Episode 132 - Methylation and Genes

MERYL: Welcome back, everybody. The Rebel Nutritionist podcast. Super excited because we have Sonia in the house. Our first podcast with one of our own team members, Sonia. And so I have Amanda back with me.

And who's a. Welcome There's a diehard podcaster. I wanted to bring in the whole topic of the discussion about DNA, why people are afraid about understanding their genetics, what DNA tells us, what it doesn't. And the reason I rounded up the troops today was because I was going to do this as a podcast by myself, and then I started getting into it.

And I'm like, you know what, this is really not as much fun because I don't want to get into the science of methylation. Right. I mean, methylation is a really, really complex, complicated topic. And rather than diving into what is the science, what does it do? I feel like going a little broader and then dialing down so we could really.

Make it user friendly, right? The whole idea of why we do DNA and why we do genetics is to make it user friendly so that you guys can take this information and apply it to your lives and implement the strategies so that you are healthier, right? So that your wellness is optimized. I mean, that's the goal here.

So welcome Sonia. Thank you. Welcome Amanda. Thanks for having us. So again I walked in today and I'm like, all right, let's like, here's what we're talking about. And when I said to Amanda if you want to **talk about DNA**, your response was,

AMANDA: well, I just, I feel like it's so scientific.

There's so much like that. I don't know on that deep a level, but, you were like, let's just talk about it in a way that we can kind of dumb it down a little bit and read that anybody can really walk away with information that's empowering and they can learn more about. Why it's important to test

right.

MERYL: But what did you say about learning about it yourself? You said to me, you just said, Oh, what am I learning? My DNA? Yes.

AMANDA: Sorry. Okay. That's where we're going with that. Yeah, I was, I was sharing with you that I've done a lot of the functional labs and I will say that the DNA testing for me was the the biggest takeaways that I had out of all the things I've done and I've learned because it's my unique.

Okay. Blueprint, and I see how I can support the missteps that I had and how I can use it to make better choices for future me. Right. Absolutely. Well, good.

MERYL: So thank you for sharing that. I know. Sorry. It's all good. All right. So, and then Sonia, when I said to you, because Sonia is like podcaster extraordinaire, she listens to like a million. So so I'm always very humbled when she says how much she loves our podcast. I do. But when I said to you about what are the thoughts that come up for you when we talk about DNA, share what you had said to me about that.

SONIA: Yes. Well, first, I think it's so amazing that we have that tool to get to know about your genes because it's so much information about yourself, like you were saying.

And I was telling you that my mom decided to do the ketogenic diet and I wanted to join her because she was borderline diabetic. So she decided to cull all carbs, and we're from Bolivia, and in Bolivia, we have a very high carb way of eating, and it didn't work for us. It actually, everything got a bit worse, and when I did my DNA, I found out that I actually do better with high carbs.

And then we switched, and it actually, for me, was like an aha moment. It's like, oh wow, really, really? Tells you so much about how youdo with your body. So for me, it means a lot more, a lot, a lot more. So yeah, that was one of my bigger takeaways from everything.

MERYL: Great. Great. Thank you for sharing.

I mean, and that is one of the beauties one of the beautiful things about DNA is that can, it does. Really link us back to what works for us as individuals. There's so much information out there that goes to the general. I always say **the general information is not suited to what specifically happens in our own bodies.** 

**Right. And it's not always, it's never a one size fits all approach.** And yet so much of the information out there is okay. Yes. You know, now people are talking about protein and how we're we need more protein. And for some people, yes, that may be true. And for other people, it's actually very, very detrimental.

And so **it still comes back to what is my DNA telling me about me?** And I think before we can even get into. That let's talk about when we're testing DNA, what that means and what it is not telling us. Right. And, and the excuse me, the, the fallacies behind understanding our genetics, because I think there's been a lot of discussion, obviously, the whole cancer piece, especially when we talk about breast cancer and the BRCA genes.

And, and so what we have to understand is there, yeah. Are different fields of studies of genetics of understanding D. N. A. And I think this is where it gets confusing for people when we test D. N. A. We're looking for missteps, genetic, what we call genetic polymorphisms, little typos, like a typographical error in your D.N. A. It is not the same field of study that we do when we look at cancer or things like that, right? The BRCA genes are specific to genetic, like, deletions, or like, that you do not have that gene at all, right? Actually, the BRCA genes are protective, and when people don't have that gene is when we start to see problems.

