Introduction and Guest Welcome

Welcome to another episode of the Miss and Autoimmune, summit. I'm Doctor Who was your host. And our next guest is Doctor Rita Marie. Lozano, the founder of the Institute for Nutritional Endocrinology.

AI is partially committed to transforming our current broken disease care system into a true health care system, where each and every practitioner skilled at finding the root cause of health challenges.

Doctor Rita Marie specializes using the wisdom of nature to restore balance to hormones, with a special emphasis on thyroid, adrenal, and insulin resistance.

And, you know, that's really important because we have an epidemic of unrecognized insulin resistance that, accelerates the disease course for those people who have multiple sclerosis and a systemic autoimmune disease.

So welcome. Rita Marie. We're so glad to have you. Okay. Doctor. We. Marie, look. How so? I've kind of been practicing. See you in your last. I to tell you my name. It's a hard one.

So I say it, correctly. So let's talk about why blood sugar is such a problem for so many people. And why blood sugar is so important for people with multiple sclerosis and other systemic autoimmune issues.

Yes. So why is it a problem for so many people that would go back to the standard American lifestyle, the standard Western lifestyle? People are eating too much processed foods, too much ultra processed foods, too much refined sugar, and even the ones that aren't eating too much of that are also exposed to toxins in the air, in the water, in the food, etc..

What Insulin Resistance Is

And those things are damaging their body, and they're basically damaging the cell receptors for insulin. So they develop insulin resistance really early on.

And there's so much more. I mean, let's explain insulin resistance, to our listeners. Yes. So insulin resistance is let's just step us, take a step back to in what insulin is.

Insulin is a hormone most people don't even realize that insulin is a hormone. It's a hormone secreted by the pancreas. And its job in life is to help glucose get across the cell walls and into the cells, so that the mitochondria can turn it into energy.

Right. That's basically what it does. And when we have an influx of sugar through the digestive tract and almost everything gets broken down into sugar, even if you're not eating table sugar, it gets put into the bloodstream as glucose.

Then that glucose triggers a response. Actually, it triggers it when it's still in the gut to say, hey, glucose is coming, get ready, insulin, get secreted.

Now, once we get to a point where we're eating too much sugar, sugar all the time, the processed foods, the starches, the breads, the passes, the cakes, etc.

then we're getting an influx of sugar constantly, and especially people who eat like they've been taught to eat, which is great. Eat every couple of hours, right?

And so there's this constant influx and insulin keeps getting called to the ready, called to the ready. And after a

while the cells get inundated. The cell receptors don't work so well anymore.

And insulin can't get the sugar into the cells. So we end up with a situation where we have high insulin and high glucose, which causes a problem. And that answers part of your second part of the question, which is why is it so important to know auto immune?

We know that an auto immune condition. So there's a lot of inflammation in the body. And when we have this constant influx and attempt for insulin to get into the cells, we do create inflammation.

Yeah. And the research tells us that if people have insulin resistance or metabolic syndrome, prediabetes or diabetes, they are, have a shorter time to job loss.

So you lose employment more quickly. You need a cane walker or wheelchair sooner. You're more likely to need, early assisted living in nursing home care.

So all of this accelerates the rapidity of your decline. And unfortunately, many neurologists are not checking your glucose, your hemoglobin A1, c, and they're not looking to see.

Are you developing this insulin resistance, this, prediabetes or metabolic syndrome? Absolutely. And, you know, you missed one one lab there that they're not checking.

That's the earliest indicator that we're heading in that direction. And that's insulin. So most doctors don't even look at insulin in the blood until you are diagnosed with diabetes.

And then even then with type ones, they check it to make sure they're giving them the right amount of insulin. But most of them aren't even checking insulin.

And it's actually going to give you a, hey, we're heading in that direction 20 or 30 years before the problem develops. Okay. So if we're going to check insulin, let's help our listeners understand.

What the insulin value should look like. And, you probably pair it with glucose. Yeah. Everybody goes though. Right. But yeah. So our listeners, if we, if we pair an insulin value and a glucose value, what should they look like?

Why High Insulin Matters in Autoimmune Disease

So glucose ideally fasting glucose is what is typically measured. Ideally fasting glucose is somewhere between 80 and 90, 80 to 88 82 to 88. We can get as narrow as we want.

