Comprehensive Candida Guide

WHAT IS CANDIDA ALBICANS?

Candida albicans, is an opportunistic yeast that normally inhabits the mouth, throat, intestines and genitourinary tract of most humans and is usually considered to be a normal part of the bowel flora (the organisms that coexist with us in our lower digestive tract).

Its job is to recognize and destroy harmful bacteria. Without Candida albicans in our intestines we would be defenseless against many pathogen bacteria. In a healthy person, Candida albicans is numbered in millions.

It is controlled by a properly functioning immune system and "friendly" bacteria. However, if the number of friendly bacteria is decreased (antibiotics), the immune systems is weakened or other conditions for yeast proliferation occur (diet high in sugar, improper pH in the digestive system) Candida albicans will shift from yeast to mycelial fungal form and start to invade the body.

In the yeast state Candida is a non-invasive, sugar-fermenting organism, while in fungal state it is invasive and can produce rhizoids, very long root-like structures.

Rhizoids can penetrate mucosa or intestinal walls, leaving microscopic holes and allowing toxins, undigested food particles and bacteria and yeast to enter the bloodstream.

What causes Candida overgrowth?

To cure Candida albicans it is essential to find what caused Candida overgrowth. If the cause is not found and treated it is possible that treatment will not be effective and/or that Candida will relapse.

Here are the most common causes of Candida albicans overgrowth:

- **ANTIBIOTICS** reduce the number of "friendly bacteria" in the intestinal tract which normally keeps the Candida albicans under control.
- **TOXIC METALS AND CHEMICALS** Toxic metals, such as mercury (found in dental amalgams and some fish) and chemicals, such as aspartame, MSG and others can kill friendly intestinal flora, alter immune response and allow yeast to proliferate.
- **IMMUNE DEFICIENCY** Any condition that results in a weakened immune system can cause Candida proliferation. Common causes of immune deficiency are AIDS and cancer.
- **GENETIC DISORDERS** like celiac disease or hemochromatosis can cause Candida overgrowth.
**HORMONAL IMBALANCE** Hormonal balance is necessary for support of friendly flora in the gut.
- PREGNANCY can cause a significant hormonal imbalance.
- BIRTH CONTROL PILLS usually contain the estrogen hormone.
- THYROID DISEASE like hypothyroid also affects hormonal balance.

**STEROID HORMONES, IMMUNOSUPPRESSANT AND ANTI-INFLAMMATORY DRUGS, ULCER MEDICATIONS OR ACID BLOCKERS USED FOR PROLONGED PERIOD**

**EXCESSIVE STRESS**

**INTESTINAL PARASITES AND WORMS** Destroy friendly bacteria in the gut making yeast overgrowth possible

**IMPROPER DIET.** Diet high in carbohydrate and sugar, yeast and yeast products can lead to Candida overgrowth. Overeating causes indigestion of food and allows fermentation.

**CHRONIC CONSTIPATION**

**CHRONIC DIARRHEA.** The friendly Bifidobacterium bifidum can be thrown out of the colon and Candida may proliferate.

**ENVIRONMENTAL MOLDS OR CHEMICALS**

**ALCOHOL** Kills friendly bacteria, increases toxic overload of liver and in turn allows Candida to grow.

**TAP WATER** Common tap water contains chlorine, that has the ability kill bad bacteria but effects also the good bacteria in the gut allowing Candida to proliferate.

**Which toxins do Candida release?**

Candida releases poisons in blood causing all kinds of symptoms. There are about 80 of known toxic substances, some of which are:

- **ethanol**: Produced when yeast has lots of food. Excess ethanol can cause symptoms of alcohol intoxication
- **acetaldehyde**: can damage organs, disrupt fatty acid oxidation and production of collagen, cause abnormal behavior, memory loss, distorted thinking, mood swings, depression, impaired intellectual functioning and emotional disturbances.
- **formaldehyde**:

**What is die-off (Herxheimer reaction)?**

When you kill off a bunch of Candida at once, all of the toxins that are currently stored in them are released into your system all at once. As there are usually significant amount of toxins stored in Candida cells, these
toxins when released will cause a temporary increase in yeast symptoms (often including new symptoms as new toxins are released), followed by a considerable lessening of symptoms.

