



Episode 10: Gut Health 101 - Understanding the Microbiome

Katie: Christa, welcome back. We had you in the last episode to talk about fertility and optimizing for pregnancy. This episode is going to be all about the microbiome which is one of my favorite topics to talk about. I always try to drag my friends into talking about it at dinner parties and it doesn't go over so well so I'm excited that we have time just to talk the microbiome.

To start off, give us an overview. What is the microbiome? When someone says that, what are we talking about?

Christa: Yeah, okay. You and I can totally geek out together on this because I'm fascinated by it. We hear a lot about leaky gut and all kinds of digestive issues but really the new model for cellular healing is what's called the microbiome and that is the combined genetic material of all of the organisms inside of the gut.

Today we're going to talk about the gut microbiome but we really have seven different microbiomes in the human body. That's just anywhere in and on us that they're are microbes and really we have ten times more of these microbial cells than we do have human cells and so when we can really genuinely understand the microbiome and create harmony between our human cells and our microbial cells, the entirety of life and health changes. It's just so transformative. Really have to start to understand that particular genetic code.

Katie: Yeah, absolutely. I think you're right, most people just think of the gut when they hear microbiome but we have to realize we really are bacterial organisms in a sense and we have microbiome on our skin and in our mouth and just all over our bodies. It's so fascinating because I feel like even with all that we know now, we're only starting to scratch the surface of I think what we're eventually going to know about the microbiome.

You mentioned this being the new model for long term healing. Why is that and let's delve into that a little bit more. Why is the microbiome so important?

Christa: I guess I want to take it all the way back to my favorite guy Hippocrates, which is the father of natural medicine and 3000 year ago he said "All disease begins in the gut." Which was quite a stoop because just now 3000 years later and functional medicine circles is just really starting to get out with people and to say hey, if all disease begins in the gut which means if we can really heal the gut and understand that the genetic perspective of the microbiome, we can heal the rest of the body.

When we're, we really know each person's physiology is as unique to them as their fingerprint and so much of that stems from the gut. This is a way to really address bio-individuality at it's best. That in and of itself is a new model for healing. I want to break down what most people suffer with so we can give a new perspective on this.

I think we're trained to think about the symptoms, whenever we have digestive problems or immune problems, whether that is direct digestive problems like bloating or gas or constipation or stomach pain or whether it stings that most people are general in the traditional medical model we wouldn't see that are connected to the gut or the microbiome like headaches and joint pain and skin issues. Even anxiety and depression. Those are a lot of symptoms.

Everything thing comes down to this harmony or disharmony within the microbial world and so if we really want to start to shift the state of mind, we have to look at rejuvenating the digestive system from this cellular perspective and resetting the immune system towards it's highest potential and that's what you do when you address the microbiome. You get to drop the traditional we look about the disease state and the traditional medical model. We have a collection of symptoms, there's a root cause underlying them but we give the diagnosis.

Whether that be Crohn's or colitis or Hashimoto's or Alopecia and even in the natural world, maybe we don't identify so much with the diagnosis in the natural pathic world but we identify with bugs. We have people say oh I have candida, I have Blastocystis hominis which is a protozoan. I have a H. Pylori infection or I have a virus Epstein–Barr and we focus on the bugs. Both focusing on the bugs or this E state or even the symptoms is a myopic approach because it's about focusing on that entire picture like you said which is the gut microbiome. This is the collective set of genes of all those microbes whether that be bacterial, fungus, protozoa, viruses, everything that's living inside of your digestive system.

The coolest thing in the world Katie is like you said, we have multiple microbiomes. We have the skin, the nose, the mouth, the esophagus, the lungs and the genitals in addition to the gut. When you heal the gut and you rejuvenate the gut microbiome, your immune system is brilliant. It is so smart that now the body learns to replicate this new powerful genetic code unique to you. It can replicate it in the other six microbiomes which I think is the coolest thing in the world.

That's why when you heal the gut, chronic sinus infections go away or when you heal the gut that eczema and psoriasis can finally start to clear up or when you heal the gut recurring vaginal yeast infections start to go away or you don't get bronchitis every time you get sick anymore because the lung microbiome is now smarter and much more well informed.

