Are At-Home Gut Microbiome Tests Worth It? with Dr. Anissa Armet, PhD, RD (ep – 96)

[00:00:04] **Dr. Ginger Hultin** Are you curious about gut microbiome testing? What it might reveal about your body and how that information could shape your health? If you are, you are in good company. These tests are popping up all over right now, and there's a lot of curiosity around them. You probably know by now how I feel about personalized health, and you likely have a sense of how I feel about all things testing. There are tests I'm always advocating for with my clients, especially blood labs and sometimes nutrigenomics. But before we order anything, I consider a few very important things. Why are we doing this test? What answers are you looking for? And what would the result tell us about how you can improve your health? If those questions sound familiar, especially when it comes to gut microbiome testing, I'm so glad you found this episode. Researcher and dietician Dr. Anissa Armet is back with me for another conversation about gut health and this time we're talking about gut microbiome testing. We get into where all this interest has come from, what some of these tests are trying to measure and if the results are worth the investment. Before we start this conversation, I want to share my top considerations when it comes to testing. The things I hope you keep at the back of your mind. The first is time. A single test result is just a snapshot and your body is not a snapshot. A clearer picture emerges when you have something to compare it against, a sense of which direction you're moving in. Trends matter so much. The second is knowledge translation. That's where a dietician or trusted health provider is so critically important. I do this work with my clients all the time, reviewing results together and deciding what it can all mean for their health. This is the most valuable part of the entire process. A number nobody helps you understand can leave you feeling more lost than before you even learned about it. There's a lot of evidence that shows when consumers get sent big packets of test results, it can often be so overwhelming and not actionable. Most people actually end up doing nothing. But when it's interpreted by a healthcare provider who can personalize what it means for you and what you can implement, then, the research shows that you'll likely end up making positive, often permanent changes. If testing is something you're considering, keep in mind that the goal is not to simply collect information about yourself. The goal is to understand your

body a little bit better than you did before, to change something that improves your health. Let's get started. First, we look at how to tell everyday digestive discomfort from something that deserves closer attention. Then we get into the different forms of gut microbiome testing and what each one is attempting to find. Dr. Armet, welcome back. Last episode, we laid the foundation for the gut microbiome, how it works and how to start supporting it better. Today, we're getting into testing, a topic that comes with so much curiosity and a bit of confusion. So what do you think is driving the increase in interest in gut microbiome testing?

[00:03:45] **Dr. Anissa Armet** First off, thank you so much for having me back, Ginger. I think now people are hearing about the gut microbiome in their everyday social media, their healthcare professional might bring it up. And I think that's because we're doing a lot more research on it and we're understanding better how it is exactly linked to our health and different diseases. And so people are naturally curious that maybe the microbiome is the reason they might be experiencing some symptoms or might be driving one of their conditions or diseases. There's still some debate about that and we don't exactly know for sure that the microbiome does cause those different conditions or symptoms but it is now becoming another tool for seeing what's going on in our body and there is some evidence for different strategies like diet but others as well that might target the microbiome and has benefits to our health.

[00:04:39] **Dr. Ginger Hultin** I get a lot of people in two camps. One is I don't have any gut health issues, but I just want to know what's going on. Could it be causing some of my other issues from hormonal to immune? And then I also get folks that have some really serious gut health issues constipation, diarrhea, inflammation. And so there's a few different reasons that somebody might want to get gut microbiome testing. When do you think it's appropriate?

[00:05:05] **Dr. Anissa Armet** I do think it's going to be something that becomes more routine in everyday clinical practice. Do I think right now we're at the point where they are truly valuable? To be honest, no. That's for two reasons. Number one is that I think in general the research behind it is not at the point that it needs to be to really say that this change in the microbiome causes this certain condition. We're getting there, but I don't think we're necessarily there yet. And then the other side of it is that a lot of these microbiome tests, they might be based on some research, but they're not regulated. And so it can be really hard for people to know which tests to pay for. They're often quite expensive, but I do completely understand people who want to try to get some sort of answers for the issues they might be facing, and that might be why they turn to these microbiome tests.

[00:06:09] **Dr. Ginger Hultin** It's a really good point. I want to hear a little bit more about why somebody would be seeking gut microbiome testing. There's a lot of gut conditions that have overlapping symptoms like bloating or irregularity, diarrhea, constipation. When should somebody suspect that there could be something wrong with their gut microbiome rather than just everyday normal digestive discomfort?

[00:06:31] **Dr. Anissa Armet** I think it comes back to that definition of gut health that we talked about before that if these symptoms are now negatively affecting your quality of life, that is an indication that you don't have optimal gut health and that your microbiome might be playing a role there. But like you said, it can be really difficult because a lot of these conditions have overlapping symptoms and somebody's normal might be completely different from another person's normal. If you either have chronic diarrhea or chronic constipation, that's lasting over a month, for example, or you're seeing blood in your stool, definitely go check that out with a healthcare professional first, but know that these microbiome tests are not going to diagnose if you have chronic constipation. If you have IBS or irritable bowel syndrome, if you have inflammatory bowel disease, that's not what these tests can do. They're not diagnostic. Maybe people already have these diagnoses. And they want more information about what their microbiome is looking like. A good thing for people to do is if they are really passionate about this and interested in getting these tests is to do more than just one because one sample is really only a very brief snapshot of what your microbiome is looking like. If a person takes this test and maybe makes some small changes to their diet, then taking another test in a few weeks or a month even, can really give you an idea of how your micro might have changed from that initial time point. And that in and of itself can be informative as to what might be going on or the impact that the change that you made had as well.