And then the fasting insulin should be between 2 and 5. Unfortunately, the standard blood, ranges at a lab test are much higher, much broader than that.

So they're not catching the nuances of, hey, we're heading out of this optimal range and we're heading in that direction. Yeah. You know, the, I believe the American Diabetes Association says, if the insulin can go up to 20 fasting and up to 25, and when it's over 25, then we're thinking, okay, your diabetic, and.

We don't want to wait for you to be diabetic. No, no. And, you know, it's interesting. I was just looking in a study recently that the glucose, the fasting glucose just very gradually builds up.

It's one of the last things to actually be a sign that you have diabetes or prediabetes. It goes up slowly, but the insulin values are going up at a much steeper curve.

So if we start to measure the insulin and, you know, say you take a 20 year old who has perfectly normal glucose and assuming perfectly normal glucose, perfectly normal insulin, and you follow them over time, you're going to see that the glucose looks good.

So if all the doctors are checking is the fasting glucose, they're not going to catch it until it's too late. But as you start to see that insulin calm and insulin has its own really negative repercussions when it gets too high, then we start to see, oh, this person's heading down the path to metabolic syndrome.

This person is going to be in trouble in the next five, ten years. So when the insulin becomes high, what are the negative consequences of the high insulin?

Oh, there's lots so high insulin. Insulin is a an anabolic hormone. So it causes the storage of body fat. It turns off the breakdown of fat, and it turns on the storage of fat.

So people who are going, I'm just not eating all that much and I'm gaining all this weight. What the heck is going on? That's because they're eating in a way that causes high levels of insulin, and they're going into fat storage versus fat breakdown.

It also elevates the blood pressure and it it interferes with magnesium and it increases our need for being on interferes with magnesium. In what way?

In what way? It causes an increased need for magnesium. Because magnesium is one of the co-factors that help get the sugar into the cell. So it helps with the insulin to be able to transport glucose into the cell.

So we're using it up at a much more accelerated rate. It also increases the excretion of magnesium and the retention of sodium.

Ideal Glucose and Insulin Ranges

And that combination amongst other mechanisms, will cause the body to go into a hypertension mode, high blood pressure. And that's a huge problem these days.

And that's part of the metabolic syndrome, right. High blood pressure, high lipids, high glucose. Yeah. Yeah. And it's also going to create problems with vitamin D because you need, magnesium to have your vitamin D function.

Exactly, exactly. Yeah. It causes increased appetite. It causes people to be hungry after a big meal is eaten. So then they eat too much, causes sugar cravings because the body's saying, I got all this insulin, but not enough sugar in my cells, and we're craving to replenish that craving to have the fuel to be able to make our ATP, which is the energy currency of the cells.

So what are, for our listeners with multiple sclerosis? Yeah. What, and this could also apply to other systemic autoimmune problems, that have a, neurologic or psychiatric symptoms.

Are there any symptoms that would make them should make them wonder, is insulin a problem for me? Yeah, there's a number of them. And, one would be that appetite.

Like I'm still hungry after I eat a meal. I just never get satiated. Tiredness. Right? Exhaustion. People think it's just, like, normal to get tired at four in the afternoon.

Difficulty focusing. That would be a neurologic type thing, right? Difficulty focusing? Brain fog. We sometimes call it, memory problems with memory, and we find that high levels of insulin and insulin resistance when it develops in the brain affects the hippocampus.

And that's responsible for taking short term memory into long term memory. So you start to forget things. And we think it's a senior moment just because we're whatever over 50, over 60.

But in reality it could be early signs. The other thing, and this is more related to like Parkinson's and Alzheimer's as early symptoms, but I believe that it's something that's a trigger that we should be thinking about.

Is constipation right. Constipation. Even when eating a good high fiber diet, because the neurology of how it affects the brain can affect, you know, because it can create the, the disadvantage or the inability to really control the, the neurology and the gut microbiome gets changed.

So, insulin resistance, you talked about, fatigue focus, brain fog. These are very, very common symptoms for people with, M. S., in the longer that they have the Ms..

Symptoms That Suggest Insulin Resistance

It is probably also very common for people with a systemic autoimmune disease that they're going to have issues with fatigue. They may have anxiety, difficulties focused, memory.

