

Improving your Digestive System with Probiotics and Yeast Elimination

If you're reading this you've been told that you have a yeast issue in your body. What does this mean? Yeast (Candida) are very small organisms that compete with bacteria in our body. The problem starts out in the digestive system but can extend to other areas of the body. For example, Thrush is a commonly used term to describe yeast in the mouth and on the tongue. It can be seen simply by opening your mouth and looking for a white coating on your tongue. This is yeast. It can also be in the vaginal area for some woman, but a woman can have yeast in her mouth but not in her vagina so it can be localized even though it would be considered to be widespread throughout the body (systemic). Are yeast harmful? Well they don't cause death, but they do harm you in the long run and can cause a lot of symptoms in the process. In this article we're going to cover several topics. The first will be probiotics and their importance to health. Then we'll cover biofilms followed by the enzyme cellulase which breaks down yeast and biofilms. We'll also discuss the liver because it has to deal with all the toxins coming from your intestines. Then we'll finally cover treating yeast and biofilms as well as establishing a healthy digestive system.

Let's dispel some myths and commonly held beliefs. One I believed for many years was that digestion happens perfectly for everyone. I thought what was most important was what I was putting into my body...ie what I ate. Turns out this is important, but the digestion of the stuff you eat is just as important if not more so. This is where enzymes come into play because enzymes give our body the ability to digest food, break it down into the smallest parts possible for rebuilding tissue and energy.

Another belief is that the body is just fine on its own and you don't really need to do anything to help it along. If this were true, we wouldn't need doctors of any kind or therapists or anyone because the body could simply fix everything. We wouldn't have symptoms and health wouldn't even be a word because everyone would be healthy. You wouldn't even consider disease because it wouldn't exist.

There's a term called homeostasis. Basically this means everything in the body is working in balance. Every tissue, every fluid, every cell is perfectly happy. How many people in America do you think have perfect homeostasis. I would say none of us, including me. We simply have too much stress, eat bad foods, don't exercise, etc. With that being said, we should all strive to get as close to perfect as we can in terms of our structure and internal chemistry. Now don't get me wrong, we all maintain homeostasis because once you lose the ability to maintain homeostasis within certain thresholds, we die. Take for example, blood. Blood must maintain a slightly alkaline pH of 7.41 (with 7.0 being neutral like with water). If you deviate from this value say to 7.2, you will die quickly because you've lost the ability to maintain homeostasis. A pH of 7.39 wouldn't kill you, but would you be healthy? No. Same with a pH of 7.43. These are small changes, but still problematic to overall health. What does your body do if you're too acidic? It uses minerals from your bone to make you more alkaline and combat the acidity. This is all in an effort to maintain homeostasis. Is this healthy? No, but it keeps you alive so some would say this is healthy.

Yeast cause a shift away from homeostasis. They overtake healthy bacteria in your intestinal tract and can escape from the intestinal tract to set up happy homes in other parts of your body like your mouth. Getting rid of these little invaders takes some doing, but it's very possible and the health benefits are enormous.

Where does yeast come from?

Everyone will have some yeast in their digestive tract. It's the excessive growth of this yeast that is the problem. The most common culprit is antibiotic use at some point in your life. So here's the deal. There are healthy bacteria for your gut and unhealthy bacteria for your gut. There are some healthy yeast for your gut and unhealthy yeast for your gut. If you have too many "bad" bacteria and yeast or simply an overgrowth of yeast you're going to suffer. You can search online for the different types of symptoms that people claim are from yeast overgrowth, but needless to say yeast are not good. They can cause allergies, auto-immune disorders, Autism

Spectrum Disorder, tooth decay, digestive symptoms like constipation and diarrhea and oh so much more.

Lets begin by discussing some basics about our intestines. Did you know that there are ten times more bacteria in our body then there are cells? But since the bacteria are so much smaller then our cells they only occupy a few pounds of our body weight. The colonization of our intestines with bacteria is so crucial, I can't even begin to tell you. In a healthy person these bacteria maintain a symbiotic relationship with us. They help us and we help them. There are bacteria that attach themselves to the wall of our intestines and stay there for long periods of time and there are bacteria that come out with each bowel movement. The type and numbers of these bacteria are staggering. There are upwards of 100,000,000,000,000 (100 trillion) microorganisms in our gut. It is estimated there are 15,000 to 36,000 diverse bacterial species that generate intense metabolic activity and are key to human health. Scientists keep finding new bacteria species in our guts on a regular basis. If the bacterial colonies shift over to more unhealthy types of bacteria you start having more health problems.

