AllerPhase® Seasonal Respiratory Support Formula

All-natural AllerPhase® is a unique herbal formula especially designed for individuals sensitive to seasonal and perennial pollens, house dust, molds and pet dander. The proprietary blend of traditional herbal extracts contained in AllerPhase works by supporting the overall health of the respiratory system, including the nose, sinuses and lungs, to aid in reducing runny nose and eyes during seasonal outbreaks. AllerPhase also promotes a healthy immune response to aid in reducing the potential for future inflammatory reactions.*

Background
Exposure to seasonal and perennial pollens, house dust, molds and pet dander often lead to respiratory discomforts, characterized by inflammation (swelling, redness, heat and pain accompanied by exudation of fluids) affecting the eyes, sinuses, nose, throat and upper lung tissues to varying degrees. Traditional Chinese Medicine has historically relied on a selection of time-proven botanicals to work with the body to gently aid in resolving the three progressive stages underlying seasonal respiratory discomforts.

In Stage 1, the body has identified a substance as a potential threat, prompting a specialized class of cells called macrophages to destroy the substance. This in turn, leads the immune system to begin producing immunoglobulin E (IgE) antibodies specific to that allergen. Individuals prone to seasonal respiratory discomfort have been shown to create abnormally high levels of IgE antibodies, making them susceptible to allergic rhinitis, asthma, atopic dermatitis and anaphylactic reactions.

In Stage 2, with the next exposure to the substance, the newly created IgE molecules begin to bind with the allergen, unleashing a chemical cascade as mast cells begin to “degranulate” and release histamine and other inflammatory chemicals – cytokines, interleukins, leukotrienes, and prostaglandins – into the surrounding tissues.

Stage 3, usually occurring 2 to 24 hours after the initial response, is characterized by the influx of additional inflammatory cells, generating a new wave of symptoms as the newly recruited cells begin secreting chemicals of their own to sustain the inflammatory process, resulting in local tissue damage.

Nasal and Sinus Congestion
Centipeda, Xanthium, Angelica and Schizonepeta have traditionally been used to support healthy nasal and sinus functions.

• **Centipeda** *(Shi Hu Sui, Herba Centipeda)*
Volatile oils from Centipeda have been shown to exert anti-inflammatory action by inhibition of pro-inflammatory cytokines in rat model.[11] In a related study, Centipeda demonstrated effectiveness for allergic rhinitis in ragweed pollen model by reduction of infiltration of eosinophil and mast cell proliferation.[12]

• **Xanthium** *(Cang Er Zi, Fructus Xanthi)*
An active ingredient in Xanthium exhibits significant selective inhibition of superoxide anion generation by human neutrophils induced by *formyl-L-methionyl-L-leucyl-L-phenylalanine*, with an IC50 value of 1.72 mcg/mL.[13]

• **Angelica dahurica** *(Bai Zhi, Radix Angelicae Dahuricae)*
A medicinal herbal product isolated from Angelica dahurica – 5-Methoxy-8-(2-hydroxy-3-buthoxy-3-methylbutoxy)-psoralen – has been shown to inhibit the cyclooxygenase-2 (COX-2)-dependent phase of prostaglandin D(2) generation in bone marrow-derived mast cells (IC50, 23.5 mM). In addition, this compound consistently inhibited the production of leukotriene C(4), demonstrating the ability to inhibit both cyclooxygenase-2 and 5-lipoxigenase activity. Furthermore, this compound also inhibited the degradation reaction (IC50, 4.1 mM).[14]

• **Schizonepeta** *(Tai Zi Shen, Flos Schizonepetae Tenuifolii)*
Schizonepeta tenuifolia extracts exhibit immunomodulation of the inflammatory response by reducing cytokine release, specifically by minimizing the release of Th1 and Th2 cytokines from T cells and preventing unprimed CD4 T cells from differentiating into Th1 and Th2 cells.[15]

Inflammation and Itching
AllerPhase also supports recovery from tissue swelling, an important component of seasonal respiratory issues, by including Fritillaria, Angelica, Paeonia, and Platycodon. Another combination of herbs—Centipeda, Fritillaria, Platycodon, and Licorice—aid the body by supporting the elimination of accumulated fluids.

