Introduction to the Gut-Brain Connection

So if you were on a really restrictive diet for a long period of time, you know, just call out carnivore diet as an example, You're not going to have had a lot of different fibers and eventually they'll die off.

I mean, they're just like humans. You stop feeding a human, it's going die. Same with these back here. They're a living organism. If you stop giving them what they eat, They will die And so variety is the spice of life in the context of the gut and supporting these new microbes that we've transplanted.

So our goal always, and this is something we educate on, is expanding the diet to include at least 50 different foods. And this will be another resource we can share in, in The Notes is like helping people to expand their diet.

This is good news, regardless of a transplant. You want to do this regardless, of transplant by shifting your diet within 24 hours, you can see a positive effect on your microbiome.

Everything is connected and I'm here to tell you how. I am Dr. Laura Hanson with Connect My Brain. This podcast is for moms who are concerned about their child's development.

The brain impacts our mind, body and overall health. I explain how your brain is wired, what happens when it's out of balance, and how early childhood development not only impacts your child but can affect you as an adult years later.

Want to know how to improve your life? Join me and learn about your amazing brain and what it can do for you. Hey everybody, it's Dr. Laura with Connect My Child's Brain.

We are so excited that you are tuning in and I have had some wonderful conversations with many different fabulous providers in so many places and this one is not going to be any exception to that.

Tonight, we are talking about poop, and that's right, poop. And we're going to enjoy it, okay? So I have Jason Klopp with me and he does a fabulous therapy and I'm just going let him take it away.

So Jason, thank you so much for being on the podcast. We welcome you to Connect My Child's Brain. Great. Well, I'm excited to be here and I hope anybody listening can learn something new.

Yes, we'll be talking in part about poop, but there's a lot more in poop that most people aren't even familiar with. And the power that it has to heal is pretty transformative and just on the topic of connecting your child's mind.

I mean, so much of the mind is also connected to the gut, right? We talk about the Gut-Brain connection and the importance of that. there's this whole web of connections that all stems from our microbiome.

And so people often talk about the gut brain connection and how the got is somehow the second brain. But I'm more and more convinced daily that the guy actually controls more than we think, and may have more to do with how we operate cognitively, mentally and so on and forth, then we're really giving it credit for so.

Yeah, as far as a little background, I first got licensed as an atropathic doctor in 2015 and began seeing patients in the gut health space. So chronic IBS and SIBO, some IBD, and that was just where I got my start and was doing a lot of that for several years and had patients from all around the world doing telemedicine and so on and forth.

And then in 2017, was confronted with someone who was inquiring to become a patient of mine.

FMT Origins and Autism Research

and lovely woman. So we had an initial introductory call just to decide like is the program is a work that we offer to help or benefit to her and then we would take it from there.

And so in the course of this discussion this woman was telling me about all the serious issues she was confronted with and her husband got so desperate that they actually ended up selling their home They bought a new organic plot of land, built a totally environmentally sustainable home, grew all of their own organic food.

And despite all that, in addition to prior to all this, trying everything from seeing Cleveland Clinic doctors, Mayo Clinic Doctors, all the integrative functional stuff, homeopathy, supplements, you name it, she had basically done and tried it all.

Yet she was still suffering so significantly. And towards the end of our conversation, I said, look, i'm really sorry, but I don't think there's anything that I offer that's different, better, more innovative than all of the different things you've already done and tried.

However, given your medical history, that you would really benefit from FMT. And for those new to the concept, FMT stands for Fecal Microbiota Transplant.

And we'll get into a little bit of what that actually is. But she was like, oh my gosh, Dr. Klopp, like this is something that I would love to do, but there's just nowhere for me to access this within North America.

I'd have to travel overseas. At this point, there was some stuff happening in the UK, some staff going on in Asia and different places. So that just wasn't feasible for her given her health.

She wouldn't be able to And so she essentially begged for me to find a way to make it accessible here in North America. And that started the journey in January of 2018. I began in partnership with another naturopathic doctor treating patients using FMT.

