



Your Monthly Update

Dear Colleague

Welcome to the March 2012 newsletter from Pure Bio Ltd.

Did you know:

A daily dose of maitake mushroom formula has been found to permanently normalize blood sugar levels in patients who had severe type II diabetes (Diabet Med. 2001; 18: 1010)

Don't forget our website on www.purebio.co.uk. We always welcome feedback and suggestions.

Thrush

Protocol Summary

Ranking	Nutritional Supplements	Botanical Medicine
Primary	Lactobacillus acidophilus	Echinacea (for symptoms; effective only for adults)
Secondary	Propolis Boric Acid	Tea tree Garlic
Other	Caprylic acid Grapefruit Seed extract	Cinnamon Echinacea Oregano Pau d'arco

Primary – Reliable and relatively consistent scientific data showing a substantial health benefit.

Secondary – Contradictory, insufficient, or preliminary studies suggesting a health benefit or minimal health benefit.

Other – An herb is primarily supported by traditional use, or the herb or supplement has little scientific support and/or minimal health benefit.

Definition

Thrush is an infection caused by the yeast fungus *Candida* spp. Small numbers of *Candida* spp. normally live harmlessly in the body, controlled by beneficial bacteria and the immune system. However, *Candida* spp. is an opportunistic fungus and, in the right conditions, numbers multiply and cause symptoms.

The environment most conducive to *Candida* spp. growth is warm, moist, airless parts of the body, hence the vagina being a common site for candidal infection. Other areas of the body that are prone to candidal infection include the groin, the mouth, and the nappy area in babies.

Widespread infection can occur in immune-compromised people.

Candida overgrowth in the intestines is thought to, in some cases, penetrate the intestinal wall, causing the yeast and other unwanted particles to penetrate other areas of the body via the bloodstream. This is thought to activate the immune system, resulting in fatigue, headache, mood swings, poor memory and concentration, cravings for sweets, and has been linked to conditions such as fibromyalgia. Most conventional doctors think this systemic condition is over-diagnosed and many disagree with the diagnosis.

Most cases of thrush are caused by *Candida albicans* but sometimes other types of *Candida* spp., such as *Candida glabrata* or *Candida tropicalis*, are the cause.

Contributing Factors

- Use of oral contraceptives, steroids, antacids, anti-ulcer medications, or frequent or long-term use of antibiotics.
- High-sugar diets
- Pregnancy
- Diabetes
- Chemotherapy
- HIV
- Allergies

Symptoms

Thrush is the second most common cause of a vaginal discharge. (The most common cause being bacterial vaginosis).

The discharge from thrush is usually creamy white and quite thick, but is sometimes watery. It can cause itching, redness, discomfort, or pain around the outside of the vagina (the vulva). The discharge from thrush does not usually smell. Some women may experience pain or discomfort during intercourse or whilst passing urine.

Thrush does not damage the vagina, and it does not spread to damage the uterus.

Symptoms include:

- Fatigue and lethargy
- Poor memory
- Numbness, burning, tingling
- Abdominal pain
- Joint pain or swelling
- Muscle aching or weakness
- Constipation, diarrhoea, bloating, gas, or belching
- Bothersome or persistent vaginal itching, burning, or discharge
- Prostatitis
- Erectile dysfunction
- Loss of libido

Lifestyle Modification

According to one study, yeast infections are three times more common in women who wear nylon underwear or tights, than in those who wear cotton underwear.

Alternative methods of birth control to the oral contraceptive may be a consideration.

Practitioners usually suggest avoiding alcohol and smoking. Both can impair the immune function.

'Natural' remedies for thrush include: live yoghurt inserted into the vagina; adding vinegar or bicarbonate of soda to a bath to alter the acidity of the vagina; tampons impregnated with tea tree oil. However, at present there is little scientific evidence to show that these remedies work but some women may find that they help soothe their symptoms.

Thrush is not a sexually transmitted infection. Male sexual partners do not need treatment unless they have symptoms of thrush on their penis. Symptoms in men include redness, itching, and soreness of the foreskin and the head (glans) of the penis. Women do not catch thrush from men who have no symptoms.