Katie: Yeah it's so fascinating and I think, thank to many even just yogurt commercials. Most people have a basic understanding that probiotics work in the gut and that's an important connection but it really goes so much beyond just probiotics and just even good bacteria and bad bacteria.

I know that you've done a lot of research on this so can you delve into the different kind of bugs that make up the microbiome and why it's so important to keep them balanced and what does the balance look like?

Christa: Totally yeah I would love to. If we break our three different kinds of microbiome up we would call them symbiotic or good bugs. We'd call them pathogenic or bad bugs and then I call the third type commensal or neutral. If we relate this to a community, the symbiotic microorganisms those are the good guys. Those are the pillars of the community. They build nice homes. They have inter-rejuvenation projects. They're cleaning up the streets. They're contributing to living peacefully in society. We really need those symbiotic bugs to be present in the right amount.

A lot of us, we have a general problem or I even say an epidemic in society of a lack of biodiversity within the cornline and a lack of these symbiotic microorganisms because of the proliferation of over antibiotic use. We have about 55 million unnecessary antibiotic prescriptions every single year. We have more stress than we've had. We have genetically modified foods, we're eating more sugar, drinking more alcohol.

All of these things that can kill these really important symbiotic microorganisms but when we have enough this really employs the one plus one equals three mentality. That's going to be really important to get those balanced and we want to have about 85 percent good bugs and only 15 percent bad bugs or pathogenic bugs. A lot of us have that ratio flipped in today's society and if you're going to go back to the community example, your pathogenic microorganisms, they're kind of, they're riff raff of the community. Maybe they're putting up graffiti and maybe they're doing certain things and that's not necessarily a bad thing because they can add flare and depth and culture which translates to challenging the immune system, keeping it strong.

It's like the immune system gets to lift weights to stay on guard and protect you, but if there's too many of them they can then bring down the entire neighborhood and they start to feel threatened. Then what they do is they try to built forts and homes and we call those thing biofilms where they're protecting themselves and it makes it harder for us to get rid of them.

Then we have the neutral microorganisms and these are the bacteria, people call them commensal because they're not good or bad necessarily but they are in there taking up valuable real estate and they could really go either way depending upon the influence exerted upon them. I like to refer to them as impressionable teenagers and that's really the balance of what makes up our community but really what's in there is that we have a combination of viruses and bacteria and protozoa and parasites and fungus and proteins.

If you've ever had, lets say chicken pox as a kid. You have the varicella magalas virus in your body. If you've ever had mono you have the Epstein Barr virus in your body. They say half the population has either cold sores or herpes in the body. If you've had the flu, a lot of times the flu is viral and so it's not bad that we have these things within our body. We can use them to our advantage when they are taken care of appropriately.

We all have bacteria. If anybody's had a urinary tract infection or food poisoning or strep throat. There's a lot of people with Lyme disease out there. Then we move to fungus with yeast infections and ringworm and nail fungus and candida. We move to protozoa where there's any matter of [teridia 00:10:22] or plasto and then parasites. It's very easy for the body to pick up parasites when the chips are low or the immune system is down.

Lots of ways just having, kissing your dog or sleeping in the bed with your cat. If you eat sushi consistently. There's just a lot of ways that we can pick this up and so we can all benefit from microbiome rejuvenation as just a way to strengthen the entire system.

Katie: Absolutely and I love the perspective of having it unbalanced because I think I've seen two camps when it comes to good health. There's those that think maybe it's just probiotics and taking probiotics will fix it. Then I've also seen people on the other extreme that are into what I would think is too much cleansing and too many supplements that they're trying to kill every bad bacteria.

Like you said it's not that you don't want to have any of those more harmful type of pathogenic bacteria in the gut but you need them in a balance and so I think all things in health that's really important to remember the balance side and not to take it too far in either direction. Another thing that's really fascinating with the gut and I think we're eventually going to find more and more the gut's almost like a finger print, like you said and we can find out so much about someone by their gut bacteria.