And we really started out treating just a lot of the chronic disease mystery illness type people, neurological diseases, MS, Parkinson's and so on. It really just grew from there to the point where we were treating at multiple locations around the world.

And eventually, you know, early on actually that partnership was discontinued and then I led the charge from then and expanded. Then it was really in 2018 actually there was a study that came out of Arizona State University If anyone's familiar, it's Dr.

James Adam. He's done some really pioneering work around FMT and autism. And we can get more into the nitty gritty of the study if there's any interest.

You're always welcome to hyperlink and include those things in the notes. But I started getting reach outs from parents saying, well, wait a minute, you know, there was a study that came out of Arizona State University, showed up really you know, two-year follow-up study, great outcomes data, safety profile really high.

We're lowering the sores and severity of the autism symptoms, we're improving the GI symptoms. So these mothers and some fathers started reaching out to me and saying, hey, well, you're out in Mexico doing this, but you haven't been doing it for children with autism.

Would you be willing to sort of amend your protocol to follow what was being done out of Arizona State? So we did that. And that was in sort sometime I believe in 2019. And so we started doing that in 2018 and then we had just started seeing more and more of these families and it grew to us expanding to several other clinic locations around the world.

We just treated hundreds of kids with autism and a smattering of other chronic diseases along the way. Again, we can drill down on any of that that interests you.

Let's drill on the study. What did the studies actually say? Yeah, so they were treating kids between, I believe the age of like 5 to 18 was the, the AIDS range.

And what they observed was, is that through an eight week course of FMT, So there was some pre-treatment, they're using antibiotic, and then they did the FMt.

There was a version of a loading dose portion, And then a maintenance dose, portion over an 8 week period. And what they saw is they a pretty significant improvement in their digestive symptoms.

So about an 80% improvement at the eight-week follow-up, like at follow up time from the initial study. I think it was 18 weeks, so 10 weeks after they completed the FMT program.

And they also saw 80 percent improvement. You think of constipation, bloating, abdominal pain, diarrhea, that type of thing. Then they roughly saw 25% in improvement of their neurological symptoms, which would include their behaviors.

stimming and tics and anxiety and depression and aggression and so on. So again, pretty dramatic, right? 80% improvement of digestion. Was there a follow-up to that?

Yeah, so that was the initial. They then followed up at two years later and the 80 percent improvement in digestive symptoms maintained and then neurological improvements improved from 25 percent to 50 percent, which was again pretty traumatic.

What's really important is that yes, it's great if we can see like a temporary improvement. That's awesome. But what happens two years later, right? What happens five years?

And so that's, really, you know, was a landmark study. Everyone was like, wow, this is just unreal. And at this point and still today, to my knowledge, there's no approved and we're talking more like drugs, but there's no proved treatment for the core symptoms of autism.

You know, it's like, here's a little bit of an anti-anxiety. Here's the laxative. There's nothing to address the course symptoms. And so this study just really sort of turned everybody's heads.

It's just like what is this whole microbiome piece? What is the connection between the microbiomes and some of these core systems of Autism? Why don't you go into what the microbiome is?

I mean, I love the micro biome, but from your work, let's really get the audience to know what is the Yeah, I mean I think we're still scratching the surface on our knowledge of what it truly is and anybody who considers themselves an absolute expert on the topic is clearly indicating that they are not because there's just so much more that we don't know than that.

We do know that what we do is that it consists of trillions of microbes that doesn't include just bacteria that does of course include bacteria, but also viruses, parasites, fungi, and it can be healthy in the sense that there's a lot of these and there are a lots of different ones.

And it could be unhealthy if there is not a variety and not diversity and a not enough quantity of certain microbes. Then, of course, it's going to be unhealthy if it is pathogenic.

So sometimes there can microbes there that are like candida, as an example. It's normal, healthy to have candidas, just when you have too much. same with E.

coli and there's versions of E colii and Clostridium and other microbes that can be pathogenic and bad and create symptoms. That's where FMT has been approved for is in the context of Closterium difficile when you start to get too much becomes toxic and creates problems and people still die of it and with a single FMT treatment, there's like a 90% cure rate.

