

MERYL: Hey, everyone. Welcome back to the Rebel Nutritionist podcast. So today being that we are a week away from Christmas now, we're actually, when this airs it'll be a little less, but because we are offering our special on our genomics tests, our 3X4.

We've gotten a lot of questions from a lot of people. There's still a lot of confusion about what these tests are, what they provide. And of course, the fear that many people have about wanting to know or not wanting to know what their genomics are. So we are here to allay those fears to explain a little bit better.

And there is still time after you hear this podcast to jump in on our special, so take advantage of the special pricing. Emily. Welcome back. Good to see you.

EMILY: Thank you for having me. Hi guys.

MERYL: Always a pleasure, always a pleasure. So let's jump right in.

One thing that I think we need to talk about, A there's a lot of confusion around testing and B, there are a lot of companies out there doing testing.

So I think one of the questions and I'm sort of stepping on your toes on this one.

Okay. So, so I'll preempt this one. Well, well actually let me throw it back to you because we were just talking about like, you still even have questions. Right.

What kind of test should I get?

EMILY: So I think that a lot of questions that I get from people when I try to tell them, oh, this three X four test is really great. It goes into a lot of nutritional stuff and it can help a lot.

Creating a unique plan for yourself based on your genetic blueprint thing. People are still confused on what that even means. And they're kind of like, well, can I just do this test that I can buy at the store and then we can see what genes I have and that kind of stuff. So I wanted to ask you to just explain to everyone and so that I can know to.

Why is ours different and why is it more in depth and basically, what are you getting for the whole experience? What are you doing with that?

MERYL: That, that is a perfect question. So let me address first things first three X four, I've been doing genomics for quite a while. I've used many different companies.

And while there are, I use more of the professional companies, **there are a lot of direct to consumer** things like 23 and me and a lot of these other. Companies that are putting out genetic testing, most companies like 23andme or ancestry, even the ones that say, oh, well their sports performance ones and so forth.

They really offer very little, in terms of data that can be used to help you make your own individual decisions. A lot of them are genes that really have no basis in research have no real ways to mitigate any health consequences of what we're finding out. Meaning we're not going to do any testing that will not provide you a solution.

It doesn't make sense to do a test and then say, oh, well, we have this information about you, but we can't help you change. That is an effort in futility. Why would you know that ends up scaring people, right? Why would you say, oh, well, we have a marker that indicates that you might have a higher risk of heart disease.

Oh. But we can't do anything about that to help you. That just creates fear. And I think that in and of itself, there is a lot of fear because people think, oh, well, you're going to tell me something I don't want to know. And I'm going to talk about this in just a second, because I do want to address your question.

I think **we have to be very careful when we're choosing testing** and making sure that you're talking to someone who is certified and knows what they're doing when it comes to the testing and interpreting that testing, because if you're just relying on a direct to consumer. Profile. And it's just going to spit out information and you have no way to use this information to better your health and your wellness.

Then it makes no sense to spend money on that test because it's going to be confusing and you're going to be left feeling disappointed. I can't tell you how many people have done things like 23 and me, and I'm not picking on 23. And me, it's just one of the most popular ones. But how many people have done that testing and have been really, really disappointed.

And then when I say to them, well, we have this testing and they're like, well, why. Why is this testing different? You know, I'm able to explain that, Hey, we are testing. So **the three X four really enables us to provide a clear, concise, manageable intervention**, right? It's basically summarizing these key points and these key areas of focus so that we can make very specific recommendations when it comes to nutrition, that we make very specific recommendations when it comes to lifestyle.

And then specific recommendations when it comes to nutraceutical or supplements. Right.

And then **the other thing that it's identifying is metabolic areas.** Meaning what system in your body is out of balance. And certainly we get into the science and stuff like that, which scares

people. But, but for me, **It allows a practitioner to really look at your individual blueprint and say, oh, well, this area has potential to be out of balance.**

How do we strengthen it? How do we address it? So identifying these areas. Gives the practitioner, a systems, what we call **a systems biology approach**. And so **it allows us to give you interventions that are meaningful** and that are going to address the areas that are specific to what we see as potential imbalances. Right. **What I want to reiterate with these tests is they do not diagnose disease and they do not predict disease.** And I think that's really, really, really important to hear. We're not predicting that you're going to get a particular ailment and we're not diagnosing you and saying, you do have this element.

