How These Four Essential Oils Help You Clean Out a Toxic Mold Infection

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For people that are fighting a stubborn toxic mold infection by Greg Lee

My sister had over a dozen guinea pigs when I was growing up. They loudly squeaked every time a person walked by, hoping to get fed. They would consume massive amounts of greens, grasses, and vegetables. My chores somehow included cleaning out their pens. Cleaning often required a scraper and a hose to get the waste out of the hard to reach corners of their habitat.

How is cleaning out guinea pig pens similar to eliminating a toxic mold infection?



Just like encrusted guinea pig pens, toxic mold can accumulate in hard to reach corners of the body

Several species of toxic mold can grow in homes, schools, or offices including: Cladosporium, Penicillium, Alternaria, Aspergillus and Stachybotrys¹. These molds are a type of fungi that reproduce by producing spores. Attached to each spore is a toxin to prevent it from being eaten by another microorganism. Dark, moist environments with cellulose are perfect environments for these molds to grow. Unfortunately, over two hundred and fifty different kinds of molds can grow in the body and cause chronic illness².

Mold can infect your nasal passages

Breathing in mold spores can lead to your respiratory passages being colonized by these fungi. Mold infections have been found in sinus passages³, throat⁴, middle ear⁵, combat wounds⁶, brain⁷, skin⁸, lungs⁹, and meninges¹⁰. Mold also produces toxins which can create debilitating symptoms.

Mold toxins are small enough to get into remote places throughout the body

As mold grows, it produces spores and toxins. Mold toxins can wander everywhere in your body which can produce symptoms of brain fog, aches and pains, allergies, fatigue, and inflammation. These symptoms can migrate from one part of the body to the next. Unfortunately, some people are unable to eliminate these toxins because they lack the right genes.

Mold toxins accumulate faster in people who are lacking specific HLA genes

Human Leukocyte Antigen (HLA) genes help your immune system to identify mold toxins and produce antibodies to eliminate them. Approximately 25% of patients are lacking the specific HLA genes to eliminate mold toxins¹¹. In this subgroup of patients, symptoms can appear quite rapidly due to elevated levels of toxins aggravating symptoms of pain, brain fog, and fatigue. Patients that have immune systems already burdened by other infections are especially vulnerable.

Patients with a compromised immune system are at much greater risk of contracting a mold infection

Patients with a weak or compromised immune system are at a greater risk of becoming very ill or possibly dying from an opportunistic mold infection. Patients diagnosed with an invasive Aspergillus mold infection

can receive a variety of antifungal medications including: voriconazole, liposomal amphotericin B, posaconazole, itraconazole, caspofungin, or micafungin. Unfortunately, these antifungal medications can produce undesirable side effects like fever, rigors, chills, myalgias, arthralgias, bronchospasm, nausea, vomiting, headaches, hallucinations, kidney toxicity, and liver toxicity¹². Aspergillus can also produce slimy biofilms to become more drug resistant¹³.

What else besides antifungal medications can help patients overcome a toxic mold infection?

Concentrated spice oils are effective at stopping a mold infection

Kitchen spices contain many natural compounds that are effective at killing mold and inhibiting their toxins. Studies show that when these spices are distilled into essential oils, these compounds are much more effective at inhibiting mold and its toxins compared to the raw spice itself. The volatile nature of essential oils enables them to penetrate into the lungs, nervous system, and other hard to reach areas of the body where mold has taken hold. Here are four essential oils that have anti-mold and anti-toxin properties.

Anti-fungal spice essential oil #1: Sage (S. Officinalis L.), Chinese name: Shu Wei Cao¹⁴

The properties of this spice herb are bitter, acrid, and neutral. This herb is used to clear infection, promote circulation and regulate the menses. It has detoxification properties and reduces swelling. Sage is also used to treat jaundice, red or white diarrhea, vaginal discharge due to infection, irregular menstruation, dysmenorrheal, sores, swollen boils, and injuries from impacts. This herb is also used to improve memory, enhance mnemonic performance and helps elevate mood.