So, It really is about understanding the nuances of what DNA is telling us. And so the genetics or genomics that we're looking at is really about **understanding what are the missteps in our DNA? How do those missteps affect the proteins that are made in our body? And those proteins then have an impact one way or another in terms of predisposition.** 

You following me on that? Following. Right? So so **if we're looking at predisposition, we're not saying you're going to get this disease**, right? We're not diagnosing with a disease. We're not predicting you're going to get a disease. We're saying, oh, look, there is a little misstep in how your body makes this protein. And if that's the case, **how do we support your health so that you can get around that and that you can replace that or that we can optimize it.** So I think we have to be very careful about when we're talking about DNA and really clarifying that, because how many times do people come into us and say you Amanda, you're in with me, right?

They're like, if I, if they're like, when I say let's do your genetics, people immediately sort of kind of push back and go, they get nervous. I don't want to know if I'm going to have, like, is it going to tell me if I'm going to have cancer? Is it going to tell me if I'm going to there's a lot of talk. Everybody's watching the Chris Hemsworth special on the fact that he found out he may have the Alzheimer's gene.

It's the same thing. It's. It's not saying you're going to get Alzheimer's. It's saying we see the predisposition that you may go in that direction. What are the things in your life that you can do that you have complete control over doing that you can prevent that from happening?

AMANDA: So what were you going to say? I was going to say, so like a

question that I feel like You know, a client might ask is like **how much of their lifestyle plays a factor in reducing the risk factor for them**, right? Yeah, I mean, so I think we have to look at it like, okay Well, we look at your DNA and then we say there's something called well now we're gonna throw out a whole other term, right?

There's something called epigenetics, right? We look at the things outside of our lives. We look at environment, we look at mental and emotional health. We look, all of those things, stress our exposure to toxicity, our exposure to temperature, like all of these things, our exposure to UV rays, right?

Those, all of those things impact how our DNA actually play out, how they get expressed. So yeah, we I always say genetics only accounts for about 20 to 30 percent of what actually happens in our body. So to your point, lifestyle is the other 70 to 80%, right? The stuff we put in our mouths, the way we move our bodies, the sleep, the stress, all of those pillars of health that we always talk about have much, a much, much bigger impact.

in what plays out with our health. So our DNA is literally just the roadmap and says, okay, well, this is the direction you want to go in, but really everything else is so much more important. And to your point, Sonia, when you said, well we were following a ketogenic diet and it didn't work with us.

**Part of our DNA is really understanding what did our ancestors do?** You know, we've come so far from that. And so there's a really good book. I'm still trying to get in touch with this author, Daphne Miller, who wrote The Jungle Effect. And her book is all, cause I'd love to have her on

the podcast. If anybody knows Daphne Miller, who wrote The Jungle Effect, please, I would love to get in touch with her and write, and I mean, and interview her because.

It, to me, it was so profoundly interesting that here we are in this day and age, we have so much science, so much technology to help us with all of the things that we now look at. Yet, if we go back and look at what are the most important things and implications in our health, it's really how our ancestors lived.

SONIA: A hundred percent. I agree with that. Because we have friends that work really fine, and they were doing really, really good, but why, why not us?

MERYL: And... You mean they were doing well on the ketogenic diet? Right. And why not me? Absolutely.

SONIA: No, get me wrong. In the beginning, we did. Of course, you, you, you cut in a lot of processed food.

Right. So you lose a lot of... water, inflammation. So yeah, you see results right away. But from there is much more. So yeah, we learned so much and we started introducing more of the healthy carbs and we actually have more energy. We feel better and then I have a friend that she's actually from China and the moment she moved here, of course, food there is completely different and right away anything Just a change of style, life, and everything changed because of the it's a totally different country.

She grew up there, so her genes are way different. Even if she tries to cook the same food that That she cooks over there.

MERYL: It's not the same, right? Well, because, right? I mean, the food here is so highly processed. It's like, people say, well, I can't eat gluten right here in the United States. And then they go over to Italy and they're eating pasta and they're eating breads and they're like, oh, the gluten doesn't seem to bother me.

