Is Your Gut Secretly Controlling You? Dr. Sabine Hazan on the Microbiome's Power Transcript

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Introduction and Guest Background

So what is your hypothesis as to why newborns predominate with bifidobacteria? Because that's the microbe that they're born. That's the beginning. That's the microbe that they're basically getting protein from the mom.

And they're getting, you know, essentially oligosaccharides to kind of grow that microbe. And they're not exposed to anything else. This is the first microbe that these newborns have.

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Hi, everybody. This is your host, Dr. Ed Park of the Recharge Biomedical Podcast. And today we're very lucky to be joined by Dr. Sabine Azan. Thank you, Sabine.

Pleasure, pleasure to be here. Okay, so you are an expert in the gut biome. You're a board certified gastroenterologist, the first female gastroenterology fellow at University of Miami.

Congratulations. And it's been quite a journey. I was reading you have partners who do fecal microbiome transplant. We'll talk about all that in the brief time we have together, but.

I think for our patients, I want to let them know that you're an expert in the field. You can diagnose and treat certain conditions. And I guess the reason I wanted to do this podcast was that I'm of the mindset that patients have very little reason to lie.

Like they don't like spending money and wasting it, so they have a confirmation bias. But many times over the years, people have come to me and said, oh doc, have you ever heard of fecal transplant?

I did it and it changed my life, at least for X number of months. So I want to go into that for people, because you and I treat chronic disease people, sometimes even long COVID, and they just search the internet for something.

And a lot of the positive results may be stem cells, exosomes, which I do, but especially fecal transplants. So we want to go into why that could work.

Okay? Yes. So let's talk about med school. So when we're in med school, back in the day, I'm a little older than you, but all we had was like stool O and P, right?

And we had C diff toxin. So that was kind of like analogous to what they call the amplicon. You look for a toxin, you say, oh, we have it or we don't.

But now in the last 15 years, they have the meta genomics, which is like the next generation sequencing or this rapid high efficiency sequencing. They can actually look for everything.

And I know you think this is not. that valid, but typically a metagenomics thing will give you up a target plot, right? They'll look for gene sequences and they'll say, oh, you have all these bacteria and they'll do like a semi-quantification.

So that's really kind of what you can offer too, right? Do you have your own lab or do you do something? Yeah, no, I have my own lab. We have all the equipment, bells and whistles, we have top of the line.

I think it's important, especially when you get into fecal transplant, to really know, in my opinion anyways, to really know who the donor is. who your donor you're using and to basically showcase engraftment.

Engraftment is the process of taking stools from a healthy donor, implanting it into an unhealthy, and matching the healthy donor. So in other words, you can see that the donor matches the recipient.

Right. If you don't have that, it's not really validation, right? So we were the lab that kind of showcased that. There's a few labs out there that are in the microbiome space.

Alex Carruths, when he does his testing of microbes and encapsulating poop in capsules, he does that to showcase engraftment.

Microbiome Testing and Engraftment

I think it's important to showcase engraftment, but it's also important to match the donor, in my opinion. That's something that I'm bringing to the field where that idea of matching, that idea of let's isolate the microbe better to get rid of the microbe and let's bring in better microbes to implant, right?

And so, you know, that's something that Yeah, let's go into that like your actual recommendations because we actually by happenstance had a common patient I told you they came in last week husband and wife and they had the fecal biome transplant They were like, oh, we can't prove for five days.

Dr. Hazan said so for the let's pretend like nobody knows anything. Okay So like you go to Thailand, you have a nice little ice cold beverage, you drink something, and all of a sudden you have travelers diarrhea.

Oftentimes it's E. coli, could be other things too. And then typically, you know, for the doctors who graduated in the last 30 years or so, We only had like, you could look for parasites, stool-over parasites.

You could look for C. diff toxin, which is a simple, I guess, maybe antibody test. And then we kind of presume that if you had Travis diarrhea, you had E.

coli would give some antibiotics, right? But actually. Let's pretend like we're not even a doctor, but a lay person. So can you start me off? The mouth has bacteria, right?

The vagina has bacteria. And the colon, there's not a person in the world who didn't have a colon that had bacteria. Nature affords a vacuum. There's got to be something there, right?

Correct. Now, when you swallow and the stomach is pH 2, that's largely efficient at killing a lot of the bacteria. That's why there's SIBO. That's why usually the small intestine is mostly clean.

Correct or not correct? Well, I mean, there's microbes in the small bowel. Every location, you know, the stomach has different microbes than the esophagus, than the mouth.

You know, we've done cultures of, we've done, you know, next generation sequencing, look at the mouth, at the throat, especially with Alzheimer's patients, Parkinson's patients.

The esophagus has different microbes, the stomach has different microbes, the small bowel, the gallbladder, the pancreas. You know, this is something that's going to be new where doctors are starting to look at all that, right?

