

Donna ([00:00](#)):

Welcome to the genius of your genes summit. I've saved one of the best interviews for the last because my friend Ritamarie Loscalzo is a longtime friend and an expert in blood, you know, like insulin and diabetes. And, and I know how important it is for people to understand the genetics around controlling your blood sugar because it's one of the most important things you can do to age well and to not get sick. Blood sugar that's out of control is damaging our DNA. So we have to know what to do about it. So Ritamarie, I know you're super busy. Thank you for letting me catch you and for us to do this interview together.

Ritamarie ([00:46](#)):

I'm so excited to be here and I love the whole concept of the genetics cause there's so many misunderstandings about, Oh my father had this and my mother had this, therefore I will get it and that that's not right.

Ritamarie ([00:59](#)):

And that there are genetic factors and they do influence the outcomes and how you need to manage particular areas of your life. And I love that you're doing this and bringing this to the public.

Donna ([01:12](#)):

Well, thank you. And you're right. Cause I think, a lot of people are afraid, even afraid to get to know their genes. Like I don't want to look all the time because I might find out something I don't want to know. What I've also found is that people are developing diabetes but they never had it in their family before. If their grandmother didn't have it, you know, where did it come from? Like, well, how come I have diabetes? Is it my genes? So I think we have a lot to work through here to help people get some clarity.

Donna ([01:45](#)):

I'll just going to let you run with this. Like, first of all, I know you got bitten by the bug gene like me years ago. Yeah. Yeah. So, there's a lot of general stuff to say. We of course turn our genes off and on by our behavior by what we're doing. But in particular, how does controlling our insulin, what would affect is that having on our genes and what genes in particular? I think it's something important to say is that diabetes per se is a poly genetic disease or in other words, is there a gene that is going to cause diabetes. So how about running with that?

Ritamarie ([02:32](#)):

Yeah, so there's lots of genes that code for diabetes or blood sugar imbalance. And I think the biggest problem people make is assuming I don't have diabetes in my family, I don't have diabetes, therefore I don't need to hear anything about managing blood sugar. The reality is diabetes as a diagnosis comes after decades, decades of blood sugar imbalance, blood sugar imbalance that is over the course of those decades causing the damage that we

Ritamarie ([03:00](#)):

associate with complications of diabetes.

Donna ([03:03](#)):

Even in the womb. Would you say that it starts in the womb?

Ritamarie ([03:06](#)):

It could because it depends on what mom was doing, right? If mom was exposed to a lot of toxins, is eating a terrible diet, you know, mama has ups and downs in her own blood sugar yeah it can affect.

Donna ([03:19](#)):

So in other words, it's not that the baby has diabetes per se, although they're definitely finding children with diabetes, but the constant or the lack of control of the blood sugar can even happen in the womb.

Ritamarie ([03:33](#)):

Absolutely. And that's predisposing them to manifestation. So I'm going to just mention type one diabetes. Type one diabetes has the most connection with genetics, right? It's a very strong connection with the gene and how it manifests and, and the diabetes. But it doesn't have to be that way. Not every child that's born with a tendency with a genetic tendency towards diabetes type one actually gets it, right?

Ritamarie ([03:59](#)):

They needs to be the environmental, like you call the epigenetic factors, what surrounds them, how does that affect them? So they're finding that dairy sensitivity, dairy antigens, if somebody is sensitive to dairy products, they cross react with the pancreas itself and the insulin molecule itself. So there's anti insulin antibodies and there's anti, I would sell antibodies. And if that person has the tendency to go that way and they're drinking the typical cow's milk formula that's fed to most children and mom's just downing ice cream throughout her pregnancy, that child is more likely to develop type one diabetes.

Donna ([04:41](#)):

And women do crave sugar through their pregnancies, one thing I know from working for years with candidiasis is that many women have candidiasis when they become pregnant. And it may not even be that acute. It's just maybe systemically a mild candidiasis. But when they become pregnant, their sugar goes up, their progesterone and estrogen goes up and now this can become very acute and, it's definitely having an effect on the baby - in other words, you have an acute infection basically going on.

Ritamarie ([05:19](#)):

Right. And those are things that affect the manifestation - well, so type one is an auto immune disease. They're thinking now that type 2 is also an autoimmune disease, that there are antibodies that are attacking the receptors on the cells and causing insulin resistance. There are antibodies that are environmentally triggered, that are food triggered. And you know, all the things that go into autoimmune manifesting. So when someone has a diabetes situation, even if it's a type two, there can be not just a genetic component but an auto immune component.