I mean, there is real... Yeah, exactly. Then there is validity to that. I think that that's important to understand. So, one of the things, so I've done a series on our podcast about the different processes in our body that, that we see in our DNA that can be affected by our DNA that really affects our health, right?

I've done a talk about detoxification. We've done a talk about oxidative stress and inflammation. And how we identify that stuff through our genetics, and then validate it through the testing, and then really help support people with the nutrition aspect of the lifestyle. And of course, those five pillars really help them implement these strategies.

That's the goal to keeping someone healthy. Like people say, well, oh if I, how do I know if I have a predisposition I have family members who have had cancer. Can we see predispositions? Well, if your body is inflamed, if your body doesn't detoxify well, we're going to talk about methylation a little bit today, but if, if those four processes **Inflammation, oxidative stress, detoxification, and methylation.** 

**Those are what I would consider your top line processes**. If, and everything, everything in our body filters down from that. And so if you have an impact of it, like genetically, your bone health. Well, there's a relationship back to detoxification and inflammation and methylation.

Right? If you have mental emotional stuff, there is a relationship back to All of methylation is involved in how our body makes those neurotransmitters.

So everything stems from that. So when we look at evaluating someone's DNA picture, we have to look at those things. And so when people say, well, I'm worried about cancer. Well, if your methylation and all of those things are in line and in balance. Then cancer will not develop in your body, right? That is just the law of how our bodies work.

## You cannot, **cancer is an autoimmune disease. Autoimmunity comes from a misstep in our immune system. What's triggering our immune system?**

And we're going to get more into autoimmunity because I'm so excited about this class that I'm doing. And really I've always said how much I love the immune system and understanding the immune system is fascinating.

And it really is. But it goes back to how do we identify these missteps in our body that can lead to us understanding our health so much better? And So when we look, just kind of re going back and revisiting the DNA piece, this is where having the information is so helpful, right? So where people say, oh, I'm watching the Chris Hemsworth video docuseries, whatever it was on the fact that he's got this gene that, that is predisposes him to Alzheimer's.

Well, it's a predisposition. It's just a predisposition, meaning he now has information. That he can use to help him prevent his body from expressing that DNA, right? It means that he does need to do maybe more work than someone who doesn't have that predisposition. But have...

SONIA Exactly. But knowledge is power.

It totally is. It's unbelievable. You have these tools to DNA. I mean, I think everybody should do this. Everybody should be aware of... What can happen if you're not taking care of yourself and I think it's great. So how would you go, like when you go over the test results, how would you, how do we do that?

MERYL: How do we do that? That's a great question. That's a great question. And then I'll answer that and then we'll kind of tag it to methylation from there. What we're doing. So, so like if we're starting at the very beginning, **the DNA test is a cheek swab**, right? It's really easy. It's not blood test. It's, it's a cheek swab.

All your data is safe and secure with the companies we use. We are not using anybody that's selling your data, like 23andMe, for example. And we are. Looking at these these high level processes, right? So my job is to look at your DNA and organize this in a way that helps explain your operating system, right?

What in your body has the potential to be a little bit inefficient, right? And if there's inefficiencies, how do we help support? You to overcome those right to, to circumvent those to optimize the systems that you that are efficient and then help you implement strategies from the diet from your lifestyle, right?

Some people, if they're very prone to oxidative stress. They, we have to watch how they're exercising. So you can see that on the DNA. Right. You can see that on the DNA, right? And then we do the testing. We will do the lab testing. So that's when we're looking at nutrient levels. That's when we're looking at inflammation levels.

That's when we're looking at all of these things. Gut microbiome, right? What are we looking at? Where are these inefficiencies in your body? How do we help you rebalance those so that you're a feeling the way you want to feel that you're optimizing the system so your immune system is working right so that you're not having inflammation and you're feeling well amazing you know and so but that requires really digging deep this is not a one size fits all this is like okay how much information do you want to know about your body And that information really can arm you in the best way possible.

Right. So I want to take a step back for a second so like I said, we've talked about oxidative stress, which is how our body creates free radicals, which is how the cells become damaged. We've talked about inflammation as a result of oxidative stress. I've talked about detoxification. And I think methylation is important to cover even though it's a very, very, I always say methylation, it took me like five years to really understand from a biochemistry perspective, forget about like, what does that mean?