[00:08:09] **Dr. Ginger Hultin** When somebody brings me a gut test that they want to do, one of the first things that I do is look at what is this testing? Because sometimes it's testing actual gut microbiome. So it's looking at different types of bacteria. Sometimes it's looking at pathogens or fungus or yeast or all sorts of different things. There's a lot of testing that you can do in the stool. How do you approach that?

[00:08:31] **Dr. Anissa Armet** There's just so many different options out there. They're all going to say something different. There's been some people that have sent the same stool sample, for example, to two different companies and gotten back completely different results. So it can be really hard to know what those results mean and are they actually accurate. Stool samples themselves are really only a proxy of what your actual microbiome inside of you looks like, it really

comes down to what specific results are you putting stock into those tests and what are you going to necessarily change because of those results? If anybody is drastically changing their diet or the supplements they're taking or medications because of these microbiome tests, that's where I would get a little bit hesitant there for those health metrics we discussed before, diversity or resilience, stability, if those tests are telling you about those metrics, they likely are fairly accurate because they're measuring the community as a whole. But again, we talked a lot about fiber in the last episode and there's been a lot of research showing that when people increase their fiber intake or they take a supplement, their microbiome diversity actually decreases. But that doesn't necessarily mean that their microbiome is any less healthy. In fact, it's probably healthier because that fiber is stimulating specific microbes. I do think in general, it's just important not to put too much stock into these results, but they certainly still can maybe be the reason that somebody is more open to changing their diet for the better and increasing fiber rich foods. There's benefits to that.

[00:10:17] **Dr. Ginger Hultin** It's a great point. One thing we have learned is blood in stool is a direct path to seeing a health care professional, right? And I had somebody the other day that was like had some blood tests and had a stool test and they were like that should tell me what I need, and I'm like not necessarily. Sometimes you need a colonoscopy for SIBO, small intestinal bacterial overgrowth, that's a breath test. So I think I think it's really important to understand that for IBS, IBD, irritable bowel disease, Crohn's and ulcerative colitis. You can't get diagnosed through doing a gut microbiome test.

[00:10:51] **Dr. Anissa Armet** No, definitely not. Those are definitely conditions that need other more definitive diagnostic tests done. And for some of those, for IBS for example, that's a classic one where there's not one specific test that will tell you that you have IBS. Oftentimes, you are ruling out other diseases and conditions like IBD or celiac disease before you can really know, okay, yes, maybe you do have IBS because you don't have these other tests that do have more definitive diagnostic criteria.

[00:11:23] **Dr. Ginger Hultin** Let's say that you are so inclined and you want to get a gut microbiome test, so you grab some stool and send it in the mail. At a high level, what can we learn from these tests?

[00:11:35] **Dr. Anissa Armet** From what I've seen, they do give you an indication of the diversity in your gut. They might tell you some microbiome health metrics or index that may or may not be evidence based, but that tries to capture what the overall microbiome community is looking like. And then it probably will give you some level of detail in terms of the relative abundances of specific microbes or species or genera, a higher level there. It might tell you

the amount of bifidobacteria that you have in your gut. It might tell how much akkermansia muciniphila you have, which is a microbe that's associated with good gut health and specifically the mucus layer there. So it might pick out some of those key microbes as well and give you an indication of how much you have relative to some threshold or spectrum that they have. But like I said, we all have different microbiome compositions. And that doesn't necessarily mean that we are missing really important ones because we might have other microbes that provide us with the same functions as the ones that are on their tests. Some of them also go into more than just the composition and they'll look at different functional metrics, especially if they've done metagenomic sequencing on the microbiome, which is a type of sequencing that can tell you these functions that the specific microbes that you have are predicted to do. But even then it's only a prediction. So it's not a definitive, yes, this microbe is performing this function for you. It's just, we know that microbe does that function. And so by having it, it might be providing that function for you.