Okay. So let me, so explain it to me because I'm just an MD and I don't really know. I didn't know. The bias they teach us is that hydrochloric acid in the stomach is largely sterilized.

So you're saying SIBO, the key is overgrowth, but there's always a low level of bacterial colonization, even in the small intestine. Remember, nothing stays stagnant.

Nothing in the body is just in the stomach, in the colon. You expect this homeostasis, but there are regions that have different pH, different microbes.

When you look at microbes that are aerobic, that breathe oxygen, versus microbes that are anaerobic, that don't breathe oxygen, that are in the colon essentially, right?

So different regions have different microbes. When the balance of those microbes is off, And this is a new concept, I think, that, you know, I think I personally just started noticing with COVID, right?

Because I, like you, trained in medical school years ago where we were all about the microbes are bad, right? There's bad microbes in the mouth, there's bad microbes in the colon, there's bad microbes, you know, and therefore kill the microbe, right?

What I've come to realize, especially with COVID, is it's not necessarily just the bad microbe. The bad microbe is there because of the loss of microbes, because you've lost the good guys.

Yeah. Okay. So let's reframe that. Cause like for me, like if I was a med student or training and I took a swab of a gallbladder, I would expect that to play it out as zero colony forming units.

I would expect it to be a sterile environment, but you're suggesting perhaps no. Yeah, perhaps. No. And I think when you start doing NGS of the fluid, when you start doing NGS of the pancreas, you know, you're going to start noticing that there are microbes that there has to be microbes because there are microbes in the blood that are passing.

So the small test is not, again, this is something that's new, new technology. This is not something that's I'm going to look at the gallbladder. Remember even the urine, urine is sterile, right?

Right, they teach us, but it's not. But here's the thing, if you have a leaky gut, are you transferring some of those microbes into the bladder? Is the blood supply?

So we need to start looking with deep sequencing at all these regions, not just at the overgrowth of the bacteria that's actually a problem for we culture, but the bacteria that's part of the environment.

All right. So let's just talk about the fact that, you know, the mouth is dirty, the colon can have anything. Sophagus has some, stomach gets sterilized, but there is that H.

pylori. And then if people have a condition, they can get SIBO, which they can do breath testing for, but then skip down to the end of the small intestine to the appendix.

So, you know, in ruminants, the appendix is like helps to digest the cellulose and it has fermentation. Is the appendix a purely vestigial organ or do humans need an appendix?

I believe the appendix was a storage of your original bifidobacteria. In fact, one of the key things that I do is basically look at the appendix. you know, whether there's a problem around the cecum and focus on the appendix, you notice people with a, you know, that had a appendectomy that end up having diseases later on, right?

Is it because they've lost their ability, their original bifidobacteria that was in the appendix, and that was semi-protecting them, right? Yeah. Let's talk, you know, last year I went to Elisa Zahram's concert.

Yeah. We definitely thought that the appendix was a useless organ. Right. But I think we're going to realize in the future that it was not a useless organ, but it was possibly a storage of early microbes from infancy.

I mean, it's very possible. But, you know, in this emerging area of science, you know, dogma clashes with, you know, there's correlation, there's causation, and there's confounding, right?

So we don't really know, because everyone's telling stories. What we do know is that large intestine is filled with a lot of stuff.

Gut Ecology and the Appendix

So typically the only time docs got involved with gut biome is when we give bacteria and all of a sudden fever of unknown origin, diarrhea, wasting, they got C.

diff colitis. And then we got to give them P. o. vanco or whatever to kill that. So talk to us about, you know. C. diff colitis is just a tiny manifestation of gut dysbiosis, right?

You can have low-grade, you can have other flora. Like, why do doctors only know about that as gut dysbiosis? Well, I think it was the first bug that kind of got us to start noticing gut dysbiosis.

I don't think, you know, I think when we started doing, you know, I think about my training, right? I went from GI to doing clinical trials for pharma and doing clinical trials on C.

diff mostly, right? I've done, you know, every antibiotic for C. diff to try to kill the bug. And then I did fecal capsules and clinical trials, and then I did the spore biotics, and then I've done monoclonal antibiotics, right?

So I've done the whole spec, I've literally gone the whole spectrum to try to kill that bug. What I realized as I was trying to kill that bug is that really, first of all, I had that bug in me, but it was not toxigenic.

Right. My husband had it, my kids, other people around my community. So when we started testing, we noticed that 90 to 99 percent of people had that microbe in them, but it wasn't secreting a toxin.

So why is it that the people that are secreting the toxin are having a problem with diarrhea, and the people that have the same microbe in their gut are not secreting a toxin and are not having diarrhea, right?

Well, the key in that is actually the lost microbes. And that was a discovery that came to me, I'm sure, to other GI doctors or other scientists out there, that it was not about killing the bug.

It was about replenishing the microbiome. What are we doing? So for some reason the C. diff survived and all the good friendly commensal bacteria were dead and that created a nasty environment.