The technical name for this experience is a Herxheimer reaction; it is more commonly referred to as "die-off" or "flare-up".

This experience is similar to experience when Candida albicans is growing, such as when you have eaten a "forbidden" food. In both cases, Candida releases its toxins and it is often hard to differentiate whether you are killing it or feeding it. In order to tell the difference between die-off symptoms, reaction food and general yeast symptoms it is wise to keep a journal of what you eat and what anti-fungals you take, so when you get a change, you know which it's likely to be.

As die-off is caused from anti-fungals it will usually last from few days to 2 weeks depending of what anti-fungal you use. As you kill almost all susceptible strains of Candida die-off effect will subside.

Even if you don't get die-off it does not mean that Candida is eradicated from the body. It is possible that amount of Candida killed (toxins released) is to small to produce massive die-off.

Then, you should either continue the same anti-fungal for few weeks to finish it off or even better, change to new anti-fungal. Also, the dosing of anti-fungals and their effectiveness can be established by observing die-off effect.

The die-off effect of anti-fungal should not be intolerable, but you should feel die-off. If die-off effect is too strong, the dose of anti-fungals should be decreased.

What is systemic Candida overgrowth?

Systemic Candida overgrowth occurs when Candida breaks the intestinal lining (see LGS) and enters the bloodstream. From there, it can travel to various parts of your body, call it a residence and multiply. The symptoms of systemic Candida overgrowth are: muscle aches, sore/stiff joints, fatigue, problems with particular organs, recurrent urinary tract infections, serious illnesses (Asthma, ADHD, Diabetes, MS, Arthritis, CFS, Fibromyalgia).

If you're experiencing systemic symptoms, then you need some systemic anti-fungals (anti-fungals that enter your bloodstream in sufficient quantity to reach your joints and organs).

The most mainstream doctors recognize systemic Candida overgrowth, but believe that only hardly immune-compromised persons (AIDS, cancer, organ transplant patients) can be affected.
What are the symptoms of Candida overgrowth?

Symptoms of Candida overgrowth are caused by toxins released. Not all listed symptoms will occur in all individuals. Usually, approximately 20 symptoms will be present.

Dysfunctioning Glandular and Organ Symptoms:

adrenal and thyroid gland malfunction, cold hands or feet, diabetes mellitus, hypoglycemia, hypothyroidism, impotence and low body temperature.

Gastrointestinal:

bad breath (halitosis), bloating, coating on tongue (oral thrush), constipation, diarrhea, dry mouth, gas, heartburn, indigestion, inflammation, irritable bowel syndrome, obesity or/and excessive weight loss.

Psychological and Allergic:

acne, blurred vision, bronchitis (recurrent), burning or tingling, chemical sensitivity, chest pain, coughing, earaches, hayfever, headaches, hives, muscle aches and tension, nasal congestion, nasal congestion, head tension, numbness, painful, swollen, stiff joints, shortness of breath, sinusitis and sore throats.

Emotional and Mental:

ADD, ADHD, anxiety, depression, disorientation, drowsiness, fatigue, feelings of unreality, frequent mood swings hyperactivity, inability to concentrate, insomnia, irritability, joint pain, low energy, mental confusion, MS, muscle pain, muscle weakness, nervousness, poor memory and tingling and numbness.

Skin:

Acne, anal itch, athlete's foot, dandruff, dermatitis, dermatitis, diaper rash, dry skin, eczema, excessive perspiration, facial rash, fungous infection of the nails, hives, impetigo, jock itch, lupus and psoriasis.

Genitourinary:
Bladder infection (recurrent), burning on urination, cramps, cystitis (inflammation of the bladder), endometriosis (irregular or painful menstruation), fluid retention (edema), frequent urination, impotency, infertility, loss of sexual feelings, menstrual irregularities, painful intercourse, PMS, prostatitis, recurrent yeast vaginitis, vaginal burning, itching or discharge.

What steps are recommended for treating Candida overgrowth?