Donna ([05:56](#)):

And just to tie in the candida part, everyone with diabetes has a systemic yeast infection and, and it does make you crave sugar. So even in the womb, some women are wanting sugar throughout their pregnancy, she's wanting that ice cream. You know, there's that joke about women sending their husband out for pickles and ice cream, craving something sweet. But of course the pickle party I hope is

because she's wishing she had some something fermented so that she gets more bacteria in your gut. But, I just wanted to throw that whole thing out there, I didn't tie in the candida thing when we first started talking about it. But so many people have systemic candidiasis today that we are going to crave sugar because the yeast want to keep the body more acidic so that they can survive.

Ritamarie ([06:44](#)):

Yep, absolutely. And then that, that exposure in the womb, just so much sugar and that exposure when they're born to so much sugar like baby formula, right? Infant formula, so bad, there's no nursing anymore, everybody was just feeding them this stuff, which is pure. It's, it's sugar. It's fructose. It's sucrose.

Donna ([07:04](#)):

Because even at the health food store, almost every baby food formula is pears and fruits. They might have something else healthy in there like kale or carrots, but there's so much sugar. I can't believe it. It's like, does anybody understand that you can't give sugar to a baby for as you said, fructose. You start people off with getting already out of balance. Of course you're going to age and there are all kinds of problems.

Ritamarie ([07:32](#)):

They become more out of balance, right? Kids are born with thrush, right? Kids that are born with vaginal.

Donna ([07:36](#)):

Cradle cap. Did you know what cradle cap is too, that's a biotin deficiency because the yeast are depleting the biotin so that they can grow into that fungal form where they have a channel.

Donna ([07:48](#)):

So, that's another sign.

Ritamarie ([07:50](#)):

I want to make sure that we're really clear on the genetics. Right? So with type one, there's a closer association with the genetics. With type two, there's a huge association with the imbalance of sugar that goes on for 30 years before the actual diagnosis is made. Medicine is way behind in even how to diagnose diabetes, they wait until the fasting blood sugar is up to like one 25 and then they go, oh, you have diabetes. What about the creeping up before that? What about what's called postprandial glucose, where they eat a meal and their sugar shoots up, but then it comes right back down to normal at the fasting state. So the genetics I've been finding really predisposes to how sensitive people are to the sugar in their diet and how much it's going to cause the sugar to go up and the insulin to start to be abundant. And then the creation of the insulin resistance. So for example, somebody can eat, and I've done this over and over again in my sweet spot program, we test people - we have thousands of people that have tested themselves. One person can have, let's say a nice

Ritamarie ([08:55](#)):

green smoothie and they put a banana in there. Their sugar shoots up to 170. Another person puts six bananas in there and their sugar doesn't budge. I can't even imagine drinking a smoothie with six

bananas, quite frankly, from the looks on your face. Yes, it's, but they don't. Right. And so what happens? So I think when we look at a cross section of the population, there's about 25% of the population that are going to have to be super careful about what they eat and how much sugar they eat and how much, tendency they have to diabetes. Like they have to just be really careful. There's another 25% like the George Burns of the world, which is a small, maybe it's not even 25% maybe it's less - it's like no matter what they do, they're not going to develop it. But that 50% in the middle is where most people lie and they, you know, you gotta be careful.

Ritamarie ([09:50](#)):

You just have to be careful whether there's a genetic tendency or not, you're gonna lean in that direction.

Donna ([09:55](#)):

How would I know that? And what was the program?

Ritamarie ([09:57](#)):

It's a program we run called the sweet spot solution. Sweet spot solution is basically helping people to find their sweet spot. Like how much carbohydrate can you eat in a meal without disrupting your blood sugar. So for me, as I've looked at my genes, I've looked at maybe there's about 50 genes that I know about that can have predisposed to diabetes and blood sugar imbalance and I have like 35 of them. So for me, I have to be super careful and I do test my blood sugar and I can eat, let's say a carrot raw and it doesn't raise my blood sugar after my meal. Whereas if I cook that carrot, my blood sugar will go up to 135-140. I can eat blueberries as long as I eat them with a green smoothie or a salad or something like that or, or pineapple or mango or any fruits.

Ritamarie ([10:51](#)):

And as long as I eat it with lots of greens and I eat a small amount of the fruit, my sugar, you know, stays stable. But if I eat it by itself, like who doesn't like a nice bowl of pineapple, right? You're in Hawaii, you're in a tropical place and it's locally grown. You just want to eat my pineapple. I can't, my sugar goes up as high as 180 I've seen it go.

Donna ([11:11](#)):

So what do you teach people to do in the sweet spot?