The whole herb contains these compounds: β -sitosterol, β -sitosterol glucoside, ursolic acid, oleanolic acid, 2α -hydroxyursolic acid, tormentic acid, caffeic acid, maslinic acid, ethyl- β -D-galactopyranoside. The essential oil can contain α -thujone, camphor, and up to 2.5% ketone and borneol. Sage essential oil is best used externally because α -thujone can be toxic if taken internally.

In one study, sage essential oil is effective at inhibiting the growth of these mold/fungi: Aspergillus niger, Aspergillus terreus, Candida albicans, and Fusarium species 15 . In another study, sage essential oil at 2 mg/ml had a strong antifungal effect against Alternaria alternate and reduced Aspergillus parasiticus growth by 87% and inhibited aflatoxin production by $96\%^{15}$. In another study, sage essential oil was highly effective at killing Penicillium verrucosum believed to be due to the compounds α -thujone and camphor 16 .

Anti-fungal spice essential oil #2: Thyme, Chinese name: Bai Li Xiang¹⁸

The properties of this spice herb are bitter, pungent, and warming. It is used to: transform mucus, strengthen the spleen, strengthen the lungs, warm the middle, and expel cold mucus. Thyme stimulates the production of white blood cells and strengthens immunity. This oil is very beneficial for the heart, valves, and is an anti spasmodic. It also reduces blood pressure. Thyme is widely used in food and is non-toxic 19. This spice contains the following compounds, thymol, p-Cymene, myrcene, borneol and linalool 20.

In one study, thyme essential oil was highly effective at killing intracellular Candida albicans ²¹. In another study, the essential oil was effective at killing Aspergillus species. and inhibiting aflatoxin production ²², and inhibiting mold spore germination ²³. A third study showed thyme essential oil as effective at inhibiting multiple Penicillum species ²⁴. Thyme essential oil has been used internally safely and effectively with patients struggling with chronic mold infections.

Anti-fungal spice essential oil #3: Clove, Chinese name: Ding Xiang²⁵

The properties of this spice herb are acrid and warm. It is used to warm the abdomen and relieve pain. Clove is also used to treat hiccups, nausea, morning sickness, vomiting, and diarrhea. This herb is also used to treat impotence, and coldness in the body and extremities. It also promotes digestion by

increasing bile and gastric acid secretions. Clove is also used topically to treat toothache. The essential oil has anti-asthmatic properties.

This herb is contraindicated in cases of fever and excess internal heat accompanied with symptoms of dryness. Side effects of this herb include dizziness, palpitations, chest oppression, headache, perspiration, decreased blood pressure, and skin rash. Clove has an inhibitory effect against Vibrio cholerae, Bacillus anthracis, Salmonella typhi, Corynebacterium diptheriae, Bacillus dysenteriae, E. coli, Bacillus subtilis, and Staphlococcus aureus.

Essential oil of clove contains these compounds: eugenol, caryophyllene, acetyleugenol, α- caryophyllene, and chavicol. In one study, clove essential oil inhibits Candida, Aspergillus, and some dematophytes including fluconazole resistant strains²⁶. In another study, the compound eugenol was effective at inhibiting Fusarium moniliforme, Fusarium oxysporum, Aspergillus species, Mucor species, Trichophyton rubrum and Microsporum gypseum²⁷. In a third study, clove essential oil increased the effectiveness of fluconazole and voriconazole against multiple Candida species²⁸. In another study, this essential oil was effective at inhibiting drug resistant Candida biofilms²⁹. Low doses of clove essential oil have been used safely and effectively for years with patients diagnosed with Lyme disease, parasites, and mold toxicity.

Anti-fungal spice essential oil #4: Cinnamon, Chinese name: Rou Gui³⁰

The properties of this spice herb are acrid, sweet, and hot. This herb is used to treat a wide variety of disorders including intolerance to cold, cold extremities, weakness, soreness and coldness of the low back and knees, impotence, lack of libido, excess urine production, and loose stools. It is also used to treat wheezing, asthma, labored breathing, swelling, and profuse phlegm. Cinnamon is also used for dizziness, flushed face, sore throat, and coldness in the lower extremities.

This herb also treats epigastric and abdominal pain, vomiting, diarrhea, gas, bloating, slow digestion, hernia pain, and spasmodic pain in the stomach and intestines. It is also used to treat hypercoagulation, irregular menstruation, amenorrhea, dysmenorrhea, postpartum pain, external injuries, trauma, deep rooted sores, psoriasis, and feelings of oppression in the abdomen.

