

## Module 4 Lesson 3

### Transcript

Today, we're talking about the connection between your gut and your brain, which I have to say is one of my favorite topics in nutrition and health. We are just cracking the surface of everything there is to know in this field. We're going to cover a lot today, but this is one of those areas you need to pay close attention to and keep paying attention to as the latest research comes out and new discoveries are made.

In this lesson we're going to cover how the gut affects brain chemistry and what we know about the gut and its connection to common mental health disorders. Most of us, are familiar with the brain's connection to the gut. I mean, whose mouth doesn't water just thinking about their favorite meal? How many of us already know we're going to be nauseous before giving a big presentation? Can you feel your salivary glands activate when you flip through all of those delicious pictures of beautiful dishes on Instagram? Your brain has powerful control over your digestive tract, but you know what?

It goes in both directions. Your gut has power over your brain too, and that my friends is what I want to spend our quality time today talking about. Let's start with some science. The gut brain access is what we call the communication network between the GI tract and the brain. It's a communication line that is physical and biochemical and responsible for loads of functions that keep us in balance. Your gut is responsible for creating millions of neurons. Neurons are responsible for communication from the brain to the rest of the body.

Your gut is full of neurons and the communication along the gut brain access transmits through the vagus nerve and tons of neurotransmitters. Your vagus nerve is one of 12 major cranial nerves that communicate with the rest of your body. The neurotransmitters that are made in your gut include famous ones like serotonin, which helps us feel calm and relaxed as well as less well known ones that are linked to fear, depression, and anxiety.

Through rodent studies, we know that some probiotics can help reduce depressive symptoms and so we're using that as a platform as we study how gut chemistry can affect brain chemistry. Our thinking is that better gut chemistry leads to better brain chemistry. This is much deeper than recovering from a sugar crash or having low blood sugar, which can easily be remedied with a little food. This is all happening on a deep structural and formative level.

The handout for this lesson goes deeper into the specific bacteria strains to take your learning to that next level as well, so don't forget to check that out. There are so many factors at play when it comes to mental health that there isn't necessarily one silver bullet here that's going to solve it all, but improving your gut may be a step in the curative direction. We're also looking at how emotions play a role in our stomach aches and pain.

Some of those rodents studies look at the vagus nerve and how the vagus nerve responds to stress. More stress equals signals through the vagus nerve causing gastrointestinal problems. We know that Crohn's and IBS sufferers have decreased vagus nerve tone and function. It also seems likely that the hormones linked to stress negatively impact your gut flora. Honestly, if you have clients who come to you complaining of constipation, diarrhea, irritable bowel syndrome, indigestion, loss of appetite, nausea, peptic ulcers, stomach cramps, and unnatural hunger, you should not be shy about recommending some good stress less techniques.

Changing the stress response can help to reverse and repair some damage linked to gut-brain problems. Come up with three to five stress reducing strategies and personalize them for each client. They can be anything from petting a dog to taking a long shower with lavender, deep breathing to meditation to journaling. Incorporate these behaviors into daily practice and make them part of your lifestyle plan with as much emphasis on them, as you do getting your green vegetables, for example.

And keep clients accountable by adding this to their food journal. The hope is that the calming and soothing activities will undo some of the vagus nerve problems and don't forget the food of course. For sure, you'll want to take a good look at your client's diet and see where you can get more gut friendly bacteria into them with real foods that promote good gut health. It's going to be harder to see if that does the trick because obviously it's going to take time and you may not be able to say, "The yard is really helping my blues." But with this one, there's nothing to lose.

The stress reduction and increased effort to get good bacteria into the gut is how your clients can feel empowered taking control of their mental wellness. All right, let's go back and review everything from this lesson. The gut brain access is the communication network between the GI tract and the brain. Your gut creates millions of neurons which communicate between the brain and the rest of the body. Research is suggesting better gut chemistry leads to better brain chemistry. As a health professional, you can help your clients improve their gut health through lifestyle, focus on stress reduction and making a few dietary changes.

Take a look at their diets and see where you can fit in probiotic rich foods like fermented foods, and make sure they're eating plenty of foods with prebiotics too. That's it for this lesson. I am so excited to see you in the next one.