And so yeah, it's this whole living ecosystem that all interplays with each other and all of the other organ systems within our body. So basically anywhere there is like, a moist area, including your ears, your nose, you mouth, like all these systems have a microbiome.

And so we're connected from our mouth all the way to our rectum and it's teeming with microbes, most of them in our large intestine and colon, but there's still millions in all these other areas and they all integrate and talk and work together much like you'd imagine the ecosystem of a Amazon rainforest, right?

It's not just trees, it is the whole living breathing biosphere.

What the Microbiome Is and Why It Matters

The same thing is very true of our microbiome and it's a huge part of life and why we live and It's being damaged just like the Amazon rainforest, you know, so the antibiotics damage.

Yeah, tell us that one. Yes The foods we eat, the air we breathe, water we drink, antibiotics, it all has, in many cases, a damaging effect on the microbiome.

And then that microbiomes is passed down generationally, right? Through the mother. When we're born, we are getting the micro biome of our mother And then, you know, it's through our life.

It's maintained and it has grown and expanded based on the way that we live and what we eat and all of those factors. And so, the delivery method is a really important one.

If you're born C-section, your coming out is essentially sterile. And so that's not great. And then breastfed, that has a really important role in, again, exposing the child to some of these keystone species that really play a role and the overall health and wellbeing, both at present and later on in life.

Wow, I mean, it's just an orchestra, right? And everything we do plays an integral part. I have two things I'd love for you to touch on is we kind of get that idea if we take an antibiotic or we eat a food, what it does to the gut microbiome.

But you said even earlier, how you think it's got a much more far-reaching impact. So let's talk about the brain. What is this that the microbiome, how does it communicate to the brains?

And when it is disturbed, what does that look like in somebody's brain? Right. Yeah. I mean, I think there's a lot going on here, especially in the context of children.

There's certain triggers that need to take place to get neurological development. And the gut plays an important role in creating those sort of triggers for development and sometimes if the guy isn't developing appropriately, because the got develops as well, right?

It shifts over the course of life and it becomes more adult-like as the child gets, you know, three, four, five, it becomes more, adult like, but it's shifting all along.

And so all of these different systems in our body that create development and neurodevelopment all need to be in sync in order so that they work together and they create the next trigger for the phase of neurological development.

So that's the first part of it. If the gut microbiome isn't healthy and isn' developing as it should and getting the inputs that it It will affect neurological development.

You'll see that in kids, right? Like they miss the speech development, like what happened there? They missed the development of the neuromotor and being able to walk properly or crawl properly, or be able do things like scootering or swinging, biking, things that just require some neurological pathways to develop that didn't or didn' completely develop.

And so that's a whole big area. The other part is if the gut is unhealthy, you create inflammation in the got that then affects the brain. Now, how exactly the microbiome communicates with all these different organ systems?

we're not totally sure. We do think there's something definitely between the vagus nerve and the gut and microbes, and so there is crosstalk between organ systems.

But how does the got in the bone? How does it got into the ear? We know it's all happening, we just don't know clearly how. And so that's, who knows? Hopefully one day we get some more clarity around that.

What happens though is if you have a lot of inflammation in your gut, First, you're not creating the right chemical signals to go throughout the body.

You're now producing all of the neurotransmitters and all the building. Everything comes from the gut, right? I mean you eat food, break it down and then it goes off to do its own thing as needed.

And so if you have enough inflammation for long enough, You start to damage the integrity of gut lining. The lining of the gut between the rest of body is very similar to the lining up the blood-brain barrier and the body.

So, inflammation in the guts creates a degradation, a breakdown of a leaky gut. That then also can create what we loosely term as a Leaky Brain. So now you're starting to get stuff that's not supposed to be going into the brain, going INTO the BRAIN, creating inflammation in the Brain.