So you need to fight fire with fire you need to put and there's there have been very good quality studies showing that you can do fecal transplant to fight C.

diff it's one of the few indications but if you extrapolate that to a broader context we have such a literature now emerging for chronic disease, cancer, ADHD, ASDs, Alzheimer's.

And so tell the lay person, because you hear these things thrown around, oh, 60, 80% of your neurotransmitters are made in the gut. What's the reality there?

So C-div started this whole process, right? C-div was really the bug that's like, hey, you're out of balance, a bacteria is secreting a toxin, bam, you replenish the balance, you replenish the microbes, you're suppressing that microbe.

You're not killing it, you're suppressing it. Or you're killing it first because you've got too much of it and then you suppress it because that's what we do when we do fecal transplant.

We get flagell vancomycin first, then we implant, right? So here's the thing. When you implant, what are you doing? You're replenishing microbes. You're adding microbes to suppress the bad ones, right?

What we realized, and that was kind of a movement that in a way I started with the Malibu microbiome meeting of bringing all these doctors to the same platform, you know, Mimi Wang, Colleen Kelly, Paul Furstad, I mean, all these doctors that were doing fecal transplant, Dr.

Borodi, and especially Dr. Borodi, because Dr. Borodi was a big pusher of fecal transplant for other conditions. And I remember when I started talking to him about this, he's like, why are you focusing on, look back at your data, right?

When I look back at my data, who improved? What did I find out, right? One of the cases that kind of You know, Pop was really this Alzheimer's patient where I gave the wife's poop to the husband, and then all of a sudden the guy could remember his daughter's date of birth, which was something new that we hadn't seen.

When we started to, and so what was in the wife's microbiome that helped this hike? Is it that if I do another guy with Alzheimer's and another wife, it's not working, right?

So this is a new field that basically we've seen a bunch of N of 1s, anecdotal cases, we call them. You know, certainly Alex Kurut saw autism improve with fecal transplant.

I saw autism improve with familial fecal transplant. You know, but then there's these other cases where you're doing exactly the same thing and it's not really working.

Why is, right? And it all comes back to Yes, we want the science to advance, but is the science really about taking stools and putting it into someone right for everyone?

And what stool matches with what? And are we compatible? And is there a compatibility issue? Think about a blood transfusion. What are you doing with a blood transfusion?

You're matching. you know, the two A with A, right? So what happens when you don't match? You have an incompatibility, right? The patient gets sick. Is that what's happening with the stools?

But we have no idea because it's more complex than the blood. Is there a compatibility with stools? Because right now we're all rushing. Okay, so we're starting to explain to the lay person, there's always going to be a bunch of bacteria, but when you get like a lack of diversity or an overgrowth, or say you take an antibiotic for whatever, and then certain healthy commensal species die off, that's when you start to get into trouble.

But for the lay person, there is a reason for bacteria in the large intestine and that is they make a lot of the B vitamins. and also the neurotransmitters.

So people always talk about your gut feeling and that the GI nervous system is older than the one up here. Like people really I think in a lot of ways are medicating anxiety and depression with food a lot of the time and they're looking for serotonin maybe.

So a lot of your mental, emotional states, psychological states will be largely influenced by that preponderance of neurotransmitters from the gut, right?

Absolutely. And I think we tend to eat with the microbe.

C. diff, Dysbiosis, and Fecal Transplant

I mean, I'm going to go out there. We're feeding them. They're demanding. Okay. As a thought instinct, feeding the microbes. And here's why I say that.

I have had a couple of cases, because now I'm very big on testing, on asking the question of like, what did you crave after you had the fecal transplant?

Right? So that's a big question of mine now. because I want to know whether they're matching my patient before I do the stool testing, which is an expensive test to see if they're matching.

And inevitably, I've had a bunch of cases. I had a case of a patient with metastatic mesothelioma, had her grandson's poop as a donor, and the grandson basically was eating chicken nuggets.

The grandma started craving chicken nuggets. I had another patient that was vegan. The recipient was a carnivore guy. And my vegan donor drank a lot of orange juice.

And my patient started craving vegetables and drinking orange juice. Isn't that hilarious? And by the way, he improved on every level. Chronic UTI improved, psoriasis improved, suicidal ideation improved, C.

diff improved. So here's a guy that was like, wow, complete transformation and even the diet to basically a complete plan diet. So, you know, it is fascinating.

And it wasn't like he wanted that because that's not what he was eating at home. Right. You didn't prompt him. There was no, yeah, ascertaining virus.

When you see that, you start going, hmm, is it, am I craving the thing that's going to kill me because I've adopted my microbes to essentially want to eat those things.

Yeah, yeah. I wanted to touch upon two important subjects. One, I went to Alisa Song's A4MPEDES thing and so much was chronic disease and bifidobacteria came up in several things.

And their strong bias as pediatricians is that, oh, C-section is bad because you don't get the vaginal flora. You know, breastfeeding is good because you get the bifido.

