. It does contain some isoflavonoid compounds (jamaicine, ichtynone, millettone) that have sedative properties. It has been used to support a healthy response, promote comfort for occasional aches and nerve discomfort, including cramps, as well as stress and tension. Jamaican dogwood compounds have one of the strongest, non-narcotic herbal analgesics properties.

### **Feverfew (Tanacetum parthenium)**

Feverfew is believed to help because of the unique plant chemical it contains, parthenolide, which may help relieve smooth muscle spasms and can combat the widening of blood vessels that occurs in the neck and head. This effect appears to be backed up by research that shows that Feverfew can reduce symptoms such as nausea, vomiting and sensitivity to light (flashing lights). Parthenolide showed significant properties selectively affecting cyclooxygenase-2 (COX-2) (8).

### **Corydalis yanhusuo**

Corydalis is one of the most used plants in Chinese medicine for discomfort and swelling. It can be used orally and topically for discomfort due to overuse and overexertion. Corydalis is the Chinese herb of choice to support the nervous system. In Korea, Corydalis is used to help with discomfort, while in China the plant is used to support and stimulate blood circulation.

### **BioPerine® Black Pepper**

BioPerine® is a patented extract obtained from black pepper fruits (Piper nigrum) standardized to a minimum to 95% piperine. BioPerine® has been used to enhance absorption and bioavailability of nutrients by at least 30%.

*Patients: Consult with your healthcare professional for the proper use of this formula.*

**For more information about this and other Condition Specific Formulas® please visit our website at:**

[mountainpeaknutritionals.com](http://mountainpeaknutritionals.com)

email us: [support@mtnpeaknutrition.com](mailto:support@mtnpeaknutrition.com)



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