What we're saying is you have the potential. To express something to, to have this play out down the road. And if we see that, let's say we see cardiovascular disease, for example, as one of these potential. Imbalances, what we're then going to do is go back and test. I'm going to do metabolic testing. I'm going to do liquid testing and it's not just about cholesterol.

It's the other lipids. And I'm going to do inflammation testing on you to see, are we seeing this play out? Are we actually seeing these things come to fruition? And if so, how do we help you? And if not, how do we prevent this? Because if we know this has potential in your biology, well, It's worth all the money in the world to be able to say, oh, I see this as a potential.

Let's go back and figure out how we prevent it. And that is real intervention, right? We're not just testing and saying, oh, well we don't know what to do with this. So

EMILY: that answer that question. Oh yeah. I might answer that in a lot. I think a lot more questions that I had, but I definitely wanted to speak to the point that you said about how.

It's the person's individual genetic blueprint. I think that just speaks for itself because a lot of people come to see us and as a dietician and someone who's learning about Nutrogenomix because it is a newer thing that we're, we're learning about it in this field. I think it's really interesting.

And it's, it's tapping into this new technology that we didn't have before to be able to really hone in on the person. Individual needs. And so it's, it's so preventative, like it's like, Hey, this could happen to you in the future based on our genetic blueprint. And so we can actually have a very efficient and direct way of mitigating that it's like the most efficient.

Direct form of preventative medicine. Cause you know, there's general guidelines that we've learned in school. There's general things that we can help people with as humans. We should maybe do this to try to be healthier or whatever, but the genetic thing literally individualizes everyone and can tell you like this person needs to do this, whereas this person might need to do this instead.

And so you're not giving the same guidelines to everybody. And that's really interesting. It's very unique and individualized, which is awesome. Yes.

MERYL: I mean, and that is the beauty, is that not, there are we are uniquely individual and uniquely different, and this is what this testing allows us to, to help our clients with.

And for example, right when you said, okay, right. We're looking at all of these individual nuances of what. What someone's biology is. So for example, if we see that someone is prone to having let's call it issues with detoxification, and that sounds very complex. I'm like, well, what do you mean detoxification?

Right. But, but we know we're exposed. Chemicals in the environment and toxins in the environment more so now than ever before. And our bodies have to deal with those toxins and they have to detoxify them and break them down. And, and our livers have to do that. Our kidneys have to do that. And so if we see that someone has a genetic missing.

Right. **A genetic abnormality in them being able to break down their toxins, that predisposes them to health conditions, more so than someone who doesn't have that issue.** And so we're able to support because, because someone who's not detoxifying may not be able to lose that. May have gut issues may have the hormonal imbalance issues, right?

Detoxification, these systems that we look at at a very, very high level, or let's even call it a very specific. Level have an effect throughout the entire body. It's not like we are separate systems that if you have a problem detoxifying, that it won't affect your hormones, it will absolutely affect how you process hormones.

Same thing with inflammation, right? We use inflammation as this catchall term, but we can really dive or dial in deep to understanding, **not just do you have a predisposition for inflammation, but where is the inflammation coming from?** Right. We can look at specific what we call interleukins and they are, and your predisposition for, oh, well, is it happening in the gut?

Is it happening more systemic or, and then being able to look at that, so. I think what happens is people get lost in those scientific terms and it becomes very confusing. But at the end of the day, what we really just need to know is this is your own unique crystal ball. So to speak again, we can't predict that something is going to happen, but it's as close to being able to say what, if this is in your future, potentially, how do we help you prevent it?

How a genetic test can help you break through health issues you can't seem to solve

EMILY: Exactly. Yeah, that's really important. And also, like you said, if someone has an inflammation problem and they're trying all these things to maybe lose weight or to feel better, it's more of a shot in the dark. At that point. If they actually get these genetic tests done, we can find the root cause and then they will see results a lot quicker.