But there were a lot of slides that were fairly convincing saying, well, the newborn is supposed to have a preconderance, if not an exclusive bifido. And I look at my report, I got no bifidol.

So I'm thinking like, okay, correlation is not causation. People get older, their flora changes. But, you know, my gut instinct, so to speak, is that if I take a capsule or have an enema or colonoscopy with bifidol transplant, that the host factors won't keep it there.

So does the microbiome fit the host, vice versa, or it's a dialogue? So a couple of things. First of all, that report you did, probably inaccurate because you don't know what they tested and you don't know if it's the baseline of your microbiome.

So it's very important to get an accurate level of bifidobacteria. I mean, unless I'm misreading this, I have a preponderance of bacteroides and firmicutes.

First of all, is that a PCR testing or is that next generation sequencing? I believe it's NGS, yeah. Okay, so you have to kind of know how deep did they go?

What are the markers? How did they normalize? How did they compare? Because they probably have a normal there. How are you being compared to know that you're less than normal, et cetera?

Honestly, I don't know how the quantification goes, but I presume it's based on the 16S. So I don't necessarily base your finding and change what you're doing on a test, because here's the thing, because a lot of people come to me with these tests from everywhere and then we repeat it in our lab and they actually are fine, they have some bifidobacteria and I'm like, you didn't need to kill yourself and worry about it and take probiotics and do all that.

So, you know, validation of a test is very important. We are not there in the microbiome space and I'm the one doing the 61 clinical trials on the microbiome and disease and I can tell you, we are not there.

We are not there because we need validation. We need normalization. We also need a report that basically tells the consumer what is Bacteroides, right?

Like you're telling me right now you've got some Bacteroides. What does that mean? Is that a good bug? Is that a bad bug? Should you be having a report that doesn't explain what these microbes are doing?

At the very least, there should be some clinical data that correlates with that. So I think, you know, I would say throw the report and just kind of say, how do you feel?

Are you healthy? Did you have COVID during the pandemic? Because if you've had COVID multiple times, you already know you've got leaky gut. If you're depressed, if you're anxious, you already know you have leaky gut.

I don't need to tell you. Let me ask you. So what is your hypothesis as to why newborns predominate with bifidobacteria? Because that's the microbe that they're born.

That's the beginning. That's the microbe that they're basically getting protein from the mom. And they're getting, you know, essentially oligosaccharides to kind of grow that microbe.

And they're not exposed to anything else. This is the first microbe that these newborns have. Right. But why does a 58-year-old not have like 90% diff at all, like a two-microbe?

I mean, a 58-year-old has had stress. You're stressed about your work. You're taking care of patients. You're drinking alcohol potentially a lot, maybe, maybe not.

You're eating foods with glyphosate. Yeah, glyphosate, yeah. But do you ever see adults with a preponderance of bifido? I would say no. Oh, you do? Yes.

Oh, okay. I didn't know that, so that's good to know. Yeah, and actually, yeah, definitely. Especially my highly exposed to COVID, never got vaccinated, never got COVID.

I have a lot of bifidobacteria. We age because our telomeres shorten and our stem cells deplete. But what if we could support both? I've been taking TA65 for 17 years.

It's the only supplement I trust to support better mood, better sleep, and exercise recovery. And at age 57, I don't have any gray hair and I don't need reading glasses.

TA65 is available now. Go to rechargebiomedical.com slash TA-65 and enter promo code RECHARGE10 to save 10% off. Okay, well let's talk a little about, we know glyphosate is like an antibiotic, it really was an antibiotic, and we know that antibiotics kill gut biome, but I want to take you back to 2020-21.

You know, I had my 40th high school reunion this weekend, and one of my classmates runs the prison system west of the Mississippi. Or the Rockies and he sent me interesting private communication in the early days.

He said that on terminal Island with a thousand men, 70% of them got COVID right away. So they did a reverse quarantine. And he said the majority of them, you know, unless they were morbidly obese or sick, they didn't have upper respiratory, but they had GI symptoms.

And so that's something that nobody ever even advertised that there's a fecal plume when you flush the toilet and that people have GI symptoms. Talk about that.

Yes, absolutely. I'm sure I'm going to create controversy there, but I'm going to say it starts at GI first.

Microbiome, Mood, and Food Cravings

It starts where you're basically swallowing some microbes, you're exposed, it goes into your gut, kills the bifidobacteria or not, but then you end up having diarrhea, you breathe that in your nose, then it goes.

Or you go into a bathroom where someone had diarrhea and you breathe that in, then it goes to your nose. I remember I used to get, yeah, I used to get GI COVID.

I wouldn't really get upper respiratory, but, but think about how interesting is it? I know you're a scientist and a physician, but how interesting is it?

We had Jay Bhattacharya was the only guy talking about epidemiology. All the rest of them just spell nine. Indeed, last week I was at a conference in Vienna for exosomes and not a single person spoke up about the danger of lipid nanoparticle vehicle or how unethical it was to force people into being vaccinated with mRNA spike protein.