Ritamarie ([11:17](#)):

Of course, I have them get a blood glucose meter and I have a chart, which, you know, I've tested a lot of them and some of them are really bad and some of them are really good at \$15-20 bucks, it just varies. So I've tested them myself and so we get a blood sugar meter. And you test your sugar before your meal and then you test it,

Ritamarie ([11:38](#)):

I actually like people to do it at the beginning of testing every 15 minutes after the meal so we could determine when they peak, when is the high point, and then when does it start to come down again. And as long as we catch that we want that peak to stay in a low range. I like it to stay at 110 right now.

For some diabetics it takes a while to get there because they're starting out with a fasting glucose that's way higher. But we get there.

Donna ([12:03](#)):

What is fasting glucose?

Ritamarie ([12:05](#)):

The normal healthy fasting glucose is in the low eighties could be in the 70s for some people if they're on the more keto type diet, it could be in the 60s but you know, low eighties is probably where to target for. In the medical labs, it goes up to 99 you can have up to 99. But here's the deal.

Ritamarie ([12:27](#)):

Studies show that over 90 you increase your risk of heart disease by four fold. So I look at in the 80s is healthy. When it starts to go in the 90s right away, I call it pre insulin resistance. When it goes over a hundred, It's medically diagnosable as insulin resistance(100-120) and then over 120 is considered diabetes.

Donna ([12:55](#)):

Well, getting back to the testing now you're eating meal and in that meal, you might have a lot of different vegetables, maybe a certain vegetable soup and it had six or seven or eight vegetables in it. Then you had some awesome other things, you know. And so there's so many things. How are you going to tell if there's something in there that's raising your blood sugar? What is that something?

Ritamarie ([13:18](#)):

Like what is that something? That's a great question because you know you go, well it's unlikely to be the kale.

Ritamarie ([13:26](#)):

You know, it's unlikely to be the cabbage. What could it be, well cauliflower when cooked has a higher sugar index. Carrots when cooked have a higher sugar index, if there's sweet potatoes in there. So what we do is we look at the meal, we have them track their meal, we have them track their glucose, and then we look at what are the suspects. Every now and then we get a weird, you know, guilty party of kale or broccoli. But it's kind of rare. Onions, onions are, especially when you cook them, right? When they're caramelized, it's bringing out all those sugars in there. So all of those things play in. So we figure out, we go, okay, let's take out the suspected foods. Let's just make another soup with just the other foods and see how your blood sugar does.

Donna ([14:12](#)):

Do you think it would be good to take that test when you haven't had anything to eat for a while? Like three, four hours, and you eat that one thing that you're suspecting?

Ritamarie ([14:22](#)):

Yes, that's the other way to do it. Yup. Yup. That's harder for people if it's not a calorically dense food, because they're going to be starving and they may eat a large amount that's not like what they normally would eat. So if you're going to just make a meal of carrots, how many carrots are you going to have to

eat, and when it's alot, it's just not your norm. So yeah, that's a good way to do it too. And we do that. I'll usually have them do that with like a big plate of greens, you know, or, or something else to help. And the other thing is we want to learn how we can eat, not just two carrots are good foods, sweet potatoes are good food loaded with nutrients, but we have to find the amount that's good for you. But we also have to find how do you eat it. So I find, like I said with you, eat it with a big plate of, you know, stir fried greens, right? Great. You know, olive oil and garlic and you have your sweet potato with it, it's going to have a very different glycemic effect.

Donna ([15:21](#)):

That's really, really true with fermented vegetables too. Because like this morning, I had this banana sitting on the counter, it's been there for three or four days, it's getting more and more ripe. And I never eat bananas because they're too sweet, but I just decided, why not? I'm just going to eat this banana up, otherwise it's going to go bad. So, I ate it. I immediately went to the refrigerator and took out a jar of my homemade fermented vegetables and ate about four or five spoonfuls of that. And there's no reaction whatsoever. I mean, I can tell without a monitor that it wouldn't have affected me. But my question now is, people are probably thinking, gosh, am I going to end up being like a pin cushion? So how many times am I going to have to poke myself to figure this out? And does it hurt?

Ritamarie ([16:10](#)):

So answer to, does it hurt? It depends. And some people are super sensitive, but it's just this little, it's quick. It's instantaneous really. And it's not really that bad. Most people that say, I'm scared, I'm scared, I'm scared, when they finally do it, go, Oh that wasn't so bad. So there is going to be a little pinpoint of discomfort, but nothing like, you know, stepping on a piece of glass or getting bitten by your dog or you know, it's not going to be horrible like that. But the other question, which is how long do you have to do this for? Once we get patterns, what I usually do is I get, we get patterns, we go, okay, this food is a no, this food is a yes, this food is with caution, you know, mix it with lots of greens and then we do for 30 days. We just eliminate all those foods in the initial trial that caused it to go up. And then at the end of that 30 days, then you can start testing again as you say, okay, I want to see how blueberries do. I eliminated blueberries for 30 days. I can't stand it anymore. Let me add some blueberries in. And you test it and then you test again. So you know, you don't have to be testing every day for the rest of your life.