So it is a complex topic, but what I want you to think about is **methylation is literally how DNA is made**. So if you think about conception, like when a baby is conceived, you need like, when, when those think about right, those cells are dividing and dividing, if your body is not methylating, right, we need methylation to have those cells divide, right, correctly, properly, right. So this is why women. Who, and we knew long ago that spina bifida was a problem, right? And because the spinal column was not forming correctly in women with nutritional deficiencies, specifically folic acid, folate. And then we come to realize when we understand methylation, well, you need folate to be optimized.

**To have proper methylation.** Oh, no coincidence there, right? So if you think about it, we need DNA is the operating system of our body. It is the operation, the chemical process that literally gives our cells the instruction of what to do. So it's involved in. So I mentioned how our body makes DNA, how our body fixes DNA, but it's involved in every single metabolic reaction in our body.

So it is how our bodies use energy, right? Calories and metabolism. It's how our brain chemistry works, right? We talk about all these neurotransmitters. We hear about serotonin. We hear about dopamine, and adrenaline. We need methylation to have those things happen properly, right? It is about So we talked about how our cells detoxify, how we break down hormones, right?

Like that's important. How we break down toxins that come in. **So if we want to detoxify properly, we have to be methylated**, right? And it's all of these, exactly. And you know, I think what overwhelms people is like, wow, there's all these things that have to go on in the body that have to occur. Like think about it.

We have millions of reactions that need to be done right in order for our bodies to be healthy. Like we don't walk around thinking of the millions of reactions minute by minute, right? We're just like assuming everything is working the way it should. So when we go back and say, Oh, well why do we want to look at methylation?

Because if methylation is not optimized, Then nothing's going to work properly. And part of that then is people say, Oh, all right, well, I'm just going to take a supplement. And so you can't just take a supplement. Amanda, what were we talking about? There was a question that you had about that.

AMANDA: Well, I kind of wanted to ask a little bit about like **MTHFR and how that gets so much noise. And that really, I feel like that's the only biomarker that. People are testing for** is mostly I know in the conventional writing. Right. And I don't know how much people know about methylation and functional medicine to the degree of which but can you talk a little bit about how MCHFR is really only just one biomarker of methylation and how there's more to the picture.

MERYL: so when we actually can do this and we're, we're doing this where we do the whole video, I should take my. biochemistry map and show people that, right? Not that they would understand it. But when we're testing for MTHFR, so now a lot of, so **MTHFR is the enzyme that converts folate into the methylated or the optimal form of folate.** And that's what we need, right? In order to go through the methylation cycle and that whole thing and the homocysteine cycle and so forth. So to not get too technical when doctors, and again, most conventional doctors, and we had a client in the other day, she's like, I said do you have lab work?

She goes, Oh yeah. Oh. And they tested. for my MTHFR gene. And, my mom said that that affects everything in my body. And all I have to do is take some folate. I'm like, okay, well, yes, it affects everything in your body, but folate is not the only be-all end-all.

So MTHFR is just one of the genes that we test. There's probably 30. That we look at in the math that affects the methylation cycle. So it's like anything else in conventional labs. If you're only looking. And one piece of the big puzzle that makes up our operating system, we're missing everything else, right? And so what happens is, is people think, oh, I'm just going to take folate or the B9 vitamin and I'll be fine.

When in reality, it's not just that. And there's different versions, right? Folate or the methylated version of folate is the optimal one that we want to use. There's a lot of supplements and even foods, right? So let's talk about some, there's a lot of supplements that have folic acid. There's been a ton of research around folic acid and how actually taking folic acid Can contribute to cancer growth rather than and it has a big impact in the development of cancer, especially things like lung cancer. And so we have to write rather than the method. So people get confused. They think folic acid and methylated folate and the optimized version of folate are the same thing and they're not.

AMANDA: No, and I'll tell you like when I was pregnant with James, it was nearly impossible to try to find a multivitamin that did not contain folic acid, right? Like 90 percent of them do.

MERYL: Exactly. So, right? Yeah. And we can go down that whole rabbit hole, right? But, and look, ideally, we want to get **the best way our body converts the actual the food form of folate is in our bodies, like the food, we should do it food first.** 

And so even if you have the methylation issue with MTHFR, MTR, MTHFZ, like there's all of these that I can rattle off, you want to always use food first because there's other foods besides the one that just have folate, right? We have. Things like choline that convert into, can you be used as, as a methyl donor as we call it, and there's other.