Inflammation just damages stuff, right? Like you think of osteoarthritis or anything aidos-related. Aidos creates damage and creates breakdown, you've got enough osteosthritis in a joint for long enough, it just totally eats the joint away.

Now, short term, very necessary, a very healthy immune response is required. It's when it's chronic inflammation over a long enough period. And so, an imbalance of the microbes in the gut creates dysbiosis, or imbalance, of microbes.

Dysbiosis then fuels inflammation and you don't have all the building blocks to counter the inflammatory response. And over a long enough period of time, you start to have an effect on your immune system and all of the other immune systems in the body.

So now you got this hyper ramped up immune response, You start reacting to foods, more inflammation. I mean, and this just keeps cascading and over enough time can create permanent lasting damage that can't be undone.

unless you do something like an FMT, a fecal transplant. Yeah, and see when this happens, when the kid's window of development is open, it's literally, correct me if I'm wrong, but it is literally becoming like a role model for how that system is actually going to grow up.

And that's what creates these children that are not developing correctly. And gosh, we just have so many. It boggles my mind how common this really is.

So what do you think about pathological biofilms. Yeah, I mean, there's definitely something there and that's essentially connected to this whole picture of dysbiosis, right?

You have bugs that, you know, are maybe normal to be there. but there's also pathogenic bugs. And, you know, the whole goal of life in general is to try to sustain life, right?

Like we're all going about our day trying to sustainable our life. We're eating, we are breathing, or drinking, and we try and avoid just running into a street.

You know? We are all doing things to keep ourselves alive. Bacteria are the very same thing. Viruses, they all want to live. And so they want to evade detection from the immune system so that the system doesn't go after them and

try to kill them, and eliminate them.

And what do they do? They go into a biofilm where they become undetectable.

How Gut Health Affects Brain Development

Then when the host, us, becomes weak, they can come out and have an effect. They can go create havoc, multiply, create more damage, lower the health of the hosts but not too low.

We don't want to kill the host because the hosts is feeding us every day. It's giving us blood supply, it's given us nutrition, and it is giving everything.

So yeah, biofilms can be a real challenge, especially in people with really chronic diseases. When I was still actively treating patients, we weren't doing it of biofilm stuff but I generally find in younger kids the biofilms stuff isn't as severe or significant as say to someone who's an adult and been really chronically ill for a long period of time maybe dealing with Lyme and other things.

Okay. All right. So now let's really get into the nitty gritty of FMT and explain like a procedure. And where do you get the poop? Sure. Yeah. No, that's an important part, right?

One of the most important parts. So, you know, FMT, the general concept of it is like, we have a patient, they are sick. They have some disease. That disease usually comes with GI problems, digestive problems.

Right? It could be IBS and they've got constipation, bloating, gas. Could be, Parkinson's disease, And they also have GI issues and neurological diseases, or it could be autism, and they've got all of those things as well.

And so patient, sick, microbiome issues, dysbiosis. Now we have a donor who's healthy, doesn't have long history of antibiotics. We could go talk for an hour just about the donors and the donor screening, but ultimately we want to make sure they're younger.

So our donors are between the ages of 10 and 30. We want to make sure they're breastfed. We wanna make that they are eating a broad, omnivorous diet, that their physically active and fit, they don't have any mental health issues or challenges.

They've got a healthy BMI. And then we look at their medical history. any kind of diseases that might affect microbiome health. And then we put them through a whole litany of questionnaires.

We look at their blood, stool, urine for anything pathogenic infectious. we've put him through all physical exam and it's a very exhaustive process. With like a basic questionnaire that people fill out less than 1% of people who like apply to become a donor actually make it into the program, which just goes to show you that it actually very hard to find very healthy people.

Wow, wow. Yes. So all those things we talked about before that damage the gut microbiome, we want to make sure that those are happening with our donors, right?

So we wanna make they're vaginally born. We wanna be sure they've been breastfed. It's just such a critical piece to make sure that the health of the microbiome is there.

So let's say we've got this very healthy, let us call them a super donor. We take their stool, which is full of millions, billions of microbes. Every time you're having a bowel movement, you are passing billions of microbes and that's just normal.