Donna ([17:17](#)):

I think if you add a bit of fat in your smoothie, maybe put an avocado or spoonful of coconut oil or something, although that could make your blood sugar go up for some people. But you know, a little bit of fat with the sugar probably helps a lot of people.

Ritamarie ([17:33](#)):

It helps but it may not be solving the problem. And this is when I was digging into the research. Yes, it won't make the glucose go up as high, but the insulin may still be going up as high. You have to be super careful - a little bit like you said, a spoonful of chia, or a spoonful of coconut or whatever is probably fine. But people making sweet with fat kind of desserts? That's probably not doing them very well.

Donna ([18:02](#)):

Yeah. Well what about the blood glucose monitor that you wear all the time? Can you explain about how those work, and how you get one? As a doctor, can you write a prescription for somebody when you're working with them to get, one?

Ritamarie ([18:16](#)):

If I'm working with them and they're, you know, within my state locally, yes. If I'm working with somebody in a coaching program, long distance, no. So I can write them. You have to have a prescription. So it's usually find a functional medicine doctor, a naturopath, a chiropractor. I don't know about acupuncturists in some state. It's different whenever they can, they can do, but it's a little patch you wear on your arm. It has a meter - it used to be you had to have a separate meter. Now you just use it on a cell phone and you hold it up and it tells you what your blood sugar is. No pricking. The only time you feel the little bit of pricking is when you put it in. But it's a little thin filament about the width of an acupuncture needle. So that's it.

Donna ([18:58](#)):

That's the way to go.

Donna ([19:00](#)):

Is it expensive though?

Ritamarie ([19:01](#)):

It's expensive. Right now it's crazy how expensive they are. Like it's like \$69 for 14 day patch. But the thing I don't understand about it - it used to be a 10 day patch and they extended it to 14 - instead of keeping the price the same, which how much more does it cost them? It's just software to get it to go to 14 - they doubled the price. It's prescription only. I think there's some drug companies that don't want us to be empowered to take charge of our own health. And it's made by Abbott labs. So yeah, they're intended for people who already have diabetes to control their insulin levels. I'm using them all the time for people who don't have diabetes and want to prevent themselves from getting there and want some good info. So it is a great thing. Insurance won't cover it unless you're already diabetic and you're out of control and on insulin. Some insurances do, some of the private insurances do. But things like Medicare and others that are more public insurances don't. I love them because I think it just gives you a great insight. You go, whoa, I just ate that orange and my blood sugar went up to 150. Oh, that twinkie just made my blood sugar go to 250. I shouldn't do that.

Donna ([20:24](#)):

Yeah. It's the way to go if you can find the money and the doctor to prescribe it. So let's get into genes now since this is gene summit. I've always been kind of amazed that, getting back to the type one diabetes, which so often happens in childhood, can you tell us more about those specific genes that have been identified that put people

Donna ([20:48](#)):

at risk for type one diabetes?

Ritamarie ([20:53](#)):

There's quite a handful of them and I personally don't have them memorized. I just refer to my handy dandy sheets. The IGF1 is one that more influences the insulin receptor. So my summary chart, and these are great charts I put together, you know, that, that go into it, I have like three pages of these. There was actually a separate page of type one. So here's three pages of genes that are associated with blood sugar imbalance. I had another sheet that has it and I have these available and I'm gonna make them available for you guys.

Ritamarie ([21:58](#)):

But that way they have them. But I'm drawing a blank on the specific ones related to type 1.

Donna ([22:04](#)):

That's okay.

Ritamarie ([22:05](#)):

Just because with type 2, I've been looking more into the subtleties of type two, but insulin resistance, that tendency to insulin resistance, that tendency to the blood, the receptors on the cells not working real well. So from that perspective, we all have heard of MTHFR. It's a methylation gene. MTHFR C677T and that in combination with an MTRR predisposes folks to having an MTRR related to B12, and B12 sufficiency. But that combination predisposes people to blood sugar irregularities.

Donna ([22:47](#)):

So, a lot of people, that's an awful lot of people.

Ritamarie ([22:49](#)):

It's like what 45% of the population has the MTHFR, the MTHFR alone predisposes people. It's associated with metabolic syndrome and insulin resistance on top of all the other things, you know, miscarriages and depression and all the other things that it's associated with.