Foods we've got foods that are high in what we call trimethylglycine, like beets, great source of of, of substances that we can use that go and are used in the methylation cycle. So I feel like it's a misconception to say, Oh, well, I have the MTHFR gene and I have to be on a supplement.

You know, most people, when we're doing the testing, yes, they're going to need some kind of supplementation. But we still want to go back and look at what are the foods that we're eating that are going to support the whole cycle. Right? And, and it's not just the folic acid or it's not just the methylated version of folate.

It is The other, we need vitamin B2 to make this system run properly. We need magnesium, we need zinc. We need vitamin C, right? We need other vitamins and co-factors to have these systems all run together in an optimal way so that our body is doing what it needs to do. and just throwing vitamins at it.

You know, how do you know how much you need?

And that's where the testing comes into play. So people come in and say, okay, well, I'm on a multivitamin or I'm on a methylation product or I'm on this or I'm on that. But if you don't know the degree to which your methylation is compromised, how do you know what to be doing?

And, and there was an interesting conversation I had with someone the other day because they're like. Well, let me just take more of this. And you know, the funny thing is, is that there is, so I, again, I'm doing this immune course, so excited about it and getting so much great information. But one of the terms that we use is called hormesis, right?

It's balance. Hormesis is balance in the body. And. You know, we need just enough of a stressor on our body to create change, but not too much. And sometimes what happens is if we're overcompensating with supplements, we actually create the opposite effect. And so we see this with antioxidants, right?

People who are like flooding their bodies with antioxidants. Well, your body needs a certain amount of stress. Your body needs certain amount of free radical production to trigger other processes. And if you're just completely wiping out every free radical in your body, guess what? Other processes are not happening.

And so it is this delicate balance, and this is why we say hormetic balance, right? Of a little push and a little pull. And why **just taking a plethora of antioxidants is not so beneficial.** So I know we just went down that rabbit hole. I just completely went on the tangent of MTHFR. But I think it's all relative, right?

I mean, in terms of really understanding, wow, how much not just methylation can tell us, but everything else around that.

AMANDA: Is there something in someone's, we talk a lot about environment, epigenetics, and you know, we talked a lot about how food and supplements can support methylation, but let's say you do have some missteps in methylation.

## Are there things in their lifestyle they can do to help support that as well, in addition to food?

MERYL: Absolutely, right? **So one of the things that we know affects methylation is alcohol intake.** Right. And so when we look at and go back and go, Oh, well, we know that drinking for men drinking more than like three, four drinks a week and women, it's really one to two.

I mean, this is the data, right? The data shows that just that amount of alcohol can impact our body's susceptibility to cancer. Why? Because alcohol. interferes with methylation, right? And if methylation isn't the root of all of this disorder and what, you can see it, there's this connection. So alcohol intake is important to look at stress, right? **Stress impacts our ability to properly methylate.** And so again we, when I'm going to talk about the mechanism of that, But, but over again, a little stress is good too much, which most of us are walking around with is not good and it'll affect inflammation.

**So toxin exposure this is a big one.** And Amanda and I talk about this a lot because, we talk about mold and we talk about what's going on in your house or whatever, but, mold exposure, toxin exposure, heavy metal, right? People are walking around with mercury poisoning because of too much tuna fish or their seafood, right?

AMANDA: But even the heavy metal in their supplements and in their protein powders, that's a huge, huge offender. Yes. For sure. And, and if you're walk, if you consume protein powders that are not regular you don't know where you get any protein. I mean, there could be lead in there. There can be all these other arsenic, right?

AMANDA: That's right. The certificate of analysis is really important to make sure it's that third party testing. I have no affiliation with them.

MERYL: You know, yeah, yeah. So and even things like what we found are artificial sweeteners. So everybody out there who is drinking these pre made protein drinks, I will not name them.

And you know, all of these muscle gainers that are full of things like sucralose and aspartame. I mean, read the fine print people, methylation.

Right. And so it's this stuff. and the stuff becomes cumulative. Yeah. What else? What did I miss in that?

AMANDA: Cause you do movement, movement, right?