There's a topic that's gaining more steam lately called "Fecal Implantation". This is not a topic for weak stomachs, but here's the deal. If someone has the bad types of bacteria in their intestines and another person has the good types of bacteria in their intestines. Then you take the good "poop" from the healthy person and transplant it into the intestines of the unhealthy person. Sound crazy? Well it's producing some incredible results. The biggest hurdle to making this mainstream is regulations because it's not a currently performed "standard of care". It needs research and time before it becomes more common knowledge. But it couldn't be any easier. There are no drugs or surgery other then cleaning the colon of the person getting the good "poop". Most of the studies have been done on people that have a vicious gut infection from *Clostridium difficile*. This infection gives crippling diarrhea and is sometimes worsened by antibiotic therapy. The results--> Astounding. Simply by crowding the bad bacteria out or whatever happens, the good bacteria clean house. Other studies have looked at insulin sensitivity being improved significantly in pre-diabetic patients as well.

Most people don't realize that bacteria can be very helpful. They clean up shop if you want to think of it that way by merely trying to live on their own. They either help us, do nothing, or hurt us. Now if there are 15,000 to 36,000 different bacterial species how could we ever take a probiotic (which is healthy bacteria) and get results. I mean most probiotics only consist of two, three or four different strains of bacteria...nothing even close to 15,000? But it's more than just numbers. It's about the environment. For example the intestines work best when they're slightly acidic. There are a whole bunch of organisms that produce acid. They're from the *Lactobacillus* family and there are several that are commonly used. I don't want to get into the details of this because they're quite frankly not that interesting, but just as an example of fifteen different species of *Lactobacillus* (L) are:

L. acidophilus	L. fermentum	L. paracasei
L. brevis	L. gasseri	L. plantarum
L. bulgaricus	L. helveticus	L. reuteri
L. casei	L. jensenii	L. rhamnosus
L. crispatus	L. johnsonii	L. salivarius

And this is just some of the *Lactobacilli*. There are *Bifidobacterium*, *Enterococcus*, *Pediococcus*, *Bacillus*, *Propionibacterium*, *Escherichia* and more. Needless to say there are a lot of different bacteria that can go into a probiotic product.

Some say that these bacteria never make it past the stomach to do their job. While the stomach is a hostile environment, many probiotics are enteric coated to help them make it past the stomach before being released. So there are ways to get good bacteria into our body without having to do Fecal Implantation.

Also, I heard of a reason for the appendix that actually makes sense. Some say it's a vestigial organ meaning it has no purpose, but others have reported that the appendix is a storage place for bacteria. Now why would we need that? Well in our clean society, there isn't a need for bacteria storage, but if you go to other countries where there

are illnesses that give massive diarrhea and completely flush out the intestines of all bacteria I could see a use for this storage place of bacteria to repopulate the intestines. Just an interesting thought.

So what are some of the benefits of probiotics?

(1) To solve four different types of diarrhea for start.

We have Antibiotic Associated Diarrhea, Clostridium Difficile Associated Diarrhea, Rotavirus Diarrhea and Infectious Diarrhea. These are the best documented conditions that may be prevented or treated with probiotics. Great, I can't wait to take a cruise...Just kidding. You often hear of rotavirus on the cruise ships where everyone gets sick and miserable.

(2) Vaginal Dysbiosis

Dysbiosis refers to the disruption of the normal microbial ecosystems in body tissues that may lead to clinical symptoms and disease. As in the intestinal tract, the normal vaginal microflora can be disrupted and undesirable microorganisms can proliferate, especially following antibiotic use. This can lead to yeast infections and urogenital infections like bladder infections.

(3) Antagonistic to Pathogens

Most probiotics have been shown to antagonize a wide variety of pathogenic organisms, including bacteria, viruses, and fungi. They do so by creating chemicals that bad organisms simply don't grow well in.

(4) Immune Function Enhancement

The intestines are the primary immune organ in the body. I've heard 70-80% of your immune system is devoted to your intestines. Why you ask? Because it's such a dirty place.

(5) Digestive Support

The colonic microflora degrades many dietary substances that resist digestion in the upper intestinal tract. This can help with carbohydrate, fat and protein digestion, dairy and wheat allergies, gluten intolerance, food allergies and your standard run of the mill allergy problems that we find with so many people.