This herb contains the following compounds: cinnamic aldehyde, cinnamic acid, cinnamyl acetate, phenylpropyl acetate, cinncassiol-A, -B, -C1, -C2, -C3, cinnzelanine, and cinnzeylanol.

Cinnamon is contraindicated during pregnancy and in patients with signs of excess heat, excess dryness, and excess bleeding. Excess amount of cinnamon can result in symptoms of flushed face, red eyes, dry mouth and tongue, bleeding, nausea, vomiting, abdominal pain, excess urination, anuria, burning sensations upon urination, excess serum proteins in the urine, dizziness, blurred vision, and numbness of the tongue.

Intravenous cinnamon reduced blood pressure, decreased heart rate, peripheral vasodilation, and decreased vessel resistance within 3-5 minutes. Subcutaneous injection of cinnamon in dogs increased the white blood cell count by 150 – 200%. This herb has an inhibitory effect on dermatophytes, pathogenic fungi, and many gram positive bacteria. In a rat study, essential oil of cinnamon has an analgesic and sedative effect.

Cinnamon bark essential oil was more effective at inhibiting more Aspergillus and Penicillium species than cinnamon leaf essential oil³¹. Cinnamon bark essential oil inhibits Aspergillus species and aflatoxin, aflatoxin-B1, and aflatoxin-G1 production. These toxins are inhibited because the essential oil binds to the DNA of aflatoxins. Also, this essential oil reacts with reactive oxygen species produced by aflatoxins, which has a protective effect on cells³². In another study, cinnamon bark essential oil was the most effective against oral isolates of Candida albicans³³. Another study demonstrated that cinnamon bark

essential oil was more effective against fluconazole susceptible Candida species than against fluconazole resistant Candida species³⁴. Low dilutions of cinnamon essential oil have been taken internally by people diagnosed with mold toxicity safely with out side-effects.

The right combination of essential oils can help you to overcome a toxic mold infection

Just like cleaning out a guinea pig habitat with a pressure washer, a combination of anti-mold/fungal and anti-toxin essential oils can help you penetrate, kill, and detoxify a hidden mold infection. Since some of these essential oils come with cautions on their use, work with a herbalist knowledgeable in essential oils and chronic fungal infections to develop a proper, safe, and effective essential oil strategy for your condition.

- 1. Shoemaker, Ritchie. "Molds, Mycotoxins, & More" http://www.survivingmold.com/diagnosis/molds-mycotoxins-more
- 2. Netkovski J, Shirgoska B. Fungal rhinosinusitis. Prilozi. 2012 Jul;33(1):187-91. http://www.ncbi.nlm.nih.gov/pubmed/22952104
- 3. Netkovski, p. 187.
- 4. Shin SY, Ye YM, Eun YG, Kim SW, Cho JS, Park HS. Local IgE-mediated hypersensitivity to Alternaria in pediatric adenoid tissue. Int J Pediatr Otorhinolaryngol. 2012 Oct;76(10):1423-8. doi:
- 10.1016/j.ijporl.2012.06.015. Epub 2012 Jul 6. http://www.ncbi.nlm.nih.gov/pubmed/22770595
- 5. Murakami A, Tutumi T, Watanabe K. Middle ear effusion and fungi. Ann Otol Rhinol Laryngol. 2012 Sep;121(9):609-14. http://www.ncbi.nlm.nih.gov/pubmed/23012900
- 6. Warkentien T, Rodriguez C, Lloyd B, Wells J, Weintrob A, Dunne JR, Ganesan A, Li P, Bradley W, Gaskins LJ, Seillier-Moiseiwitsch F, Murray CK, Millar EV, Keenan B, Paolino K, Fleming M, Hospenthal DR, Wortmann GW, Landrum ML, Kortepeter MG, Tribble DR; for the Infectious Disease Clinical Research Program Trauma Infectious Disease Outcomes Study Group. Invasive Mold Infections Following Combatrelated Injuries. Clin Infect Dis. 2012 Oct 5. [Epub ahead of print]
- http://www.ncbi.nlm.nih.gov/pubmed/23042971
- 7. Huang WM, Fan YM, Li W, Yang WW. Brain abscess caused by Cladophialophora bantiana in China. J Med Microbiol. 2011 Dec;60(Pt 12):1872-4. Epub 2011 Aug 18.