It's not just a normal part of the way that the system works, but there's more and more there and they keep reproducing and maintaining this healthy balance in a healthy person.

And so we want to make sure the person's healthy so that their microbiome is healthy. We then take that stool and there, again, we could talk for another couple hours just about how we convert that product into the finished end product.

And I've got a few demos here so that you can see. So it ends up being a couple of different product types. This is a capsule. It just looks like a probiotic.

Essentially, it's a powder. Makes it easy to ship, makes it easier to store. Its double encapsulated and terracotta, which means that when you take it, you don't have to worry about the stomach acid killing the bacteria.

Then this is the product that a patient would take. I didn't realize you could do this orally. Yeah. Yeah, that's like most common way today of treating is oral.

Oh my gosh, it's so much easier. Well, there's this, which is the enema. So still being in, this is obviously empty and not labeled, but the anem, This is 60 ml.

And so you can still take it rectally. Gastroenterologists were doing FMT via colonoscopy would go this route and they would apply it at the time of colonocopy, But it is just not a super common of doing it anymore.

We still make it because it isn't an approach some people take. And if there's a lot of distal inflammation, we may suggest starting out with an enema, like someone who's got a proctitis or an ulcerative colitis distil in the colon, We may consider going that approach.

But yeah, so this is a capsule and as a lab, So we're based in Canada, but we are licensed by Health Canada with what's called a drug establishment license.

So that means we have a GMP licensed lab similar to the manufacturer of any other drug or medication. I won't bore you with all of those details. So this is the capsules, one of the product types.

The enema, another product type. But the other one that's really interesting in the context of kids and pediatrics is actually we developed, this an oral powder.

It comes in like a small vial and so it's substantially colorless, odorless and tasteless. And you would just take it out of the small vial, mix it with a little water or juice or milk, whatever a parent would normally give with their kid.

And they would take an oral because, you know, again, a lot of kids can't swallow capsules. That was going to be my question. What do you do with the kid that can swallow a pill?

Yeah, the only distinction is that with the oral powder, we suggest going on a proton pump inhibitor to lower the stomach acid so that more of the microbes can get through and have a positive effect.

Now, when we were treating patients, We actually compared the two groups, capsule group and oral power group, and we didn't have any distinction in the outcome.

whether they did a capsule or powder. Now, when they do the oral powder, they would always start with the rectal enema and then they'd go to the oral powder Most clinics today that are still treating pediatrics and kids with autism are not doing the Rectal Enema.

They're just relying on the Oral Powder and they'll do a loading dose with Orals Powder, and a continued maintenance dose thereafter. Wow, that is absolutely fascinating.

Biofilms and Chronic Dysbiosis

I can remember, it was probably three or four years ago, I may have run across that study which really got me thinking about it for some of my patients and I was really encouraging patients or parents with children that had just

either low functioning, developmental delay, autism, whatever the case may be.

Let's dive in. But it was very costly. Of course, they had to travel. Can you talk a little bit about what kind of investment are you looking at? Sure.

Yeah. I mean, so at the stage, and we didn't get to this part of the story, but I spent several years treating, you know, hundreds of patients. And we had clinics in different countries around the world.

Then we decided in roughly 2023, early part We decided to discontinue the patient treatment side. Remember, this whole story started with that person who was trying to get access to FMT.

And in the few years of treating, we learned how to solve some of the hard things. One, how do make the product, find donors and actually have something to deliver.

Two was the protocols that we developed to treat the patients that worked with. So once we sort of cracked those two codes, the next phase of expanding access was to actually educate practitioners and get the product into more hands of more doctors so that people didn't have to travel to other clinics, countries, locations.

And so where we are today is we just supply product to different clinics doctors, research groups around the world for whatever indications that they have regulatory approval for and that that can access it for.

And so cost-wise, I mean, that really depends on the length of the protocol, right? So in a case of C. diff, where it's a very acute condition, you could get away with like as little as 12 capsules.