Ritamarie ([23:09](#)):

So we really need to be looking at the signaling. It also affects insulin signaling mechanisms. Insulin needs to signal to the cells, Hey, let's allow the sugar in. The other one that's really important one is one called FTO that reduces the sensitivity of the cells to insulin. There's another one called LEPR which affects leptin, which interacts with insulin. And it also affects appetite. So if somebody is trying to follow an insulin friendly blood sugar friendly diet, and they've got this FTO gene, they're going to be looking at like, I can't control myself. How do I prevent sugar cravings? There's very much connected to people being obese and overweight. Exactly. Right, exactly right. And, and part of it might be that it affects the signaling.

Ritamarie ([24:14](#)):

So there's genes related to the uptake and the utilization of various nutrients. We know that magnesium is super, super important for helping the insulin carry the sugar into the cell. And there's a gene, and I can't remember the name of it, but there's a gene that controls the magnesium status in the body. Okay, so you have a gene that maybe makes you less able to absorb and makes the cells less receptive to magnesium. What do you do? You only add more magnesium rich foods. And if needed, you add a supplement of magnesium. And that solves that problem.

Donna ([24:52](#)):

Well, you know, there's different types of magnesium, there's magnesium glycinate, malate, taurate. Is there any particular type of magnesium, I know citrate wouldn't be one of them, or is there a combination?

Ritamarie ([25:10](#)):

I found most are affected to glycinate, but taurate can be too, and I gotta look at what else is going on. So if someone's having some gallbladder issues and they're having trouble with fat or they're having some sleep issues, they may have low GABA, taurate, magnesium taurate because it's combined with the amino acid taurine, which can be very helpful if they have some gut inflammation, if they have leaky gut. Zinc carnosine has been found that zinc carnosine, not magnesium, sorry, but zinc carnosine is another thing that's important. But the magnesium glycinate is the one that I most recommend when people are going through our program and supplementing.

Donna ([25:49](#)):

I think people need to know that the genes always have cofactors like you mentioned, and magnesium is important for quite a few genes actually - B6 is extremely important as a cofactor and lysine is a cofactor for B6.

Donna ([26:08](#)):

So, so very often you, you know, it isn't the gene it's the co-factor and you're deficient in B6 and you can get that from food or supplementation. But, the gene, you know, the gene isn't working right now because the gene is mutated or has a variant but because you're deficient in that cofactor too which is another thing to look at. Basically just want people that are listening to this for the first time to know that it isn't just the gene.

Ritamarie ([26:36](#)):

No, it's not. It never is just a gene. In fact, most of the studies show that, you know, 95% is epigenetics and 5% the genes. If you, if you have a gene that predisposes you to some, you know, deficiency in a biochemical pathway and you push that pathway. So let's just say you have a gene that predisposes you to having trouble with heterocyclic amines - that can be related to blood sugar imbalance because those are damaging.

Ritamarie ([27:05](#)):

They're decreasing the liver detoxification. Those are found in charbroiled meats, but also in exhaust fumes from cars. So if you are a smoker, if you are eating hamburgers, you are pumping your own gas and standing out there while other people are keeping their exhausts on. Even if you have a car and you put your car in the garage and then you shut the door, the fumes can leak under your door and into your kitchen. So there's a lot of things that we can do to decrease the impact of these genes.

Donna ([27:42](#)):

Yeah, so the thing is, getting back to what we said early on is diabetes is poly genetic. There's a whole bunch of genes that are being triggered, turned off very often, not just turned on but turned off. So the epigenetic, what can you do whether you have these genes or not, you're at risk.

Donna ([28:04](#)):

Everybody's at risk because of the way we live because the way we eat. So what is kind of just your program that you would put somebody on if they came to you and you knew that blood sugar was out of control, basically they didn't maybe have diabetes, that they're heading in that direction, insulin resistance, are there clues already that you're looking for that tell you that they're already insulin resistant and they're at risk basically?

Ritamarie ([28:30](#)):

Yeah. So when they tell me that every time they eat a meal, no matter how big and filling it is, they need to have something sweet to end it. When they are telling me that they're hungry in between meals, like they made eaten a meal and two hours later they're hungry again. When their waist is bigger than their hips or in women, more than 80% of their hips.

Ritamarie ([28:52](#)):

The waist hip ratio is a super easy one to look at, that they're heading there. And I call it pre insulin resistance because insulin resistance is actually a medical diagnosis and you have to have fasting blood sugar on at least three occasions of over a hundred. But a lot of people are in that state. They're in the limbo land. They may even have fasting blood sugar in the 80s but when (that was me), when they test in at what's called postprandial after meals, their sugars are going way up and coming right down. So there's a whole lot of tests that most docs don't know about, they only do with diabetics, hemoglobin A1C, insulin, C peptide. That can tell us if they're heading in that direction, actually a long time before they get to diabetes. So it's really knowing that, not necessarily that you have a family history, but look at your diet.