MERYL: Exercise is important. Too much exercise. Absolutely. Too much of a stress, right? Too much exercise that you're producing a, you're producing too many free radicals and you're producing too much inflammation.

Well, that's what causes it. Is a stressor.

SONIA: Like if you have a stressful life already and then you go and do your orange cherry clouds at 7 a. m. I have much more stress and then I, I noticed that the time cycle and like lose the extra pounds after my baby. I need to do more cardio and you already have so much stress and then the moment I relax.

And I meditate. I was like, okay. My whole body went into Absolutely.

And then it was like, okay, now you can go back to normal and, and yeah. Stress is a big one. Yes. If people don't notice how much stress they already have with their lives and they go and do marathons and stress their bodies much more after that.

MERYL: Yeah, absolutely. I mean, I know stress gets talked about a lot. I feel like a lot of it just gets swept under the rug because we live in a fight and flight. environment and just everything that we do. So yes, a little stress, like I said, is good. I mean, we need a little bit of stress in our lives again to create that push and pull, but we are overwhelmed with stress on a daily basis.

And that has really tilted the, whole mentality, not mentality, but our, Ability to stay healthy.

SONIA: And now with our phones and social media, we have all the time these **notifications.** And the moment we wake up in the morning, we have our phones, it's like we don't let our brains kind of like relax a little bit. That's also stress.

MERYL: Yeah, that is totally a stress. So you know, I think taking a time, and this is why I always say when I do my walks in the morning, like getting out in nature, right? Part of it. reframing our circadian rhythm and connecting with the energy of our environment and allowing our body to kind of regulate is so important.

Yeah, even when it comes to any of these even in terms of just supporting our DNA, right. The things that support, what are the innate things that support our health and optimize our health? What else do we,

AMANDA: Well, I kind of think like just To recap, kind of what we've already discussed, but kind of I have the question, like, how do we reframe the fear around learning about your DNA into something that's empowering and how can we use this information every day to help us?

In our everyday life, right? And we kind of touched on that a little bit,

MERYL: but I think we should go back to that fear because I think, again I mentioned it in the beginning that **we're not using this test to predict or diagnose**, right? It doesn't mean that people aren't still fearful, right? And so I don't know how to take out the fear other than to say, Hey, **Giving yourself the information to set yourself up in the most positive of ways is what we are doing**, right?

That if I see a misstep with your methylation, what you should know is we can fix that. If we see a misstep with how your body detoxifies, we can fix that. Because all disease

comes from Where all disease stems from these missteps in your body. It's one becomes another. You know, cancer doesn't grow overnight. Heart disease doesn't develop overnight. Diabetes, autoimmune diseases do not develop overnight. In a month or in two months, these things take years of imbalance in our body to develop.

And so we can pay attention to the things that trigger that, right? Like if you can measure homocysteine, let's say. Homocysteine is an easy marker on any blood test to measure. If your homocysteine starts to creep up above nine, that is a trigger there. That should be a signal like. Something's going on with my methylation and that also leads to cardiovascular disease and so great. So there are the nuances of what we can really look at.

To take away the fear of, Oh my God, I am going to get cancer, right? I mean, one of the things that I look back at, I'll use myself as understanding this is, or as trying to help people understand it when I went back. And so I had Hodgkin's lymphoma 20 years ago, right? And then the question is always.

How did I get it? Right? And look, I have theories on that. I backed up to a golf course and in my house, my backyard was on the back of a golf course. And that golf course was definitely sprayed with chemicals. And so was my exposure to chemicals part of it? I mean, I had pregnancies pretty quickly one after the other did my body's hormonal balance really recover?

And then when I go back and look at my DNA. And I look at, wow, my body doesn't really detoxify so well. And it doesn't detoxify hormones so well. Oh, and I have a little bit of a misstep in inflammation in my body. So, had I have known what to look for, had I have known how to optimize detoxification, had I have known what to really pay attention to, Would I have been able to prevent that and my answer is going to be yes, because here's what I'm going to say is I've been my own experiment for the last 25 years and knock on wood.

I have used that information to continue to empower myself and I was saying I was doing a video this morning and I said it's really about. You know, **the work that we do here is healing**, **right? But it's really about optimizing your healing because we are always healing.** Was I technically healed from cancer?