But in the context of something more severe like an autism, we were treating for four months. We see clinics treating now between two, three, four, months, just depending.

So it could range as low as a few thousand bucks up to eight or $10,000, depending on the length of the overall protocol and how much total product is being used for that protocol.

The cost really varies a lot. And it just comes down to the length of the protocol and that ultimately comes to how chronic and severe. We've developed a lot of protocols based on the research and we do share all of those and predominantly we're sharing those to actual physicians and providers.

But happy to share that with you as well for your review and you're welcome to it. It's more pertinent to physicians of course. Wow, this is absolutely fascinating.

So do you have providers in the United States? Yeah, all across the US we have doctors. Oh wow. Okay, well we're definitely going to need some resource to be able to know where those are.

Right, and a lot of that comes down to, you know, we are happy to connect people depending on what it is they're dealing with. Like if it's an autism thing, Probably we're going to connect them to one person who's doing this via telemedicine and does stem cells alongside of it.

If it's someone who is treating like say, you know, a patient with a lot of Lyme or something, we might connect him to someone's treating a little Lyne.

So it combines, so you're bringing the best of the two worlds together. We're happy to be a resource for that. As someone wants to just go to our website, reach out via the contact form, or happy, to make introductions.

we don't just have like a broad list of all of doctors. It's just more of a one-off depending on what's needed. Well, yeah, we will definitely we want to make sure that we have all of your information in the show notes, and I definitely want To connect further with you because I really do see this as a way for parents to really understand what's going on.

How FMT Is Done and Donor Screening

And I can tell you, I've been doing my work for 30 years, and there isn't one child in 30 that I have not said, we've got to start with the gut. Everything does start out with a gut, but I couldn't agree more.

And you've got parents that are having their child basically live on Merillax to go to the bathroom. You have children that they're not eating well. We have school lunches that aren't terrible.

The idea of how they are made. And I always say, we've got these grocery stores here that say 10 for 10. I won't name them out so I don't get in trouble.

But you go and there's a cardboard box with, you can get 10 small packages of goldfish. And parents, it's hard to pay for everything. you know, try to feed your kid and then you got a picky eater.

And so you just think that all you can do is feed them and they got to have something. Some pediatricians say it really doesn't matter what you give them.

I mean, so as a parent, I just feel like you're hit with so many things that you don't know what to do. But I would support this approach. for almost every person in this practice because the gut is such an issue.

Food is the hardest thing to try to get people to change. But I really believe in, Jason, you tell me if you agree with this or not. If we restore that microbiome and we brought improvement of health, wouldn't the drive of what you eat change?

Absolutely. I'm glad you got to this natural point because I would be remiss if I didn't include the importance of it. It's one thing to do a transplant, but if you keep living the same lifestyle that you were pre-transplant, you're going to end up back in this literal similar situation in a matter of time.

The way that the microbiome works and the reason we have bacteria in our gut to begin with is because we aren't able to digest fiber. Like, we don't have a mechanism for that, right?

Like if it's a protein, say a piece of beef or chicken, you eat that there's stomach acid and proteolytic enzymes and all the things that help to break it down to small components that we can utilize to build hormones and neurotransmitters and muscle and bone and other stuff.

Fiber, We can't do that with. And so we have bacteria to break down the fiber and get all of the great benefits from it. The bacteria then spin off their own metabolites like short chain fatty acids, including butyrate as an example.

Buty rate is all these wonderful benefits of healing, being a fuel source for the gut lining as anti-inflammatory. This is again, just a sliver of all the different things that happen within the microbiome, including producing some B vitamins and then just the list goes on.

And so the role then of the diet is that these different fibers from different foods feed different bacteria. So we have different bacterial in our gut to break down and ferment different fiber.

But if we're only eating a few foods, we don't have much variety of fiber. And so we only feed a subsection of the microbes that should exist in our gut.

So if you were on a really restrictive diet for a long period of time, just call out carnivore diet as an example, you're not going to have had a lot of different fibers, and eventually they'll die off.

