Introduction and Jennifer Woodwardu2019s health journey.)

Most of us Most of us get the get the same same same blood tests every year: fasting glucose, blood tests every year: fasting glucose, cholesterol checks. You do a cholesterol checks. You do a basic metabolic basic metabolic panel, and if panel, and if the results are within the results are within normal limits, the doctor says normal limits, the doctor says you are perfectly healthy.

you are perfectly healthy. But “norm” is not “ optimal.” The norm does not optimal.” The norm does not indicate whether indicate whether your mitochondria are working efficiently your mitochondria are working efficiently, whether, whether you have signs of you have signs of metabolic dysfunction, or whether metabolic dysfunction, or whether your aging is accelerating your aging is accelerating even before the even before the first symptoms appear. This is where first symptoms appear. This is where functional functional functional laboratory tests laboratory tests radically change radically change the situation. Today we're the situation. Today we're going to talk about going to talk about real data that real data that most doctors don't most doctors don't ask about, and ask about, and how it can how it can predict and predict and prevent prevent prevent health problems that health problems that shorten your shorten your life. My guest life. My guest today is Jennifer today is Jennifer Woodward, a Woodward, a functional functional functional diagnostic diagnostic diagnostic nutrition practitioner with over nutrition practitioner with over a decade of a decade of a decade of clinical experience clinical experience and and and founder of Jennifer Woodward founder of Jennifer Woodward Nutrition. Jennifer has a Nutrition. Jennifer has a master's degree in master's degree in integrative integrative integrative nutrition. She is a nutrition. She is a certified certified functional functional wellness coach and wellness coach and has helped over 1,200 has helped over 1,200 women navigate women navigate perimenopause.

perimenopause. perimenopause. Today we will Today we will expand the topic and expand the topic and talk about talk about functional functional functional testing as a testing as a longevity tool for everyone: longevity tool for everyone: doctors, doctors, doctors, health-conscious people, and health-conscious people, and even biohackers. We'll even biohackers. We'll dive into which dive into which tests really tests really matter, what they matter, what they say about your say about your biological aging, biological aging, and how to read the data that and how to read the data that matters.

matters. matters. Jennifer Woodward, Jennifer Woodward, welcome to welcome to our program. Hi Jennifer, Hi Jennifer, welcome to the show. Thank you, Dr. Jones.

Thank you, Dr. Jones. I am very happy to be here. I am very happy to be here. OK. I'm happy that OK. I'm happy that we were able to we were able to chat. I chat. I want to get right to the want to get right to the point because you have a point because you have a fascinating story and fascinating story and you're doing incredible you're doing incredible work in the area of work in the area of optimizing health optimizing health and longevity. But and longevity. But everyone has their own everyone has their own beginning story, beginning story, right? Unless you've been saying, "Mom, I want been saying, "Mom, I want to be a to be a functional functional functional nutrition practitioner" since you were four years old. But I don't nutrition practitioner" since you were four years old. But I don't think it was think it was possible then. So possible then. So tell us about your tell us about your journey to health. How did journey to health. How did you get to what you you get to what you do now?

Yes, I wasn't that Yes, I wasn't that developed a child. I developed a child. I always thought I always thought I only wanted to be a mother only wanted to be a mother and a wife. So the path and a wife. So the path that brought me here was quite interesting.

was quite interesting. When I was When I was about 30, I about 30, I had four had four children in 6 years, and my children in 6 years, and my health just health just fell apart. I've always fell apart. I've always been a type A person,

been a type A person, always energetic. I've always energetic. I've always been able to always been able to handle a lot of handle a lot of stress, but at 30 stress, but at 30 with four with four kids, I just kids, I just couldn't do it anymore couldn't do it anymore. However, I didn't. However, I didn't realize this was realize this was happening because I happening because I had been used to living like this for too had been used to living like this for too long. So, long. So, everything started to everything started to fall apart after the fall apart after the birth of my birth of my fourth child.

fourth child. I had terrible I had terrible insomnia, almost insomnia, almost panic attacks at night panic attacks at night because I couldn't sleep. because I couldn't sleep.

This lasted 9 months. I could This lasted 9 months. I could n't lose weight. n't lose weight. My hair started falling out My hair started falling out. My energy. My energy was at zero. My was at zero. My mood, of course, mood, of course, suffered too. My skin suffered too. My skin and nails became so and nails became so dry and brittle. I dry and brittle. I just felt like, "What the just felt like, "What the hell is happening to me hell is happening to me? I don't understand? I don't understand what's going on. I can't what's going on. I can't be a good be a good mother. I can't be a mother. I can't be a good wife. I can't good wife. I can't take care of these take care of these four little four little kids when I feel like kids when I feel like my body is just my body is just completely, you know, completely, you know, destroyed." And, of course, like many people, I, like many people, I went from doctor to went from doctor to doctor. I was at my doctor. I was at my gynecologist. I went to a gynecologist. I went to a local local local chiropractor.

chiropractor. chiropractor. I went to a I went to a therapist. I worked therapist. I worked with several online coaches. But I coaches. But I didn't really know didn't really know what I was looking for, and as it what I was looking for, and as it turned out, neither did they.

So I was offered mood-balancing pills mood-balancing pills and Prozac because I and Prozac because I couldn't sleep and I was, you couldn't sleep and I was, you know, completely know, completely confused with confused with anxiety and depression.

And I thought, "You know And I thought, "You know what? I know I'm kind of crazy right now what? I know I'm kind of crazy right now, but, but I don't feel like that's the I don't feel like that's the main problem. I main problem. I feel like there's something something deeper going on inside my body." And so, I'm a woman of deeper going on inside my body." And so, I'm a woman of faith, and I always faith, and I always feel like God feel like God led me to led me to functional functional functional diagnostic diagnostic diagnostic nutrition, because, as nutrition, because, as luck would have it, one day at 2 a.m.

luck would have it, one day at 2 a.m. I'm back on YouTube, I'm back on YouTube, searching for: "What the hell is searching for: "What the hell is wrong with me wrong with me?" on YouTube, and?" on YouTube, and this video comes up of a this video comes up of a woman who called woman who called herself a herself a functional functional functional diagnostic diagnostic diagnostic nutrition practitioner. And when nutrition practitioner. And when she was listing the she was listing the symptoms that she symptoms that she works with her works with her clients, I was like, " Yeah, yeah, my God, Yeah, yeah, my God, wow, that's about me." wow, that's about me." So for the first time in a very So for the first time in a very long time, I felt long time, I felt hope, and I'll tell you, hope, and I'll tell you, Dr. Jones, like I Dr. Jones, like I said, I'm a said, I'm a type A person, there's nothing I can do about type A person, there's nothing I can do about it. I it. I thought, I don't want to thought, I don't want to be this be this girl's client. I want to girl's client. I want to become such a become such a specialist myself. So the specialist myself. So the next day I next day I told my husband told my husband that I wanted to go back that I wanted to go back to studying and began to studying and began my journey in my journey in functional functional functional diagnostic diagnostic diagnostic nutrition. That was 11 nutrition. That was 11 years ago. I never years ago. I never looked back.

looked back. Wow. It sounds like you're dealing Wow. It sounds like you're dealing with the same thing that many people are dealing with many people are dealing with, and as you'll, and as you'll realize during realize during this conversation, I this conversation, I love analogies, it's how love analogies, it's how I see the world.

It's like if It's like if your body, your heart, your body, your heart, was a car, you was a car, you were checking the were checking the "check engine" light on the "check engine" light on the dashboard and you thought, " Hey, let's just Hey, let's just turn that light off." But you actually." But you actually looked inside looked inside the engine to the engine to understand why it was understand why it was beeping, right?

beeping, right? Because I think it's so Because I think it's so easy to just easy to just press a button, press a button, remove the signs, but remove the signs, but then it all then it all comes back again, comes back again, right? Because we right? Because we never fix the never fix the problem itself. So, problem itself. So, you hit on the very you hit on the very fundamental thing fundamental thing that brings that brings many people into this many people into this field. So my field. So my congratulations to you for congratulations to you for not accepting rejection.

not accepting rejection. And I think this is a And I think this is a key point. Don't key point. Don't accept…let accept…let accept…let me emphasize me emphasize this. Don't this. Don't settle for a settle for a simple answer, don't simple answer, don't accept that accept that nothing can be nothing can be done. That's why I done. That's why I always applaud people always applaud people who do that.

who do that. Since that's the reason Since that's the reason we're here, you know, that's great. And now I, that's great.

What Functional Diagnostic Nutrition Practitioners do.)

