Realizing the need to further support the immune system from elusive viral infections, and other immune suppressing organisms, Mountain Peak Nutritionals® has added **Viral Immune™** to our family of immune boosting formulas. Humic acid is one of the scientific breakthroughs of the 21st century. Humic and fulvic acids are highly bioavailable. They are an organically based combination of humic substances which result from the degradation of organic matter created by soil-based micro-organisms (SBOs) and are high molecular weight polymers. The unique quality of humic and fulvic acid is its ability to bind both positively and negatively charged ions, making the combination a powerful free-radical scavenger and natural antioxidant. **Viral Immune™** also includes two potent antiviral botanicals, olive leaf and elderberry fruit. Olive leaf's active ingredient is oleuropein, a phenolic glycoside. Serrapeptase is an effective anti-inflammatory enzyme that adds to the repair and regeneration of injured tissue.

**INGREDIENTS:**

**Humic and Fulvic Acid**
Humic and fulvic acids are principal components of humic substances which are found in soil (1). These compounds contain a vast array of naturally occurring bio-chemicals including, but not limited to, supercharged antioxidants, free-radical scavengers, superoxide dismutases (SODs), nutrients, enzymes, polymeric compounds, amino acids, natural antibiotics, natural antivirals, and natural fungicides (2). The antiviral role of the polymeric compounds is to interfere with the mechanisms responsible that allow the viral attachment to host cells (3). The inability of the virus to attach effectively to the host cells is caused by inhibiting hemagglutination and cell-to-cell fusion (4).

**Olive Leaf**
The active constituent in the olive leaf is oleuropein, a phenolic glycoside. Olive leaf also contains the bioflavonoids rutin, luteolin, and hesperidin which work synergistically with oleuropein to enhance its natural activity. We use the highest concentration available of oleuropein extract (17-23%), which provides natural protection and a healthy environment for cells without suppressing immune system function or harming beneficial microflora (5).
Serrapeptase
Enzymes are proteins that facilitate chemical reactions in living organisms and are required for every single chemical action that takes place in our body. Serrapeptase is a potent enzyme that exhibits strong anti-inflammatory properties. Inflammation is a natural response of the body to injury. However, excessive inflammation retards the healing process. Serrapeptase is a proteolytic enzyme that reduces inflammation by neutralizing the biochemicals of inflammation (i.e., bradykinins and pro-inflammatory eicosanoids) to levels at which the synthesis, repair and regeneration of injured tissue can take place (6).

Oregano
The applicable part of oregano is the leaf and oil, making it a powerful immunostimulant. Research at Cornell University found oregano was one of the few natural substances that killed all 30 germs against which it was tested. Authors publishing in the International Journal of Food Microbiology found that of all spices tested, oregano proved most powerful for halting the growth of fungi.

Elderberry
Elderberry, the dark blue/black fruit from the shrub Sambucus nigra, has been a traditional medicine for colds and flu. Elderberry has been shown to reduce the duration and severity of fever, headache, muscle ache, mucus production and nasal congestion associated with colds and flu. Recent placebo-controlled, double blind studies on elderberry found it to be an effective treatment for influenza by reducing hemagglutination and inhibiting replication of human influenza A and B viruses (7). The primary flavonoids found in Elderberry are the anthocyanin 3-glucoside and cyanidin-3-sambubioside that have significant antiviral and immunomodulating effects (8).

REFERENCES