I mean, they're just like humans. You stop feeding a human, it's going die. Same with these back here. They're a living organism. If you stop giving them what they eat, And so variety is the spice of life in the context of the gut and supporting these new microbes that we've transplanted.

So our goal always, and this is something we educate on, is expanding the diet to include at least 50 different foods. And this will be another resource we can share.

In the notes is like helping people to expand their diet. This is good news, regardless of a transplant. You want to do this regardless, of transplant by shifting your diet within 24 hours, you can see a positive effect on your microbiome.

just by shifting your diet. It's the simplest thing to change your microbiome. With or without FMT, the best thing you can do is expand your diets, include more diversity.

Of course, avoid antibiotics and try to sleep well and avoid stress. There's all these other things, but there's nothing single-handedly that works better and faster.

and simply shifting your microbiome via what you eat. And so, a big part of during and following the FMT protocol is that you begin shifting you diet to one that includes more diversity.

The focus is just on eating different foods, right? And, so you know, like wheat is wheat, if it's in a pancake or a muffin, it just wheat. So you want to try to expand and we share a whole list of different foods that you can choose from to help you get more diversity in your diet.

And you'll probably appreciate this Dr. Hansen. So we had parents in our treatment group years ago, we were still treating patients and they'd say, well, if the goal is 50 and that's good, I'm going for 100. that they would hit a hundred.

I mean, it was so impressive. And I'm like, man, can you be my cook? In a week, they'd eat a 100 different foods. Now they had to put a lot of effort in.

They were freezing things and they were batch-packing. There's a lotta effort that goes into hitting 50, never mind 100. But the average American's eating like maybe 10 to 15 different food, period.

And that's not great. And a lot of those foods are processed and full of colors and dyes and other chemicals and crap. So yeah, it's a challenge to do that, especially if you've got a child who's, you know, not neurotypical, neurodiverse.

Costs, Access, and Provider Network

It can be very challenging. I've had kids come to me, they're eating like one, two different foods. That's it. And so, you know, but the good news is once their microbiome starts improving, they become less sensitive and the story improves from there.

So yeah, the diet is like such an important piece, of course, to be canned organic. But like, let's not make that the focus. Let's make the focused trying to expand the.

Later on, one thing at a time. Yeah. Well, and the other thing that really gets to me, I'm in Atlanta, Georgia and I'll go to the grocery store, another one that I won't mention their name so I don't get in trouble.

But you go in there and everything in the produce area, just I would say probably 80% of it, is all from California. And I am in Georgia. Where the sun shines the same and can easily be grown there.

We got farmers here. And when you think about what they have to do to get it to market so that it looks good, not only, you know, let's have everything every season, but they're picking it before it's ready and we're changing.

I mean, there's so many things that work against individuals trying to and I'll be happy to say the name of this one. I get my groceries from a local farming group called Fresh Harvest, and they literally deliver it to my door.

It's Thursday today, so I got my grocery. And it's coming right from the farms, And I've got fresh duck eggs and Vidalia onions and romaine lettuce and whatever else I picked, you know?

So there are other ways that We can make a shift. I like what you said. Let's just make it shift Look at what your eating and start trying to expand it when that gets comfortable Maybe think about the resource just one little step at a time But you're right if food is everything for the human being There's no getting around that And here's another fun one.

This is something I usually kind of make a light joke about, but to go hug a tree. I mean, the earth is the original microbiome, right? I means, that's where we got our microbiomes from.

The microbes were in the soil and wherever else. And then over time, we ingested them and then it started creating its own life inside of us. Beautiful.

I love it. Yeah, I think it's important. Like there's so many benefits. We know all the benefits so you can read all of the studies on the importance of fresh air and sitting outside and walking on a lawn and you name it, right?

Kids who spend more time outdoors and have a pet and all these things are generally better off. Now, why don't we spin ourselves, you know, like go out in nature, literally go hug a tree, go swim in a lake, roll around on the beach.