Ritamarie ([29:42](#)):

So the dietary factors are super important. So refined carbohydrates, even for some people, whole grains does it to them. So we have them test those and see, the sugars of course, all the different kinds of sugars. Some people, and I'd love your opinion on this too. I know you're interviewing me, but you're a pioneer in this. Some people are saying that Stevia will raise glucose and insulin. I haven't seen anything like that. And in fact, you know, the people that I work with, so we help them to satisfy their sweet taste craving while they're getting through this with Stevia or monk fruit.

Donna ([30:22](#)):

I am the person who brought the stevia rebaudioside into the world years ago. And what I know from years and years is that the green leaf is definitely, it seems very much, going to change your blood sugar. If you pull out the stevia side and the rebaudiana side which most of the stevia is actually rebaudioside, at least 80, 85% of it is the rebaudioside. Cause that's the tiny little molecule that tastes better. A little bit of Stevia. That molecule isn't doing it. You're not working with a plant. You're working with these little molecules. I think that's why it's so safe. I mean usually you never just put a drop of stevia on your tongue. You'll put it in something like lemon juice. Like, you know, like I have a glass of water here and I'll squeeze a whole lemon, half a lemon and then I'll put in maybe 10 drops of our Stevia and you know, you're not getting just Stevia, you're getting lots of water, lots of lemon. So, you know, I don't think so. I mean, I'm very, very sensitive to foods and particularly to sugars. I feel it immediately actually, and I've never personally myself, of course we're all unique. I don't think so. I don't see logically how it would.

Ritamarie ([31:42](#)):

I don't know about the plant either. Cause I've used the plant as well or the green, just dehydrated from that. There's no sugar in green plants. I mean virtually no sugar. Like it's like saying mint might raise your blood sugar or parsley might raise your blood sugar.

Donna ([32:01](#)):

And the plant has a very strong licorice like flavor. So people don't usually use it for a sweetener. But a lot of tea companies will use the Stevia in it crushed up. So there's the leaf dried and crushed in with the herbs, whatever, to sweeten it. And so I don't know. I'm not sure, but I don't think so. I mean I think that's why stevia is so safe. Such a safe choice. Cause it's not raising your blood sugar. It's not feeding yeast, for example, which is why I introduced it in my book back in 1994 after four or five years of getting it here and teaching people about it and I was looking for something that

Donna ([32:40](#)):

was really safe because you can't get, well if you have sugar in your diet.

Ritamarie ([32:44](#)):

You can't. So that's the basics. There's other things in the diet, right? You know, hydrogenated oils, they will damage the cells, oxidize oils. That doesn't mean hydrogenated in the plant. That means you take, you know, a jar of corn oil and you start to saute with it. You've created oxidized fat and it's damaging in the body. But there's more than just diet. Even in a healthy person, one night of bad sleep can cause insulin resistance the next day. Now, if that person goes back and starts sleeping again, that's fine. But what that says to me is if you've been up all night with a sick kid or studying for an exam or you know, meeting a work deadline, don't eat anything with sugar or high carbs in it the next day because your body's not going to be able to handle it.

Ritamarie ([33:30](#)):

So sleep is super important. And then you figure, most people who are chronically sleep deprived and that's contributing to hypoglycemia, hyperglycemia, insulin resistance problems.

Donna ([33:41](#)):

You know, I also, like you, have a whole bunch of genes that predispose me to diabetes. We don't have it in our family, but, I used to sometimes get a little skin tag right here (points to neck) and some are on my neck. And Dr. Jonathan Ryan said well that's a sign of insulin resistance. I thought, well, I never eat sugar, so why would I have that? And so I did some thinking and, and it really boiled down to the fact that I was eating sugar, cause I actually need a little bit of complex carbs myself personally, especially to sleep well. But it wasn't that because I had sugar in my diet, it was cause of stress in my diet.

Donna ([34:21](#)):

So let's run with stress, that may be number one, that and sleep, maybe over diet.

Ritamarie ([34:28](#)):

Yes. I think stress is our number one cause of disease. I call it sympathetic overload. We're constantly under stress. The body's constantly producing cortisol. Cortisol is a hormone that is intended to help us to run away from hungry tigers. And so what do you need to run away from hungry tigers? Strong arms and strong legs. So what do you need to power those? You need sugar. So cortisol's job is to go find

sugar, release it and have it in the bud, which raises the sugar. And then the insulin goes, Whoa, I gotta take care of this. The pancreas secretes insulin to try to take care of it. So we create insulin resistance from stress. The thing is, most of the stress is sitting in our jobs, sitting at the desk.