We do know right now, so many things can influence gut bacteria and gut health so what are some things in someone's personal and medical history that could influence the expression of their gut bacteria?

Christa: There's so many things that can influence and it was like when I just talked about if you've had chicken pox, if you'd had mono, how many times you've had the flu. These are all part of your personal health history. If you got Montezuma's revenge in Mexico that one time. For me it was Africa. These are things where people, they think I took some antibiotics and that was eight years ago and I'm fine but maybe they never actually got it in balance or you really have to look.

For example myself, I first got into gut health with candida because I was a cesarean baby. I was not breast feed. My father was in pharmaceuticals. I had more antibiotics than you can image. By the age of six I was immune to amoxicillin. I had to move to the heavy hitters and so I had no immune system.

By the time I was in my teenage years and I lost my teenage years and my 20s and I had raging candida overgrowth which wasn't recognized by the traditional medical community which took me a really long time to sort that out for myself. I also had adrenal fatigue and thyroid disorders and so I have people come to me with similar stories of I lost the last 15 years and I can't quite pin point where or when or what happened.

It's really looking to see, okay what are these turning points in someone's health history because everybody has a pathogenic bent if you will. Where people are more prone to having their bacteria out of balance. Some people like myself are more prone to having the yeast/fungal imbalance and others are more prone to protozoa and parasite imbalance.

It's really looking at your whole health history throughout your life to see where, which one of those three imbalances your body is susceptible for and then rejuvenating it from there.

Katie:

Yeah that makes so much sense as well. I know I can trace my own gut infections. I didn't have, I was born vaginal and I was breast fed but I had recurrent ear infections and strep throat when I was little. Like you I had, probably dozens or hundreds of rounds of antibiotics by the time I was five. Had my tonsils removed, had my adenoids removed. Which now we know are also part of the microbiomes so it's kind of sad looking back. Had tubes in my ears. All of that.

Had my tonsils out helped and I was able to stop taking the antibiotics and things but I can definitely see it in hindsight. How that really changed my health at that point. Then I had struggled ever since then. Finally getting my gut back into balance has been a really big factor for me and that, seeing the research sometimes it's hard not to get discouraged when you read things. When you take one round of antibiotics, your gut bacteria could either be permanently altered or it takes ten years to recover. There's so many different opinions.

It is encouraging that it is possible to really undo a lot of that damage if you're focused enough. I see that a lot in people like you said that had that health crisis moment or it was a gradual health crisis and then they had to undo the damage. You actually have a whole program on this and it's amazing and I'll make sure I like to it in the show notes.

My husband's actually going through it now for a secondary infection related to having his appendix removed year ago. You have a whole five step process that really rejuvenates the microbiome and the immune system. I would love it if you could give us an overview of that and explain how you take people through these five steps to really overhaul the whole microbiome.

Christa:

Yeah I would love to. I would love to and so the whole idea of overhauling the microbiome and we had just talked about it in the last podcast is really getting this whole new epigenetic directive and now we have this field of turning on or off switches for disease within the body and we understand that when we can prove the microbiome, we can reset our genetic code which allows us to reach our higher genetic potential. Which I just think is so exciting.

The five steps that I've developed that help rejuvenate the microbiome. Step number one is slashing inflammation. You have to take the fuel off the fire. I've heard Tom O'Brien say that more time than I can count but really its everything. You have to identify the inflammation set point within the digestive tract and you have to start to really clean that up.

I just think, imagine your intestinal tract, small intestine red and inflamed and we want to take a cooling vacuum cleaner and clean things up and leave everything calm and soothed. That's really important to set the tone for everything. At the same time because we all have a unique health history, there's a lot of things that we've been through, our digestive organs are probably pretty tired. The pancreas, the gallbladder, the liver and the cells in the stomach. Called the parietal cells that produce hydrochloric acid.