Absolutely, right? But I've been optimizing my healing every single step of the way. I mean, I know Mandy, you can say that too, right? Yeah, it's like, what is the information that we have to optimize the healing? I do this with. You know, my kids too, I'm like, here's your DNA. Let's talk about what we need to do.

I mean, sometimes they're like, okay, mom, shut up, shut up, shut up. But you know, it's knowledge is power in that.

SONIA: Yeah. **Optimize is the key word here because a lot of people like to go to doctors when they're already sick.** Yes. And everything is like like the middle line is there. is compared to sick people already.

So what I like about what you do is like we have a lot of people that are not necessarily sick, but they want to know when they're feeling good. What is their baseline? So then when you get sick, you can go back to the baseline and say, Okay, this is how everything looked when I was feeling good. So what what changed? Yeah so you're not compared to the general population that is So knowing about your DNA and all of these little details is like, so amazing, like everybody should do it. It doesn't matter if you're sick or not.

MERYL: Well, one thing I want to say, because I had an interesting thing come up situation come up with a client.

Who was a former client who I had seen her many, many years ago and we had done her testing and we've done some work and I said to her if you don't change this or if you don't change that, I worry about where your health might go. Right? Because there were definite red flags at that time.

And, the body is the body. You cannot. outsmart your operating system, right? And so when we see red flags, there's a reason those red flags are happening. It means things are happening in your body and pay attention. And unfortunately, I don't know that she heeded that advice well enough. And she was back in not too long ago and, and does have a diagnosis of cancer. And there's a part of me and look, God willing we were going to, she, she kind of re-engaged our services and we're going to really support her and. You know, and I think she's listening a little louder this time, but part of me can't help but wonder if she really heeded that advice when we looked at it and said, here's your predisposition.

If things don't change in your life, maybe you're headed and I would never say. You know, anything like, Oh, told you, we can never predict what's going to happen, but we can certainly say, look, there's a red flag. You got to pay attention to this. You know, it's like no different. You you, **the engine light comes on in your car.** 

**If you don't pay attention to it. And then your engine doesn't work all of a sudden.** You're like, Oh, shame on me. Right. But it is yeah. It is very, very similar. Like, why are we not listening to these red flags? And I think a lot of it is just so much of what goes on in our bodies. We don't feel, we don't, again going back to the prevention or it's not loud enough, right? That war, that symptom is just not. strong enough.

SONIA: You get used to like the pain. There are people like living their lives with you know, bloating and stomach pains or afternoon headaches. They say it's normal. I get used to it. I just take a pill, but they're not really paying attention to the To

signal, to subtle signal and then they don't do anything about it and then it's too late. Yeah. So that's the problem. Yeah.

And one thing I wanted to ask you, because you know people, and I'm like a perfectionist, and I also, everything I do, I like to do my best. So I remember when I got my DNA I was like. What am I actually looking for? Like a perfect DNA?

That's a perfect. Well, there's right. Yes. Right.

MERYL: And that's, and honestly, that's what makes us unique. There are no, there's no such thing as perfect because there's, it just, it doesn't exist. Right. We all have. missteps. You know, we all have information in our DNA that can help arm us with information to support our health in the best way.

And I think that's right. It's you look, I've seen some people with predispositions, like really strong, impactful predispositions in so many areas. And yet, when we look at their, at their test results, we're like, oh, okay, everything is pretty well in balance. Right. So it's not like we're looking For something.

It is about how do we interpret the information, how do we look at them and we, and, and **and it's also never one gene is predictive of one diagnosis**. Right. It's not like the Mt HFR gene is gonna predict that you're going to get cancer. Right? Right. It is not like your apo A, you know that your apo E three three, four your APO three gene, APOE gene, sorry.

Your APOE gene is gonna predict that you're going to get Alzheimer's. It's, **it's the nuances of understanding how is my body responding to that genetic variant. And so we're looking at it in patterns**, right? What is the pattern that's telling me? We need to, you need to not be on a ketogenic diet.

What is the pattern that tells me you might be sensitive to blood sugar? What is the pattern that's telling me you're at a predisposition for bone loss? Right? It's, it's the patterns that impact our health. And then looking at the testing, so it is very nuanced and it is very scientific and it does get complicated.