Right. So I think that's another reason why someone might want to do this test is to relate. **Find the actual answer, rather than trying to guess** and doing these general things that, oh, my friend did this. So let me try that because it worked for them. Well, literally this test is showing you why it might not work for you and it worked for them, or so it can give you a lot more information about your own body that you've never had before.

And to **help you feel like you're on the right track and the results will come sooner** because I think everyone wants that quick fix. And this might be the closest thing we have to it because people will have results sooner. If they're on a track that's unique.

MERYL: Absolutely. And the answer, there are two key points to that that I want to bring up the first one.

When we go back to let's talk about the weight-loss piece. I can't tell you how many times people come into me and say, oh right, I've tried. I've done the diet thing. I've done the exercise

thing and I can't lose weight. I can't lose weight. I can't lose weight. And yet we do their genomics and we're like, well, **this is how you need to lose weight.**

And you've been doing it a little bit wrong, and this is how your body wants to exercise. And you've been doing that a little wrong. Oh. And by the way, if you're not, if your gut is not really balanced also because we see there's an issue there. Well, that's going to affect your entire metabolism. I think we have a very, very hard time.

Especially because of diet culture, right? **We think if we eat right and exercise, a plus B equals weight loss and our bodies do not work in a linear fashion at all.** Right. We've been going off of this calorie metric. I'm going to calories in calories, out equal weight loss. If you live in a vacuum that works really well.

Right. Last I checked. Neither you nor I live in any sort of vacuum. And those formulas that were created, oh, 3,500 calories equal a pound. Yes. Those work in a lab. Right. And that works when you're measuring direct calories versus indirect counters. It does not take in consideration into consideration. Oh, well, are you stressed?

And is your gut working healthy? Oh, and you know, what is your level, of inflammation? Because if you have inflammation, all bets are off. So it really. Well, we really need to realize is calories in calories out a plus B never, never, never equals C. And now we have the equation of a plus B plus C plus D because Janell cause genomics now gives us the insight and that predisposition.

And it goes back to even, I had a client say to me, this. Another example is with appetite and satiety, we talk about the brain signals, right? That the stomach to the brain, the brain telling the

body stop eating. And, and there is a real genetic, genetic misstep in that when we can see that, right. So it's not just, oh, because I have lack of willpower it's there is this direct connection between the brain and the gut.

And, and if there's a genetic mis-step in that. Then if we need to provide specific changes and specific guidelines and be very focused on how we can support them, knowing that information. And that's, and that's a big one because I think people come in feeling bad, like, oh, I have no willpower.

Oh, I feel bad. I cheated, oh, I feel bad. And. But you can't blame everything on genetics, but at least if we know there's a predisposition, because then what we know, and we can go back and test, right. We can go back and test things like leptin things like adiponectin things like , which are all of those chemicals that send the signal.

To the brain and the gut and being able to say, oh, stop eating. And so we can look at those in real time. We can really, really create a plan. That's going to be effective. That's going to embrace, embrace, not just the nutrition and the exercise, but then the behavior and the lifestyle and so forth. And so that's so important.

And I think the other thing that I want to bring to the point that I want to make to. Another, I had another client say to me, oh, I knew there was something wrong all along. And every doctor that I've gone to said, there's nothing wrong with me. And but I knew, but I knew something was off and then they get their genetic test and they're like, oh, see, I'm vindicated.

We hear that a lot. They're like, oh, I'm so happy to hear that because. Yeah, **they inherently knew something was off and they couldn't put their finger on it and they keep being told. No,**

no, no. And of course we hear that, not just with genetics, but we hear that with testing as well. I had a young girl who we just did some testing on and she's young.

She's 27. She's known for many, many years. She just hasn't felt well. She's like off and she's had a bunch of testing done and I'm digressing just a little bit, but had thyroid testing done over and over and over, and nobody ever identified that she's got an autoimmune issue. Right. Because they didn't do the right testing.