But you're a scientist, and I think the thing that has been most interesting to me is how science tests tend to be very much rule followers. So they don't want to get in trouble.

They don't want to lose their grants. They don't want to, you know. So the other side of this… I'm on a planet by myself. Yeah. Well, that's great. And I think that's glorious.

But I think that the lay person doesn't really understand that, you know, half of what's published is false, you know, and that Marcia Angle of the New England Journal even wrote a book about that.

It's all BS. But I think people got bamboozled a little bit into saying, well, why is anyone speaking out? Well, they're not speaking up because they have a mortgage to pay and they have friends that will call them crazy.

I mean, I, you know, so people really underestimate the power of silencing free speech. So I like to say that- Neighbors, by the way, that are like my hypothesis that was published and retracted.

Imagine a hypothesis retracted. So it's not even about, you know, publishing the wrong data. No, it's about conformity. Yeah, it's total fascism. And the people yelling fascism are the most fascist at all.

I mean, in California, we had that law, AB 2098, two paragraphs poorly written. It's crazy, COVID disinformation. So there's there, I feel like the science became political and the politics became religious.

And you could never question someone's religion. So I still get this. I mean, I only just recently, I did nine blogs about COVID in the early years. Every single person with a college degree from my college or high school came out to decry me and they had no medical or public health background.

So it was a fascinating time. Yeah. Horrible times. I mean, I'm starving PTSD from it. I'm still fighting this by the way because here's the thing When you retract the hypothesis, you're not letting the scientists tell the story Yeah, right.

And if you can't tell the story you can't go to the next page of the storyline It's like you're cutting the story in half and you're going stop telling the story but my story has good results of two twins with autism that are speaking don't you want to know how i got there i mean it started off with fecal transplants no no no but that's the thing i don't trust doctors i don't trust scientists i trust patients because when patients get results You know, other than the wasted money and feeling stupid, like, why would they come back to me time and time again and say, oh, I did a fecal transplant and I was so much better.

My fibromyalgia went away, my depression, this and that. So, but, but my point I was trying to get to earlier was that let's say I do the protocol and for people that don't know, you can swallow capsules, coated capsules, you can get spores, you can do a colonoscopy.

That's the gold standard, but you need to like kind of do a little destruction and then do a transplant. and then not

poop, try and retain it to get an engraftment, right?

But my suspicion is, and yeah, I do have a glass of wine before karaoke at night, but like, you know, my suspicion is that they said adults, as they get older, don't have that much bifido.

But you're saying I could become a new man if I just held onto the bifido? Well, I mean, you know, here's the thing, you know, when you, it's, you know, you talked about fecal transplant and you said, you know, they improve for two months, right?

You don't want to do a fecal transplant, which is expensive and improve and give two months. Like that guy I told you that was craving orange juice and went, you know, plant based.

It's been five years. I've not seen him back in my office. It's, and he's still matching the original. So it can engraft, it can change. It can engraft, it can change, but here's the thing, if you don't give the right diet changes, if you're not careful, if you're one of those high rollers that's on a plane every two days, flying from here to there and you're exposed to a million people or you're you know you're one of those rock stars that is going to concerts from one concert to another exposed to thousands of people you're you're not letting things implant right you're essentially a tornado you know you're basically you know moving from one not a stable environment yeah no so And literally like taking that bottle of water and shaking it up.

And eventually it explodes because these microbes are just not sitting in planting. You need to like go to the beach, rest, plant your feet on the ground, grasp, meditate, yoga, breathe, pray, whatever you want to do to reorganize yourself.

It's not just, hi, I'm putting some stools in your colon and you're going to be fixed. No, you've got to move apart. Alright, let's bury two more concepts.

One is probiotics, like people have sauerkraut, kimchi, yogurt, lactobacillus drinks I love. How much of that even influences the large intestine bio?

Well, I think yogurt, you know, have some benefits. I think the fermentation, the kimchi, the sauerkraut have some benefits. Of course, the best study to do on that is to do a before and after where you basically give nothing and then you give the patients like four yogurts a day and see what microbes are waking up, right?

And what are they feeding on? This is a big thing of mine. I love doing those kinds of studies where I don't change anything in the environment. I don't change the diet and I basically just change one thing.

So, like we're testing right now lactoferrin. What is lactoferrin doing to the microbiome, right? So, we are giving these packets of lactoferrin to kind of see what that's doing.

We're testing manuka honey. Eventually, we're going to be testing cumin. We tested vitamin C to show that it increased the bifidobacteria. We tested bovine immunoblobulins.

And because we noticed like it increased the bifida. So what happened with bovine immunoglobulins was I was getting these anecdotal cases of inflammatory bowel diseases improving.

