Candida & Nutrition

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What is Candida?

• Candida is a type of yeast
• Most common cause of fungal infections worldwide
Candida albicans

- Most common species of candida
- *C. albicans* is part of the normal flora of the mucous membranes of the respiratory, gastrointestinal and female genital tracts.
- Causes infections
Candidiasis

- Overgrowth of candida can cause superficial infections
  - Commonly known as a “yeast infection”
  - Mouth, skin, stomach, urinary tract, and vagina
- Oropharyngeal candidiasis (thrush)
  - Oral infections, called oral thrush, are more common in infants, older adults, and people with weakened immune systems
- Vulvovaginal candidiasis (vaginal yeast infection)
  - About 75% of women will get a vaginal yeast infection during their lifetime
Causes of Candidiasis

• Humans naturally have small amounts of *Candida* that live in the mouth, stomach, and vagina and don't cause any infections.

• Candidiasis occurs when there's an overgrowth of the fungus
RISK FACTORS

WEAKENED IMMUNE SYSTEM
- Infants
- Elderly

ASSOCIATED FACTORS
- HIV/AIDS (Immunosuppression)
- Diabetes
- Corticosteroid use
- Antibiotic use
- Contraceptives
- Increased estrogen levels

Type 2 Diabetes – Glucose in vaginal secretions promote Yeast growth. (overgrowth)
Treatment

- **Antifungal medications**
  - Oral rinses and tablets, vaginal tablets and suppositories, and creams.
  - For vaginal yeast infections, medications that are available over the counter include creams and suppositories, such as miconazole (Monistat), ticonazole (Vagistat), and clotrimazole (Gyne-Lotrimin).
  - Your doctor may prescribe a pill, fluconazole (Diflucan).
The Candida Diet

- **Avoid carbohydrates:** Supporters believe that *Candida* thrives on simple sugars and recommend removing them, along with low-fiber carbohydrates (e.g., white bread).
- **Avoid yeast-containing foods:** Examples include beer, wine, vinegar, baked goods, and mushrooms.
- **Use probiotics:** Advocates say this will help introduce more "healthy" bacteria to the gut to help prevent a build-up of *Candida*. Yogurt with probiotics and/or supplements may be recommended.
- **Candida cleanse:** These types of diets tend to begin with detoxification, where fasting may be promoted, or a diet restricted to vegetable juice, colon cleansing, or consumption of herbs with antifungal properties.
Candida Research

- One study published in *Microbial Ecology in Health and Disease* looked at the dietary influence of various carbohydrates in vitro on the adherence of Candida to human epithelial cells.
- The study examined the effect of various carbohydrates including fructose, galactose, glucose, maltose, sorbitol, and sucrose.
- The results found that galactose and glucose promoted a higher adhesion as compared with maltose and fructose.
Issues with the Candida Diet

• The "Candida diet" allows no alcohol, no simple sugars, no yeast, and very limited amounts of processed foods.

It is not clear whether the diet actually gets rid of Candida or helps people feel better because it is a healthful diet.

• Not enough research to suggest that dietary strategies help resolve Candida infections.

• Restrictive diet can lead to deficiencies in certain nutrients; in those with a weakened immune system, dietary restriction can cause a decrease in consumption of nutrients necessary to improve immune system function.

• Many people with Candida can actually have a gluten sensitivity or other food sensitivity. Once those are corrected, the Candida may improve.
Alternative Therapies

• **Probiotics**, *Lactobacillus acidophilus* or *bifidobacterium* may help restore normal balance of bacteria.
  • Taking probiotics or "friendly bacteria" at the same time that you take antibiotics may help prevent a buildup of *Candida*
  • Evidence is mixed
  • If you take drugs to suppress your immune system, ask your doctor before taking probiotics.

• **Vitamin C, vitamin E, and selenium**, help reduce inflammation and keep your immune system strong.
  • Fruits and Vegetables
  • Nuts
Alternative Therapies

- **Essential fatty acids** Help reduce inflammation. A mix of omega-6 (evening primrose) and omega-3 (fish oil) may be best. It also helps to reduce animal fats in your diet and increase your intake of fish and nuts.
- **Caprylic acid** may have antifungal properties.
- **Propolis**, a natural substance created by bees from pine resin, has antifungal properties according to test tube studies. One study in humans showed that a special propolis preparation got rid of oral thrush in people who had denture stomatitis (mouth sores).
Recommendations

- Choose a diet that boosts immune function, beneficial bacteria, fiber, and nutrients, while decreasing sugar and processed foods.
- Choose:
  - Yogurt
  - Whole grains
  - Fruits and Vegetables
  - Fish
  - Nuts
- Limit:
  - Simple sugars and refined grains
Questions?
References