And now I want to dive into the want to dive into the topic of FDN, because many topic of FDN, because many people have heard of people have heard of nutritionists, and nutritionists, and many have heard of many have heard of dietitians. So, dietitians. So, what is the difference between an FDN what is the difference between an FDN and a regular and a regular nutritionist or nutritionist or dietitian?

dietitian? You know, when I You know, when I tell people my tell people my initials, they initials, they ask, “What? What is this ask, “What? What is this? Then I literally decipher it for them: a practitioner of literally decipher it for them: a practitioner of functional functional functional diagnostic diagnostic diagnostic nutrition. And then nutrition. And then they get even more confused. They. They say, “That’s too say, “That’s too many complicated words. " many complicated words. " Tell me what you do." Tell me what you do." And I always tell people And I always tell people that I'm trained to work that I'm trained to work with functional with functional lab lab lab tests, right? There are tests, right? There are many nuances with many nuances with the tests, but the essence of the the tests, but the essence of the FDN practice is to take comprehensive take comprehensive functional functional functional studies and look for studies and look for hidden causes that hidden causes that lead to lead to symptoms. Of course, symptoms. Of course, there's a component of there's a component of nutrition and, you nutrition and, you know, dietetics. And of know, dietetics. And of course, there is a component that is more related to more related to functional and functional and alternative alternative alternative medicine, as well as health coaching. But health coaching. But really, what really, what attracted me to this attracted me to this program and what program and what attracted my attracted my husband when he husband when he said, "Yeah, go said, "Yeah, go learn," was the data. We learn," was the data. We look at the data. FDNs look at the data. FDNs are taught according to five are taught according to five standards that are standards that are not really not really universally accepted, universally accepted, they are standard for they are standard for FDNs but not for everyone FDNs but not for everyone else. Five else. Five specific specific specific laboratory laboratory laboratory tests that look for tests that look for hidden systemic hidden systemic problems, that is, problems, that is, disorders that disorders that occur deep occur deep within the body. And that's what within the body. And that's what I tell people when I tell people when they ask me, " Should I Should I look into an look into an FDN program or FDN program or work with an FDN professional?" I professional?" I answer: "Yes, yes answer: "Yes, yes and yes again." They and yes again." They truly stand out in the truly stand out in the wellness wellness coaching field due to coaching field due to their dedication and their dedication and deep understanding of deep understanding of the data our bodies provide us the data our bodies provide us. A very good very good friend of mine just graduated from friend of mine just graduated from this program, and there's this program, and there's a lot I don't know.

I thought I I thought I said " functional functional functional dietary dietary dietary nutritionist", " functional functional functional diagnostic diagnostic diagnostic nutritionist". I was nutritionist". I was just making up just making up

nonsense. It was nonsense. It was uncomfortable. It was uncomfortable. It was embarrassing. It took me a while to learn to while to learn to say, " Functional Functional Functional Diagnostic Diagnostic Diagnostic Nutritionist." And I'm Nutritionist." And I'm like, "Okay, fine." like, "Okay, fine." Now I've learned it. I Now I've learned it. I understand, you know? It's really interesting to learn about this and what cool things you do really interesting to learn about this and what cool things you do. So I want to. So I want to dig deeper into how dig deeper into how exactly you analyze exactly you analyze lab lab lab results.

results. results.

Why normal labs do not always mean optimal health.)

Help me Help me understand this, because I'm understand this, because I'm sure—and I sure—and I see this all the time in see this all the time in my practice, and I'm my practice, and I'm sure you do too—when sure you do too—when you first you first start working start working with clients, they with clients, they bring in bring in test results where there's a huge range set for test results where there's a huge range set for many of the metrics many of the metrics.

. For example, For example, testosterone can testosterone can range from 260 or range from 260 or 320 to 900. Even with 320 to 900. Even with thyroid thyroid thyroid and some other and some other markers—the reading is markers—the reading is supposedly normal, but we supposedly normal, but we always say that always say that normal does not mean normal does not mean optimal, and optimal, and normal does not mean normal does not mean healthy for many healthy for many people. So how do you people. So how do you draw this line draw this line on tests, why is the on tests, why is the normal range normal range so wide, and how do you so wide, and how do you explain to people why explain to people why you don't just leave things you don't just leave things as they are if the reading is as they are if the reading is just within normal limits?

just within normal limits? Yes. Great question. So, I think part of. So, I think part of how I understand how I understand the term " functional functional functional diagnostic diagnostic diagnostic nutrition"—our nutrition"—our nutrition"—our founder, Reed Davis, founder, Reed Davis, always says that the " functional" in functional" in the title means the title means going from a state of going from a state of dysfunction to a state of dysfunction to a state of normal normal normal functioning, functioning, functioning, right? Basically, that's the right? Basically, that's the point. And this is similar to the point. And this is similar to the situation with situation with optimal optimal optimal ranges. Yes, ranges. Yes, when you take when you take tests, there is a tests, there is a normal range, normal range, but the people who but the people who take them usually don't take them usually don't feel well.

feel well. People who go for People who go for tests tests tests usually have some usually have some health problems. So we can. So we can take the average or take the average or median values ??of median values ??of different things, like T4, testosterone, or T4, testosterone, or whatever, but that doesn't whatever, but that doesn't necessarily mean necessarily mean that a person that a person will feel good will feel good within that within that range. And, as you range. And, as you rightly noted, this rightly noted, this range is simply range is simply huge. Therefore, huge. Therefore, optimal values ??are optimal values ??are usually, although not usually, although not always, in always, in the middle of the middle of the middle of the reference the reference the reference range, but sometimes, range, but sometimes, for example in for example in men, a higher men, a higher testosterone level testosterone level at the upper end of this at the upper end of this range may be range may be more optimal.

more optimal. For many people, that's the For many people, that's the beauty of beauty of functional functional functional medicine and FDN—each medicine and FDN—each person is very person is very individual. What individual. What works well for my works well for my husband regarding husband regarding testosterone levels may testosterone levels may not work at all for you not work at all for you given the given the reference values.

reference values. It also depends on It also depends on your age, your age, activity level, and other activity level, and other underlying underlying underlying health conditions. Therefore, we health conditions. Therefore, we say that a " normal" level on normal" level on routine tests routine tests does not always mean " optimal." As, optimal." As, again, in the again, in the case of the case of the thyroid gland, testosterone, or, testosterone, or estrogen. But if estrogen. But if we talk about we talk about functional functional functional diagnostics, diagnostics, diagnostics,

such as GI-Map or hair mineral analysis, the results hair mineral analysis, the results become more detailed become more detailed because we examine because we examine more specific more specific indicators. For example, indicators. For example, when analyzing when analyzing minerals in hair, minerals in hair, normal normal normal potassium levels may not make potassium levels may not make a person feel a person feel energetic. She energetic. She may still may still sleep poorly. She sleep poorly. She may still have may still have digestive problems. She digestive problems. She may still may still feel a lack of feel a lack of energy. But if we energy. But if we raise raise raise potassium levels and balance potassium levels and balance them with other them with other minerals, the body minerals, the body will begin to move from a will begin to move from a state of dysfunction to state of dysfunction to normal normal normal functioning.

functioning. functioning.

Blood sugar, fasting glucose, and CGMs.)

OK. Now I want to OK. Now I want to offer you offer you a little a little a little functional game of " ping-pong," if ping-pong," if you will. you will.

Oh, yes. Oh, yes. Let's try. I'll Let's try. I'll name certain name certain lab markers, lab markers, and it seems like the gist of the game —which I had hardly —which I had hardly prepared for… It prepared for… It literally came to my literally came to my mind while you were mind while you were talking. I hope talking. I hope I don't fail, but I don't fail, but we'll see what we'll see what comes of it. We will comes of it. We will discuss several discuss several laboratory laboratory laboratory markers, and I want markers, and I want you to explain the you to explain the difference between when they are difference between when they are evaluated by a evaluated by a traditional medicine doctor and when you as an and when you as an FDN specialist.

FDN specialist. Agreed? Agreed? Agreed? Class. Class. Class. Let's see how it Let's see how it goes. goes. goes. This is a fresh idea. This is a kind of sound remix, if sound remix, if you will. I, I, I sing a you will. I, I, I sing a cappella. I'm going cappella. I'm going off script. I off script. I 'm going off 'm going off the script. Good.

the script. Good. Got it. I'm here to Got it. I'm here to help you, I support help you, I support you. you. you. Let's do this. Let's do Let's do this. Let's do this. OK. Er, this. OK. Er, fasting glucose. A regular doctor wants regular doctor wants to see a score somewhere to see a score somewhere between 70 and 110. If you're a between 70 and 110. If you're a functional medicine doctor, you definitely want, you definitely want to see numbers like 70 or 80.

to see numbers like 70 or 80. Good. OK. And Good. OK. And is this what you are is this what you are asking about? Is this what asking about? Is this what you are asking about? is you are asking about? is n't that right? And the second n't that right? And the second part of this, you know, I have to go into, I have to go into great detail because we have a great detail because we have a few of them. Why is there few of them. Why is there such a difference? Why, what such a difference? Why, what makes this different from what you see?