Bifidobacteria, COVID, and Early-Life Microbes

And I was also getting irritable bowel syndrome patients improving. So I started testing this bovine immunoglobulin and essentially what I noticed was that it increased the bifidobacteria, decreased the bacteroides, increased the firmicutes, decreased the proteobacteria, which if you have that signature microbiome that's out of whack, then that's a perfect, and you're a diarrhea patient and you have Crohn's disease, that's the first step, right?

That's kind of like a wall hanging fruit that you could say, try this before we go to the biologic, right? And therefore it's safe, it's like, it's blood from the cow spun around and it's clear liquids and we test it, we test it first.

for all sorts of microbes and make sure that it's clean blood because it is still blood, even though it comes from a cow. So ultimately, you know, there are some, the best way to do this, to answer this question is, what is kimchi doing?

Let's give a person massive amounts of kimchi and see what microbes it's improving. But it survives the stomach and gets the large intestine and stuff.

But yeah, there's a lot of foods. So fermentation, fermented products do survive the acidity and for some reason do… Let me close out this last topic because I know you would frown on this, but I know some people DIY it.

They do it themselves. Like, you know, it's not hard to get an enema kit or a turkey baster and borrow your friend's poop or your baby's poop. and put it in there.

Obviously, you frown upon this, but when we talk about poop, it's not like it's a monoculture either. These commercially available FMTs are a mixture, right?

There's trillions of microbes in there, but the majority of those people have microbes that determine who they are, right? The same thing that can cause you to grow your hair, alopecia areata, we saw the two cases of Colleen Kelly at Brown University where she showed that two C.

diff patients grew hair after fecal transplant. But here's the same thing, for those two cases, there's two cases of alopecia totalis. post-fecal transplants, so it was strongly demonic.

So you're saying if you just go and take your buddy or your friend's kid's poop and put it in your bum, it's just too much of a gamble, you're saying?

It's a gamble. You don't know what you're doing and you don't know if you're compatible. Here's the other thing. You don't know if you have vancomycin-resistant E.

coli, which could kill you. you know, carbapenemycoli, which could kill you. You know, this, C. diff, are you getting C. diff? You know, there are cases that are not.

Okay, but let's talk about money, okay? So a person doesn't really have the money to come see you, and they're struggling with arthritis, maybe long COVID, they have irritable bowel, leaky gut.

I mean, I've had some success with exosomes, but the best case I ever had was a guy with mast cell activation from leaky gut. I didn't believe it prior to that.

But if they're like, oh, Dr. Sabit, I can't afford you, can I just do something simple, probiotics, some capsules, maybe an atom? Do people overdo that?

I mean, can they do that? So here's the thing, freedom of choice, right? Your life, your body, your choice, right? I mean, here we are. We were talking about vaccination and freedom of choice, right?

If I see that the data is not the way that I like the data to be, And I read the data and I make an informed consent and say, you know what, I'll pass on this new vaccine because it's not tested to the level that I want to be tested.

My choice, my risk. I'm on the front line. I was exposed to patients with COVID. You know, I took a chance at dying exposed to patients with COVID, right?

But I made an informed consent, right? If a person chooses to do whatever they want, take from the neighbor and do it in their kitchen, and they know that there's a risk of death, and they're ready because they're so depressed and they're so, first of all, it's probably not going to work because you have to go all the way to seek them.

So putting it in the rectum is kind of useless in my opinion. And then secondly, you know, are you killing those

microbes when you're getting them from the neighbor?

You know, microbes are supposed to be anaerobic. They don't breathe oxygen. So it's probably not going to work. I mean, I'm not saying most people would do it, but I'm just asking.

But what I'm saying is it's probably not going to work. But here's the thing. The thing is that the human being, the public that has a problem needs to be the soldier on the front line to push the regulations to say, we want this to be approved for rheumatoid arthritis.

We want familial fecal transplant to be a protocol for Parkinson's at the FDA. Why is Dr. Hazen's protocol of familial fecal transplant not advancing at the FDA?

Why does it need to be a pharmaceutical product, right? Because I'm willing to take on the clinical trial. I'm willing to see if a family member can donate to another family member.

I'm willing to test. I'm willing to raise the money with the Microbiome Research Foundation, which is what we do with autism. So this way, we put, by the way, anybody that can't afford me, we put them on a list because we're waiting for funding and we're waiting for that one person that's a billionaire that has a disease that could say, you know what, Dr.

Eason, I'll put the $2 million on the protocol and we'll find the FDA to get this approved. Yeah. I mean, hopefully somebody would be listening to this, right?

Yeah. So that's what those people need to do. Because here's the thing, I'm handcuffed, you're handcuffed, the government is not letting us do this. And I can't even guide you to tell you whether a stool is clean or not because I don't feel comfortable Okay.

So let's, let's talk about that. Let's talk about that. So right now it's not really FDA approved. So therefore it's not paid for by insurance. So we're looking for that good donor whose life was changed and wants to pay it forward.