What we want to do is we want to use the proper type of enzymes that are going to give those organs a break. Send them on vacation, give them what they need so they don't have to do too much work while they're healing so that way when we do call them back to action. They're really ready to give it their all. In terms of slashing inflammation, that's very important using the right other types of enzymes to clean up old molecules of gluten and dairy is very important.

Also certain enzymes that are going to clean up the blood of these pathogenic activity, the proteins in the pathogens that are in the blood. Proteolytic enzymes really work well with that. We want to break down those biofilms I talked about that the pathogens build. Not in a bad way but just like humans build homes and like to live in communities so do pathogens and we know now that they're not isolated and where there's on there's many and that a yeast can live with the bacteria, can live with the heavy metal. We want to break down those biofilms and that is all part of slashing inflammation.

Of course the diet is huge, so we're getting rid of things like gluten and dairy and sugar and alcohol and genetically modify food and we're adding in really supportive foods that come in and slash inflammation like turmeric and ginger and we're really building and boosting the system with foods like bone broth and more vegetables and mostly cooked foods in the beginning so that you're taking the pressure off of the digestive system.

Then you can jump in if you have questions Katie because I could talk about this forever. I want to make sure we get through the five steps. Also really spices work so well to slash inflammation. For example I would use a cumin, coriander and fennel tea for so many different reasons. Food is medicine, fennel is super calming to the small intestine. Aloe Vera is super calming to the small intestine.

When you mix that cumin, coriander and fennel together they have a synergistic effect. The cumin starts to train the pancreas to produce more of its own pancreatic enzymes. This is really true healing from your root cause and when you're going to rejuvenate the microbiome you want to give yourself foods where you're cutting inflammation but you're also preparing your body for the journey. You're supporting your liver. You're supporting your adrenals, you're supporting your thyroid so that by the time you get to step number two, you are ready for it and your body is ready.

Step number two is purging pathogens. I like to do this in a harmless way to rid the body of this excess riff raff. We're not going to get rid of all of them, we're just going to work to create balance and like you said Katie, antibiotics. That's the western way whether, antibiotics, antifungals, antivirals, immunals, suppressants. It doesn't really work for sustainable health.

A lot of times in the natural model we do that as well with high doses of botanicals. Heavy doses of oregano oil. Heavy doses of whatever it might be and that's executing that same strategy which is not a great model for long term healing and a lot of people get terrible die off as well when these pathogens, they're excreting metabolic waste.

I remember you and I were on the way to a gathering in LA and I said to you in the car, do you know what quorum sensing is and you're like oh yeah. I thought that was so cool because you talked to most people about quorum sensing and they don't know what it is. The way that we work when we interrupt the way the pathogens communicate, that's quorum sensing. It's a way, it's like a cell phone technology that all these pathogens can communicate with each other then it enables them to, at the speed of light, share their genetic code and replicate. This is how we get way too many bad guys and not enough good guys.

Instead of attacking them, instead of killing them, I think an eye for an eye leaves the world world blind and so what we do is we interrupt quorum sensing so we cut their cell phone communication so they can no longer talk and if they can no longer talk they can no longer proliferate.

Now we're changing the terrain. We've got inflammation under control. Now we're interrupting the way that these pathogens communicate by using a lot of different very powerful botanicals that work and address every single aspect of the gut and of these bacteria and viruses and protozoa. We're addressing them all but it's a dose that's low enough that we don't assault them but we're getting them out in a much more graceful way.

Katie: Absolutely and I love that. It's so fascinating and I don't think it's widely understood yet. That's why I love that you incorporate that as well. I have so many more questions and so many more things I want to delve into with you on the guy but I want to save some of the question for the next couple of episodes because the next one we're really going to delve into gut infections and things like cbo and candida like you mentioned and how to overcome those using some of these techniques.

Also in the last episode with autoimmunity and the he cut which is a connection I think thankfully we're really starting to understand. There's some really neat techniques people can use to improve autoimmune conditions through gut health. I want to save my questions for those. I encourage everybody to join us again for the next episode so we can deep dive into those a little bit more.

Christa thank you so much for being here again and for sharing your knowledge and we'll see you back in the next episode.

Christa: Sounds great.