- **Candida Control Diet**
- **Avoid use of antibiotics and steroids** unless absolutely necessary. Antibiotics kill friendly bacteria and promote yeast growth !!!
- Determine the cause of Candida overgrowth and treat it if still present. If you do not find and treat the cause you might have hard time getting rid of Candida or have a relapse.
- Digestive aids: Replace any deficient digestive secretions such as hydrochloric acid and pancreatic enzymes. These will help you to absorb your nutrients and supplements and will leave less behind for Candida to eat.
- Strengthen the immune system It is highly likely that Candida has weakened your immune system
- Nutritional supplements. Because Candida interferes with absorption of vitamins and minerals and Candida Control Diet limits food one can eat it is common to for Candida patients to have vitamin and mineral deficiencies. Therefore, it is recommended to take hypoallergenic, yeast-free multiple vitamins and minerals, to provide your body with essential micronutrients and to boost immunity.
- A healthy, active life-style and positive attitude also speeds recovery.
- a nutritious diet with avoidance of refined and processed foods and avoidance of tobacco and excessive alcohol are important.
- Keep a diary of symptoms and intake of food and medicines.
- Changing your environment from polluted, humid to clean and dry.
- five to six different anti-fungals, taken in rotation.
- Replace the microflora in the intestinal tract by taking probiotics
- Restore the proper pH value to the intestinal system. Candida grows best in a mildly acidic environment. Therefore, Candida is usually connected with lack of acid. Use food or medications to acidify your gut.
- Exercise regular. Exercise is vary important. It helps your body to function more efficiently and strengthens your immune system. With increased breathing your body will get more energy. I personally recommend swimming, walking, jogging, fitness programs, dancing (classical dancing especially), marshal arts, tai chi (chi gong) and joga.
- Avoid mold, petrochemicals, fumes, dust, perfumes and other common allergens, which stress immune system.
- Stop smoking. Cigarette smoke is common allergen. Introducing toxins in your system increases the overload of immune system.
- Breathe correctly. Correct breathing is important. It helps with stress and gives you energy.
How long does it take to cure Candida overgrowth?

The general rule of thumb is that it takes about a month of recovery for every year of being sick. If you were treated with lots of antibiotics two years ago, it is reasonable to assume that antibiotics cause Candida albicans overgrowth and you need minimum two months to recover.

In general, you'll start getting major yeast symptoms about two years after the overgrowth starts. So, think back to when your symptoms started and try to figure out what happened in the two years before that. If there was something major in that time period, that gives you a starting point (for example, if you entered puberty then, you might have a hormonal imbalance). If not, then you might have something like parasites, which enter your body very quietly, without clear symptoms.
**What is anti-Candida diet?**

### ALLOWED FOOD.

<table>
<thead>
<tr>
<th>FOOD</th>
<th>COMMENT</th>
</tr>
</thead>
<tbody>
<tr>
<td>filtered water</td>
<td>The only drink that is always recommended. Drinking increased quantities of filtered water helps the liver to detoxify the body and can help curing many diseases including Candida overgrowth.</td>
</tr>
<tr>
<td>Stevia</td>
<td>Recommended sweetener.</td>
</tr>
<tr>
<td>vegetables</td>
<td>broccoli, cauliflower, parsley, sprouts, spinach, celery, cucumbers green pepper, peas, tomatoes, beans, yellow, cabbage, onion, radishes, kale, lettuce, spinach and turnip. Avoid vegetables containing simple carbs, like potatoes.</td>
</tr>
<tr>
<td>Meat</td>
<td>beef, duck, eggs, quail, chicken, fish, oyster, rabbit, clam, tuna, turkey, crab, shrimp, goose, pheasant, lobster, hen, lamb, pork, veal</td>
</tr>
</tbody>
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### EAT IN MODERATION OR AVOID COMPLETELY.