And the only thing that's approved is that they have seeded. Right. Right. Right. But I think what I'm hearing from the people on the front lines, like yourself and the patients is that.

It can be transformative and that it needs to be expanded. So just like in the early days of the AIDS act up, people need to advocate politically. But let me finish with two.

Can I ask you two common questions? So people do water enemas like in the Tony Robbins or they do coffee enemas. Are enemas safe? I personally think that you're probably killing microbes.

You're getting rid of microbes. You're altering the balance of your microbiome and then you don't know what you changed. Okay. Yeah, I was never a fan, so I decline.

Water is probably not that bad, but I don't know what coffee enemas do. Secondly, there are a lot of people who feel that meat is murder, so they have a vegetarian plant-based diet.

Obviously, they have some B vitamin deficiencies, which they should look up and take care of, because down the line, it can have very serious neurological consequences.

But if somebody is vegetarian, then is there a gut flora? Does it need to be tweaked in order to have a more balanced biome? So that data's coming.

Probiotics, Diet, and Refloralization

We're analyzing vegan, vegetarian, and carnivore. So there's not much I can talk about, except that I'm going to say there are differences. And not everybody's meant to be carnivore.

Not everybody's meant to be vegan. Not everybody's meant to be vegetarian. So I think it's really what you probably have inherited through generations.

You think of the guy from Ethiopia whose whole family was just eating grains and vegetables. That's his comfort food. You think of the guy from Norway that's eating fish and potatoes, that's his comfort food.

You think of the person that's eating meat and potatoes, that's their comfort food. The Mediterranean, that's their comfort food. I'll tell you, for me, Mediterranean diet is my comfort food.

That's where I'm from. Right. You're Moroccan? You know, my cangine is my best food. I mean, like lamb and honey and prunes, I'm set. And probably you have your comfort food too.

When we deviate from that comfort food, And we start, and you've certainly seen it as a doctor on the front line where, you know, Japanese person goes and eats Mexican food comes to see you with GI problems.

Mexican food, eating sushi comes to see you with GI problems. You know, person that never ate bread all of a sudden starts eating bread and now cannot tolerate bread.

Oh, last question. Yeah. Okay. So we know gluten is a, is a total shit show. No offense. I know you're not offended because the title of your book is what?

Let's talk shit. Let's talk shit, that's right. And by the way, hold on. Show us the cover. There you go. This is the English version, and this is the Korean one.

Oh yeah, so graphic, yeah. And it's actually much prettier, I think. A couple, like, should turns there, but we'll allow it. So is there any level, Dr.

Hazan, as an European, is there any level of sushi that's safe? You know, as a GI doctor, I'm not a fan of sushi, but I still eat it. But I make sure that I put a lot of soy sauce, ginger, and lemon slices with it.

So want to make sure my stomach is really acidic. Fair enough. And you know, they used to recommend the Cipro or the quinolones for Travor's diarrhea.

I hate that drug because of the way it kills mitochondria and cause tendonitis. So for me, my go-to broad spectrum is Doxy. And I feel like. That's one of the safer ones.

If someone has travelers, diarrhea, fear, what should they carry with them? My first thing is bovine immunoglobulin, Bion Booster Plus. I mean, is that freeze-dried or?

It's freeze dried, it's blood from the cow spun around with some glucose. That's my first thing. I had traveler's diarrhea and I took one scoop and bam.

And I'll be talking to Jill Christa. She's like a modern day witch with the naturopathy. She has a lot of natural remedies too. But if you have to go big gun pharma, what are the relatively safer?

I used to like Bactrim, I like Doxy. But now I don't like to miss it. I like Doxy. We gave it to kids with acne. We give it to Lyme patients and we give it to Lyme patients for a long time.

What I like about Doxy also is it has a good coverage for mycoplasma. Because too often we don't think of mycoplasma and mycoplasm is one of those bugs that's acerular, right?

Yeah, yeah. I know we're not going to cover all of gut GI, but talk to me about candida because I hear a lot about that. And then obviously in certain countries, and then there's giard parasites, longworms.

Thankfully, none of us have really seen a tapeworm that's often or ascaris. But like what I do see in these immune

dysfunction people is the lime and the mold.

So talk to us, like, what is it about the systemic immunity and the gut immunity that allows for candidiasis overgrowth? Well, I mean, I think, you know, that's something that's really not thought about too much.

We don't tend to look at it. You know, certainly with immunosuppressive patients, we see that a lot. I think there's an overdiagnosis. So you think it's this background noise.

You don't think in most cases. When you look at the next generation sequencing of these microbes and you really pay attention to the bacteria, you realize that it's really a lack of bifidobacteria and a lack of good microbes that is the problem in Namaskarli.

you know, the parasitic, you know, I know there's a whole culture of like, oh my God, parasites kill the parasite. But what happens is when you're killing the parasite, you're also killing your microbiome.