And she's so angry. She was frustrated. She's like, well, why didn't they do this testing? I'm like, because this is. It was not in their toolbox. Right. And so genomics is just, it's not right wrong or otherwise, or the testing that we do, it's not a matter of making it right or wrong. It's understanding what is in your toolbox.

And if you're using an old toolbox or an outdated, or your practitioner is just not aware of understanding root cause if you're not using a root cause, toolbox where, where we're really not serving our clients that well, so. Yeah, we really do get to hone in on, on that individuality in a way that, that, again, it shouldn't be looked at as, as fearful.

EMILY: Yeah, definitely. I think that happens a lot more often than we would like. And I think a lot of people come to us for that reason they're trying to advocate for themselves and they're trying to. Find the right answer and going back to what I said before, this definitely can, can get you on that track and probably find the answer.

What types of information can you find with a genetic test?

But I wanted to ask you. So I hear you saying a lot about nutrition and exercise and then also all these hormonal things you can test for and all these different snips for cardiac disease. And I know there's some for Alzheimer's and a lot of brain disorders. Can you maybe go through like the cat, the broader categories of what this test gives?

Cause I did the test, so I actually know, but I think our listeners would love to hear like, what are they actually getting with this test? What can we look at? And then yeah, that's where I'll start with that

MERYL: question. Absolutely. I mean, look again, we do get a lot of information and if there's one thing I've learned, it's like, I always say we have to unpack this slowly for clients because there's so much in there.

And most people can't really absorb it the first time. So I'm really going much slower because they're like, yeah, yeah, yeah. I want to know. And then I tell them, and they're like, whoa,

EMILY: It's cool though, because there's some that you can get a lot of information about your body, which is

MERYL: right. So **we break it down into what we call a systems approach**, right? So if we look at this, if we look at our body from top to bottom, our body is broken down into systems. Every system has its own responsibility.

So yes, they're unique systems, but. There's always **the intersection between all of those in the body**, because remember we're all connected, right? We're in one, one living system. It's not a

separate our, our brains are not separate from our lungs and our gut and our hormones interact with everything else.

So we really have to live. As, as a unique combination of what is the interplay with all of it, but, but in and of itself, I mean, we look at things cardiovascularly. And so when we say cardiovascular, what does that mean? Well, it means we're looking, not just at how your body's handling cholesterol, which is a big one, but we're looking at the other lipins meaning the other fats, because those other fats are really, really important in our systems.

Right? Our liver has to deal with it. Break it down and we need that. We need those fats for all brain and heart and muscle and bone

and

all that. We look at things like vascular health, right? What are the health, the health of your arteries and your blood vessels? Because if those things aren't strong and healthy, that could lead towards blood pressure, we look at the propensity towards hypertension and all of that, we look at things like clotting, right?

What is your propensity for blood clots and how we can prevent. Possible strokes. So those are, those are some of the **cardiovascular pieces**. And then we look at things like, what is your **predisposition to have collagen and joint damage**? Right. That's one of my big ones. I will tell you, I just recently finished this three X four.

One of my biggest, which I didn't as suspect, or I didn't expect was collagen and joints was one of my biggest what we call high impact areas. And so I'm like, oh, wow. I really, it's not just from

a osteoporosis perspective. Right? It's not because it really wasn't bone. It was collagen, which is, which is ligaments and all of that.

And so maybe that explains some of the hip issues that I'm having. Right. I can, when I run, I'm like, oh my goodness. But, but knowing here's the thing, right. I am really, really active. I work out I'm, I'm balancing in between. I try and do my recovery, which is the yoga, but you know, I'm running a little bit, I'm in the gym.

I am lifting, I'm lifting significant weights. And if I want to really have the longevity of that, if I want to be able to be in the gym until I'm. On my deathbed seriously. I'm like, I want to be able to do it. And you know, until the day I go, then I need to pay attention to my genetics in that area of collagen.

And joints because I need to support those things. Things like. Not just how I exercise. Right? So maybe I'm not going to be doing the pounding and the running because that affects my joints as much. Maybe I need to do more of the low-impact stuff, but I also need to feed my joints with things like Collagen things like what we call MSM and glucosamine and those, and those supplements.