http://www.ncbi.nlm.nih.gov/pubmed/21852529

- 8. Kelly D. Craven,1,† Heriberto Vélëz,1 Yangrae Cho,2 Christopher B. Lawrence,2 and Thomas K. Mitchell. Anastomosis Is Required for Virulence of the Fungal Necrotroph Alternaria brassicicola. Eukaryot Cell. 2008 April; 7(4): 675–683. http://www.ncbi.nlm.nih.gov/pmc/articles/PMC2292617/
- 9. Buess M, Cathomas G, Halter J, Junker L, Grendelmeier P, Tamm M, Stolz D. Aspergillus-PCR in bronchoalveolar lavage for detection of invasive pulmonary aspergillosis in immunocompromised patients. BMC Infect Dis. 2012 Oct 2;12(1):237. [Epub ahead of print]

http://www.ncbi.nlm.nih.gov/pubmed/23031334

- 10. Brown. David. "Meningitis cases increase; very rare fungus identified" Washington Post. 12 Oct. 2012. http://www.washingtonpost.com/national/health-science/meningitis-cases-increase-very-rare-fungus-identified/2012/10/11/b44a7b1c-13e5-11e2-ba83-a7a396e6b2a7_story.html
- 11. R. Shoemaker. Surviving Mold. p. x (Foreward).
- 12. Thomas J. Walsh, EJ. Anaissie, D. Denning, R. Herbrecht, D. Kontoyiannis, K. Marr, V. Morrison, B. Segal, W. Steinbach, D. Stevens, J. van Burik, J. Wingard, T. Patterson. Treatment of Aspergillosis: Clinical Practice Guidelines of the Infectious Diseases Society of America Clin Infect Dis. (2008) 46(3): 327-360 doi:10.1086/525258 http://cid.oxfordjournals.org/content/46/3/327.1.full
- 13. Fanning S, Mitchell AP (2012) Fungal Biofilms. PLoS Pathog 8(4): e1002585. doi:10.1371/journal.ppat.1002585
- 14. Joe Hing kwok Chu. shu wei cao. Complementary and Alternative Healing University. http://thedao.com/shu_wei_cao.htm
- 15. Sage. The Genus Salvia. Edited by Spiridon E. Kintzios. CRC Press 2000. Print ISBN: 978-90-5823-