(6) Enhancement of Mineral Availability, Vitamin Production, Reduction of Cholesterol, Management of Inflammatory Bowel Disease (Ulcerative Colitis and Crohn's Disease), Anti-cancer activity, Detoxification, Support for Autism Spectrum Disorders

(7) Oral Health and Modulation of Biofilms

This one fascinates me the most. First what are biofilms. The term biofilms comes from industry where hard material forms on the inside of pipes making the openings inside the pipe smaller and smaller. These biofilms are made by bacteria mostly to make an environment for the bacteria. In our body, these biofilms protect bacteria from our immune system. Most bacteria in the oral cavity also exist in biofilm communities known as dental plaque. Under ideal conditions, biofilms form a beneficial relationship with the host, facilitating the health-promoting effects of the beneficial organisms while limiting the activity of pathogens. Clinical studies in both children and adults show probiotic use effectively reduces the incidence of tooth decay and gum disease. And a randomized, double-blind, placebo-controlled study involving nearly 600 children found consumption of milk fermented with Lactobacillus rhamnosus led to significant reductions in the incidence of tooth decay after seven months compared to consumption of regular milk. Everyone needs to know about this stuff.

Much of this information on probiotics can be found on the internet. I want to thank the company Klair Labs for making sense out of this stuff. Their research and technical summary's were instrumental in my understanding of probiotics. I'm passing along some of those insights to you. There is much more that can be learned of course, but I need to stay on topic.

The product I like to use in my office is called iFlora made by Sedona Labs. This product contains 16 different strains of bacteria. Most probiotics only contain four or five strains. We sell this product in our office in pill or powder form. The powder form actually tastes good as well. They add what are called prebiotics to their formula to feed the bacteria in your gut. These prebiotics are sweet tasting. Even our 9 year old likes the flavor. You can get this product from our office or order it on Amazon or many other places I'm sure. Start out with the dosage they recommend, but if you start feeling really tired or sluggish, stop taking it for two days or so, then start back at a lower dose. You're simply cleansing too fast for your body to get rid of all the toxins. We'll talk more about this in a bit.

There are several goals when it comes to nutrition. Most think of nutrition as just eating better foods. Although this is important, by the time you're probably reading this, you're past the point of just eating better foods to obtain "Ideal" health. So what else can be done to speed things along? Probiotics are of course very important, but you also need enzymes. Enzymes are very unique proteins that speed up chemical reactions in your body by 100 to 1000 times faster than these reactions would occur without enzymes. Yes, they're really important.

There are three major classes of enzymes:

Proteases - These digest proteins

Lipases - These digest fats

Amylases - These digest carbohydrates

Cellulases - These digest cellulose.

These enzymes are automatically inside raw foods and are within each cell of the raw food. When the food is chewed up, the enzymes are released to help digest the food. However, cooking destroys these naturally occurring enzymes so your body has to produce the enzymes on its own. This stresses your organs and robs you of energy and nutrients that could be doing other things like helping you rebuild skin, bones, muscle, etc.

Almost everything we eat has been cooked or processed in some way as to remove all or most of these enzymes. We simply have to supplement with enzymes to replenish our body. You simply cannot, after 40 or 50 years of eating cooked foods, go to a raw food type diet and make up the difference.

Back to biofilms. Since we're talking about the intestines and biofilms, the enzyme I want to discuss is cellulase. The reason is that most biofilms are made of cellulose and since we don't want these biofilms around we take cellulase to break them down. So we use probiotics and cellulase to change the environment in our intestines and we use the other enzymes, in addition to cellulase, to break down our food. In addition, cellulase destroys yeast because yeast have a membrane made of cellulose as well. So you can get rid of biofilms and destroy yeast with one type of enzyme. How awesome.

When I first started taking cellulase, I have to admit it was not a pleasant experience. Why? Because the breakdown of these biofilms and the destruction of the yeast created so much toxicity in me that I had issues. Nothing serious. Mostly fatigue, grumpiness and headaches. After I stopped taking it, that all went away. Prior to learning about probiotics, I tried cellulase several times. Even a really small dose would cause a lot of fatigue. After learning about probiotics, I used them for several months to change the environment in my intestines. Clearly I had a lot of issues and I wanted them handled, but you still have to live. I mean you can't sleep all day long and be grumpy, right! So now, I'm slowly bumping up my cellulase intake to handle more of the problem. Others with less of an issue won't have such reactions. I've had others just say, they're a little fatigued, but after a few weeks they're fine. My suggestion is start out slowly. Please, please start out slowly.