So, if we're talking So, if we're talking about stable about stable blood sugar levels, blood sugar levels, when you're controlling when you're controlling not only sugar, but also not only sugar, but also insulin levels, insulin levels, inflammation levels, inflammation levels, cortisol, because cortisol, because stable sugar stable sugar is affected by so many is affected by so many different hormones, different hormones, right? If you are at the right? If you are at the lower end of lower end of the range, or don't the range, or don't see big see big fluctuations in fluctuations in functional functional functional medicine, then you are medicine, then you are stable. If you stable. If you see large see large fluctuations, or the fluctuations, or the reading is slightly higher, reading is slightly higher, especially after eating, especially after eating, it indicates that it indicates that your cortisol is your cortisol is probably not normal, your probably not normal, your stress hormones are stress hormones are out of whack, your adrenaline out of whack, your adrenaline may be out of whack, and may be out of whack, and other sex hormones other sex hormones like testosterone or like testosterone or estrogen may also estrogen may also be altered, as be altered, as they all affect they all affect blood sugar levels.

blood sugar levels. True. Um, there are True. Um, there are studies, I'm sorry I do studies, I'm sorry I do n't have n't have the articles in front of me right now, the articles in front of me right now, that indicate that the that indicate that

the higher the fasting glucose level higher the fasting glucose level, the higher the, the higher the risk of developing risk of developing insulin resistance insulin resistance insulin resistance over time, in older over time, in older age. Which I find age. Which I find fascinating. That is, fascinating. That is, if doctors say, "Oh, I'm 97, 90, I think, I'm 97, 90, I think diabetes is diagnosed diabetes is diagnosed at 126." And I have 110, that's at 126." And I have 110, that's not good. It's not good. It's not good at all, you see, not good at all, you see, so it's important so it's important to understand not only to understand not only what you're saying, but also where what you're saying, but also where it's leading, because it's leading, because most likely, for most likely, for many people, the many people, the arrow is pointing up.

arrow is pointing up. OK. OK. OK. Yes, and if we're Yes, and if we're considering Oh, yes, considering Oh, yes, go ahead. Good. go ahead. Good. Come on, come on. I wo Come on, come on. I wo n't.

n't. n't. No, I just wanted to No, I just wanted to say Okay. say Okay. Maybe add a little Maybe add a little detail to this so it's detail to this so it's clear to everyone clear to everyone listening. If you listening. If you look at look at blood sugar levels and their blood sugar levels and their relationship to relationship to insulin, every time insulin, every time we eat, right?

we eat, right? Or whenever, as we've Or whenever, as we've learned over the last learned over the last 20-30 years, 20-30 years, cortisol levels spike cortisol levels spike and the body releases and the body releases glucose, right? Your glucose, right? Your body also has to body also has to release insulin release insulin to compensate for to compensate for all this excess all this excess sugar in your blood. And so sugar in your blood. And so we see this we see this relationship between, relationship between, you know, higher you know, higher glucose levels or wider glucose levels or wider fluctuations fluctuations fluctuations in blood glucose and in blood glucose and increased insulin, right? This is not, right? This is not necessarily good.

necessarily good. We would like a We would like a functional functional functional insulin level to be insulin level to be somewhere between two and somewhere between two and six. This is a very six. This is a very low figure. I low figure. I rarely see this in rarely see this in the analyses when the analyses when I check on my I check on my clients. Most clients. Most people have people have scores somewhere between scores somewhere between nine and 20, which is still nine and 20, which is still within the normal range, but within the normal range, but not at all optimal.

not at all optimal. I understand you, I understand you, of course. So, we are on our of course. So, we are on our way to studying way to studying glucose. We are here now.

glucose. We are here now. With that in mind, do With that in mind, do you see any benefit in you see any benefit in continuous continuous continuous glucose monitors (CGMs)?

? I have mixed feelings about CGM I have mixed feelings about CGM. My. My mother has mother has type 1 diabetes. She has to type 1 diabetes. She has to wear it because she wear it because she needs to know her needs to know her blood sugar level.

blood sugar level. I think a lot of what's happened in happened in metabolic metabolic metabolic medicine in the last 10 medicine in the last 10 years was a years was a short-term phenomenon short-term phenomenon and almost a and almost a precursor to what's precursor to what's happening happening happening now in peptide now in peptide medicine, where people are medicine, where people are fasting, eating once fasting, eating once a day, constantly a day, constantly obsessively monitoring their obsessively monitoring their glucose levels, glucose levels, trying to keep their trying to keep their sugars very, very sugars very, very low, and never low, and never eating carbs. This is all a bit eating carbs. This is all a bit too much. This is too much. This is just too much, just too much, right? If you right? If you want to constantly want to constantly monitor your monitor your sugar with a CGM, go sugar with a CGM, go ahead and see what ahead and see what trends you have. But the trends you have. But the best thing I best thing I learned about CGM learned about CGM actually came actually came from the brilliant from the brilliant engineer Marty engineer Marty Kendall, one of Kendall, one of my favorite my favorite researchers. His researchers. His wife had type 1 diabetes wife had type 1 diabetes, and he tried, and he tried to regulate to regulate blood sugar levels for blood sugar levels for himself, for her, and himself, for her, and for all the

people who for all the people who went through his went through his programs. He taught programs. He taught me that it's not me that it's not necessary necessary necessary to check my sugar to check my sugar after a meal, it's better after a meal, it's better to check it to check it before a meal to before a meal to see if my sugar levels are stable enough to sugar levels are stable enough to eat. If eat. If you're hungry and your you're hungry and your sugar is 140 or 150, don't sugar is 140 or 150, don't eat, okay? This is eat, okay? This is false hunger because your false hunger because your sugar levels are too sugar levels are too high and anything you high and anything you eat will be stored eat will be stored as fat. But if you as fat. But if you can get what can get what he calls the trigger down to, he calls the trigger down to, say, 70-80, and you're say, 70-80, and you're hungry, and your hungry, and your blood sugar is still blood sugar is still in the 70-80 range, then in the 70-80 range, then eat calmly, you're good to go eat calmly, you're good to go. Your body is. Your body is metabolically ready metabolically ready to eat. So I to eat. So I think that's an think that's an advantage of CGM, but I wouldn't advantage of CGM, but I wouldn't say you should be obsessively monitoring it, any more than you would with the obsessively monitoring it, any more than you would with the Oura ring— who the hell needs that?

who the hell needs that? It's exhausting. What if the It's exhausting. What if the result is result is result is not ideal? not ideal? Will you be upset Will you be upset all day? I do all day? I do n't know. I'm wearing n't know. I'm wearing it now as a it now as a self-experiment, self-experiment, self-experiment, just because just because Okay, I'm listening to you.

Okay, I'm listening to you. Well, I just want Well, I just want to see how my glucose levels change after eating and glucose levels change after eating and after waking up, and after waking up, and that's fascinating: it that's fascinating: it works exactly as it's works exactly as it's supposed to. I see supposed to. I see improvements when I improvements when I train. This is logical.

train. This is logical. This is good because you This is good because you need glucose to need glucose to be released, as well as a be released, as well as a store of glucose for your store of glucose for your muscles, glycogen, muscles, glycogen, when you exercise when you exercise to be able to to be able to keep going. It's interesting to keep going. It's interesting to watch. But it's watch. But it's also interesting also interesting to watch while to watch while eating and the like.

eating and the like. Yes, I'm not panicking Yes, I'm not panicking about it. Is this about it. Is this ideal? No. The app ideal? No. The app I use I use literally wants me to literally wants me to check my metrics check my metrics 75 times a week. In 75 times a week. In my opinion, this is madness.

my opinion, this is madness. I'm not going to I'm not going to check the same thing check the same thing 75 times a 75 times a week, 10 times a week, 10 times a day. This simply won't day. This simply won't happen. You know, it's happen. You know, it's simple…but it's useful simple…but it's useful to see. And for people to see. And for people who have problems with their who have problems with their glycated glycated glycated hemoglobin levels or hemoglobin levels or glucose regulation, it glucose regulation, it can be helpful can be helpful to see how it to see how it fluctuates during fluctuates during certain events. But I certain events. But I think you're right—the main thing is not to be main thing is not to be obsessed with it. And this is what happens with happens with a lot of the media and a lot of the media and data that we data that we receive. There is so much receive. There is so much data around. But you data around. But you need to know how to need to know how to use them and use them and when.

when. when. Absolutely. 100%. So, Absolutely. 100%. So, do you want do you want to check your to check your stock portfolio 75 stock portfolio 75 times a week? I don't times a week? I don't think so. This is madness.

think so. This is madness. You know, that would You know, that would just drive you just drive you crazy, right? But it's the crazy, right? But it's the same with gadgets: same with gadgets: I see an I see an overdependence on them.

overdependence on them. You use them to You use them to dictate dictate dictate what to do for your what to do for your health, instead of health, instead of trusting trusting trusting your intuition and your intuition and what your body tells you what your body tells you. Am I hungry?

