

Yeast, Candida and Other Such Critters That Make Us Sick & Well

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Fungi are a special kingdom of organisms which include yeasts, molds, mildews, mushrooms, rusts and smuts. Unlike plants, which they were originally thought to be, they lack chlorophyll and therefore must derive their energy (nutrition) from other organisms, either live (parasitic) or dead (saprophytic). However, Fungi are more advanced than Bacteria, as they have nuclei and organelles within their cells (eukaryotic vs. prokaryotic).

Bacteria and fungi were here before us, and evolution determined that it would be best for us to carry a farm of bacteria and fungi within us, to harness their abilities. They defend us against other more harmful critters, and produce compounds such as vitamin K2, B12, B3 and others.

In fact, we carry as much as three pounds of these critters of up to 400 different species within our lower intestines. Of the trillions of cells that make up our body, only 10% are us, while they are 90%! So, rather than us using them, they are using us as a home, transport and feeding device!

While the first reaction to this fact might be "eeewww", upon further examination, some of the greatest accomplishments of civilization are based on utilizing these critters. Bread, beer, wine and coffee could not be made without the fermentation caused by their biochemical machinery. Antibiotic-producing molds, formally discovered by Alexander Fleming 1928 (actually by Ernest Duchenne in 1897, and over 2500 years ago by the Chinese and Egyptians) have enabled us to live longer lives. Death by overwhelming infection, of children, mothers, surgical patients, and trauma victims prior to the 1900's was quite common. Prior to penicillin, the only anti-bacterial agents used were toxic chemicals such as arsenic and others (see below) which caused huge damage while doing their job. Penicillin was truly miraculous by doing its magic without causing damage.

In fact, this effect was so amazing, that it instantly hoisted allopathic medicine over other professions such as homeopathy and herbalism. To this day, we carry around a hope that no matter what we do, there will be a "magic bullet" that will solve our problems. In fact, the term "magic bullet" was coined by Nobel-prize winning German scientist Paul Erlich to refer to chemical agents that specifically target bacteria without causing damage to the host¹.

Yeast and Bacteria in the Twenty-First Century

However, the quest for the magic bullet has its downsides, as we are learning today. Bacteria in hospitals develop antibiotic resistance, and are now getting into the community (such as drug-resistant tuberculosis and MRSA). Also, by taking antibiotics, we kill off the good bacteria within our gut, which changes the balance of organisms (ecology), to from 90% good-10% bad to 10-90, a condition called dysbiosis. These "bad" bacteria, cannot keep naturally occurring yeasts such as Candida albicans under control. These bad bacteria and yeast then produce toxins which damage the lining of the gut, and make it permeable to compounds that it is normally designed to keep out of the body, a condition called leaky gut syndrome. The toxicity of leaky gut can then lead to a host of dysfunctions--of the immune, hormonal and mind-body systems, the gastro-intestinal system itself, the liver, as well as other conditions.

Symptoms of Yeast Dysbiosis

Immune dysfunction usually manifests as progressively increasing allergies, autoimmune disease (Hashimoto's thyroiditis, colitis and rheumatoid arthritis as examples), and poor resistance to common infections such as sinusitis, upper respiratory infections, yeast infections of the skin, nails and genitals, and perhaps cancer. Hormonal dysfunction can manifest as PMS, endometriosis, infertility, accelerated peri-menopause, adrenal fatigue, hypoglycemia and pre-diabetes, to name a few. Mind-body dysfunction can manifest as mental fog, irritability, anxiety, depression, ADD, autism, seizures and other neuro-developmental problems in children. These often fail to respond to conventional drugs and talk therapy, as the root cause is not addressed. Gastro-intestinal dysfunction can look like chronic constipation or diarrhea, IBS (irritable bowel syndrome), GERD (gastro-intestinal reflux disease), and various malabsorption conditions. Other associated conditions include pelvic floor dysfunction, interstitial cystitis (ICS), fibromyalgia and chronic fatigue syndromes, elevated cholesterol and C-reactive protein, painful muscles, arthritis-like symptoms, acne, and feeling sick when the liver cannot keep up with the load of toxins. Sometimes there are no obvious signs of yeast infection, such as involvement of the feet, toenails, genitals, or skin, but the persistence of symptoms raises the question.

Evaluation of Yeast Presence

There are no reliable conventional tests to prove the yeast syndrome, as all of us carry some in our bowels and have antibodies to yeast in our blood.

However, there is one best test for "invasive" candidiasis. When yeast is under control, it is contained in the bowel and produces minimal evidence of its presence. However, in the case of leaky gut, a specific product of yeast metabolism called d-arabinitol passes through the lining of the gut, into the bloodstream, through the kidneys, and into the urine. If there is a significant amount of this marker in the urine, it is a reliable measure of invasiveness.