There's nutraceuticals, even things like fish oil that will help lubricate my joints. So, so I know, right. That's one area specific to me that I know that I need to pay attention to. And there's more. And again, at some point I'm happy to go through my own genetics and walk everybody through it.

But but it doesn't really

EMILY: matter and not to cut you off, but I just want to like speak to that. Cause I think that's a really good example of why this test is helpful, right? Like you're an extremely healthy person. And on the outside, anyone could look in and be like, Merrill is so healthy. What do you mean.

This genetic snip for joints, but that's just your genetics. And I think that's where people have to understand. It can stop there. If you have the preventative measures in place like that gene doesn't have to ruin your life or come in and cause a joint problem. You just have the information now.

And so **you are a little more focused on that area**. Whereas if someone knew that they had a predisposition to cardiovascular. Disease, they would just focus on that area a little more so that, that just won't happen to them. It's kind of like hacking your body, like ahead of time. So that way you can prevent it

MERYL: fully prepared.

Absolutely. It is totally **biohacking** in a way, right? In a way that you can support your own. Individualness of it the individuality of what makes you unique and what, what could potentially impact you. Right. And, and so things like collagen and joints. So we look at bone health, we look at **glucose and insulin** and we know diabetes is on the rise.

It's not even just diabetes, dysregulated, blood sugar. I will tell you. I would guarantee if we walked around with a glucose monitor and we measured the blood of, of people just walking around, they would be shocked at how high their blood sugar levels are. Right. But we can see the predisposition for that.

So we look at glucose and insulin. **Hormone imbalance**, both female and male. We look at how your body is **detoxifying**. We look at antioxidant activity, something called oxidative stress, right? Which is, which is your body's defense, your body's immune system. What is your **immune system** like? **Memory and brain health, mood and behavior**.

Right. We can look at mood and behavior, and this is a big, big, big. That people really need to hear because so many people, I will really, I think 90, I'm comfortable saying the 95% of the people that walk into this practice are on some kind of whether it's an SSRI SS and I some kind of. Antidepressant anti-anxiety medication.

And most of the time it's given to them because they are being dismissed by their practitioner because their practitioner, again, wrong toolbox or **not using the right toolbox to figure out what is the root cause of that anxiety or where it's coming from**. But the fact is, is we could actually look like, is there a dopamine issue if you have.

An issue with making enough dopamine or dopamine receptors, or if you're, if you're not detoxified, this is a perfect example of detoxification. If you are not detoxifying those neurotransmitters, those, those neurotransmitters that are, that are adrenaline, right? Like that fight or flight. If you're not breaking those down, they kind of get stuck in your brain for a lack of a better way to say that.

And they can cause anxiety. And so there's many reasons for that. It's not just because you can't cope with the world outside of you. There could be a real chemical reason for that. And we can see that and then we can go back and test for that. Right. And then we can support that naturally. So mood and behavior is a big one.

And the reason I'm saving **brain health** for last is because you did mention right things like Alzheimer's Parkinson's and people, I will tell you, I think this is where there's the biggest fear because people see. Their loved ones and family Ray family member comes to me. And I have a client who, a few of them, many, many of them who have, who have had a family member to come to Alzheimer's or Parkinson's.

And I look at them and I'm like, we got to test your genetics. And they look at me and they go, I don't want to know. And I'm like, what? I almost want to put my head through a wall. Like, what do you mean you don't want to know? I am not going to tell you if you are going to get Alzheimer's, but the chances that if someone in your family already has.

Dementia going on mood memory issue or cognition issue or a full-blown Alzheimer's the chances that you might get that is pretty good, right? Because that's a pretty, pretty specific genetic marker. And if you know, you have that predisposition, then why wouldn't you want to start early? I will tell you memory and brain health is one of my biggest.