. Am I hungry? Did I sleep well? Did I sleep well? Well, I don't know. What does Well, I don't know. What does my CGM say? What did my my CGM say? What did my Aura ring say? Do you understand? We Aura ring say? Do you understand? We need to need to need to use it, use it, but not abuse it.

but not abuse it. OK. Next on OK. Next on my list is CRP, or my list is CRP, or C-reactive protein.

Inflammation, CRP, cholesterol, and heart health.)

Well, I love peptides, Well, I love peptides, so I love CRP in the so I love CRP in the context of peptides. context of peptides. So, C-reactive So, C-reactive protein, right? It's just protein, right? It's just one of the basic one of the basic markers of inflammation.

markers of inflammation. We can move on to We can move on to more, you know, more, you know, esoteric markers of esoteric markers of inflammation that don't inflammation that don't necessarily need necessarily need necessarily need to be checked all the time. But CRP is generally a. But CRP is generally a fairly well- fairly well-studied studied studied inflammatory protein, and it inflammatory protein, and it tends to be elevated tends to be elevated if you have if you have autoimmune autoimmune autoimmune diseases, diseases, diseases, insulin resistance, insulin resistance, insulin resistance, or food or food intolerances. It is intolerances. It is also an indicator of also an indicator of how well how well your your cardiovascular system is working. So cardiovascular system is working. So this is a good indicator this is a good indicator that is worth that is worth checking fairly checking fairly regularly. The most regularly. The most encouraging and encouraging and exciting thing I've exciting thing I've seen in the last, seen in the last, probably, 11 years is that probably, 11 years is that GLP-1 peptides GLP-1 peptides can definitely can definitely lower C- reactive protein levels in reactive protein levels in humans. We have seen this in the humans. We have seen this in the literature. I see this literature. I see this in my practice. I have in my practice. I have worked to worked to lower CRP in lower CRP in clients through food food intolerance testing, gut optimization, gut optimization, circadian rhythms, and circadian rhythms, and minerals. But I haven't minerals. But I haven't seen such an seen such an overall reduction in overall reduction in CRP as I have from peptides in the CRP as I have from peptides in the last 18 months.

So I find this very So I find this very encouraging. encouraging. encouraging. I understand you. Now, I understand you. Now, in terms of conventional in terms of conventional labs, labs, labs, it seems like their it seems like their range for range for high-sensitivity CRP is less than three, and when you is less than three, and when you get to three, you get to three, you get an get an get an abnormal abnormal abnormal reading. For reading. For most people, I most people, I want this want this number to be less than number to be less than one. And I don't know one. And I don't know if I'm if I'm aiming for this right, but I aiming for this right, but I say, "Yes, we want say, "Yes, we want less than one." Because less than one." Because you're right, it's a you're right, it's a very non-specific very non-specific indicator, because it's indicator, because it's influenced by many influenced by many factors, but you factors, but you can see a can see a trend: is trend: is it decreasing? And it decreasing? And when you think about what inflammation does, I always inflammation does, I always look at it from the look at it from the perspective of the heart. This is perspective of the heart. This is one of the things you one of the things you can can can use use use if you want. I don't know if you want. I don't know if I'll give you anything you'll remember.

you'll remember. But when I talk about But when I talk about atherosclerosis or atherosclerosis or heart disease, I always look at the, I always look at the three things that are three things that are needed for it, needed for it, like a campfire. You like a campfire. You need fuel, something to burn, and burn, and oxygen, right? It's like oxygen, right? It's like fire, right? You fire, right? You need fuel, need fuel, fire, oxygen, right?

fire, oxygen, right? Sorry, I just Sorry, I just said, oh, yeah, you said, oh, yeah, you need something that need something that will burn. We will burn. We call it, you know, call it, you know, I'll say—fuel.

I'll say—fuel. Fuel, fire, Fuel, fire, oxygen. Let's oxygen. Let's do this. Let's say do this. Let's say the fuel is your the fuel is your plaques, right? So plaques, right? So plaque formation plaque formation requires foam requires foam cells, all of that.

cells, all of that. But for this fire to But for this fire to really ignite, you…sorry, I was…sorry, I was wrong. My God,

wrong. My God, that's it. Fuel, heat, oxygen. That's it.

, oxygen. That's it. Oxygen—that would be your Oxygen—that would be your oxidative stress, oxidative stress, right? Your MPO, your right? Your MPO, your oxidized LDL, uh, oxidized LDL, uh, oxidized LDL. We won't oxidized LDL. We won't go into go into detail about any of these detail about any of these gradients. I'm gradients. I'm going somewhere. I'm just going somewhere. I'm just improvising on this improvising on this podcast, friends. This, podcast, friends. This, I guess… this was an I guess… this was an interesting topic. Then interesting topic. Then you need heat. And you need heat. And the heat is your hs-CRP or the heat is your hs-CRP or CRP and your Lp-PLA 2. Because that CRP and your Lp-PLA 2. Because that shows me whether shows me whether you have an active you have an active inflammatory process going on. So inflammatory process going on. So for me, once I for me, once I can remove one of can remove one of those variables, and those variables, and inflammation is such a inflammation is such a powerful variable in powerful variable in this fire equation, this fire equation, then hs-CRP allows me then hs-CRP allows me to know to know to know the temperature in the the temperature in the room. How…how does that room. How…how does that sound?

sound? sound? I like it. I like it. I really I really like it. Yes. like it. Yes. Everything is fine. She… She was Everything is fine. She… She was paid very well paid very well for this show. She…she's for this show. She…she's going to going to No, seriously.

No, seriously. You hear a "ding-ding " on the phone, it was " on the phone, it was like a money transfer. It like a money transfer. It was a money transfer.

was a money transfer. It passed. It It passed. It passed. Um, the last thing passed. Um, the last thing I want to discuss I want to discuss in our little in our little circle is LDL.

circle is LDL. M-hm. OK. So, yeah, I like that, I like that because, you know, we because, you know, we look at look at normal normal normal LDL ranges and optimal LDL ranges and optimal LDL levels, but like LDL levels, but like a lot of things in a lot of things in conventional medicine, it doesn't tell the, it doesn't tell the whole picture, whole picture, especially when we especially when we look at older look at older generations. So, generations. So, basically, on basically, on middle-aged people, right?

middle-aged people, right? We know that LDL is We know that LDL is your “less good” your “less good” cholesterol, right? cholesterol, right? Traditionally, we want Traditionally, we want to see it below 199.

Um, but first of all, LDL Um, but first of all, LDL in the literature, in in the literature, in study after study after study, HDL is your more useful, is your more useful, you know, denser or you know, denser or lighter, looser, lighter, looser, let's say, let's say, cholesterol cholesterol cholesterol number; Higher number; Higher HDL levels, above 45, HDL levels, above 45, anywhere from 45 to 75, are anywhere from 45 to 75, are more correlated with more correlated with reduced reduced cardiovascular events than cardiovascular events than high LDL levels. Does this make sense? No, no, no, this make sense? No, no, no, than low than low LDL. Sorry, I was LDL. Sorry, I was wrong. So, we wrong. So, we need high need high HDL levels. LDL HDL levels. LDL is actually not as is actually not as big a problem as big a problem as we thought. A little we thought. A little background: I background: I actually sold actually sold Tricor. I worked at Tricor. I worked at Abbott Laboratories. I was Abbott Laboratories. I was selling selling selling cholesterol medication and telling cholesterol medication and telling people, "Hey, you should people, "Hey, you should take this." This was take this." This was one of my best- one of my best- selling selling selling drugs. I got a drugs. I got a car, a phone, car, a phone, trips because I sold trips because I sold a bunch of DHEA, but now I a bunch of DHEA, but now I know that know that wasn't necessarily the wasn't necessarily the best thing, especially best thing, especially for the people who for the people who took it, right? As we age, took it, right? As we age, our our our cholesterol levels start cholesterol levels start to rise because the to rise because the body body body produces hormones less well, and produces hormones less well, and we know that we know that cholesterol is the basis of cholesterol is the basis of many sex many sex hormones in the body, hormones in the body, right? And so every right? And so every time I see a time I see a middle- middle- middle-aged woman that I've worked with for aged woman that I've worked with for years, her cholesterol years, her cholesterol starts to go up, her starts to go up, her LDL starts to LDL starts to go up in go up in middle age, but there's a middle age, but there's a biological, biological, biological, functional functional functional reason for it.