Ritamarie ([35:12](#)):

We're not running away from tigers. We're just sitting here going, I just read the stock report. I'm really, you know, stressed out about it. So we need really to look at stress. And I think sympathetic overdrive is the main cause of almost every disease and it causes us to binge eat. Cause you go, I'm stressed, give me a bowl of broccoli. When have you ever heard anybody say that? No, give me a bowl of ice cream, give me the M&M's because that stress, we're requiring more sugar and we crave food. So I think that stress is super important and I teach people how, you know, do many meditations throughout the day. Heart math, which is an invaluable tool that you can do in 30 seconds. Cause like, you know, we're busy people and I don't have the time to sit for an hour in the morning and an hour at night to meditate. Nor am I able to quiet my mind for quite that long. So I do mini meditations throughout the day.

Donna ([36:09](#)):

Give us an example of a mini meditation, cause I'm sure you're speaking to a lot of people that think, well that's me, I know I should meditate but I just can't sit still long enough. I've got too many things to do.

Ritamarie ([36:20](#)):

Three minutes.

Ritamarie ([36:21](#)):

Okay.

Donna ([36:21](#)):

Okay. As in three minutes. Okay.

Ritamarie ([36:23](#)):

I can do a three minute meditation and I can just sit there and breathe and do simple meditation technique for three minutes. One minute even is going to make the shift. With heart math, it's a little different. You can do it in a minute. We're looking at the combination of deep breathing and appreciation, so instead of quieting the mind completely, we're bringing back a memory of some place where we just felt cozy and nice and we go into an appreciation state. Maybe you have an appreciation for your goldfish. Whatever you have appreciation for and you just shift your body. You have to stop. You have to breathe your focus on your heart

Ritamarie ([37:09](#)):

and just that quick, I can feel my neck releasing, my shoulders releasing and I can feel the shift into parasympathetic. Parasympathetic is the part of the nervous system where we heal, where we, you know, we digest, where we reproduce, where we detox, all those things happen. We're in parasympathetic mode, so we want to be in that. The Vegus nerve has gotten a lot of press lately. There's a lot of books on the Vegus nerve, the healing power of the Vegus nerve, biggest nervous part of that parasympathetic and it controls the heart, lungs and the digestive tract. And when those things are

not turned on, it affects cardiovascular disease, it affects breathing, people get asthma, digestive stuff. So we need to really get ourselves in parasympathetic as much as we can.

Donna ([38:02](#)):

Actually I had an experience with that earlier today. I had a spiritual teacher tell me years ago that the way to handle stress is to be absolutely grateful for everything that happens to you. So sometimes that's hard to do. Like this morning a pipe burst into the sink and water went everywhere and then, you know, how can you be grateful for that? I had to stop everything and handle the flood.

Ritamarie ([38:30](#)):

I'm grateful I was not away when this happened.

Donna ([38:33](#)):

That's exactly what I thought. I thought, well God, I was here and thank God I got to immediately. So there's a lot of water. But I got to it and I started dealing with it and people came up immediately and there was things to be grateful for. But I try to practice that all the time because I am one of those people that juggle too much. That's my personality and I create stress. So I think that that's really important. So that triggers your genes. Now, do have you been up on the studies about, I'm trying to remember. I was actually trying to find it cause of the flood. I didn't find it. You know, there's a study where the the grandfather has a metabolic syndrome. He's fat and he has terrible diet and everything and then they find out two generations down the granddaughters get diabetes.

Donna ([39:22](#)):

But the inheritance factor, so what are we doing to our future generations? Because we're really out of control right now with our blood sugar, whether we have good genes or not, you know.

Ritamarie ([39:32](#)):

Epigenetic factors are passed down. That's the thing that people don't realize that if I've got this sugar binge, right and that's what I eat and I have these genes and then I have a baby, that baby is going to not just get my genes, they are going to get my epigenetics.

Donna ([39:49](#)):

And so what was surprising I think to the researchers is that it's not even the next generation, but the next generation after that. So it's a long lived change, you know. And another thing I hear all the time is, well, our genes are fixed, but our epigenetics are everything. But actually I keep reading about how our genes can change.

Donna ([40:13](#)):

You can actually, they can actually get altered. And there's a great book out, about exactly about that. I can't think of it. I have it in my Kindle, but, it's about how we are evolving ourselves. We are absolutely creating new generations to come. We don't know what they're going to be like.

Ritamarie ([40:34](#)):

Maybe we need 6 fingers. Maybe that gene will suddenly become dominant because we need that sixth finger.

