

Mycorepel™



THIS INFORMATION IS FOR PHYSICIANS AND OTHER LICENSED HEALTH CARE PRACTITIONERS ONLY. THE INFORMATION IS INTENDED TO ASSIST PRACTITIONER DECISION MAKING AS TO WHETHER OR NOT THESE PRODUCTS FIT THE NEEDS OF THEIR PATIENT. THE SCIENTIFIC INFORMATION AND DIETARY SUPPLEMENT PRODUCTS PROVIDED BY ALIGHT HEALTH FORMULAS ARE NOT INTENDED FOR USE BY CONSUMERS AS A MEANS TO CURE, TREAT, PREVENT, DIAGNOSE, OR MITIGATE ANY DISEASE OR OTHER MEDICAL CONDITION.

Mycorepel™ was formulated to provide protection and repair from exposure to a damp or mold-infested building, while also providing low doses of well-tolerated antifungal botanicals to reduce colonization formation. This formula is suited for the person who is still being exposed to mold or who only recently has been able to avoid mold.

Mycorepel™ may also be utilized as an exit strategy to transition off more aggressive antifungal treatments, while still providing anti-inflammatory and mild antifungal support. This subtly powerful, balancing formulation is rich in antioxidants, yielding a potent anti-inflammatory effect.

Specific antifungal herbs were selected for their synergistic interplay and for their anti-mycotoxic effects, preventing existing mold colonies from increasing mycotoxin production as a defensive tactic.

Vitamin A

Vitamin A plays an important role in controlling the immunopathologic mechanisms of allergic diseases. It's a useful supplement in managing allergic rhinitis and asthma by decreasing the severity of inflammatory responses.

It's useful to monitor and control Vitamin A levels when managing patients with allergic conditions and asthma, as seen commonly with mold exposure.

Vitamin A deficiency enhances mycotoxin absorption in the intestine as compared to Vitamin A sufficient groups. In addition to vitamins C and E, A is one of the antioxidants with immunoprotective activity against mycotoxin-induced oxidative stress in lymphocytes. Antigenotoxic effects have been observed with Vitamin A in a dose-response manner.

Supplement Facts			
Serving Size 3 capsules Servings Per Container 30			
Amount Per Serving	% Daily Value	Amount Per Serving	% Daily Value
Vitamin A (from Mixed Carotenoids)	2490 mcg RAE 277%	Quercetin	25 mg *
Acerola Extract (<i>Malpighia glabra</i>)(fruit) [standardized to contain 25% vitamin C]	400 mg *	Rutin	25 mg *
Grape Seed Extract (<i>Vitis vinifera</i>)(seed) [standardized to contain 95% proanthocyanidins]	90 mg *	Clove (<i>Syzygium aromaticum</i>)(bud)	25 mg *
Curcuminoid Powder (Curcumin C3 Complex®) (<i>Curcuma longa</i>)(rhizomes) (containing three curcuminoids: curcumin, bisdemethoxycurcumin, demethoxycurcumin) [standardized to contain 95% curcuminoids]	80 mg *	Allspice (<i>Pimenta dioica</i>)(berry)	25 mg *
Garlic (<i>Allium sativum</i>)(bulb)	60 mg *	Sweet Basil (<i>Ocimum basilicum</i>)(aerial parts)	25 mg *
Vitamin E Isomers (as DeltaGold® delta and gamma tocotrienols)	30 mg *	Sage (<i>Salvia officinalis</i>)(leaf)	25 mg *
Ginkgo Extract (<i>Ginkgo biloba</i>)(leaf)[standardized to contain 24% ginkgolavonglycosides and 5.4% terpene lactones]	25 mg *	Rosemary Extract (<i>Rosmarinus officinalis</i>)(leaf) [standardized to contain 7% carnosic acid]	22 mg *
		Lutein Esters	7.5 mg *
		Lycopene	7.5 mg *
		Trans Resveratrol (<i>Polygonum cuspidatum</i>)(root)	5 mg *

Other Ingredients: Cellulose (capsule), microcrystalline cellulose, vegetable stearate, silicon dioxide.

Curcumin C3 Complex®

DeltaGold®, delta and gamma tocotrienols

Resveratrol source: *Polygonum cuspidatum*, extracted without fermentation

*Daily Value not established.

Recommended Use

Take one capsule three times daily with meals, or as directed by a health care practitioner.

