Caprylic Acid Plus is a powerful antifungal agent that helps to prevent \textit{Candida albicans} overgrowth and reduce infections, without affecting the healthy microflora of the intestines. Caprylic Acid Plus helps to return yeast population to normal levels in both the digestive and genital tracts. Caprylic Acid Plus balances friendly bacteria in the colon and helps to prevent the proliferation and spread of harmful microorganism to other parts of the body. The antimicrobial action of caprylic acid is further strengthened by the antifungal properties of pau d’arco, cloves and garlic extract, making this the ideal supplement for yeast overgrowth.

**Ingredients**

Each vegetable capsule contains:

- Caprylic acid (calcium) (short-chain fatty acid from coconut oil) \ldots 180 mg
- Caprylic acid (magnesium) (short-chain fatty acid from coconut oil) \ldots 180 mg
- Caprylic acid (zinc) (short-chain fatty acid from coconut oil) \ldots 40 mg
- Pau d’arco \ldots 250 mg
- Odourless garlic (1000 mcg allicin potential per capsule) \ldots 100 mg
- Cloves \ldots 35 mg

Non-medicinal ingredients: Vegetable magnesium stearate and silicon dioxide in a NON-GMO vegetable capsule composed of vegetable cellulose and purified water.

Contains no: Preservatives, artificial flavour or colour, sugar, dairy, starch, wheat, gluten, corn, soy or yeast.

**Dosage**

Take 3 capsules twice a day (morning and evening) with water before meals.

**Warning**

- Not intended for children.
- Not recommended during pregnancy and breast feeding.
- This product should be used cautiously in individuals with diabetes and/or hepatic cirrhosis.
- Caution is suggested for people who are taking anticoagulants (warfarin, heparin) and/or antiplatelet (clopidogrel, aspirin) and/or protease inhibitors.
- Caution is suggested for people who are taking non-steroidal anti-inflammatory drugs (NSAIDs).
- Avoid taking prior to or after surgical procedures as certain ingredients in this product may prolong bleeding time.

**Indication**

Caprylic Acid Plus is an antifungal agent that helps to balance healthy bacteria in the colon, prevent \textit{Candida} overgrowth and treat \textit{Candida} infections, returning yeast population to normal levels.

**Purity, cleanliness and stability**

Third-party testing is performed on the finished product to ensure Caprylic Acid Plus is free of heavy metals, solvents residues, pesticides and other impurities.
**Pharmacokinetic**

Garlic undergoes first-pass effect in the liver following rapid absorption in the intestinal tract. Peak plasma concentrations are reached 15–30 minutes after oral absorption. Metabolism occurs in the liver and kidneys. The elimination half-life of garlic metabolites was found to be approximately 6 hours. Excretion occurs in the feces and urine, possibly via bile and intestinal mucosa.

**Pau d’Arco**

The bark of *Pau d’Arco*, native to the rain forests of Central and South America, has antifungal activity, and narrow-spectrum antimicrobial activity against mainly Gram-positive bacteria. Multiple in vitro and in vivo studies have shown that naphthoquinones, which are the active compounds of *Pau d’Arco*, express antibacterial, antifungal, and antiviral activities. (16) Beto-Lapachone, a naphthoquinone, was found to be more effective than ketoconazole as an antifungal agent, and the proposed mechanism involves uncoupling of oxidative phosphorylation or electron transfer inhibition. (17) Thus, *Pau d’Arco* bark extract is used to inhibit or control the growth of *Candida* species. (5, 18, 19)

**Clove**

**Pharmacodynamic**

Clove show great medicinal properties particularly in fighting infection and reducing pain. Eugenol, the component responsible for the medicinal action of cloves, is present in concentrations ranging as high as 85% to 90%. In clove studies, clove derivatives were shown to prevent proliferation and rapid spread of harmful microorganism such as *Candida* to other parts of the body. The antimicrobial action of clove oil is further strengthened by the antifungal properties of *Pau d’Arco*, cloves and garlic extract.

**Caprylic Acid**

**Pharmacodynamic**

Caprylic acid is a medium-chain fatty acid that is found naturally in the triglycerides of butter, coconut oil, palm oil and hemp, as well as in human breast milk. It is considered safe to use for human consumption. (4) Caprylic acid exerts antifungal effects and inhibits the opportunistic growth of fungi in the small and large intestines, without affecting beneficial microbiota. (4–5) It is unclear how caprylic acid exerts its antifungal and antimicrobial effects, however, it is proposed that it alters the fluidity of viral and fungal cell membranes. Changes in the permeability and fluidity lead to membrane disaggregation, loss of cellular function as cytoplasm leaks out, and subsequent cell death. (6) In an in vitro study comparing the antifungal activities of nine different fatty acids, caprylic acid was found to have significant antifungal activity, including complete inhibition of spore germination. (7) Its antifungal action is useful in the treatment of gastrointestinal and systemic infections. (8) Another study examined the efficacy of both the monoglyceride component of caprylic acid, monocaprylin, and caprylic acid to inhibit common candidiasis pathogens such as *Streptococcus agalactiae, Streptococcus uberis, Staphylococcus aureus, and Escherichia coli*. Both caprylic acid and monocaprylin reduced all five pathogens and thus were shown to offer antifungal activity against multiple microorganisms. (9) Naturopathic doctors often use caprylic acid as an antifungal agent for yeast control against systemic Candida infections. (10) Caprylic acid has the potential to trigger die-off reactions from the yeast after they are killed that may contribute to a release of toxins into the circulation, that may potentially cause mild and transient side effects.

**Pharmacokinetic**

Caprylic acid is absorbed in the intestine and, unlike polyunsaturated fatty acids, enters directly into portal circulation where it undergoes beta-oxidation in the liver. (11) In four children receiving medium-chain triglycerides, urinary excretion of octanoic acid (caprylic acid) by glucuronidation was rapid at 1–2 hours postingestion, and decreased thereafter. (12) An in vitro study demonstrated that octanolic acid competes with non-steroidal anti-inflammatory medications on albumin binding sites. (13)

**Garlic**

**Pharmacodynamic**

Based on several studies, garlic exerts antibacterial, antiviral, antifungal, and antiparasitic activities. (12) When there is *Candida* overgrowth, it generates a mold fungus by-product called a mycotoxin. Garlic extract has been shown to inhibit the formation of this toxic metabolite. (14) Alliin (diallyl thiosulfinate), the main active component of garlic, is the key ingredient that was reported to have a strong antifungal effect, thereby being effective against many strains of pathogenic yeasts including *Candida albicans*. It stops *Candida* growth by completely inhibiting lipid synthesis. (14) It appears that the breakdown products of alliin have the ability to cross cell membranes and combine with sulfur-containing molecular groups in amino acids and other proteins, thus interfering with cell metabolism. (15) It has been suggested that the reason human cells are not poisoned by alliin derivatives is that they contain glutathione, a sulfur-containing amino acid that combines with the alliin derivative, thus preventing cell damage. In addition to their biochemical mechanism, these derivatives appear to stimulate cellular immunity, an important ability lacking in conventional antifungal medications. (15) Garlic extract has shown to be more effective than nystatin, an antifungal drug, against pathogenic yeasts, especially *Candida albicans*. (12)