Right. I already see it with my dad. He definitely has cognitive decline. He'll tell you, right. He can't finish his sentences. He yells at me for finishing his sentences. So I'm working on that. But I already see it when everybody in his side of the family has had that you know, and so I'm thinking, okay, if that's going to be my destiny, **I'm going to do everything I can to prevent that.**

So, so I'm doing those things now because we know that. Alzheimer's and Parkinson's and all of these brain disorders, they don't start when you turn 70 or 80 or 60, they start in your thirties, they start in your forties. Right. And we can measure that. And so you're doing things to prevent that brain decline.

Yeah, whether it's brain games and memory stuff, or even nutraceuticals and lifestyle, right. We know lifestyle plays a big one. I just saw a research study published by Daniel. Amen. And I don't think it was new. I think it's pretty old, but you know, Daniel Ayman does all that work with Alzheimer's and Dale Bredeesen.

They're amazing. But Daniel Ayman does those SPECT scans. And so he showed a SPECT scan of someone's brain who just has, I think it was. Three drinks a week three alcoholic drinks a week. And there was a pretty significant, yeah. Yeah. There was a pretty significant decline or physiology physiologic effect on that brain.

And I'm going, I mean, I don't really drink that much, but I'm like, well, that's a good deterrent to not drink it. Right. But, but you know, here I am my fifties and I'm saying, okay, I am going to do everything I can knowing that I have a genetic predisposition to prevent any of that from happening.

And the fact is is that if you're doing things that are helpful for brain health and, and helpful for cardiovascular health, well guess what, it's going to trickle down. It's going to help your inflammation. It's going to help. Right? Because again, everything works. You know, it's like when people say to me all the time, well, oh, well, should I eat blueberries because they're good for my brain.

And they're good for my heart. I'm like, well, blueberries are good for everything. Exactly. And then you're done. That's

EMILY: good for your brain is good for the rest of the body. Cause your brain.

MERYL: Exactly for the entire body. The entire body is happy when you eat those things. Right. It's like, it kills me and people say, well, it's just brain.

Oh no, no, it's pretty much food for everything else. So but again, maybe the long-winded answer to, to that, to that part of it, but I really do feel that people need to understand that. What we, what we can give them with genomics is, is a real gift. I mean, I, I say this, I use this example with my son over and over.

And maybe if you haven't heard the other, the other podcasts that we've done on this, I will say it again. I have done genetic testing on my kids and I did it for my son, Jason, who is now 25. I think I did it for him or much earlier on, but. Because again, my dad's side of the family, they seem to have the crappy genetics, but every single male on my father's side of the family has had a cardiovascular event, right.

Whether it's been a heart attack or stroke or whatever it is. And, and it's, it's pervasive on that side of the family and my dad at 62, he was 62 years old, had a quintuple bypass. Right. So I was like, well, what better gift to give my son than to know his predisposition. Because God forbid he's in his forties and he's fifties and, and all of a sudden he has a, you know God willing and never a fatal or close to fatal heart issue.

But now I've given him the gift of looking at his genetics and saying, yeah, okay, well, there is a predisposition there. So when you are 25, you can totally prevent. This cardiovascular event, which may have been inevitable at some point from happening because you have all of this information, you are armed with this information and we can do the subsequent testing.

We're not just looking at cholesterol, we're looking at his inflammatory markers. We're looking at all of these things so that he can prevent this cardiovascular disease from ever, ever happening.

The fear of finding answers

EMILY: That's amazing. I mean that he now has it information, whereas the people in your family that came before you guys, they didn't have that information.

And that's really unfortunate because **if they did, maybe it could have been prevented**. And so while there's fear around all of this, **I think that fear should be motivation for a lot of people** and say I think it's not something to fear to know that you have a predisposition. The thing to fear is, is getting that.

And that's where people have to understand where their fears even coming from in the first place. And to say to them, **we actually have a method now to prevent that from happening to you. Is actually more reassuring**. So I think just shifting the mindset around genetic tests. Is important and getting the word out there that this, the test itself is not the fear, knowing that you have the, the genetic snip is not the fear, the fear that you have visible having this happen to you.

And so we know that yeah, there is actually a risk here. Then it's just, **it's more helpful information to help you avoid what you're afraid of**. And I want them to also make a point that it's not all that information that we gave you with this test. There's some stuff in there. Like I remember the coolest thing that you told me when I sat down with you to go over.