Are you trying to say that everybody's probably has an insulin issue, or we should consider that, I would say, and the studies show 93% of the population has a problem, a metabolic problem.

So, yeah, I would say almost everybody has it. And with it's an early sign and a lot of people have it in, they're just told, oh, you know, just drink more caffeine, get more sleep, whatever.

And it's really just that's doing them a disservice for not digging deeper into seeing. And a simple blood test, a simple 15, $20 blood test called insulin can give you that information.

A simple test like what's called postprandial glucose, not just what it is in the morning, but how do you respond to your to your life, to your foods, to your stressors?

Two days you don't sleep versus days you do sleep. And then we get to look at how can we control the glucose level and keep it relatively steady so we can control those insulin levels. So, so our listeners, you likely have issues with insulin.

Ideally go get an insulin level or at least at A1 c so that we can begin to unravel that. I do tell my, listeners, many of you will at least have a fasting lipid.

You could go back to electronic medical records if you've had a fasting blood lipid, and then look at your triglyceride level, your HDL cholesterol level.

That's a ratio. You know, if that ratio is four or higher, that is really consistent with insulin resistance. If and the ideal number that I would like to see my patients at certainly less than three.

And it's you can get it down to two that's even much better. Yeah. And I try to get them down to 1 or 1 and a half, because that's where the studies show that you're in the safest on.

So even if you, if you, even if you can't get a fasting insulin, you know, I predict all of you have a fasting lipid. So you could go look at that ratio.

And is it for 321.51. And that will tell you a lot. So people have they're going to go check their ratios and they'll go like well shoot. Mine is not where I want it to be.

So what what's the next step? Well, the next step is an overhaul very similar to what you teach with people getting their bodies balanced for, you know, dealing with an autoimmune condition or multiple sclerosis.

And they need to have good nutrition. So they need to have a plentiful a diet plentiful in nutrients, which would be a lot of veggies. The low glycemic, getting rid of the sugars in the processed foods and the high fructose corn sirup and all the obvious things, but also getting the grains out.

Maybe whole grains as, you know, I don't know, some people deal with quinoa just fine, but they just don't deal with the other, you know, the processed grains, which is usually in the crackers and the cookies and the breads and all

that and pastas.

Diet Changes to Lower Blood Sugar

So replacing those and there are good, easy replacements for all of those things that are more low glycemic, higher and protein and higher in nutrients.

Why don't we explain the term low glycemic, high glycemic sugar? But our audience doesn't know. That might not know. Yeah. So when I say low glycemic hypoglycemic, it has to do with the carbohydrate content of a meal of a food.

So for example, if you eat, broccoli, it doesn't have the potential to raise your blood sugar very much because it's a low carb, high water content, good source of protein, good source of minerals, no fat.

And it's not going to raise your blood sugar. So it's the blood sugar raising potential of a food. If you eat a piece of candy, you're going to get pretty rapid increase in that.

And then there's foods all the way in between. So a banana and an apple may do a different job on it. An apple a green apple might be considered a lower glycemic food.

Not completely low, but lower. But a red apple might be considered high, whereas bananas and papayas and mangoes might be considered high. And they have the potential to raise your glucose very high, which means it's going to cause a surge of insulin in the system.

So picking the non-starchy vegetables, lettuces, kale, cabbage, peppers, these would all be, cauliflower broccoli. These will not raise your blood sugars.

But then if we get to the starchy vegetables, potatoes, yams, there's more starch there. And that those have the potential to raise your blood sugar much higher.

Yes, yes. And everybody's a little different, which is why I recommend either a CGM, a continuous glucose meter, or just getting a little, you know, prick, prick your finger and test your blood sugar and see how these things go, because everybody's a little bit different.

And it's based on your genetics. It's based on your stress levels, your sleep levels. It's based on a whole bunch of factors. There. Could we talk about, you know, the microbiome impact?

Blood sugars. Yeah. So huge. So, you know, imbalanced microbiome can throw off the blood sugars. Imbalanced microbiome can lead to certain cravings that will then cause you to eat certain foods that are going to affect your blood sugar.

There is just this feedback loop from the microbiome, and, you know, get in the bloodstream. They secrete certain kinds of chemicals and we see a big difference if somebody's balanced versus if they have a whole big yeast overgrowth or an overgrowth of of organisms that are munching and looking for for sugar.