That's the microbiome. It's teeming around us. Let's get it. Don't be so paranoid about cleaning everything other than maybe something that's in a hospital, you know, to be cautious about, but like in nature, I remember when I was a kid, and I don't rinse off one thing that I get.

I eat it just like that because I'm getting the diversity from the dirt. i'm Getting it from where it's been. And yeah, that's how you build diversity in your gut.

Now you might want to rinse of the stuff that comes from stores that you can't name.

Diet Diversity, Nature, and Closing Advice

Exactly. Now that I would totally agree with, but when it comes right from the farm, and I can really understand that woman who decided to sell everything and go start her organic lifestyle.

There's such a part of me, I'm like ready, just go build a farm. Get a couple of goats, some ducks, Well, then invite your patients to come and hang out with you there.

Exactly. Never mind doing consultations in a clinic room. Have them on the farm. Wouldn't that be great? One of my friends told me to do it that way, too.

So you never know. Whatever God has in store, I just open the door and make it happen. Well you've already gotten a few little, you know, pushes here.

I'm one of them. Yeah. Well, Jason, this has been just so wonderful. I am so excited that I got to meet you and have this conversation. And I look forward to really bridging a connection because I'm really a big supporter of your work.

And I think it could really change some lives. So thank you so much for being on the podcast. Now, tell everybody, how do they find you? And if you had one little pearl to leave us with, what would that be?

Oh, yeah. Well, our website is just novelbiome.com, N-O-V-E-L-B-I- O-M- E. On all of the social things, it's similar. It's at NovelBiome. So you can always check us out there.

But the website would be the great resource if you wanted to be connected to a provider or someone and or just ask us questions. Then if your health care provider listening to this, you could definitely reach out and we'd be more

than happy to have our conversation and go over what we do, how we things the way we operate and how you might be able to offer this to your patient population if it is of interest.

And the microbiome is just such a key part of our life. and it's something we should respect, cherish, take care of, be grateful for when it is healthy and really do our best to turn around if it isn't.

FMT isn' t for everybody. Not everybody needs it. Most people can get away with cleaning up their diet, avoiding things that we know kill it, spending more time in nature, eating more diversity.

That will fix most people's problems. the disease, the inflammation is just gone too far. Or the starting point in the life, they just missed it. Not being born vaginally, not being breastfed, early use of antibiotics, restrictive diets, environmental challenges or toxicities, those people may need it and would very likely benefit.

But there's a lot that people can do just with the things that are around them that aren't expensive, that our accessible. And so, yeah, I would just say, don't give up hope.

keep fighting for a better future for yourself, for your kids, and for our greater world around us. Yeah, God really has given us everything we need, hasn't He?

Pretty magical, including in our poop to bring it all the way to 16. Exactly. See, and I got a lot of boys in my office and they love to talk about poop.

And I'm always asking them, did you poop today? And they loved to have that kind of conversation. Kids, they are just so awesome. I love it. They really are.

Well, thank you again and thank everyone for tuning in. We really enjoy bringing you this information, and remember, check out our website, connectmybrain.com.

We have a couple events coming up in June, depending upon when you hear this. You might hear it before the last event that we're offering, which is the Babysitter's Club.

We are asking grandparents, young people, if you take care of somebody, we want you to come to the Babysitter Club last Saturday in June 12 to 1, complimentary.

We want to help moms and dads get out on a date night. Now, if by chance you missed it, it's okay. Be sure and check out our resource tab. We offer events.

It will probably be very light in July, just because it is a big travel month. But get ready in August, we have a lot of new things coming your way. Now this was a really important podcast tonight.

So if you heard something in there and it made you say, you know what, I need to check this out, be sure and share the podcast and subscribe and we'll make sure we have all kinds of great information about Jason in our show notes.

And as always, thanks for tuning in and be blessed. Thanks for listening. I hope today's lesson will help you or someone you love. Do you have a question or just really want to talk to somebody about brains?

Connect with me over on Facebook or Instagram at Connect My Brain. Looking to understand and optimize your particular brain? Check out connectmybrain.com for course information and resources.

See you next class. you