Does not contain gluten, dairy, soy, or GMOs.

Acerola Extract (standardized to contain 25% vitamin C)

Acerola (*Malpighia glabra* fruit) is a super-fruit that provides one of the highest natural forms of vitamin C (ascorbic acid), having approximately 50-100 times more than that of a lemon. Acerola also contains many more phytonutrients like carotenoids phenolics, anthocyanins, and flavonoids, which assist in reducing allergic reactions and stabilizing mast cells.

Acerola fruit exhibits high antioxidant capacity lending to its use in anti-aging medicine. It has antifungal and multidrug resistant reversal activity, making it a useful addition to biofilm or fungal colonization treatments.

Grape Seed Extract (standardized to contain 95% proanthocyanidins)

Grape seed (*Vitis vinifera*) extract is an extremely potent antioxidant, even moreso than Vitamin C alone, and has reach across many aspects of damp building exposure toxicant effects. It ameliorates immunotoxicity and oxidative stress that's commonly observed from mycotoxin exposure, as well as having antimutagenicity and antioxidative DNA damage properties.

Grape seed extract in particular is suited to pregnancy and/or preconception planning for women who have previously been exposed to damp or water-damaged buildings for its oocyte protective effect displayed in animal studies. Note that no human studies exist due to the known teratogenicity of most mycotoxins.

Turmeric (*Curcuma longa*, containing curcumin, bisdemethoxycurcumin, demethoxycurcumin, standardized to contain 95% curcuminoids)

As one of the more diverse and broad acting anti-inflammatory herbs, it comes as no surprise that turmeric and its components protect against the inflammatory cascade induced from mold and mold chemical exposure, including mycotoxins. Turmeric has mild antifungal properties and encompasses a diverse array of antioxidants. Turmeric reduces histamine secretion from mast cells, resulting in amelioration of allergic symptoms.

Curcumin mitigates mycotoxin-induced liver injury via the Nrf2 signaling pathway, and in animal models is neuroprotective and protective to the gastrointestinal system, primarily acting upon the gut microbiota. Turmeric combats mycotoxin effects on hemodynamics by being hemoprotective.

Garlic

Garlic (*Allium sativum*) has extremely diverse biological activity including antifungal, antimicrobial, antioxidant, anti-inflammatory, immunomodulatory, cardiovascular and gastrointestinal protective, anticancer, hepatoprotective, nephroprotective, neuroprotective, anti-diabetic, and anti-obesity. The sulfur-containing allicin and alliin are the bioactive antimicrobial compounds. One action particularly helpful for mold-affected people who struggle with hypercoagulability is garlic's antithrombotic effect.

Garlic has antifungal activity against more fungi than yeast, including *Aspergillus* & *Penicillium* species. Mouse studies show that its efficacy against *Candida* was only slightly less than fluconazole, with added activity against drug-resistant species. Garlic also has antibiotic activity against *Staph aureus*, *E. coli*, *Pseudomonas*, *Bacillus cereus*.

This formula assists those who are actively being exposed to mold or who have just removed mold.

To assist those still in a current mold exposure, increased doses may be required to prevent colonization.

Vitamin E

Vitamin E tocopherols are lipid-soluble antioxidants. Mycotoxins are lipid-soluble as well, causing lipid-rich tissue to sustain oxidative and inflammatory damage. Tocopherols play a preventive role in the histopathological changes seen with mold spore and mycotoxin exposure. Tocopherols are immunoprotective, hepatoprotective, cardioprotective, and nephroprotective as related to mycotoxin exposure.

Ginkgo Extract (standardized to contain 24% ginkgoflavonglycosides and 5.4% terpene lactones)

Ginkgo Biloba is neuroprotective, cardioprotective, gastroprotective, and has antioxidant properties shown to assist with multiple degenerative processes. In a mouse model of asthma, evaluation of lung histology after Ginkgo ingestion showed that it alleviated chronic histological changes of the lung including reduction of mast cells. Ginkgo exhibited cytotoxic activity against a variety of human cancers by suppressing various pro-inflammatory signaling cascades and oncogenic transcription factors through multiple modes of action.