So that has a big diff, plays a big role. And what about Aquaman's here? You the philia? Yeah. It's got a lot of press these days. And Aquaman, she has a very important a bug that tends to be lower in people who have less of a high veggie type diet.

People, need it to keep the blood sugar balanced, to keep the the microbiome balance. And it also is involved in everybody's been hearing about lately GLP one you know about all praise right.

And romances can help the body to produce more of the GLP one which then helps to control insulin levels, glucose levels and appetite. So it's super important. Now it's acromion.

C is one of those things that it's not just like more is better, because you can get to a point where if the acromion is too much, so if you're supplementing it, you do have to watch, because if it gets too much, those arc romances will eat up the the mucus lining of the gut and can create, you know, a barrier problem which could lead to something like a leaky gut or intestinal permeability.

And intestinal permeability is one of those things that contributes very greatly to autoimmune diseases, because we don't have that barrier protecting the inside worlds from the outside world.

And a lot of the stuff that should be filtered away and pooped out ends up in the bloodstream and causes an immune response.

Microbiome, Fermented Foods, and Gut Health

Okay. So, we've we've talked a lot, it's important to measure, get a sense of where you're at. Everybody, when you're done, go look at your lipids, check your ratio.

Like, okay, I gotta do something. If your ratio is too high, lower the, carbohydrate content. So get rid of the sugar. Get rid of the white flour based breads, pastas, cereals, more non-starchy vegetables, berries would be good.

You can sort of think about how many how much fruit you can have. It depends on where where your ratio is. Your microbiome. You could check your microbiome.

You could, What do we do about the microbiome? There's a lot you can do with the microbiome, right? So one is fermented foods. That's the obvious one.

We eat fermented foods or take probiotics. I personally believe that by making your own fermented foods or buying fresh made fermented foods is going to be a lot better than buying a strain of microbes.

Probiotics that you. It's minimal mix limited. Whereas with foods are widespread and diversity of the microbiome is super important. I was just interviewing somebody recently and she was talking about some of the things that we all think about for improving the microbiome, which is getting out in nature more going barefoot outside, hugging trees.

Things like that, to increase our exposure to the good microbes in the environment. So there's a lot of things you can do to improve your microbiome to your foods.

Like that's a huge one to your foods, to your spirits. So more so many people are just bolting down their food. And when you bolt down your food, you're not chewing it fully.

You're not extracting all the nutrients that you need in it. You get undigested food particles going down and aggravating the gut lining, which then can predispose you to intestinal permeability issues and increased by the bugs that you don't like.

So chewing your food, basic eating in a parasympathetic state, meaning a calm and restful state, right? Calming yourself before each meal. Huge difference in how your body digests its food and how your microbiome flourishes.

So, do you have any favorite tips on how to calm yourself before your meals? You know, it goes back to when I was a kid. We always laughed at the family.

We'd have us do grace before meals, right? We had to also calm down, you know, give thanks to our food and you can do something like that. Whatever religious background you have, it's not a religious thing.

It's more of a of a physiologic thing that helps support your health. So you basically stop before you eat. You don't just take your tray and sit in front of the TV and gobble down your food.

You sit and you appreciate you appreciate the source of the food. You appreciate that you have beautiful food on

your plate. You give some thanks, you to a few deep breaths, and then you calmly eat and chew each bite slowly and carefully.

And it's great. It's an easy way. It's free. Not necessarily easy, right? Because people are not used to that. But it's a free way to help improve your microbiome.

Excellent, excellent. You know, and if you are getting fermented foods in addition to the probiotic bacteria, the get the viruses that were infecting the bacteria.

Those are called bacteriophages. You also get the probiotic yeast that were part of that. Fermented foods. And and you I think that's why, more these trials that show the fermented foods have so many health benefits above and beyond, what a single probiotic, capsule may have.

Absolutely. And think about that. It's microbiome diversity that's super important. Right. And how many bugs can they put in a capsule that you can take in the morning.

We don't have the ability to even extract or, or caps encapsulate very many of them. There's thousands of them in the system. And when you take a cabbage and it's already got its own microbiome, so to speak, on it, and all the organisms there, and then you fermented.

Those are growing and more things are growing in there. And it's good stuff. And it makes, makes the gut bugs very happy. The ones that are already there to have good company.