• **Fritillaria** *(Chuan Bei Mu, Bulbus Fritillariae Cirrhosa)*
In one study Fritillaria inhibited airway inflammation by suppression of cytokines, IgE, histamine production, and eosinophilic accumulation along with increased interferon-gamma production in tests on lung tissue.[16]

• **Paeonia** *(Bai Shao, Radix Paeoniae Lactiflorae)*
The root of *Paeonia lactiflora* has been used frequently in traditional medicines of Korea, China and Japan. Research suggests that constituents in *Paeonia lactiflora*, *paeniflorin* and *paeonol*, *Continued on back*
can improve IgE-induced scratching behaviors and inhibit mast cell degranulation.\(^9\)

- **Platycodon** (*Jie Geng, Radix Platycodon Grandiflori*)
  Platycodon root has been shown to exert anti-inflammatory effects via regulation of the NF-kappaB pathway, specifically inhibiting the expression of lipopolysaccharide-induced iNOS and COX-2 genes at the transcriptional level.\(^8\)

- **Licorice** (*Gan Cao, Radix Glycyrrhiza Uralensis*)
  Glycyrrhizin from Glycyrrhiza root has been shown to inhibit airway constriction, lung inflammation and infiltration of eosinophils in bronchial areas by stimulating CD4 and CD8 immune cell function.\(^9\)

**Headache and “Brain Fog”**
Traditionally used to support memory by promoting blood flow to the brain, *Gastrodia* is thought to assist other herbs in reaching inflamed tissues to aid in diminishing seasonal “brain fog.”

- **Gastrodia** (*Tian Ma, Rhizoma Gastrodiae Elata*)
  In studies, *Gastrodia* has demonstrated novel anti-angiogenic, anti-inflammatory and analgesic activities, and *in vivo* and *in vitro* inhibitory activity on NO production.\(^10\)

**Long-Term Benefits**
While many of the herbs in AllerPhase are directed towards supporting a healthy immune response to seasonal respiratory discomforts, AllerPhase also supports general overall immune system function. *Paeonia* and *Pseudostellaria* have been shown to promote liver and lung function to support proper, overall immune function. These herbs are likely, along with *Gastrodia*, to be partly responsible for helping to reduce the potential for future episodes of seasonal respiratory discomforts.

\(^*\) These statements have not been evaluated by the FDA. This product is not intended to diagnose, treat, cure or prevent any disease.

### Inflammatory Chemical

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<thead>
<tr>
<th>Inflammatory Chemical</th>
<th>Inflammatory Reaction</th>
<th>Active Inhibiting Herb</th>
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<tbody>
<tr>
<td>Histamine</td>
<td>Dilates blood vessels, causes local tissue swelling; Constricts bronchial tubes; Irritates nerve endings, itching and pain; Stimulates mucus production</td>
<td><em>Centipeda</em> <em>Xanthium</em> <em>Schizonepeta</em> <em>Angelica dahurica</em></td>
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<tr>
<td>Tumor Necrosis Factor Alpha [TNF-alpha]</td>
<td>Prolongs tissue inflammation, pain</td>
<td><em>Xanthium</em></td>
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<tr>
<td>Prostaglandin E2</td>
<td>Increases vasodilation; Enhances histamine effects</td>
<td><em>Angelica</em> <em>Paeonia lactiflora</em></td>
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<tr>
<td>Substance P</td>
<td>Irritates nerves, itching; Stimulates histamine release; Vascular leakage, tissue edema; Induces synthesis of Ig, immunoglobulins</td>
<td><em>Schizonepeta</em></td>
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<tr>
<td>Platelet Activating Factor</td>
<td>Induces systemic anaphylactic symptoms, including bronchial tube constriction</td>
<td><em>Centipeda</em></td>
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### Supplement Facts

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<thead>
<tr>
<th>Proprietary blend</th>
<th>Amount Per Serving</th>
<th>% Daily Value</th>
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<tbody>
<tr>
<td>Gastrodia</td>
<td>300 mg</td>
<td>*</td>
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<tr>
<td>Centipeda</td>
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<tr>
<td>Xanthium</td>
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<td>Schizonepeta</td>
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<td>Angelica</td>
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<td>Pseudostellaria</td>
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<td>Fritillaria</td>
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<tr>
<td>Paeonia</td>
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<td>Platycodon</td>
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<tr>
<td>Licorice</td>
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* Daily Value not established

**Recommended Use:** Adults, 2 capsules, 3-4 times daily. Children take 1 capsule, 3-4 times daily. Not recommended for children under the age of 6.

### Safety
The herbs in AllerPhase have a long history of safe use in Traditional Chinese Medicine for seasonal respiratory discomforts. AllerPhase is a non-drowsy formula that doesn’t cause fatigue or fuzzy thinking. And since AllerPhase is *not* a CNS stimulant the formula does not cause the “wired” sensation typical of certain OTC preparations.

**AllerPhase’s** unique, proprietary blend of “essence herbs” supports safe and rapid relief from seasonal respiratory miseries caused by pollen, house dust, dust mite particles, mold spores, pet dander and chemical pollutants.

### References