



Yeast / Fungal Detox

Stock #508-9 (90 capsules)

Millions of bacteria reside in the gastrointestinal tract of healthy individuals. A large percentage of these bacteria are beneficial organisms (microflora) that keep the bowel functioning normally and discourage the overgrowth of *Candida albicans* yeast and other undesirable bacteria and fungi. Unfortunately, the overgrowth of candida yeast can result in a complex medical syndrome known as chronic candidiasis or the "yeast syndrome." Chronic candidiasis is 8 times more likely to affect women than men, due to the yeast-promoting effects of estrogen and birth control pills. Other factors that contribute to candida overgrowth include decreased digestive secretions, impaired immunity, nutrient deficiency, diabetes, impaired liver function, many prescription drugs (especially antibiotics and steroids such as estrogen, progesterone and cortisone), and poor diet (i.e. high intake of refined sugar/carbohydrates, dairy products, and mold and yeast-containing foods, including alcoholic beverages, bread, cheeses, dried fruits, mushrooms and peanuts). A wide variety of symptoms affecting virtually every system of the body have been attributed to candida overgrowth, with typical symptoms including allergies (i.e. nasal congestion,

sinus problems, skin rashes), chemical sensitivities, depression, digestive disturbances (i.e. abdominal pain, belching, bloating, constipation, diarrhea, gas, heartburn, indigestion), fatigue, headaches, immune system malfunction, and a general sense of "feeling sick all over."^{1,2}

Yeast/Fungal Detox is a nutritional formula designed to enhance immune function, promote liver health, and inhibit the growth and facilitate the detoxification of candida yeast and other pathogenic (disease-causing) fungi. Yeast/Fungal Detox contains herbs and nutrients with proven antifungal and immune-enhancing activity, as well as the ability to improve liver function and promote detoxification, two critical factors in the successful treatment of yeast and fungal overgrowth.²

Yeast/Fungal Detox contains:

Selenium, one of the most common nutrient deficiencies, is important due to its dual function as an antioxidant and as a nutrient necessary for immune modulation. Selenium is required for the activity of the enzyme glutathione peroxidase—a key antioxidant enzyme that promotes liver health and immune function, including the development of all white blood cells. Selenium has also been shown to inhibit the growth of some yeasts. Selenium deficiency is associated with immune dysfunction and impaired resistance to microbial and viral infections. In fact, animal studies show that selenium deficiency causes a reduction in candidacidal (candida-killing) activity. Furthermore, selenium deficiency is known to be associated with oral candidiasis and abnormal phagocytic function (the ingestion of harmful microorganisms by phagocytes, a type of immune cell) in animals.³⁻¹⁰

Zinc - The importance of zinc in resistance to infections by virus, fungi and bacteria is crucial because of its pivotal role in the efficient functioning of the entire immune system. Zinc is essential for thymus gland function and the production of thymic hormones that regulate the body's defense mechanisms. In addition, zinc is especially critical for maintaining cell-mediated immunity. These various cell-mediated immunologic mechanisms are important in preventing mucocutaneous infections (infections of the mucous membranes and skin) caused by *Candida albicans*. For example, a study of 29 women with recurrent vaginal candidiasis found that the women exhibited significantly lower plasma zinc levels than healthy control subjects. The differences in plasma zinc levels were even greater when results were adjusted for dietary and supplemental zinc. Researchers concluded that mild zinc deficiency is associated with recurrent vaginal candidiasis and may play a role in the susceptibility of women to recurrent infections.^{3,11-13}

Oregano contains volatile oils that are effective antifungal agents. The essential oil of oregano yields a high content of the phenols carvacrol and thymol, which have been shown to possess significant activity against *Candida albicans*. Oregano oil has also completely inhibited the growth of 9 different foodborne fungi, showing greater inhibition than sorbic acid at the same concentration. Other studies have confirmed oregano oil's antimicrobial activity against numerous genera of bacteria, including animal and plant pathogens (disease-causing organisms), food poisoning and spoilage bacteria. In addition, a recent study compared the anti-candida effect of oregano oil with that of caprylic acid. The results indicate that the anti-candida activity of oregano oil is greater than 100 times more potent than caprylic acid.^{2,3,14-16}

Caprylic acid is a naturally occurring long-chain fatty acid derived from coconut oil. Fatty acids have been known and used for centuries as antimicrobial agents, as most organic fatty acids are fungicidal (capable of killing fungi). Caprylic acid has demonstrated proven activity against *Candida albicans* and is reported to be an effective antifungal compound in the treatment of candidiasis. Furthermore, although caprylic acid is toxic to yeast, it is safe for humans

when used correctly, unlike the yeast-derived antifungal drug nystatin—this and other antifungal medications can cause drug interactions and unpleasant or even toxic side-effects, as well as the re-growth of candida colonies once treatment has ended, since these drugs fail to address the underlying factors that cause candida overgrowth.^{1,3,14,17,18}

Echinacea research over the last 20 years has focused primarily on the herb's immune-stimulating properties. Although echinacea has many historical uses, it is currently being used to combat bacterial, viral, protozoan and fungal infections. For example, echinacea has been shown to possess antimicrobial activity against fungi, including clinically relevant pathogenic (disease-causing) fungi such as *Candida albicans*. In one such study, echinacea inhibited *C. albicans* infection in rats given lethal doses of *C. albicans* intravenously. Furthermore, the effect of echinacea against *C. albicans* demonstrated in animal studies has been confirmed in several clinical studies. In fact, the vast amount of positive outcome clinical studies support the use of echinacea for treating vaginal candidiasis.^{3,19-22}

Sodium propionate (propionic acid) - Propionic acid is a short-chain fatty acid that has been shown to inhibit *Candida albicans* and other fungi in vitro. Propionic acid is also capable of inhibiting bacterial proliferation by entering the bacterial cell and inhibiting its metabolism.²³⁻²⁵

Sorbic acid has been shown to inhibit both Gram-positive and Gram-negative bacteria, and has demonstrated fungistatic (growth-inhibiting) activity against *Candida albicans* and other fungi, including *Candida tropicalis*—a major cause of septicemia (blood poisoning) and disseminated candidiasis (spread of candida to one or more internal organs), and the second most frequently encountered medical pathogen (disease-causing organism), next to *C. albicans*.^{3,26-30}

Garlic possesses antibacterial, antiviral, antifungal and antiprotozoal activity, and provides beneficial effects on the immune system. One of the active components in garlic is allicin, the substance responsible for garlic's pungent odor. Allicin has been shown to exhibit antiviral activity; antibacterial activity against a wide range of Gram-negative and Gram-positive bacteria, including multi-drug-resistant enterotoxigenic (a substance that produces poisons in the intestines) strains of *Escherichia coli*; antiparasitic activity against various major human intestinal protozoan parasites such as *Entamoeba histolytica* and *Giardia lamblia*; and antifungal activity, particularly against *Candida albicans*. Garlic's significant antifungal activity has been confirmed in both animal and in vitro studies. Furthermore, garlic has demonstrated greater anticandidal activity than the prescription antifungal drug nystatin.^{2,3,22,31-35}

Pau d'arco has been studied extensively for its broad spectrum antimicrobial activity against bacteria, viruses, parasites and fungi, including candida yeast. Pau d'arco contains the active constituents lapachol and beta-lapachone, which are fungistatic (inhibit the growth of fungi). In addition, pau d'arco contains xyloidone, which exhibits activity against numerous bacteria, including *Staphylococcus aureus*. Furthermore, xyloidone inhibits several species of fungus, including *C. albicans*, *C. kruzei* and *C. neoformans*.^{1,3,22,36-38}

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