Another thing reason for it. Another thing about LDL—your brain about LDL—your brain is 60% is 60% cholesterol, right?

cholesterol, right? Our nerves Our nerves are made up of are made up of cholesterol. We cholesterol. We need cholesterol. need cholesterol. Chris Kresser has a Chris Kresser has a great book, something great book, something like "The like "The Heart Health Myth" or Heart Health Myth" or something like that. This is a something like that. This is a free free free e-book that e-book that I love. And what it essentially says is that says is that LDL is not as LDL is not as big a problem as big a problem as we thought. I'm not a doctor, we thought. I'm not a doctor, you're Dr. Jones. I'm just a you're Dr. Jones. I'm just a health coach, health coach, so I don't make so I don't make any medical claims, any medical claims, but I will tell my but I will tell my clients: don't clients: don't panic if your panic if your LDL is, say, 205 or LDL is, say, 205 or 210. Well, if it's 400, then 210. Well, if it's 400, then we have a really big we have a really big problem, right? But problem, right? But if it's a little higher if it's a little higher than normal and you're than normal and you're middle-aged, it middle-aged, it may protect you may protect you more than harm you, more than harm you, especially if your especially if your HDL is above 45–55.

HDL is above 45–55. Sorry, I'm trying Sorry, I'm trying to be brief, but I'm to be brief, but I'm very verbose. very verbose. No, no, no. I think it's No, no, no. I think it's important to know that, do important to know that, do n't you? And I think that… we just need to… we just need to make sure that people make sure that people understand this difference.

understand this difference. And I hate…and we're And I hate…and we're going to move on to going to move on to some different some different markers now, because there's a markers now, because there's a big difference between big difference between LDL-C and LDL-C and LDL particles themselves. And you LDL particles themselves. And you hit the nail on the head, because, hit the nail on the head, because, well, the LDL that well, the LDL that most people most people send to send to traditional traditional traditional labs is labs is just a measurement of just a measurement of the amount of the amount of the amount of LDL cholesterol in LDL cholesterol in the blood per volume, the blood per volume, but it doesn't tell you but it doesn't tell you how many how many particles there are, what particles there are, what size they are, and are they size they are, and are they small? They're like small? They're like beach balls or like beach balls or like cannonballs, right?

cannonballs, right? Depending on their Depending on their size, and I think that's a size, and I think that's a big big big difference, difference, difference, right? And I believe that right? And I believe that understanding this understanding this difference will help difference will help keep many keep many people from taking people from taking medications they don't medications they don't necessarily necessarily necessarily need. Do you know?

need. Do you know? Yes. Yes. Yes. Um, and… Sorry, Um, and… Sorry, continue. continue. continue. No, I just No, I just agreed with you agreed with you 100%.

100%. 100%.

Longevity and the most important lab markers.)

Thank you. So, now Thank you. So, now let's move on to more let's move on to more interesting questions, shall we? I want to move on to… because this is a big… I don't want to because this is a big… I don't want to say "buzzword," say "buzzword," but this is something that we're but this is something that we're all talking about right now, all talking about right now, especially in the last especially in the last few years, is few years, is longevity. And depending longevity. And depending on who you on who you ask, everyone has ask, everyone has their own definition of what their own definition of what that means to them.

that means to them. So I'll start with the So I'll start with the big picture. big picture. Jennifer, what does Jennifer, what does longevity mean to you?

Live well for as Live well for as long as possible. And it's really long as possible. And it's really funny, Dr. Jones, because my husband, because my husband always says that when always says that when I say, "Hey, Bo, you know, I say, "Hey, Bo, you know, maybe you should go for a maybe you should go for a healthier option healthier

option instead of ice cream, instead of ice cream, maybe have a sorbet, maybe have a sorbet, or instead of three or instead of three glasses of wine, have glasses of wine, have two or something." He's two or something." He's pretty balanced pretty balanced most of the time, most of the time, but ever since he was young, he's but ever since he was young, he's always told me, " Baby, it's about the Baby, it's about the quality of life." He quality of life." He says, "I don't care says, "I don't care if I live to be 95, right?" " And I'll be like a 'vegetable.' I And I'll be like a 'vegetable.' I just want just want to enjoy to enjoy to enjoy life and I want to life and I want to feel good feel good doing it." And so doing it." And so my definition of my definition of longevity is living longevity is living well, not just living, well, not just living, but living well for as but living well for as long as possible.

OK. Now the second OK. Now the second part of the question, part of the question, because this word has become because this word has become so widespread, so widespread, there have been so many longevity interventions, and it longevity interventions, and it falls under so many falls under so many categories, right? There are categories, right? There are diets, there is fasting, diets, there is fasting, ketosis, the ketosis, the Mediterranean Mediterranean Mediterranean diet, you talk a lot diet, you talk a lot about supplements, about supplements, peptides and all that, peptides and all that, but I want to start with but I want to start with your specialization.

your specialization. Because there are also many Because there are also many very expensive very expensive laboratory laboratory laboratory tests for tests for longevity. You longevity. You start looking at start looking at biological biological biological age tests, you look at, age tests, you look at, say, the immune say, the immune panel from ECLA, which is panel from ECLA, which is very expensive. It very expensive. It studies, you know, studies, you know, immune senescent immune senescent cells, and there are cells, and there are many such tests.

many such tests. And they are And they are not cheap. But in not cheap. But in terms of tests terms of tests that you can just that you can just take with commercial take with commercial insurance, or insurance, or even pay out of even pay out of pocket so pocket so it's not too it's not too expensive—if you were to expensive—if you were to put together a put together a longevity panel that longevity panel that anyone could take, what would anyone could take, what would it include?

Oh, great question. Oh, great question. So, I would say that So, I would say that insulin and glucose, insulin and glucose, or metabolic or metabolic health, is number health, is number one. We mentioned C- reactive protein, reactive protein, glycated glycated glycated hemoglobin, I would hemoglobin, I would check the check the check the thyroid, thyroid, thyroid, specifically T3, reverse specifically T3, reverse T3, TPO antibodies, and T3, TPO antibodies, and TG antibodies. So TG antibodies. So let's take a look at let's take a look at how your thyroid is working how your thyroid is working,,, because it's an important because it's an important indicator of health. We indicator of health. We will look at vitamins, will look at vitamins, vitamin D will be vitamin D will be key. Vitamin B12 key. Vitamin B12 can be very can be very interesting because interesting because there are many there are many correlations between correlations between inflammation and high inflammation and high levels of B12 in the body.

levels of B12 in the body. Of course, I would also Of course, I would also pay attention to the pay attention to the viral load. This is something I often. This is something I often do with my do with my clients. If you clients. If you have a persistent viral have a persistent viral illness, illness, illness, for example, I often for example, I often see high levels of see high levels of Epstein-Barr virus Epstein-Barr virus in my clients.

in my clients. If you're struggling with If you're struggling with this viral this viral load, you don't have load, you don't have enough vitamin enough vitamin C or immune C or immune defenses to defenses to actually suppress actually suppress this virus, you're going to this virus, you're going to feel terrible, feel terrible, right? I also right? I also order a complete order a complete blood count (CMP) for blood count (CMP) for most of my most of my clients. We'll clients. We'll look at, you know, look at, you know, total total total cortisol levels. We wo cortisol levels. We wo n't do this by saliva, but n't do this by saliva, but simply by looking at the simply by looking at the normal level of normal level of cortisol in the blood.

cortisol in the blood. Measuring fasting cortisol first thing in the morning can be very morning can be very helpful. And then helpful. And then hormones, we hormones, we strive for longevity.

strive for longevity. We want to check We want to check hormones. So, hormones. So, estradiol on days 2-4 of the

estradiol on days 2-4 of the cycle, testosterone, cycle, testosterone, progesterone on progesterone on days 19-21 of the cycle.

days 19-21 of the cycle. Look at sex hormone binding globulin to sex hormone binding globulin to see if see if you are absorbing these you are absorbing these hormones or not. And hormones or not. And then you can then you can go into detail go into detail if you want. But, you if you want. But, you probably already know that, probably already know that, Dr. Jones. There is Dr. Jones. There is this cool company this cool company called Rhythm Health.

called Rhythm Health. I hope it's I hope it's okay that I'm okay that I'm not financially connected to them not financially connected to them, but they're, but they're cool. It costs cool. It costs $79 a month and $79 a month and they send you an they send you an at-home at-home at-home lab test.

lab test. And the most interesting thing here is And the most interesting thing here is that you get not that you get not only your only your test results, of which there are test results, of which there are probably about 25 probably about 25 every month, but also your every month, but also your metabolic age, which, in my opinion metabolic age, which, in my opinion, is really cool. So, they do. So, they do it for you for 79 bucks it for you for 79 bucks a month. I don't know if the $79 price will remain when this $79 price will remain when this comes out, but it's a comes out, but it's a very cheap way very cheap way to find out your to find out your metabolic age.