Dietary Modification

Diet is an important part of the Candida cleanse. The length of time on the Candida cleanse depends on the length of time one has had symptoms, symptom severity (including how localized or widespread the symptoms are), and overall health. People may notice improvement after strict adherence to the diet for two to four weeks. For others it takes months. Once symptoms are gone and lab tests show significant improvement, foods from the restricted list can be slowly incorporated back into the diet.

Foods to totally exclude:

Sugar

- Refined sugar is thought to encourage the growth of Candida yeast.
- Exclude: all forms of sugar and syrup, chocolate, sweets, cakes, biscuits, ice cream, jams, fizzy drinks
- Read labels carefully because there may be hidden forms of sugar. When reading the label, words to watch out for include: sucrose, fructose, maltose, lactose, glycogen, glucose, mannitol, sorbitol, galactose, monosaccharides, polysaccharides.

Dried Fruit and Commercial fruit juice

- Dried fruit has a very high content of sugar; commercial fruit juice is frequently made with mouldy fruit which is not fit to be sold as fruit

High Yeast-containing foods

- Beer and champagne, marmite and vegemite, bread (use pitta or unleaven bread as alternatives)

Vinegar

- This includes all types of vinegar and any food made with vinegar, such as mayonnaise, commercial salad dressing, ketchup, Worcestershire sauce, and other commercial sauces.

Mushrooms

- Mushrooms are typically not allowed on Candida diets.

Peanuts, Peanut Butter, and Pistachios

- Peanuts, peanut butter, and pistachios are thought to have mould contamination.

Alcohol

- Alcoholic beverages are believed to encourage the growth of yeast.

Coffee, Black Tea, Cider, Root beer

- Includes filter and instant coffee, decaffeinated coffee, and all types of black tea.

Aged, Mouldy and Processed Cheeses

- Aged, mouldy or blue cheeses are eliminated, along with processed cheeses.

Packaged, Processed, and Refined Foods

- Canned, bottled, packaged, boxed, and other processed foods containing yeast, refined sugar, refined flour, chemicals, preservatives, or food coloring.

Foods to limit:

- Dairy Products -- Candida is thought to impair the body's ability to digest fat, so dairy products may need to be restricted. How much dairy one consumes may also depend on individual reactions to cow's milk and cow's milk products such as cheese, yogurt, buttermilk, and butter.

This list is not exhaustive and not everyone will require this level of exclusion – always be led by your practitioner as to your own specific needs – Ed.

Nutritional Supplement Treatment Options

Commencing an anti-candida diet and a regime of supplementation may lead to a "die-off" or Herxheimer reaction. This is caused by the dying candida releasing protein fragments and toxins that can trigger an antibody response from the immune system.

It is essential to combine an anti-candida diet with a course of prescription of naturopathic anti-mycotics, along with probiotics; in order to prevent an increase in systemic spread of candida.

Improvement in symptoms is usually noticed after two to four weeks.

[Lactobacillus acidophilus](#) - 3 capsules daily on an empty stomach. *Lactobacillus acidophilus* can be taken orally and can also be administered vaginally. In a controlled trial, women who consumed 8 ounces of *Lactobacillus acidophilus*-containing yogurt per day had a threefold decrease in the incidence of vaginal yeast infections and a reduction in the frequency of Candida colonization in the vagina. In another trial, women who were predisposed to vaginal Candida infection because they were HIV-positive received either *Lactobacillus acidophilus* vaginal suppositories, the antifungal drug clotrimazole, or placebo weekly for 21 months. Compared to those receiving placebo, women receiving *Lactobacillus acidophilus* suppositories had only half the risk of experiencing an episode of Candida vaginitis—a result almost as good as that achieved with clotrimazole.

Acidophilus can also be taken preventively during antibiotic use to reduce the risk of Candida vaginitis.