- 005-8. Vol 11, p. 146.
- 16. Farag, R.S., Daw, Z.Y. and Abo-Raya, S.H. (1989b). Influence of Some Spice Essential Oils on Aspergillus Parasiticus Growth and Production of Aflatoxins in a Synthetic Medium. Journal of Food Science, 54 (1), 74–76.
- 17. Sibel Ozcakmak, M. Dervisoglu, and A Yilmaz. Antifungal activity of lemon balm and sage essential oils on the growth of ochratoxigenic Penicillium verrucosum. African Journal of Microbiology Research, 30 March, 2012. http://www.academicjournals.org/AJMR, DOI: 10.5897/AJMR12.569 Vol. 6(12), p. 3082
- 18. Qi Food Thyme. http://www.qifood.eu/en/aliments/212_thymian
- 19. Kassner, P. Essential Oil Description. Jan 2011.
- 20. Thyme. http://en.wikipedia.org/wiki/Thyme
- 21. Tullio V, Mandras N, Allizond V, Nostro A, Roana J, Merlino C, Banche G, Scalas D, Cuffini AM. Positive Interaction of Thyme (Red) Essential Oil with Human Polymorphonuclear Granulocytes in Eradicating Intracellular Candida albicans. Planta Med. 2012 Aug 7. [Epub ahead of print] http://www.ncbi.nlm.nih.gov/pubmed/22872591
- 22. Alizadeh A, Zamani E, Sharaifi R, Javan-Nikkhah M, Nazari S. Antifungal activity of some essential oils against toxigenic Aspergillus species. Commun Agric Appl Biol Sci. 2010;75(4):761-7. http://www.ncbi.nlm.nih.gov/pubmed/21534488
- 23. Paster, N., Juven, B. J., Shaaya, E., Menasherov, M., Nitzan, R., Weisslowicz, H. and Ravid, U. (1990), Inhibitory effect of oregano and thyme essential oils on moulds and foodborne bacteria. Letters in Applied Microbiology, 11: 33–37. doi: 10.1111/j.1472-765X.1990.tb00130.x http://onlinelibrary.wiley.com/doi/10.1111/j.1472-765X.1990.tb00130.x/abstract
- 24. Lixandru BE, Drăcea NO, et al. Antimicrobial activity of plant essential oils against bacterial and fungal species involved in food poisoning and/or food decay. Roum Arch Microbiol Immunol. 2010 Oct-Dec;69(4):224-30. http://www.ncbi.nlm.nih.gov/pubmed/21462837
- 25. Chen, John K., and Tina T. Chen. 2004. Chinese Medical Herbology and Pharmacology. City of Industry CA: Art of Medicine Press, Inc., p. 461 462.
- 26. Pinto E, Vale-Silva L, Cavaleiro C, Salgueiro L. Antifungal activity of the clove essential oil from Syzygium aromaticum on Candida, Aspergillus and dermatophyte species. J Med Microbiol. 2009 Nov;58(Pt 11):1454-62. Epub 2009 Jul 9. http://www.ncbi.nlm.nih.gov/pubmed/19589904
- 27. Inder Singh Rana, A. S. Rana, R. C. Rajak. Evaluation of antifungal activity in essential oil of the Syzygium aromaticum (L.) by extraction, purification and analysis of its main component eugenol. Brazilian Journal of Microbiology (2011) 42: 1269-1277 ISSN 1517-8382 http://www.scielo.br/scielo.php?pid=S1517-83822011000400004&script=sci_arttext
- 28. Rózalska B, Sadowska B, Wieckowska-Szakiel M, Budzyńska A. [The synergism of antifungals and essential oils against Candida spp. evaluated by a modified gradient-diffusion method]. Med Dosw Mikrobiol. 2011;63(2):163-9. http://www.ncbi.nlm.nih.gov/pubmed/22184911
- 29. Khan MS, Ahmad I. Biofilm inhibition by Cymbopogon citratus and Syzygium aromaticum essential oils in the strains of Candida albicans. J Ethnopharmacol. 2012 Mar 27;140(2):416-23. Epub 2012 Feb 2. http://www.ncbi.nlm.nih.gov/pubmed/22326355
- 30. Chen, John K., and Tina T. Chen. 2004. Chinese Medical Herbology and Pharmacology. City of Industry CA: Art of Medicine Press, Inc., p. 447 449.
- 31. Singh G, Maurya S, DeLampasona MP, Catalan CA. A comparison of chemical, antioxidant and antimicrobial studies of cinnamon leaf and bark volatile oils, oleoresins and their constituents. Food Chem Toxicol. 2007 Sep;45(9):1650-61. Epub 2007 Feb 28. http://www.ncbi.nlm.nih.gov/pubmed/17408833
- 32. Lokman Alpsoy. Inhibitory Effect of Essential Oil on Aflatoxin Activity. African Journal of Biotechnology Vol. 9(17), pp. 2474-2481, 19 April, 2010 www.ajol.info/index.php/ajb/article/view/79702/69978
- 33. Carvalhinho S, Costa AM, Coelho AC, Martins E, Sampaio A. Susceptibilities of Candida albicans mouth isolates to antifungal agents, essentials oils and mouth rinses. Mycopathologia. 2012 Jul;174(1):69-76. Epub 2012 Jan 14. http://www.ncbi.nlm.nih.gov/pubmed/22246961
- 34. Pozzatti P, Scheid LA, Spader TB, Atayde ML, Santurio JM, Alves SH. In vitro activity of essential oils

extracted from plants used as spices against fluconazole-resistant and fluconazole-susceptible Candida spp. Can J Microbiol. 2008 Nov;54(11):950-6. http://www.ncbi.nlm.nih.gov/pubmed/18997851

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