metabolic age. For example, I'm 43, For example, I'm 43, almost 44, but according to almost 44, but according to my rhythm, which is probably my rhythm, which is probably why I love it so much, why I love it so much, I'm only 36 years old. I'm I'm only 36 years old. I'm like, "Oh, that's just like, "Oh, that's just great." great." great." I need to I need to check this again for check this again for celiac disease. I know them celiac disease. I know them because they do an obesity genomics panel. Many obesity genomics panel. Many of you have seen this panel, of you have seen this panel, and they do it and they do it if someone has a if someone has a history of childhood history of childhood obesity, if there have been obesity, if there have been multiple failed multiple failed treatment attempts, and treatment attempts, and they check all these they check all these markers like PPAR- gamma, FTO, LEP, LEPR, and it's gamma, FTO, LEP, LEPR, and it's really cool. And really cool. And now the most important thing, and now the most important thing, and again, I don't know again, I don't know how long this will last : if they : if they meet meet meet the criteria, they don't the criteria, they don't charge money for the test. That's what charge money for the test. That's what I'm looking at. I I'm looking at. I had to fight for it had to fight for it because I because I sent a sent a sent a referral for the referral for the patient and they patient and they said, "We don't said, "We don't allow allow allow Medicaid patients to go through this." Medicaid patients to go through this." And I caused a And I caused a real scandal because of it.

real scandal because of it. Oh, I also arranged it. Oh, I also arranged it. Yes, dude. I actually Yes, dude. I actually thought, "What thought, "What would Karen do?" What would would Karen do?" What would Karen do? And I Karen do? And I decided, "I'll do decided, "I'll do just that." So I started just that." So I started writing all these letters: " Just go for it, this is Just go for it, this is nonsense." Here and there, and so on. And I there, and so on. And I thought, "I'll do thought, "I'll do just that." I'm going to just that." I'm going to do it. So I do it. So I started writing all these started writing all these letters: "Just go for it letters: "Just go for it, this is nonsense." Here and there, and so on." Here and there, and so on. And I don't know if that's why. And I don't know if that's why they changed their they changed their decision. I hope decision. I hope not, but they not, but they changed it. They're like, " Yeah, on second thought, after Yeah, on second thought, after all this, we'll all this, we'll just let you just let you do it." I think do it." I think they will let Nature's they will let Nature's Path do this test.

Path do this test. So, that was my So, that was my moment. This was my moment. This was my moment. Congratulations to moment. Congratulations to Nature's Path. Congratulations to Nature's Path. Congratulations to Nature's Path.

Nature's Path. This, this is truly This, this is truly rare. Well done. I rare. Well done. I mean, it's cool that your patients that your patients have a doctor who have a doctor who advocates for them advocates for them.

.. Honestly, this is unusual. Honestly, this is unusual. This is really, really This is really, really cool. cool. cool. Oh,

yes. Sometimes you Oh, yes. Sometimes you have to fight.

have to fight. You have to fight You have to fight for your patients. for your patients. Sometimes no, it's not…it's Sometimes no, it's not…it's ridiculous, right? I ridiculous, right? I said, "Okay, we're said, "Okay, we're fighting for this." fighting for this." I understand. Choosing I understand. Choosing supplements can be supplements can be overwhelming.

overwhelming. overwhelming. There are hundreds of There are hundreds of brands, conflicting brands, conflicting claims, and no claims, and no way to know what's way to know what's actually good and what actually good and what will truly make a difference in will truly make a difference in your health. That's your health. That's why I created Dr. Jones Supplement Store. Every Dr. Jones Supplement Store. Every product in the store is product in the store is for energy, for energy, gut health, sleep, gut health, sleep, hormone optimization, recovery, and more.

, recovery, and more. It is personally It is personally reviewed, reviewed, reviewed, tested and tested and recommended. These are the recommended. These are the formulas I formulas I use and use and recommend to my recommend to my patients, friends, and patients, friends, and family. So go family. So go to drjonesseupplements.com, to drjonesseupplements.com, sign up for the sign up for the mailing list, and you'll mailing list, and you'll get 10% off your get 10% off your first order. You will first order. You will also receive also receive exclusive exclusive exclusive protocols and insights protocols and insights that I share only that I share only with my community.

with my community. So let's cut through the So let's cut through the noise and noise and get to what get to what really works. really works.

The HIDDEN framework for whole-body health.)

Okay, I want to Okay, I want to change the subject a little and change the subject a little and talk about something talk about something exciting that I exciting that I found while preparing for found while preparing for this episode. There is this episode. There is a concept of a " hidden" hidden" hidden" system. Yes? H I D D E N, and system. Yes? H I D D E N, and it's not about it's not about hiding anything, hiding anything, people. But I want people. But I want you to explain what this is you to explain what this is, because I think it's a, because I think it's a really cool really cool approach to understanding the approach to understanding the health connection.

health connection. Yes, Dr. Jones, you Yes, Dr. Jones, you love metaphors and FDN love metaphors and FDN loves acronyms. It's loves acronyms. It's funny how many funny how many acronyms we have for so acronyms we have for so many things, and you're many things, and you're right, HIDDEN right, HIDDEN really does stand for really does stand for body systems.

body systems. So, these are the hormonal, So, these are the hormonal, immune, immune, immune, detoxification, detoxification, detoxification, digestive, endocrine, and digestive, endocrine, and neurobiological neurobiological neurobiological systems. And it really systems. And it really covers the whole covers the whole body, right? And body, right? And essentially, FDN—the essence and essentially, FDN—the essence and the concept of what we the concept of what we study in the program— is that all is that all symptoms stem symptoms stem from what we from what we call call call metabolic chaos, metabolic chaos, right? Which, in essence, right? Which, in essence, is the fact that the is the fact that the nervous system is nervous system is overloaded and overloaded and needs to somehow needs to somehow get our get our attention. For example, the attention. For example, the HPA axis (hypothalamic- pituitary- pituitary- adrenal), right? The adrenal), right? The hypothalamus, pituitary gland, hypothalamus, pituitary gland, and adrenal glands and adrenal glands can no longer fully can no longer fully comprehend all of these comprehend all of these stressors affecting the body. And because of body. And because of this this this overload of the overload of the HPA axis, we face HPA axis, we face hormonal hormonal hormonal disorders such as disorders such as PCOS, endometriosis, PCOS, endometriosis, missed periods, missed periods, or early menopause.

We have immune We have immune problems, such as problems, such as Epstein-Barr virus, Epstein-Barr virus, prolonged COVID or prolonged COVID or ongoing illnesses and ongoing illnesses and other autoimmune other

autoimmune disorders. We have disorders. We have detoxification problems detoxification problems, such as, such as mold exposure, ICAC, mold exposure, ICAC, and other fungal and other fungal infections. We have detoxification problems, detoxification problems, such as such as Crohn's disease, ulcerative Crohn's disease, ulcerative colitis, constipation, or colitis, constipation, or diarrhea, right? And diarrhea, right? And endocrine disorders, right? We also have, right? We also have other other other body systems that are body systems that are seriously seriously seriously affected.

affected. affected. Fertility problems, etc. Fertility problems, etc. Also the nervous Also the nervous system: anxiety, system: anxiety, depression, and even depression, and even diseases like diseases like Parkinson's. It Parkinson's. It doesn't really doesn't really matter. We do not matter. We do not consider these consider these symptoms as separate symptoms as separate phenomena in themselves.

I think anyone who has had I think anyone who has had any illness or any illness or unexplained health problems understands that there was a understands that there was a root cause. There is something root cause. There is something deeper that led deeper that led to the development of this to the development of this symptom. This is indeed symptom. This is indeed one explanation, one explanation, especially for people especially for people who have who have several problems at once.

several problems at once. You know, when one You know, when one person has person has fertility issues, fertility issues, Hashimoto's thyroiditis, Hashimoto's thyroiditis, celiac disease, early celiac disease, early wrinkles, or something else.

wrinkles, or something else. And they ask: "What the And they ask: "What the hell is going on?" Well, in FDN we?" Well, in FDN we trace it to trace it to HPA axis dysregulation.

HPA axis dysregulation. What can we do What can we do to calm to calm the body so that it the body so that it starts sending the starts sending the right signals to the right signals to the right systems?

right systems? This is really cool. And I This is really cool. And I think understanding the think understanding the interconnection of things is very interesting.

very interesting. To me, imagine six To me, imagine six rooms, six systems, all rooms, six systems, all running through a running through a common pipe, and if there's a faulty, and if there's a faulty pipe—let's pipe—let's pipe—let's look at it differently.