Donna ([40:41](#)):

Or we made a mistake and like vitamin C, we used to make vitamin C once and now we don't. So, you know, who knows. I mean, I always feel responsible for future generations. And I know, the company, seventh generation that makes the cleaning products, for example, that's where their name comes from because the American Indians, women would get together. They actually were their council members. Not that the men like you always see on the movies, but they were the chiefs and they carried everything out. But the women in all these different tribes would meet and they'd, you know, come up with these ideas of how we can live long together and, they always thought seven generations down the road, which is where the company's seven generations came from, the name of it. And so I think we should be doing that. You know, it isn't just now and us, it's what are we to the future.

Ritamarie ([41:34](#)):

I think that's important. And I think the millennials are seeing that cause they're going, what are you guys doing to this world? We are going to have to live in this world. You're gonna be gone and we're going to living in this world.

Donna ([41:44](#)):

Yeah, the millennials are different. I think things could really change in their generation.

Ritamarie ([41:47](#)):

I agree with that and I just want to mention two genes that people should be aware of if you do genetic testing because if you have these two genes, it's really important that you get your blood sugar under control that you start to measure and you start to look at it. One is GLUT2 and that affects the receptors and it's the cell receptors, that's what insulin has to bind onto. So I think that's really super important. Then the other one is IGF1 one and that's insulin-like growth factor one.

Ritamarie ([42:23](#)):

If you look and you know I have both of those genes, you know I have a snip, whether it's heterozygous or homozygous, I don't know if you talked too much about that, but for one parent yellow on the reports are two red on the reports. It's something to be looking at and it's something that might explain why your neighbor or friend can eat the jelly beans and their sugar doesn't go up. And yours does. We have someone who her sister can eat all this stuff and her sugar doesn't go up and she's like eating carefully and her sugar goes up. So it's like the luck of the draw, right? The ovarian lottery. What you got?

Donna ([43:02](#)):

I always think that because some of these beautiful movie stars because you can see, I think a lot of them take care of themselves cause they have to, but some of them don't.

Donna ([43:10](#)):

And they're right there with their Coke and I think how come she looks so beautiful and be so healthy and have that great body and she's eating that way. So they're probably the lucky ones that got the good genes.

Ritamarie ([43:21](#)):

That got the good genes, yeah but there are like 40 or 50 I don't know how many you've discovered with relationship to it. I know about probably about 50 of them and they're all in my pages here, so.

Donna ([43:33](#)):

Great. Well thank you so much. I think that this might be a good stopping point - if there's anything else you want to say, but most of all I want you to tell people about yourself so they can find you. I honestly think that sweet spot course is a genius thing, that's a really needed thing for people to learn how to find about themselves because you won't, maybe you won't get your genes tested, maybe you feel like you're wasting your money or you don't want to know for whatever reason, but you should know what have you raised teaching in this course.

Ritamarie ([44:05](#)):

So it's an excellent course.

Ritamarie ([44:08](#)):

We're going to be running it and we run it every spring live, but then you can do it evergreen anytime you want. People like what we do at live because they get on live calls with me and they get to ask questions and we've had some amazing results. I mean, people who are diabetic, three or four years, didn't want to go on medication, but their blood sugars were running in 180's-250's, and within a couple of weeks literally called up crying because they saw their first blood sugar under 100, like serious stuff like this happens all the time. So it's TheSweetSpotSolution.com. I'm at DrRitaMarie.com. I'm passionate about helping people to manage their health, to take away the, the role of taking charge of your health from the medical community and the drug companies into your own life. Yeah, there's times we need drugs, there's times we need surgery, you know, trauma care, et cetera, but we have control and every choice you make matters in every moment. And when we make the choice to consume good foods, we contribute to how we feel and how we look and how we act and, and how we show up in the world. So I'm very passionate about this stuff.

Donna ([45:20](#)):

Well, I mean, I think actually controlling blood sugar and not becoming insulin resistant and developing diabetes is very, I love the course because it's, it's how a person can find out about me. Even if there are genes that say, okay, I'm at risk, but what about me? How, how well am I doing? Am I living, eating, sleeping, and so on in a way that my blood sugar's in control or I think I'm eating well and I'm not doing such a good job, you know? So I really think that's a brilliant gift to the world, I guess you would say.

Ritamarie ([45:55](#)):

And we have a version of it for practitioners. So if you're a health practitioner, nurse, doctor, health coach, et cetera, and you want to be able to teach this to people, we have the insulin resistance practitioner training.

Donna ([46:06](#)):

Great. That's great too. So thank you very much. I see your book in the back background in Unstoppable Health and I know you work hard. I know you were diligently, you're just passionate about what you do and about helping people. So thank you for that. And for being on the summit.

Ritamarie ([46:22](#)):

Thank you so much for inviting me.