[00:13:16] **Dr. Ginger Hultin** This episode is brought to you by Orgain. Have you ever wondered whether collagen is actually worth it? My answer is usually the same. It depends on why you're taking it and if you're able to take it over time. The research we have points to benefits that build gradually. That's what I like about Orgains plant protein plus collagen. It has 15 grams of plant-based protein. And 10 grams of grass-fed collagen peptides in a single serving. It comes in creamy chocolate and vanilla bean, and it's a good source of fiber, something so important when we talk about gut health. Find it at orgain.com. You have probably noticed that Anissa is fairly cautious about these tests. I wanna sit with that for a moment because I think it's one of the most useful things in this episode. Her caution is not pessimism and it's not a dismissal of the field. What she's careful about is whether the tests currently being sold to consumers can deliver on what they promise. Skepticism from someone so close to the research is worth listening to. And if you need a little more evidence, I've got some interesting nutrition news for you. Earlier this year, researchers conducted a study where they took a single donor's stool and homogenized it so every portion was identical. They then split it into 21 kits and mailed them to seven different at-home testing companies. You would think that identical samples should have produced similar reports. But that's not at all what happened. The number of bacterial groups identified ranged from 34 to more than 900 across analyzes. One company returned three reports from that same sample, two calling the microbiome healthy and the third calling it unhealthy. Now, this research can make testing feel pointless, but I don't want that to be the takeaway. At its core, this research shows that measuring gut health at home cannot consistently yield the same results, which just means we'll have to wait a little longer for these companies to catch up and for some much needed standardization. With our healthy balance between science and skepticism, I

want to get Anissa's thoughts on what you should do if you did order a test and have the results. Let's say you are a person and you're having gut health issues and you've gotten a test back. What do you do with it? How do you interact with it, any high-level suggestions?

[00:16:04] **Dr. Anissa Armet** There are a lot of tests out there that already take what your microbiome is and then will recommend specific foods that you should be eating more of to try to correct. It might be called Dysbiosis which is a term sometimes used to describe an altered microbiome that might be associated with a certain condition. But even then I don't think we really have good evidence to suggest at doing that and following a very personalized diet based on your microbiome is significantly more beneficial for you than just eating a high fiber diet on its own that might not be specifically tailored to a specific microbe that you have in your gut. I think with those results, you can bring them to a healthcare professional and hope that they can maybe translate it for you. But oftentimes, it's just the fact that these healthcare professionals also don't know what to do with the results. And I don't blame them because I don't think enough research to really understand what that means for a person. If you are experiencing those symptoms and you have these microbiome tests in front of you, I think focusing on trying to increase the amount of fiber that you're consuming from whole foods is a great first step. And then you might find that a certain food really exacerbates the symptoms that you are consuming. If you can track that, if you can write down the foods that you have in a day. And then maybe track what symptoms you have in a day. Over time, a healthcare professional might be able to better see which foods might be driving some of those symptoms. And then it's about choosing a different whole food to get you that fiber that you need that it's better tolerated.

[00:17:48] **Dr. Ginger Hultin** Yeah, it's a great point. I have my strong opinions, but I'm wondering what your favorite high fiber foods are.

[00:17:55] **Dr. Anissa Armet** For me, the foods that I try to eat every day are some form of legume, like a bean or lentils, chickpeas. Those are so packed with fiber, but they're also packed with protein. Raspberries are one of the highest fiber fruits that you can have. Avocados are really rich sources of fiber and those healthy fats that we need in our diet as well. And frozen edamame and frozen green peas are also fiber powerhouses that also pack a really good protein punch as well. Canned and frozen options are great budget-friendly ways to increase your fiber intake. It's just so important to really focus on foods first before any sort of supplements because the supplement is just going to give you the fiber and yes there are certain supplements in certain conditions that can be good for. But then you're not getting anything else related to it. So it's really important to choose foods as much as you can.

[00:18:52] **Dr. Ginger Hultin** So anyone that's feeling helpless. I've been dealing with this for so long. It's hurting my life. What do you want them to hear right now?

[00:18:58] **Dr. Anissa Armet** Honestly, I think whatever you're feeling is completely valid there. Nobody knows your body better than you do. And I know a lot of people have had poor experiences within the healthcare system of a healthcare professional not listening or not validating what you're feeling. So I totally get that. I know it's super frustrating, but I think that should motivate you even more to be even louder in terms of being advocate for your health. And seeking out a healthcare professional that does listen to you and validates what you're experiencing and really tries to work with you to identify what is going to work best in terms of using diet as a tool to manage a certain condition or disease. As a dietitian, I'm biased, but at the same time I know they are integral parts of a healthcare team and should be an integral part of your health journey if you are experiencing any sort of issues with your health.

[00:19:50] **Dr. Ginger Hultin** I'm so grateful to have a researcher like you come in that's also a dietitian. It's just been amazing having your expertise.

[00:19:58] **Dr. Anissa Armet** Thank you so much Ginger, the conversation has been great with you as somebody who's clearly just as passionate about helping people and nutrition and gut health.

[00:20:08] **Dr. Ginger Hultin** This was such an important conversation. I'm not giving you a direct recommendation on gut microbiome testing, and I'm genuinely okay with that. Researchers and health companies both know there's a real demand for answers here, which makes this an exciting space to watch. There are a lot of very smart people, Anissa included paying close attention. I can't help but think the future of this field will be very bright. While we wait for the testing to continue to develop, I hope you keep the other wisdom Anissa shared close. Your gut health experience is valid and your advocacy for better care is always worth it. Nobody knows your body better than you do. If something feels off, an at-home test might not be the answer, but a thoughtful healthcare practitioner who listens most definitely could be. Thanks for listening to this episode of The Good Clean Nutrition Podcast. I have a gut feeling this one might be worth sharing. If you enjoyed it, leave us a rating and a review and I'll see you next time.

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