Let's go another Let's go another way. Let's say way. Let's say you have these six rooms you have these six rooms in a house connected by a in a house connected by a common common common plumbing plumbing plumbing system. If the water in system. If the water in one room one room gets contaminated, it will gets contaminated, it will inevitably contaminate inevitably contaminate all the others to some extent, right? Because they, right? Because they can all depend on can all depend on one system, and a one system, and a failure in one can failure in one can affect another?

affect another? Will the body Will the body try try try to compensate for this? Is to compensate for this? Is he he he decompensating? That's how decompensating? That's how I see it. If I'm I see it. If I'm wrong, you can wrong, you can say, "That's not it." say, "That's not it." Aptly. Aptly. No, that's Aptly. Aptly. No, that's absolutely correct. Like absolutely correct. Like one house, many one house, many rooms, right? Like one rooms, right? Like one sewer sewer sewer system, many system, many small small small branches. It is so branches. It is so true that the body is true that the body is one, right? We are one, right? We are not made up of all not made up of all these little parts.

these little parts. We are one body, and we We are one body, and we know that our know that our autonomic nervous autonomic nervous system controls everything, system controls everything, right? It's like the ring in " The Lord of the Rings." Like The Lord of the Rings." Like one system that one system that controls everything, controls everything, you know? The you know? The autonomic nervous autonomic nervous system will system will direct and guide direct and guide all other systems in the all other systems in the body. So, yeah, body. So, yeah, if this, you know, if this, you know, master bedroom or the master bedroom or the main main main water line is faulty, then

every other part of, then every other part of the house or system is the house or system is definitely going to suffer.

Gut testing, GI-MAP, SIBO, and food sensitivities.)

So I want So I want to dive into the "D" —digestion, because I think that's where functional where functional medicine, FDN, shines, medicine, FDN, shines, because when most because when most people come to people come to their doctor with their doctor with gut issues, you might gut issues, you might get a get a parasite overgrowth, parasite overgrowth, maybe that, but if maybe that, but if it's serious, you it's serious, you might get might get an endoscopy, a an endoscopy, a colonoscopy, but that's colonoscopy, but that's pretty extreme.

Pretty serious, Pretty serious, you know, pretty you know, pretty extreme measures extreme measures to figure out what's to figure out what's going on with going on with digestion, but from digestion, but from your perspective, what does a your perspective, what does a functional functional gut assessment look like in gut assessment look like in practice?

practice? practice? Yes. Regarding tests, I Yes. Regarding tests, I often use often use GI-map. Sometimes I do GI-map. Sometimes I do GI-effects, sometimes I do a methane breath methane breath test for SIBO or something test for SIBO or something like that, but GI-map is like that, but GI-map is my standard. I'm looking for my standard. I'm looking for markers of digestion, markers of digestion, like are like are they producing they producing pancreatic pancreatic pancreatic enzymes? Do enzymes? Do they produce, they produce, you know, elastase? And this is probably number one.

probably number one. Can you Can you break down food? And break down food? And number two, we look for number two, we look for initial infections initial infections like H. pylori, you like H. pylori, you seem to have mentioned seem to have mentioned at the beginning, you know, at the beginning, you know, if you don't have H. pylori, you don't break down, you don't break down food, or if you have food, or if you have too much H. pylori, you too much H. pylori, you don't break down food either don't break down food either because you don't have enough because you don't have enough stomach acid.

stomach acid. Then we look for Then we look for things like things like overgrowth of bacteria, overgrowth of bacteria, especially especially especially commensal commensal commensal bacteria, good bacteria, good bacteria, or bacteria, or bacteria that bacteria that shouldn't be there. We don't shouldn't be there. We don't want dysbiosis under want dysbiosis under any circumstances, and we any circumstances, and we are also looking for parasites, are also looking for parasites, candida, or viral candida, or viral infections in the infections in the gut. God, I gut. God, I see this all the time. I've see this all the time. I've never seen a never seen a clean GI map, and I don't clean GI map, and I don't know if that's know if that's the genius of Diagnostic the genius of Diagnostic Solutions Laboratory or just the Solutions Laboratory or just the fact that all of our fact that all of our guts are so guts are so messed up by life in messed up by life in this modern this modern world. In addition to world. In addition to that, Dr. Jones, that, Dr. Jones, I usually do an MRT test, a food test, a food sensitivity test, you know, a sensitivity test, you know, a high high high reactivity test, to reactivity test, to see if there's anything see if there's anything that we think is that we think is healthy but that might be healthy but that might be contributing to, you know, contributing to, you know, poor digestion.

poor digestion. So, these are the two I So, these are the two I usually start with when it comes to gut health. And then gut health. And then the symptoms, because I want the symptoms, because I want to know how you to know how you feel. If feel. If you have Helicobacter and you have Helicobacter and two parasites, but you, you two parasites, but you, you know, don't notice know, don't notice it or it or feel it, feel it, you know what I mean?

you know what I mean? This is one thing. But This is one thing. But if your GI map if your GI map shows nothing, and shows nothing, and you have all this bloating, you have all this bloating, distension, and, you know, constipation, well, then, constipation, well, then we need to dig we need to dig deeper. Analyses don't deeper. Analyses don't necessarily tell necessarily tell everything. We also everything. We also look at the symptoms.

look at the symptoms. That's great, and I That's great, and I thank you. I love GI Map, thank you. I love GI Map, so I'm glad you so I'm glad you support it, and support it, and you've touched on all the you've touched on all the main

points main points I'm bringing up.

I'm bringing up. It's great for this, and you also mentioned, and you also mentioned testing for SIBR. Were testing for SIBR. Were you talking about you talking about testing for SIBR, testing for SIBR, or did I make that up?

or did I make that up? Ahem. Ahem. Ahem. No, I said I No, I said I mentioned it. Yes, mentioned it. Yes, I mentioned it. For me I mentioned it. For me, this is probably the third, this is probably the third stage.

stage. stage. Yes, yes, yes. So, those are the Yes, yes, yes. So, those are the key things to key things to start with, and there are other start with, and there are other tests that I've seen. I've tests that I've seen. I've seen some seen some specialists do specialists do tests for organic tests for organic acids. And I know there's acids. And I know there's another lab, another lab, and I don't know if and I don't know if you do any tests with Cyrex?

you do any tests with Cyrex? I've used I've used a few of their panels a few of their panels as a little bit of deeper as a little bit of deeper testing, yes. But testing, yes. But generally, I just generally, I just use the MRT and use the MRT and also the GI map, which also also the GI map, which also shows us if you have gliadin antibodies, correct?

gliadin antibodies, correct? Do you have, you know, Do you have, you know, high or low high or low secretory IgA? So we secretory IgA? So we can get a can get a pretty good pretty good idea of ??whether idea of ??whether I should eliminate I should eliminate wheat from their wheat from their diet. So I don't diet. So I don't know if know if I should necessarily do more I should necessarily do more in-depth testing in-depth testing unless the symptoms unless the symptoms indicate it.

indicate it. Yes. Yes. Yes. But do you like these tests But do you like these tests enough? enough? enough? Well, I Well, I like them as a like them as a second stage, right?

second stage, right? Deeper dive, right? So, these are not the? So, these are not the first steps; first steps; they are probably at a they are probably at a secondary level. Because, secondary level. Because, if I say someone is if I say someone is coming in and I'm coming in and I'm going to check going to check their their their gut health, I'll probably gut health, I'll probably start with a GI map, but start with a GI map, but they have signs like, they have signs like, "Okay, it's walking and "Okay, it's walking and quacking like a quacking like a placebo duck." I can placebo duck." I can do a do a placebo test because it begs the placebo test because it begs the question: why are you question: why are you bloated from that bloated from that meal? Why are meal? Why are you so bloated?

you so bloated? Wait, you drank Wait, you drank soda and your soda and your stomach turned stomach turned into a balloon. into a balloon. Wait, this is interesting, Wait, this is interesting, right? Or you've right? Or you've tried all these tried all these different things and nothing has different things and nothing has worked. Okay, worked. Okay, wait, right? There are wait, right? There are certain things that certain things that start to, you know, start to, you know, flicker like this is a flicker like this is a person who needs to person who needs to take a take a placebo test, but I would placebo test, but I would do more in-depth do more in-depth testing, whether it's intestinal permeability levels, whether it's not intestinal permeability levels, whether it's not just gluten but just gluten but gluten-related gluten-related gluten-related things, like different types of things, like different types of gluten. If we gluten. If we run into run into obstacles, or " wait, I did a GI map, but your map, but your antigliadin was antigliadin was so high they so high they couldn't couldn't couldn't read it." It was read it." It was just incredibly just incredibly high. Okay, we high. Okay, we need to deal need to deal with this. This is abnormal, with this. This is abnormal, right? I think it right? I think it all comes down to where we started: where we started: data is useless if you can't interpret it, or interpret it, or if it doesn't give if it doesn't give you actionable information you actionable information,,, or if there's so or if there's so much data that the person much data that the person sitting across from you says, "Where do we even, "Where do we even start?" Of course? And start?" Of course? And the thing about these the thing about these data points is, the more I data points is, the more I get, the more get, the more supplements I'm likely to supplements I'm likely to want want want to prescribe to you, because to prescribe to you, because one thing tells me to one thing tells me to do this, another tells me to do that.

do this, another tells me to do that. And I don't want to give you And I don't want to give you 25 supplements. I want to 25 supplements. I want to focus on what focus on what really concerns you, the, the test scores and test scores

and results, because results, because otherwise it can otherwise it can just be a disappointment.