Right. To the company. Yeah. And it's a fun family activity. Very fun. If you, make your fermented food with your children or your grandchildren, and then they can see the evolution of the ferment, over the next week or two weeks or through expand how long you're planting things.

It's super fun. And you can do that with your cabbages, your vegetables. You could do that with your nut milks. And if you tolerate, dairies, you could also do it with, other dairies as well.

Yeah. You can even do it with some of those higher glycemic starchy vegetables and make yogurts from, say, sweet potatoes. Right. And it decreases the sugar content.

So you make a yogurt from a sweet potato. You basically cook the sweet potato period down, add some sort of starter culture to it, and let it ferment like a 24 hours, I think, for a yogurt.

And yeah, we're going to be doing a lot about why I have people that know more than me about that. They teach it in my programs. But yeah, that sounds that sounds pretty interesting.

I'll have to give that a whirl. Yeah, you can do it with almost anything. Look up yam gourd. I think I have a recipe for it on my blog. I will check that out.

That sounds, really quite fun. So let's take a little, with, a few moments continuous glucose monitors. How do people get them? Why should they get them? And, what would that look like?

Yes. So up until a couple of months ago, I would have said, you have to get a prescription from your doctor.

Continuous Glucose Monitors and Testing Options

You have to go through a third party company like levels or a health or, there's a few others because they were prescription only. And then in the last few months, Abbott and, Dexcom are the two companies that make them.

They decided to create over-the-counter versions of them. So you can actually go there to the Abbott or Dexcom website, and you can order a CGM and it's great.

Or ask your doctor to prescribe it. The cheapest ways usually have your doctor to prescribe it, take it to the pharmacy and see if you can get them to give you a coupon.

A lot of them have coupons for them, but basically that's it. You either go to your doctor, you go to a company like say a health or levels, or you go and check out Abbott and Dexcom for their new over-the-counter versions.

Oh, excellent. Excellent. You know, and I think this is a tremendous resource. We have, what I, I last, think it was 93 million people here in the US with metabolic syndrome.

There's an even greater number with insulin resistance. I don't know those numbers, but I do know every year it's quite a bit larger. Yes. So there's a study posted by, University of North Carolina in 2018 and said that 88% of the population didn't pass the criteria for minimum metabolic health, and it was a simple criteria.

And in 21, 2021, they went back and did it again. It's 93%. So you have to be in that upper 7% of the healthiest people on the planet to not have some degree of insulin resistance, or I call it pre insulin resistance, and it's not a medical diagnosis, but I call it pre insulin resistance because there are signs that you can tell you're on your way but you're not quite medically diagnosable.

So it's huge very huge. It is huge. And the average American is having over 300g of carbohydrates every day. The Mediterranean diet has about 125g of, carbs.

And for most Americans, those are high glycemic index carbs. They're sugars. They're white flowers, breads, pastas and cereals. And, what is shocking for adults, 60% of our calories are coming from sugars and white flowers.

And for our children, it's 70% of our calories. Coming from sugars are white flowers, which is why so many children have so many chronic diseases now.

So many adults have chronic diseases because we are nutritionally starved. Yes, know we don't have enough protein. We don't have healthy fats, we don't have enough vegetables and berries in our diet.

Right? Absolutely I see no.

Metabolic Health Statistics and Closing

Okay. Well, doctor reader Marie Louise Kelso, how am I doing? Good job. Okay. Very good. So how do people find you? And. Well, first, are you still seeing patients?

I see very few people, 1 to 1. But I have programs where I train. So I have a an institute where I train health practitioners is called the Institute of Nutritional Endocrinology.

And my practitioners, then we put together programs to take people through all of the diet changes, checking all of the lab testing, etc.. So, yeah, and I take on a small number a year to keep my fingers in the pot and, yeah, to be able to report back to everybody how that's going.

And so, the listeners are probably quite intrigued. I think I got a tune up my, insulin levels. How how do they find you? Yes. So if you are interested in helping yourself, my website is Doctor Rita marie.com, but my website for practitioners is I and e method.com.

Why don't you repeat both again? Yes, doctor. Rita. Maria's doctor Rita Maria Rita maria.com. And then the other one is I animated.com. Okay. Well thank you so much.

And this has been wonderful. I so appreciate you. Thank you so much.