Quercetin

Mold spores induce allergic responses. Quercetin acts as an inhibitor of mast cell secretion, dramatically inhibiting mast cell tryptase and IL-6 release in a dose-dependent manner. In cell studies, Quercetin is involved in the down-regulation of histidine decarboxylase mRNA transcription from human mast cells, thereby reducing the expression of pro-inflammatory cytokines.

Quercetin is a key cytoprotective factor for mold mycotoxin exposure. It modulates oxidative stress mediators in multiple tissues, resulting in immunoprotective, neuroprotective, nephroprotective, hepatoprotective, and genoprotective effects.

Rutin

Chronic inflammation is a common aspect in conditions resulting from damp and water-damaged building exposure and the stealth infections that may follow. Rutin is a plant-derived flavonol that “through its strong antioxidant properties, can effectively ameliorate inflammation by reducing the levels of pro-inflammatory markers such as tumor necrosis factor- α , interleukin (IL)-6, cyclooxygenase-2, IL-1 β , as well as blocking nuclear factor kappa B (NF- κ B)/mitogen-activated protein kinase (MAPK) activation to improve metabolic function.” Rutin in combination with Quercetin have antigenotoxic effects after exposure to certain mycotoxins in cell studies.

Antifungal Herbs

Antifungal herbs Clove (*Syzygium aromaticum*), Allspice (*Pimenta dioica*), Sweet Basil (*Ocimum basilicum*), and Sage (*Salvia officinalis*) were included for multiple mechanistic effects. These common culinary herbs are high in antioxidants, are anti-inflammatory, and have a synergistic antifungal effect when used in combination.

In addition to their antifungal properties, these particular herbs contain naturally derived essential oils which have anti-mycotoxic effects, thereby preventing existing mold colonies from defensive mycotoxin production increases.

For more information about Alight Health Formulas™, email contact@alighthealthformulas.com

Rosemary Extract (standardized to contain 7% carnosic acid)

Rosemary (*Rosmarinus officinalis*) has been shown in both cell and animal studies to have antibiofilm activity against *Staphylococcus aureus* and *Pseudomonas aeruginosa*, two pervasive biofilm producers. Rosemary was used in combination with antimicrobial treatment to yield a synergistic antibiofilm effect.

Carnosic acid from rosemary extracts are cytoprotective against the oxidative stress induced by certain mycotoxins. Rosemary's powerful antioxidant, rosmarinic acid, has strong anti-inflammatory properties particularly useful for neuroprotection, hepatoprotection, gastroprotection, mitigation of colitis, as well as anti-nociceptive action.

Lutein

The carotenoid lutein is the predominant in human brain tissue. Higher lutein status is related to better cognitive performance, and lutein supplementation improves cognition. Neuroprotective biological effects include antioxidation, anti-inflammation, and a possible structural role.

Lutein has been shown to protect cells of the immune system and gastrointestinal tract from mycotoxin-induced oxidative stress and apoptosis via prevention of NF-kappaB nuclear localization and down regulation of NF-kappaB and CycloOxygenase-2 expression in cell studies. Lutein is also protective against eye diseases.

Lycopene

Lycopene has many beneficial aspects for mycotoxin repair. Interestingly, it's been shown to restore trace element levels in Ochratoxin-exposed animals. Furthermore, animal studies show many protective effects from almost all mycotoxins found in damp and water-damaged buildings.

Lycopene protects against acute Zearalenone-induced oxidative, endocrine, inflammatory and reproductive damages. In the gut, Lycopene protects against oxidative damage to the intestinal epithelium from mycotoxin exposure. It's also shown in animal models to be hepatoprotective and inhibit mitochondrial damage from various different mycotoxins.

Resveratrol

Resveratrol is a naturally occurring polyphenolic antioxidant that has innumerable ways in which it assists the mold-affected or inflamed patient, with studies showing benefit against almost all mycotoxins found in damp and water-damaged environments. Resveratrol's actions include antioxidant, anti-inflammatory, and protective benefits for the brain and nervous system; respiratory, cardiovascular, digestive, and endocrine systems; specific hepatoprotection and nephroprotection; and gene and cytoprotection.

Resveratrol has antibacterial, antifungal, and antibiofilm properties. Even at "subinhibitory concentrations, resveratrol can alter bacterial expression of virulence traits leading to reduced toxin production, inhibition of biofilm formation, reduced motility and interference with quorum sensing."* Resveratrol inhibited growth of *Candida albicans* biofilm in a dose-dependent manner.*

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