<table>
<thead>
<tr>
<th>FOOD</th>
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</tr>
</thead>
<tbody>
<tr>
<td>eggs</td>
<td>Raw eggs contain substance called avidin that interferes with absorption of biotin. Boiled eggs do not have this problem. Eggs are common allergen.</td>
</tr>
<tr>
<td>yogurt</td>
<td>Sometimes contains additional sugar</td>
</tr>
<tr>
<td>Fruits</td>
<td>Avoid on strict diet, eat maximum of 1 or 2 pieces of fruit a day, preferably less sweet ones.</td>
</tr>
<tr>
<td>wheat</td>
<td>Hard to digest, feeds the yeast</td>
</tr>
<tr>
<td>nuts</td>
<td>usually contain mold, which feeds Candida. If roasted some of the mold will be eliminated and roasted nuts can be used in less strict anti-Candida diets</td>
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</tbody>
</table>
# AVOID COMPLETELY.

<table>
<thead>
<tr>
<th>FOOD</th>
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</tr>
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<tbody>
<tr>
<td>Artificial sweeteners</td>
<td>Avoid completely artificial sweeteners, like Aspartame (NutraSweet), saccharin, .... They are very bad for your health. Use Stevia instead.</td>
</tr>
<tr>
<td>Fruit Juices</td>
<td>Usually contain lots of sugar. Exception: Freshly prepared juice</td>
</tr>
<tr>
<td>Caffeine</td>
<td>Avoid any kind of coffee, tea and soft drinks including decaffeinated coffee. See information about caffeine</td>
</tr>
<tr>
<td>Sugar</td>
<td>Feeds the yeasts big time. Elimination of all sugars: white sugar, brown sugar, honey, dextrin, maple sugar, beet sugar, ... Use Stevia instead.</td>
</tr>
<tr>
<td>left-overs, yeast, mold</td>
<td>It is highly likely if you have Candida overgrowth that you are allergic to mold. Also, food that mold can grow on, can feed Candida. Avoid anything containing yeast : brewer's yeast, baker's yeast, vitamins derived from yeast. Mold tends to grow on left-overs. Refrigerate your food or better freeze it and try to eat it in 24 hours after preparation.</td>
</tr>
<tr>
<td>Alcohol</td>
<td>All alcohol is made by fermentation, and is forbidden in strict Candida diet. Vodka is the drink recommended as the least harmful of all drinks if you simply have to drink something.</td>
</tr>
<tr>
<td>Melons</td>
<td>Too sweet</td>
</tr>
<tr>
<td>Vinegar</td>
<td>Avoid vinegar and all foods containing vinegar: mayonnaise, mustard. Fresh lemon juice can be used instead vinegar.</td>
</tr>
<tr>
<td>fermented products</td>
<td>such as soy sauce, soda bread, cheese, yogurt, sauerkraut, green olives and pickled vegetables.</td>
</tr>
<tr>
<td>Bread</td>
<td>Contains yeast and refined flour. It is best to avoid bread completely. Others recommend toasting it well. You could also be allergic to grains.</td>
</tr>
<tr>
<td>diary</td>
<td>All kinds of milk and milk products (cheese, ... Use Stevia instead.</td>
</tr>
</tbody>
</table>
buttermilk, ... ) should be avoided if you have problems digesting it. It is very common allergen.

tap water the chlorine found in most tap water is killing good bacteria living in your intestines.
edible fungi like mushrooms, truffles, ... they can feed Candida or/and you can be allergic to them
processed food like bacon, hot dogs, sausages, meat loafs, ... Processed foods usually contain yeast, refined sugar, chemicals
starch Starch transfers into carbohydrates. Avoid food containing high levels of starch like corn and potatoes.
dried/candied fruits contain mold, sugar and other toxins.
animal fat toxins are stored in fat and eating animal fat increases toxic overload

Can I cheat a little while on diet?

If you cheat on the diet (while taking anti-fungals) it can make yeast more resistant to anti-fungals. Basically, when you take anti-fungals you kill off weaker strains of yeasts while the harder strains remain. If you cheat on diet, you feed the yeast and the harder strains will proliferate. To get rid of those yeasts that remain you will need different (stronger) anti-fungal. If you cheat on the diet, you can finish feeling worse than at the beginning of treatment.

Therefore, do not cheat on diet while taking anti-fungals. Wait on taking the anti-fungals until you are serious about the diet.

