

MycoXpel™



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MycoXpel™ contains a synergistic blend of nutrients and botanicals that assist with the detoxification and repair of tissues affected by the mold mycotoxins found in damp or water-damaged buildings. When people are exposed to a damp or water-damaged building, they are impacted by a mix of microbial aspects, including microbial and fungal volatile organic compounds (mVOCs) and mycotoxins. Rarely do we see that they've been made sick from only one toxic component of mold and damp. Usually it's a mix of that particular building's pathogenic ecosystem.

If someone initially tested positive for only one or two of these toxic components (or none at first), as detoxification pathways are supported, we often see an increased excretion or change in the toxicant load. This indicates that as we improve the ability to mobilize and excrete toxins, new ones rise to the fore. Therefore, different supportive nutrients are necessary along the healing process.

MycoXpel™ was developed to cover many mold neutralization and detoxification bases. This synergistic formulation contains precursors and cofactors for detoxification to address many different damp building conditions. The nutrients in this formula also enhance immunologic clearance of mold and its toxicants, a system often impaired by the effects of damp building exposure. Since mold mycotoxins are lipophilic and neurotoxic, neuroprotective aspects were additionally included.

Molybdenum

Molybdenum is an essential cofactor in multiple detoxification enzymes, especially those involving sulfur metabolism. This is important for patients who've developed yeast overgrowth as part of their symptomatic picture. The mycotoxin Gliotoxin, secreted by yeast and other molds, can enhance infectivity of the fungi by using the sulfur-molybdenum pathway.

Over-utilization of enzymes using this cofactor, normally responsible for breakdown of purines and sulfur-containing amino acids, will oxidize harmful sulfites to sulfates, occasionally leading to conditions such as hydrogen-sulfide SIBO. If mold or damp-exposed patients cannot tolerate sulfur-containing foods or topical sulfur, such as epsom salt baths, consider Molybdenum deficiency and a corresponding yeast overgrowth.

Supplement Facts

Serving Size 2 capsules
Servings Per Container 30

Amount Per Serving	% Daily Value	Amount Per Serving	% Daily Value
Vitamin C (as Ascorbic Acid)	500 mg 556%	Green Tea Extract	50 mg *
Biotin (as d-Biotin)	150 mcg 500%	(<i>Camellia sinensis</i>)(root)	
Zinc	15 mg 136%	[standardized to contain 95% polyphenols and 45% EGCG]	
(as Zinc Bisglycinate Chelate)		Turmeric Extract (<i>Curcuma longa</i>)(root)	50 mg *
Selenium	100 mcg 182%	[standardized to contain 95% curcuminoids]	
(as Selenomethionine)		Grape Seed Extract (<i>Vitis vinifera</i>)(seed)	50 mg *
Manganese	3 mg 130%	[standardized to contain 95% proanthocyanidins]	
(as TRAACS® Manganese Bisglycinate Chelate)		R-Lipoic Acid	30 mg *
Molybdenum	100 mcg 222%	Vitamin E Isomers	15 mg *
(as TRAACS® Molybdenum Glycinate Chelate)		(as DeltaGold® delta and gamma tocotrienols)	
N-Acetyl-L-Cysteine (NAC)	250 mg *		
L-Leucine	150 mg *		

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

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Recommended Use

Take one capsule twice daily with meals, or as directed by a health care practitioner.
Does not contain gluten, dairy, soy, or GMOs.

N-Acetyl Cysteine (NAC)

Whether mycotoxins are ingested or absorbed through respiration, the powerful antioxidant NAC has a protective effect. NAC inhibits reactive-oxygen species (ROS) generation, and alleviates mycotoxin-induced apoptosis and inflammation, particularly in the male reproductive system.

L-Leucine

L-Leucine is one of the essential amino acids. It's involved in the synthesis of proteins, which is hit hard by trichothecene mycotoxins. These mold mycotoxins impair protein synthesis related to the immune system by inhibiting leucine-rich immunoglobulin production. The mycotoxin Zearalenone is particularly impactful on L-Leucine.

By supplementing this critical amino acid, the engines of protein synthesis can re-engage, allowing repair to the rapidly dividing cells, such as enterocytes and immune cells, thereby attenuating mold's affect on the innate immune system.

Vitamin E Isomers

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

Alpha Lipoic Acid (ALA)

Alpha Lipoic Acid (ALA) has been shown to protect against, or reverse, the adverse health effects of mycotoxins. In addition, animal models suggest that ALA offers antioxidant, hematological, hepatic, and immunological protective effects, with notable reduction in expression of inflammatory genes.

Green Tea Extract (standardized to contain 98% polyphenols and 45% EGCG)

Green tea polyphenols are extremely potent against the oxidative damage caused by exposure to damp and water-damaged buildings, as well as bacterial endotoxins. Collectively these increase oxidative damage systemically, yet are particularly detrimental to the health of respiratory tissues.

Some mycotoxins increase susceptibility to respiratory illnesses by enhancing viral replication and virulence in the lungs. Green tea extract significantly decreases the deleterious effects on the lung tissue from mold and mycotoxin exposure. In animal models, EGCG from green tea is cytoprotective, hepatoprotective, and immunoprotective primarily by mitigating oxidative stress.

Selenium in the form of selenomethionine has protective effects against multiple mycotoxins, alleviating oxidative stress and mitigating immunotoxicity, along with additional hepatoprotective activities.

Turmeric

As one of the more diverse and broad acting anti-inflammatory herbs, it comes as no surprise that turmeric protects 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.

Turmeric 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.

Grape Seed Extract (standardized to contain 95% proanthocyanidins)

Grape seed extract is an extremely potent antioxidant, even more so 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 on this due to the known teratogenicity of most mycotoxins.

Additional Therapeutic Benefits



Environmental toxicant load is increasing in our patients from increased use of pesticides, chemicals, volatile organic compounds, and toxic metals. The herbs and nutrients contained in MycoXpel™ provide additional benefits with the clearance of toxic metals and many other environmental toxicants, as shown in the literature.

As patients degrade biofilm in order to recover from fungal colonization associated with mold exposure, using products such as Alight's Biofilm Plus™, accumulated toxic metals may be mobilized.

This powerful formula addresses the commonly seen unlayering of toxicants, so your patient's needs are being met throughout the detoxification process.

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

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