

Module 4 Lesson 2

Transcript

A sexy nutrition topic for today is your gut microbiome. Before we get to the other topics we have lined up in our gut health module, we need to lay the foundation of understanding the microbiome. There is so, so much fascinating research coming out about the connection between the microbiome and our health. I don't think I'll ever get bored talking about the microbiome.

In this foundation lesson, we're going to cover what your microbiome is and what it's made up of, what the microbiome influences and how it's tied into nearly everything else that goes on in the body, future directions in research here and where this field is going. Let's get to it. Call it microbiome, call it flora, whatever you want. We're looking at how bugs in the gut play a role in everything from weight management to cognitive functioning and immunity to digestion. I am floored by what we're learning from the studies and I cannot wait to share it with you. You know I love the science and research.

The topic is too rich to just cram it into one lesson. And as I said, we'll build on this in future lessons, but today we're just going to lay a basic foundation. I feel like the microbiome is in such a spotlight right now because it's one of the first things to really reflect our changing lifestyle, environment, and food supply. I can tell you that I have countless clients who come to me who eat a diet, something like this, breakfast, a yogurt with a little bit of a boxed granola and maybe a banana. Morning snack, maybe a bar of some kind. Lunch, a microwaveable meal, frozen or fresh, doesn't really matter for this example at least. In the afternoon, that same client might grab a shake with a scoop of protein powder or a bag of popcorn. Dinner, might be similar to lunch and may or may not include a veggie or two. Forget about what's obviously wrong from a nutrition point of view and look at it from another angle.

Pretty much everything this made up person is eating in a day, comes from a box or is vacuum sealed or otherwise zapped of any possible living organism and pretty safe from any possibility of foodborne illness, pathogen or bacteria. Unless this person happens to drop her protein bar on the ground and adheres to that five second rule, there are probably no creepy crawlies from food entering her gut. Don't get me wrong, we like clean, bacteria-free food, but our biology is not designed to eat a diet of only nuked, sterilized, and pasteurized foods. On top of that, and I won't go into so much detail here, but all of those additives and preservatives in our food supply are great for keeping food from turning but maybe not so great for our small intestines.

So in your gut are billions of bacteria, viruses and fungi, billions. You're hosting colonies and armies of microscopic bugs, which we collectively call microbes. This is what's known as your microbiome. These microbes are essential to your immune system, heart, lungs, skin and gut, which we are focusing on in this whole module. We're still learning if microbes enter the gut in utero, but we're certain they're introduced during normal vaginal delivery. Then as you grow and are exposed, certain microbes are introduced through foods. There are bacteria specific to breast milk for example. We know certain bacteria help to digest fiber and short-chain fatty acids, so the foods you eat are going to help to diversify the microbes in your GI track. That is good. This is good stuff. You want lots of different bacteria, viruses and fungi to have a nice rainbow of microbes that will help to keep you healthy and in fine-tune.

Research is looking at how diverse and rich your microbiome is in several areas. First, we're looking at weight management. There's really good research out there now, even twin studies that find that the more diverse and active the gut biome, the better when it comes to weight management. Gut dysbiosis, a fancy way of saying microbe imbalance is linked to overweight and obesity intimately. Some of the coolest research out there looks at introducing stool from healthy weight individuals. Yes, with a pill, not actual stool, into overweight individuals and as the dysbiosis resolves, the weight starts to come off even without any dietary changes. I'm telling you, this is fascinating stuff going on. Again, another one of the reasons nutrition is so cool. While I'm not recommending poop pills to my clients right now, I'm really comfortable with a probiotic to start.

Next, science is pointing to digestive disorders like IBS and leaky gut being linked to microbiome dysbiosis. Introduction of a higher fiber diet and more diversity in foods as well as probiotic rich foods can help to manage symptoms and prevent flare-ups.

Interestingly, there are certain specific microbes that have been identified as being particularly beneficial. I recommend *Saccharomyces boulardii* for IBS and Crohn's disease sufferers, for example. Oh, and I'm not done. Moving right along, there's also great evidence pointing to probiotics which are part of your biome as being beneficial to your heart by lowering cholesterol, promoting HDL, we know the good cholesterol, and lowering triglycerides. By the way, research also says that a rich microbiome helps regulate blood sugar, preventing spikes and crashes. I'm holding off on talking in depth about gut flora and immunology because I have a whole lesson coming up on that, but I'll introduce the idea here that yes, absolutely people with more diversity in their gut benefit from better immune functioning, decreased illnesses and fewer sick days.

And finally, even though research is still pouring in all the time, the gut brain connection cannot be overlooked. There is a connection between neurotransmitter formation, which we learned

all about in another module and your microbiome. There are studies on dysbiosis, increasing depression symptoms and research finds many mental health disorders are connected to a hampered gut microbiome. Your gut health likely connects to your brain health. Okay, I am truly so fascinated by all this gut talk, but this part specifically, and I'll discuss it in more detail in the lesson in this module on the gut-brain connection.

Okay, you want healthy gut microbes, don't you? I do. So here's what you should do. Mix it up, eat a wide range of foods and make sure you don't get stuck in a packaged food rut. This doesn't mean you shouldn't have your dinner leftovers for lunch tomorrow. It just means that you should get a good variety of foods into your rotation and push yourself if you're a picky eater. And especially if your clients are picky eaters, you got to push them here for that variety.

Eat probiotic and prebiotic foods. Probiotic, of course, I'm talking yogurt, kimchi, sauerkraut, Kaffir and fermented foods. Prebiotic foods like artichokes, bananas, oats, apples, and other foods that stimulate the growth of the existing microbes in your gut. Breastfeed, if you can, for at least six months. Research finds babies who are nursed at least six months show huge gut advantages when compared to formula-fed baby. And avoid antibiotics unless absolutely necessary. They can kill your good cooties along with the bad ones. They can kill your good cooties along with killing the bad ones. Avoid artificial foods like sweeteners and unhealthy chemicals and unhealthy chemical preservatives, which can damage your good flora.

That was a lot of really important information, so let's do a quick recap before we end this lesson. The microbiome consists of billions of bacteria, viruses, and fungi in your gut that are essential to your immune system, heart, lung, skin, and gut. You want lots of different microbes to help keep you healthy. Research is showing the microbiome is connected to weight management, digestive disorders, heart health, blood sugar management, the immune system, brain health and mental health. Wow! That is an amazing list. I told you the microbiome is so important and so fascinating. You can help your clients support a healthy microbiome through their diets. Suggest eating a wide variety of foods, especially fresh foods and foods with probiotics and prebiotics. Help them steer clear of too many packaged foods and definitely avoid artificial ingredients and sweeteners.

Okay. Now, we have a foundation for understanding the microbiome. We'll call upon this information in the following lessons, and I cannot wait to see you in the next one.