My test was you were like, if you want to be a triathlon athlete or a triathlete, like you would kill it because they talked to you about. Like what your, your best exercise forms are, or if you have really good endurance or if you could if you have good endurance with running or weightlifting or what, what your body would do best with, and you were like, you have all three, so you could be a triathlete.

And I was like, you go me. So there's some things in there that are actually motivating and can get you. To feel good about yourself, and see that you actually have good genes. I mean, what if you knew that you didn't have a snip for alzheimers disease, like that's great news. You can relax on that front.

You know what I mean? So while you might find out the areas that you need to focus on for lifestyle change, **you might actually be able to relax in a few other areas**. And I think. Also helpful information and can help people with their fear and anxiety.

MERYL: Yeah. And I think another point to that, and that was great.

Yes, because we've, there is good. It's not always bad. It's not that we're saying what's the bad, what are the bad things is really you know, we're highlighting the things that we want to pay attention to that so that you don't get these things. And again, look, we can never say with a hundred percent certainty.

You're not going to get heart disease, if you follow all these things. Right. Of course. **But we certainly can stack the deck in your favor** because nothing is, is, is certain right. We are not guaranteed the next minute of our lives. So how we can say, okay, well we can totally prevent

this, but we can certainly do a lot to stack the deck in your favor and to continue to build on those healthy habits.

Right. I mean, there is a reason. I do this work day in, day out, day in, day out it's because we want to be able to provide people with prevention and that's the other thing in this society, **in this culture, we really don't embrace prevention, but that's what we should be doing**, you know? **And for 25 years I've been working on how do I prevent cancer from reoccurring in my body.** That is my driver. I work on my immune system every single day. Right. Because I know what, where, what it's like to have to deal with a disease and, and thankfully come out of it. But, but yes, it's, it is about constantly giving yourself the information to make the best choices and decisions for you.

Nurture vs nature

EMILY: Okay. But no, what I was gonna say back to that too, is it's we hear a lot about nurture versus nature, right? And like, and a lot of times people talk about. Your nature, you can't necessarily change your nature. Your nature is your genetics. It's what you were born with.

It's your biology, but **you can change the nurture.** So like talking about what you control, what you can control and trying to let go of the things you can't control. Well, **we don't have to let go of the nature piece. Like we should know that it's there and we should know more about it, but then the nurture piece comes in and that can actually change the game.**

And I think that is, is really cool for people to feel empowered, to be able to. I **have this ability to control their destiny and not let the nature part just take over** because I think they're both

really important and people argue all the time, which one determines your future. And I think it's both right.

MERYL: Yeah. Yeah. Sorry. I didn't mean to go. Yeah. Yeah. There's no question. I mean, look, we know genetics accounts for. Or at least the genomics right. Can account in some cases, 30 for 30 to 40%, of what gets expressed. But **we know that diet and lifestyle have an even bigger effect**, right? If genetics is 30 to 40, well, lifestyle and diet is 60 to six.

Right and behavior. So you've got a tremendous you, you have the ability to control that and, and take charge of that and not have to say, oh, well, right. It's my genetics. I can't do anything about it. I mean, and especially one other point I want to bring up is, is the cancer. And then people who, especially they around the BRCA gene, everybody's what we want, what I want to make clear is that **genomics is not genetics**.

We're not talking about insertions or deletions of genes. We are talking about typos, little typographical errors, so to speak in the expression. And again, it gets into the science of what that is, but we don't need to get into that science, but understand. That it is not the same. And **we're not saying you're going to get this disease**.

So when people come to me and I have a client that I'm thinking of who's has a family history of breast cancer, and she doesn't have any BRACA snips or anything like that. And, but she is very worried because her family there's a huge predisposition. And then when I did her genomics and I'm looking at this and I'm looking at all the things that can contribute to cancer development, things like methylation, And that's something that we'll get into.