If the presence of invasive yeast is clear, such as a case of a nursing mother with vaginal yeast which spreads to her breast and her baby's mouth ("thrush"), then such a test is not necessary. However, if a patient has persistent symptoms despite treatment of other causes, looking for the yeast marker can be very important. At the same time, the urine can be examined for markers of good and bad bacteria, assessing the overall ecology of the gut.

Strategies for the Treatment of Yeast

Holistic medicine, which approaches illness multi-dimensionally, lends well to healing the yeast syndrome. Unfortunately, too many patients are placed on excessively restrictive "yeast free" diets for long periods of time, or are given multiple courses of drugs and unnecessary supplements in their quest for healing. Many patients, from the very young to the very old, are treated for other chronic conditions, with limited success, when the presence of yeast is totally overlooked.

Of the many strategies that can be used to heal from yeast overgrowth, no specific "protocol" can apply to all people. For example, someone with a stressful job, poor

sleep, taking the birth control pill, chronic constipation, heavy metal toxicity and nutritional deficiency may need these issues addressed before healing of yeast can begin.

1. Anti-yeast diets. In general, these are diets that restrict the carbohydrates that feed the yeast and bad bacteria. Often, this is not a sufficient strategy because the minute the diet is stopped, the yeast tends to return. However, if combined with other strategies, it can be helpful. In addition, specific toxins in our diet, such as the antibiotics in conventional animal products, including farm-raised fish, and even the chlorine in our drinking water can kill off the good bacteria that we are trying to grow. So, the healing diet requires more than carbohydrate restriction.

2. Beneficial yeast. One of the simplest and often effective strategies is to take "pro-biotic" yeast, similar to the bacterial pro-biotics in yogurt. This good yeast, a cousin of the yeast used to make beer, helps push out bad yeast and bacteria. Due to its safety, it has been effectively used for young children. It has been effective in dozens of cases of intractable diarrhea, constipation, colitis and IBS.

3. Stomach acid and enzymes. One of the causes of yeast (and bacterial) dysbiosis is a lack of stomach acid. As discussed in a prior article, the stomach is supposed to be extremely acidic. This helps defend against invasion by yeast and bacteria entering through the mouth. If this acid is blocked by drugs, stress or other conditions, these critters can enter our GI tract and populate our stomach (H Pylori, the ulcer-causing bacteria), small intestines (the upper small intestines is not supposed to host bacteria), and other places such as the gallbladder.

Also, without acid, the enzymes of the stomach and pancreas do not work properly. Without enzymes, our foods are improperly digested, which may cause food intolerance, allergy, and the malabsorption of specific nutrients. Furthermore, these improperly digested foods, especially the carbohydrates, feed the bacteria and yeast in the colon and cause overgrowth, leading to dysbiosis as discussed above.

4. Specific anti-yeast supplements. There are several supplements that can kill or weaken yeast. These include oregano oil, berberine, undecylenic acid, garlic, specific enzymes, and others. For persistent vaginal yeast and sinus infections, these agents can be applied topically. Killing yeast too fast can cause a "die-off reaction", where the products from the dying yeast cause a toxic reaction. Therefore, it is best to add these products in the right sequence.

5. Anti-yeast drugs. The big gun of treatment is to use anti-yeast drugs. The general experience, however, is that yeast will return if other strategies aren't used to prevent re-growth once the drugs are finished. Also, most of these drugs are toxic to the liver. So again, if used, they should be used as part of a strategic sequence.

6. Treating co-existing conditions. The yeast syndrome often co-exists with adrenal fatigue, thyroid dysfunction, nutritional deficiency, chronic stress, and other conditions. In a holistic fashion, all should be worked on together utilizing a balanced program.

7. Energy medicine techniques. While the most subtle, energy techniques such as acupuncture, yoga, and Neuro-Modulation Technique can facilitate healing in a gentle manner. These techniques can enhance immune function, gastro-intestinal function, hormonal balance, sleep,

emotional balance and other processes that are necessary to achieve a root-cause, long-lasting healing.

The Garden of the Gut

The importance of gut function and its pervasive effects on virtually every function of the body was well known by Hippocrates, as well as the ancients who developed Chinese and Ayurvedic Medicine. Thinking of the gut as a garden and yeast as weeds reminds us that we have to constantly do "spot weeding" (occasionally using special supplements), add mulch and other agents (such as probiotics), and to do seasonal clean-ups (such as periodic elimination/ detox diets). Using such a holistic approach is effective and long-lasting for people of all ages.

IMPORTANT NOTE: This educational material may not be used to make decisions about medical care without the help of an experienced practitioner.

Footnotes

¹ Erlich invented the drug Salvarsan in 1909, before penicillin was discovered, to treat syphilis. This synthetic antibiotic was not a magic bullet, as it was quite toxic.

For More Information

- See Dr. Cheikin's website, www.cheikin.com for related articles on: Stomach Acid, Hormone Havoc, Adrenal Fatigue, Thyroid Disease and others.
- Dr. Cheikin offers workshops on numerous holistic health topics for adults and children. Please call if you wish to attend or host a Workshop.
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