And then you don't know what it looked like before you killed it. So I think there's too much of a, of course you're going to have parasite if you have a leaky gut, of course you're going to have, you know, candida if you've got leaky gut, you've got space there, you've lost your good microbes.

So you need to replenish the space with the good microbes. And here's the problem, and we didn't really touch on it too much, is that even the probiotics is not necessarily the answer because unfortunately, by the time they hit the stomach, majority of them get killed.

And so now you have a dead microbe going into the colon. In a world that's full of live microbes, what is that doing to your microbiome, right? And then is the microbiome, is the probiotic real?

Is it fake labeling? So many labels, we've shown 16 out of 17 probiotics on the market have mislead the consumer and don't even have bifidobacteria. Even the yogurts, three out of 26 didn't have bifidobacteria.

And yet they say on the label bifidobacteria. So there's a big problem with quality out there. There's a big problem with selling these products to think, well, that's the next best thing.

I'm going to hypothesize to say that it's not about the bugs you give, but it's about the nutrients for the bugs that you need to give. And that's the world that I'm looking at.

When I coined the term reforalization, people thought that I was talking about fecal transplant. No, Alex coined the term intestinal microbiota transplant for fecal transplant.

I coined the term refloralization to bring back the flora, or really to understand what does the flora like to eat? What does the bifidobacteria like to eat?

What are all the things that improve the bifidobacteria? What are all the things that kill the bifidobacteria? I think that's where it starts, in my opinion.

And that's the world I'd like to go in, rather than, hey, here's some bugs, here's some acroments here, here's some bifidobacteria. What is that all doing?

At what point do we say, stop the probiotics, stop the acroments here, you're too high, and therefore you're heading in another direction through neurological problems, for example?

Well, it's certainly a very interesting and emerging field, and you're one of the pioneers.

Travelers Diarrhea, Candida, and Practical Takeaways

So if people want to connect with your testing and your FMT, where would they go? For genomeIM.com, they can

ask all the questions. If they want to do the testing, they are willing to pay for a portion of it.

The foundation pays for the other portion. But if they want to, you know, they're welcome to contact us and tell us. If they want to just participate in our trial and wait till we get funding.

So too often, like right now we're doing a study on Manuka honey. So we're going to be looking for volunteers. So anybody that wants to test or microbiome, please send an email to.

So you don't recommend that the common commercially available gut biome testing currently. I do not because I just haven't validated it. As far as fecal transplant, if you've got C.

diff, I'm your girl for sure. If not, we can recommend you a bunch of doctors that do fecal transplant. So general take home people, try to breastfeed, try not to take a lot of antibiotics, monitor your bowel movements.

Yes. Yeah, stress, everything, right? Like it's psychoneuroimmunology, right? No, that's where your vitamin D levels measure. If you're vegan, you're having some vitamin B, like you said, you know, I think all that is important.

We tend to underestimate the power of vitamins, but a good vitamin goes a long way because it's nutrition. And stay away from processed foods and filter your water, right?

Yes. Okay. And stay away from alkaline water. Alkaline water kills the microbiome. You want your stomach to be acidic to kill those microbes that are coming in.

Interesting. Yeah. A lot of people have gotten that. And even though like alkaline water, you know, the kidneys are working harder to create pH balance in your body.

Your lungs are working harder. So eventually you do maintain, you know, a pH normalized, but why put your body through that stress, you know? By the way, you probably don't tube a lot of people anymore, but are you still recommending colonoscopy for people above 50s?

I still choose people. I still do colonoscopies. How is the U. S. Preventative Task Force? Do they still recommend that as screening? Yes, and we recommend it at 45 now because younger people are getting colon cancer.

No, absolutely, turbo cancers. But there's also testing. There's testing for stool testing that's available. I see that. They have the genomic testing.

Is it too sensitive, not specific, or what? I mean, it tends to miss and over calls. So, you know, I prefer, you know, I'm an old fashioned colonoscopy until we have a better tool.

I think in the future, we're going to have probably a microbe that's linked with the, with colon cancer. Yeah, like H. pylori up top. Yeah. Okay. All right.

Well, Dr. Hazana, we could go for hours, but I know you have a busy clinic full of patients. So thank you so much. And they can go to pro, what is it?

Progena Bios. Progena Bios. So do they ship from Australia there? We ship to Australia. We ship to… Oh, I thought he was in Australia making the stuff.

Who? No? Your doctor… No, he's in Ventura. Oh, okay, okay, okay. Oh, yeah, the lab is in Ventura. Dr. Baroti is in Australia doing… That's where I'm at.

Yeah, yeah, okay. Great. Okay. And we've worked together. He basically sends me his tools. We look at the before and after. I love it. So, you know, it's been a fun ride.

Okay, Dr. Azan, thank you so much. Appreciate it. My pleasure. Bye. Thank you for tuning into Dr. Talks. We hope

today's episode has enlightened and inspired you on your path to optimal health.

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