Here's the plan. If you want to pursue this course of changing the environment in your intestines, start out with probiotics (the iFlora product), then either right away or a couple months later start with the cellulase enzymes. Together, you will experience nice changes in your bowels and overall health. Increased energy, healthier skin,

less body odor, and much more. You just don't know how much better life can be, until you actually experience it. But, this isn't always a pleasurable experience. If you go into this knowing that you'll be better off. But many think that improving their health means instantly feeling better and not having any issues at all.

With the iFlora, I suggest the powder because you get more of the stuff in the powdered version vs the pill version for the same cost. Also it's easy to control the powder dosage a little easier. They suggest taking 1 Teaspoon a day. I tried that, but after a few days, I had to back down to 1/2 a teaspoon per day and stay on that dose for a couple months. Then I bumped it up to 1 teaspoon per day and wasn't nearly as fatigued. If you experience any visual oddness as well, you're taking too much. The toxins that are released can play tricks with your vision. Nothing serious, but it's just harder to focus. Sounds scary, but it's not. Just something to be aware of. It goes away quickly if you do experience it.

The product I use for cellulase is called SMI (for Small Intestine). SMI also has some beneficial bacteria in it, but they are not enteric coated and should be taken on an empty stomach. This way, it passes through your stomach really quickly without destroying the bacteria. If however you take it with meals, the cellulase will still do its job in your small intestines. You must start out slow with this product as well.

Here's the action plan for SMI:

Start out with 1/8 teaspoon two times per day for three days. If you start getting symptoms, either back down to 1/16 teaspoon dose two times per day or only do the 1/8 dose once per day.

After the three days, if you don't have any symptoms go to 1/4 teaspoon two times per day for three days. If you start getting symptoms, the same rule applies...either back down to a lower dose or only do the 1/4 teaspoon once per day.

If you're still ok after these three days (now six days into the whole process), you can go to 1/2 teaspoon two times per day for three days.

If you're still ok after these three days, you can go to 1 teaspoon two times per day for three days.

If you're still ok after these three days, you can go to the full dose of 2 teaspoons two times per day and stay on that dose.

Now what I usually hear from people is by the time they're doing the 1 teaspoon dose, they're feeling funky. This is due to the toxins released from the trapped biofilms and the yeast die off. Think of it like this. Remember how I discussed biofilms making up the hard stuff in the industrial pipes. Well imagine if water was flowing through those pipes. If the water didn't have any cellulase in it, these hard biofilms would simply stick where they are and the water would be clean. But then if we added cellulase to the water running through the pipes, the cellulase would slowly break down the biofilms and they would now be in the water. The water would not be "clean" anymore. In our body, these toxic products from the breakdown of biofilms and yeast get reabsorbed into our blood stream causing us problems. It would be nice if they just went out in our poop, but no such luck. They get reabsorbed and our liver and kidneys have to deal with this junk. That's why we get symptomatic. Good news is, once it's all gone, it's gone. Then we feel great. You have to look for the light at the end of the tunnel.

You also need to support the liver and kidneys to get this stuff out of you, but things have to progress slowly.

On a separate note, when someone comes to my office for treatment they often have symptoms. They're usually coming to me to get rid of those symptoms and what we've just talked about doesn't seem too pleasant. I understand and in many cases there are other things that can be done to tackle your symptoms. This might involve other enzyme formulas or postural work. Either way be aware that what we're talking about above might

not be your best course of action when you start seeing me. Of course, after we take your history and discuss your concerns, I'll discuss with you the best course of action. It might include what we've been talking about here or maybe this would be better saved for a future date after other issues have been corrected.

I hope you now have a better understanding of yeast, biofilms, probiotics, enzymes and yes Fecal Transplantation. A major key to our health is our digestive system. If it works well, we stay looking younger longer and suffer less. If it works poorly, we age faster and have more symptoms and disease.

Just FYI, I have another article on body mechanics. It's 24 pages of really good material. After reading it you'll have a better understanding of body mechanics than many doctors. Either pick it up at our office or go online to order your copy.

If you have any other questions, you can reach me during office hours at (608) 277-1975 or on my cell phone at (608) 219-7723.

Sincerely,

Jeffrey M. Aberle, D.C.