Why is caffeine not allowed?

Caffeine can kill up to 75% of the friendly bacteria in the colon per cup of coffee or tea. The same goes for decaffeinated too. It takes the body approximately five hours to replace that flora depending on the diet and the balance of the body at the time. Tea, coffee, soft drinks (like Coke) contain significant amount of caffeine.

Why do we lose weight on anti Candida diet?

- Anti Candida diet and lifestyle changes are aimed in reducing toxins produced by Candida and overall toxic overload of the liver. Liver and gallbladder are important in weight loss process. If liver cannot detoxify all toxins, it will store them in fat.
• Candida overgrowth causes nutrient deficiencies because Candida eats our food. The hunger is basically lack of nutrients. When fighting Candida we tend to feed ourselves and not the yeast.
• A diet high in sugar and/or carbohydrates promotes high insulin levels and/or insulin resistance. Insulin is a hormone that lowers the level of glucose in blood. Glucose is either stored in liver or converted to fat. Anti Candida diet is one of low-carb diets and it doesn't elevate glucose levels in blood. In order to generate energy (glucose) body needs to burn fat (ketosis) and this leads to weight loss.
• Diet high in protein promotes weight loss

What is the Glycemic Index and how does it relate to Candida albicans?

Glycemic index of carbohydrate food sources, measures how quickly or slowly they are metabolized, causing the blood sugar to rise compared to the pure glucose.

Simple carbs are high on glycemic index, while complex carbs are low on glycemic index. Complex carbs are digested more slowly, in the intestines. Since the breakdown of complex carbs is slower, the sugar goes into the bloodstream over a longer period of time, so it doesn't cause the sudden surge in blood sugar levels that simple carbs do. That's why foods with simple carbs and sugar tend to have a higher glycemic index than foods with complex carbs or no carbs.

If you have a major yeast overgrowth in your intestines, then eating complex carbs with a low glycemic index will feed them quite nicely. Your body digests these foods in the intestines, so they will be converted to sugar in that location, which is right where the yeast are. On the other hand, less sugar will get into your blood with these foods, so if your yeast is elsewhere in your body, they might be a good choice.

In general, foods with a low glycemic index are a better option than those with a high index for Candida sufferers. It would be best to avoid all carbs but that is very hard. Glycemic index is valuable resource, but other effects of food should be taken in the account : acid/alkaline effect of food, food allergies, mold on food, nutritional value..

How can I stop the cravings (for food or sugar)?

• take virgin olive oil or coconut oil with your food.
• take trace mineral supplement with chromium and vanadium. A deficiency in these minerals cause cravings.
• treat your self a cake or a drink with Stevia
Can Candida be cured with probiotics alone?

Nope, Candida albicans is attached to mucosa wall and if anti-fungals are not taken, there will be no empty space and the majority of friendly bacteria will go down the drain.

What diseases are commonly linked with Candida overgrowth?

Candida overgrowth is commonly linked to:

- ADD/ADHD
- AIDS
- Anemia
- Arthritis
- Autism
- Cancer
- Celiac disease
- Chronic Fatigue Syndrome
- Dysbiosis
- Fibromyalgia
- Hyperglycemia
- Hypoglycemia
- Irritable Bowel Syndrome
- Leaky Gut Syndrome
- Lichen Sclerosis (LS)
- MS
- MVP
- Prostatitis
- Psoriasis
- Sinusitis
- Wilson Syndrome

How does Candida effects immune system?

Candida overgrowth depresses immune system. Candida is known to:

- lowers T-cells by a factor of 15. This increases the risk of autoimmune disorders.

What books are available about Candida?


Candida cookbooks

"Candida Albicans Yeast-Free Cookbook" by Pat Connolly March 2000 ISBN: 0658002929
"Overcoming Candida : The Ultimate Cookery Guide" by Xandria Williams

"The Candida Control Cookbook" by Gail Burton  It includes both meals and
deserts, and it has good, easy to make recipes that don't require a lot of
ingredients. ISBN: 0944031676

"The Yeast Connection Cookbook" by William G. Crook & Marjorie Hurt

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