But what I want people to know is that's my job. Right? Like, I love being able to look at this. And I think that's one of the things Howard said to me the other day, like, what do you really love doing? Or what are you really, really good at? And I'm like I'm a really good diagnostician. Yeah. And he couldn't pronounce the word. So we have to find another way. Right. But what is the diagnostician? **A diagnostician takes all of this information. I say, I always take all of** 

the information. I'm running quarterback for you. I'm organizing this in a way that most. You know, conventional doctors are not doing and even the functional world.

They're not always taking this information, **taking a step back and saying, how does this impact you as a whole person?** You know, we had a gal come in the other day who had seen a functional doctor. And they ran a million tests. We're still waiting for those tests to come back. But it was very quick to just say, here's supplements, but didn't address any other lifestyle factor. Didn't ask her about her sleep, or her stress, or even some of the mental, emotional trauma that went on. And all of that is part of what her, her now disease is, we're dealing with. So, we've got to be able To lean on the people and use the people who, who know how to do these things in a way that are, that's going to support health.

And that's, I think, really where my super healing power is in being able to do that. And stepping into the authenticity of what that looks like for people. Right.

SONIA: And so that's a superpower because believe me, if you say I'm a podcaster, yes. Why? Because I like information. I like to learn about things that sometimes can be overwhelming. Something's like, right. I don't know where to start. How do I start? Okay. I'm going to cut this. I'm going to do that. And then, and then it's just so much. And you have this platform, you bring everywhere, every client here. And then you do all this testing and you are able to read. everything for them and organize them and you know, it's a superpower.

Then I don't have to waste my time trying to diagnose myself because it's really hard so much information. But yeah

I think what you're doing is amazing. Like I always say if you podcast when I started listening, I it's I learned so much.

MERYL: Thank you. Well, and that's this is really the takeaway here is really about educating yourself.

And that's what doing to circle back around. **That's what doing the DNA testing is. It is about educating yourself about your own body**. What does your, I mean, like. How fascinating is that? **How does my body work and what are the things that I can specifically do? Like, we have now the very specific things that you can do to affect your health in the most positive of ways.** 

If that's not the most empowering thing that you can do on this planet, I don't know what is.

AMANDA: Yeah. And I will say that just sitting in on these interpretation sessions that you walk through the results with the clients, there's a lot of aha moments that our clients have. I mean, I know, personally, I had that experience when we walked through mine and when we continue to revisit it, when I'm constantly bombarding you, I'm like, I have more questions. But even our clients who are sitting here and you say, does this resonate with you? Are you seeing this? And they're like, yes like there's a histamine situation happening. Oh, that makes sense. I constantly have these hives and these rashes and I've had it for years and I thought it was allergies.

There's so many moments for these clients that I get to Witness these aha moments that play out for them when you're able to connect the dots things that are going on in their body that they're aware of, but not knowing why and not knowing that there's a reason and being able to see it and then be able to do something about it. That's empowering and that takes the, in my opinion, the fear

**out of this.** And so that I think ultimately is what we were trying to get across in this podcast is that how do we. You know, debunk the fear around this to make it so that this is empowering our clients, our listeners, people who are interested in wanting to learn more.

MERYL: Absolutely. So, yeah, I think, absolutely. You said that perfectly. So and Sonia, thank you for joining us. It's always nice to get another perspective because I feel like sometimes, yeah, I'm talking at a little bit of a higher level only because that's just. Sort of how my brain works. And, and having these conversations with you guys, really, because you're listening to what the clients are saying, you're listening to what they're saying on the outside of, okay, here's what I really want to know.

And here's where my hesitation is in doing it. And so hopefully this has shed a little light on that. This has put you guys a little more at ease. In terms of the willingness to get this testing done and really having the right interpretation. I think that's the other key here is **there's a lot of genetic tests out there**.

If you're just getting a genetic test and they're just spinning back information that says, well, you have the predisposition for this or this or this, and nobody's putting it in the context for you. And then they're just saying, here's a supplement for this and this and this. I would be a little weary of that because there's so much more depth in the details. And you know, how can we help support that? So I hope this was helpful for everybody. And yeah, another, round table discussion that goes in many different directions. So with that, thank you ladies again, this is your Rebel Nutritionist signing off, make it a great day.