The beneficial bacteria *acidophilus* is thought to control candida by making the intestinal tract more acidic, discouraging the growth of candida, and by producing hydrogen peroxide, which directly kills candida. Research has shown that supplementing with a hydrogen peroxide-producing strain of acidophilus, DDS-1 greatly reduced the incidence of antibiotic-induced yeast infections.

These beneficial bacteria also help to restore the microbial balance within the digestive tract.

Boric Acid - *Insert vaginal suppositories containing 600 mg BID.* Boric acid capsules inserted in the vagina have been used successfully as a treatment for vaginal yeast infections. One study demonstrated that 85% of women who used boric acid vaginal suppositories were cured of chronic recurring yeast vaginitis. These women had all previously failed to respond to treatment with conventional antifungal medicines. The suppositories, which contained 600 mg of boric acid, were inserted vaginally BID for two weeks, then continued for an additional two weeks if necessary. **Boric acid should never be swallowed.**

Propolis - *Apply an alcohol extract containing 2 grams per 25 ml QID.* In a preliminary study, topical application of an alcohol extract of Brazilian propolis resolved candidiasis in 12 out of 12 people who were experiencing oral candidiasis associated with the use of dentures. The extract, which was prepared by mixing 2 grams of dried propolis in 25 ml of an 80:20 alcohol:water solution, was applied to the lesions QID for seven days.

Tea Tree - *Swish 15 ml of a 5% or less solution in mouth for 30 to 60 seconds QID, then spit out.* A small, preliminary trial found that a mouthwash with diluted tea tree oil was effective in decreasing the growth of **Candida albicans** and in improving symptoms in AIDS patients with oral Candida infections (thrush) that had not responded to drug therapy. People in the study took 15 ml of the oral solution (dilution of tea tree oil was not given) QID and were instructed to swish it in their mouth for 30 to 60 seconds and then spit it out. *For use of tea tree oil as a mouthwash, one should not exceed a 5% dilution and should be extremely careful not to swallow the solution.*

Fibre - *One teaspoon to one tablespoon of soluble fibre containing guar gum, psyllium husks, flaxseeds or pectin can be mixed in an 8 oz glass of water two times per day on an empty stomach.*

Enteric-coated essential oils - *two capsules BD with water, in between meals.* Enteric-coated capsules containing oregano oil, peppermint oil, and other volatile oils are thought to prevent the overgrowth of candida. Pure volatile oils can be quite toxic in this amount so the liquid form of these oils should never be ingested, and the capsules should not be broken open before ingesting.

Caprylic acid – *one to two capsules TDS, with water, before meals.* Caprylic acid, also known as octanoic acid, is a naturally occurring fatty acid. Caprylic acid promotes a favourable environment for beneficial microflora. Due to its fat solubility, it is believed to penetrate intestinal mucosal cells to exert its effects.

Grapefruit seed extract – *one to two capsules TDS, with water, before meals.* - Grapefruit seed extract is a highly concentrated fungal and microbial balancing extract. A preliminary clinical trial reported that grapefruit seed extract supplements helped support healthy gastro-intestinal function and symptomatic relief.

Botanical Treatment Options

[Cinnamon](#) - The essential oil of cinnamon contains various chemicals that are believed to be responsible for cinnamon's medicinal effects. Important among these compounds are eugenol and cinnamaldehyde. Cinnamaldehyde and cinnamon oil vapors exhibit extremely potent antifungal properties in test tubes. In a preliminary study in people with AIDS, topical application of cinnamon oil was effective against oral thrush.

[Echinacea](#) - Echinacea, which has the capacity to enhance immune function, is often used by people who suffer from recurrent infections. In one study, women who took Echinacea experienced a 43% decline in the recurrence rate of yeast infections.

[Garlic](#) - one capsule BD. The action of garlic on yeast and fungi is positively dramatic. One study showed that growth of *all* soil fungi was totally inhibited by an aqueous garlic extract. Medically-important fungi and yeasts (notably *Candida albicans*) are also inhibited and then killed by increasing concentrations.

Other herbs that are well-known for their anti-microbial activity include [Pau d'arco](#), [Alfalfa](#), [Ginkgo](#), [Ginger](#) and [Thyme](#).

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