And in 2022, I'm going to do a little bit more descriptive of understanding these systems in the genomics, right. But methylation is a very, very important biological biochemical reaction in the. That plays a role in in cancer development. And if you have sort of missteps and methylate methylation, it can set you up for certain issues with, with cancers, right?

So if you don't methylate well, and again, back to detoxification, if you're not detoxifying those hormones properly, and if you have other predispositions and inflammation, Well, **you may not have a BRACA gene, but you certainly have all these other things that we need to pay attention to because those missteps in your genetics can lead to cancer development.**

So how do we help support methylation support, detoxification and support and inflammation so that you don't end up. With the cancer. Right? And so again, this is where the uniqueness of understanding your own individuality, your own biology is so, so very important with genetics because we can really look under the iceberg, as I always say, and, and **play the conductor in your own orchestra**, help you play the conductor of oh yes.

You know, here's, here's how this symphony has to, has to play.

EMILY: Yeah, definitely. It's kind of like stacking your army to make sure these things don't happen to you. Like if you think about it like you said, and like the step by step approach with methylation, this has to happen for this to happen.

And one of those steps is off. W why wouldn't we step in on that step? So we don't have to step in when you actually have cancer down the road and then try to backtrack and fix the problem and then figure out how it started in the first place and make sure it doesn't happen again. If we

can adjust and fix the step that was off, then your process is running smoothly and we don't have to worry about it anymore.

So that's, I think that's where preventative medicine just is so, so important. And I think people are starting to realize that more and more, which is great. And so, yeah. I think this has been a really great conversation.

MERYL: I love, I know I said it was so funny. Cause when we were starting out, when we started, you're like, wait a minute.

I don't know what questions I want to ask. I'm like, it's not, it's us. You and I have these conversations all the time. It's just like, we're talking, you know? and I'm teaching you all this. So I knew, I knew it would flow, and look at the time here we are almost 45 minutes later or 40 minutes or whatever it is.

So yeah. Look, I love talking about this because. I just see the potential of where we can go with it and how we can really, really help people and how we have helped people. I have so many people that come to me and say, wow, **So happy to know all of this and be able to unpack all of this in a way that it's going to support my health.**

And anybody who has done a genetic test, I had someone come in and say, well, well, all I really got out of my chest was that I shouldn't be eating gluten. And I looked at, I said, honey, if that's all you got out of that, come back in and we got to go back through that report because you missed a lot.

Right? So. So it is, it is something that I always say does need to be unpacked over and over and over, because this is your blueprint. It's not something that's going to change. It's not going

to go away. And so the more you understand the inner the underpinnings of what makes your body unique and what makes it work and to.

The better you can help yourself moving forward. And that has an, and that's really the message that we are both trying to share today and, and have people really.

EMILY: Yeah, exactly. It is. It's, it's kind of one and done, **you do the test once and you have that information for life**. So I think it's worth it.

I mean, it definitely was worth it for me. It helped me a lot and it helps us to interpret the other tests that people might want to do with us too. Like if they're doing the nutria valley can understand why their numbers are the way they are. Right.

MERYL: It helps a lot.

EMILY: So yeah, I think this information has been really helpful.

I hope our listeners. Yeah. I feel a little more at ease about what genetic testing is and, and how it might play a role in their, in their journey and their healing and all that kind of stuff. So, Yeah, thank you.

MERYL: No, thank you. And as always, if you guys out there, any of our listeners have any questions, please send them our way.

We will always answer them. And if we can't get them on a podcast, then we'll certainly try and answer them individually. But. We always do get great questions from our clients or from our listeners out there. So keep, keep them coming. And like I said, **we are offering our special on our genomic testing through this week**.

So what better way to give a gift than the gift of lifelong health to someone that you love and care about? So really it's just a no-brainer in my opinion. And with that, we will sign off. This will probably be our last podcast of 2021. And we look forward to start a wow.

I just said, wow, that's crazy. Right. I know. I know. I know. So yeah, our last podcast of 2021, and we wish everybody a healthy, safe new year holiday season. And as always, Emily, thank you for your insight and your input. This is your Rebel Nutritionist signing up make it a great one, everyone till next time.