. Amen. Amen, brother. Amen. Amen, brother. 100%—I feel the same way 100%—I feel the same way. I tell my. I tell my clients, "I don't… I've had clients, "I don't… I've had specialists in specialists in the past the past try to get try to get me to take 30 me to take 30 supplements a day." I supplements a day." I just couldn't just couldn't do it. I can't do it. I can't do this. So I will do this. So I will never demand never demand that from them. I that from them. I always tell them, “What always tell them, “What can we do can we do with food and with food and lifestyle lifestyle lifestyle before we add supplements, before we add supplements, even based on even based on lab tests?

» Of course, I have » Of course, I have a few proven a few proven remedies. If your remedies. If your hormone levels are low, we hormone levels are low, we should prescribe should prescribe hormones for you, right? If hormones for you, right? If you have an intestinal you have an intestinal infection, we infection, we need to remove the need to remove the pathogens. But many pathogens. But many other things, like coenzyme other things, like coenzyme Q10 for energy, Q10 for energy, fish oil, or fish oil, or even vitamin D—all of these are even vitamin D—all of these are helpful if you helpful if you need them. However, it is need them. However, it is not wise to take 10, not wise to take 10, 12, or 15 supplements mindlessly— first, it is very expensive, first, it is very expensive, and second, it can and second, it can be hard on the be hard on the body; especially body; especially for those with for those with liver liver liver or gallbladder problems, or gallbladder problems, as the body as the body has to has to has to process all these process all these supplements along with the supplements along with the fillers. So fillers. So what can we do what can we do naturally?

naturally? naturally? Do you know what we would have done about Do you know what we would have done about 50 years ago, before 50 years ago, before all these all these supplements came along? And how supplements came along? And how can we replicate that can we replicate that now so you can now so you can sustain it in the sustain it in the long long long term? Because I don't term? Because I don't want you to want you to spend spend spend $400 a month on $400 a month on supplements forever. That's supplements forever. That's ridiculous, isn't it?

ridiculous, isn't it? Yes, that may be Yes, that may be too much. That's really a too much. That's really a lot. And I think it's lot. And I think it's important to talk about it important to talk about it. Sometimes we. Sometimes we prescribe a little prescribe a little more supplements, but I more supplements, but I always warn: “ Listen, this is not Listen, this is not forever. This is for a forever. This is for a specific purpose.

specific purpose. Maybe you'll drink Maybe you'll drink one jar and one jar and stop, or we'll stop, or we'll drink the course for a couple of drink the course for a couple of months and do months and do repeated tests, because repeated tests, because I don't want you to I don't want you to take a million take a million supplements, because the supplements, because the more capsules you have to more capsules you have to swallow, the less swallow, the less willing people are to do it. It's just hard. It's just hard to maintain. But to maintain. But God forbid, you God forbid, you travel, you take travel, you take all this with you, you all this with you, you might get robbed. Yes, you can, you can get robbed. I want get robbed.

Peptides and why lifestyle foundations come first.)

I want to end with this, because to end with this, because I really love peptides, I really love peptides, and I was thinking, "Oh, I can't and I was thinking, "Oh, I can't wait for the end, because wait for the end, because this work is very interesting." So, here's the thing." So, here's the thing, right? There's so much information, right? There's so much information about peptides now about peptides now, it's so, it's so easily accessible, and I easily accessible, and I think that think that among those who among those who promote them—whether on promote them—whether on social media social media or in stores—we or in stores—we fall into the trap of, fall into the trap of, "Oh, you have this "Oh, you have this problem? "Take problem? "Take this peptide." But I this peptide." But I think something is think something is being lost here, and being lost here, and I'm going to rant now, Jennifer.

I think what's missing is I think what's missing is that there's a pretty that there's a pretty significant percentage of significant percentage of people who will tell people who will tell you, "I tried these you, "I tried these peptides and they didn't do peptides and they didn't do anything for me." Truth? And then the Truth? And then the mutual mutual

mutual accusations begin, right? From accusations begin, right? From the client's perspective, it the client's perspective, it looks like this: " Maybe you gave me the Maybe you gave me the wrong dose." " wrong dose." " Maybe you gave me the Maybe you gave me the wrong peptide." And we wrong peptide." And we look at the person look at the person across from us and say: " Well, did you actually Well, did you actually train?" "You train?" "You really changed really changed your diet, right?" But your diet, right?" But I think before we I think before we blame each blame each other, we should other, we should think about whether think about whether we have created the conditions for a person to we have created the conditions for a person to succeed with succeed with peptides? And this peptides? And this brings me to the brings me to the question: in your question: in your opinion, what needs to be opinion, what needs to be optimized optimized optimized first, and we're first, and we're not kidding here.

not kidding here. Peptides are a completely Peptides are a completely different category, different category, right? We can right? We can add them here if add them here if we want, but we want, but for the most part, what needs to for the most part, what needs to be optimized be optimized before someone is before someone is ready to get the ready to get the most out most out of peptides?

Oh, you speak my Oh, you speak my language. This is something I language. This is something I keep saying, and it's keep saying, and it's so important because so important because you're right. We don't you're right. We don't want to sit around want to sit around pointing fingers pointing fingers at each other, and we don't at each other, and we don't want to want to want to get frustrated get frustrated get frustrated over the over the misuse of this misuse of this cool new cool new tool, right? So tool, right? So I always tell my I always tell my clients, on my clients, on my podcast, and in my podcast, and in my book: book: book: foundation first, then foundation first, then injections. First injections. First the foundation, then the foundation, then the injections. You should be the injections. You should be living a relatively living a relatively healthy healthy healthy lifestyle before lifestyle before adding any adding any peptides. I know Jay peptides. I know Jay Campbell calls it a " garbage fire," garbage fire," right? If your right? If your health is on fire, don't health is on fire, don't think peptides think peptides will fix you, because they wo will fix you, because they wo n't. Peptides are n't. Peptides are simply a wonderful simply a wonderful tool. It's a very tool. It's a very powerful tool, powerful tool, but it's still just a but it's still just a tool, and you tool, and you need to consume need to consume protein, you know, for protein, you know, for women—over 100 grams a women—over 100 grams a day. You need to day. You need to get 5,000 mg of get 5,000 mg of potassium daily. Normal potassium daily. Normal people get people get about 2000 mg. You about 2000 mg. You should be should be outside for 5 minutes outside for 5 minutes before before before looking at screens, looking at screens, first thing in the morning, first thing in the morning, midday, and at dusk. Just 5 minutes for. Just 5 minutes for the body to know how to the body to know how to tune into its tune into its circadian rhythm and circadian rhythm and start producing the start producing the right hormones, right hormones, especially melatonin and especially melatonin and cortisol, right? You cortisol, right? You need to make sure you are getting 25-35g of are getting 25-35g of fiber, and that your fiber, and that your intestines are able to intestines are able to break it down. And break it down. And of course, of course, make sure you get make sure you get 6 to 8 hours of sleep.

6 to 8 hours of sleep. And if you don't And if you don't, well,, well, go back to my go back to my original advice: original advice: consume protein, consume protein, work on your work on your circadian rhythms, circadian rhythms, and manage stress.

and manage stress. My clients My clients take take take Epsom salts baths, we Epsom salts baths, we practice breathing practice breathing exercises, square exercises, square breathing, and breathing, and grounding. It's pretty grounding. It's pretty simple stuff, you know, you simple stuff, you know, you don't have to pay don't have to pay $5,000 to get $5,000 to get it, but you have to it, but you have to be consistent with be consistent with all of it. And if all of it. And if you're you're you're consistent, willing to consistent, willing to be part of this be part of this new wave of people new wave of people trying things for trying things for the first time, and maybe the first time, and maybe mess up a little bit mess up a little bit with peptide therapy at first, with peptide therapy at first, but go back to but go back to basics and try basics and try again when you get again when you get more protein or sleep, more protein or sleep, I think the results I think the results will be pretty will be pretty good. Not being good. Not being perfect won't perfect won't make you a superman, right? You're not, right? You're not going to be like Gisele, you're going to be like Gisele, you're not going to be like Denzel, not going to be like Denzel, right? I don't right? I don't care who you are, you won't care who you are, you won't turn into turn into someone else, but someone else, but

you can become an you can become an optimized optimized optimized version of yourself if these version of yourself if these foundations are foundations are laid before the laid before the injections begin.

injections begin. That was beautiful. You're That was beautiful. You're basically… That's exactly how I basically… That's exactly how I would answer, right? And I'll would answer, right? And I'll end with an analogy, as end with an analogy, as we began. So, we began. So, how do we start, and how do we how do we start, and how do we finish? To me, finish? To me, it's like you said, " Hey, doctor, I hear you Hey, doctor, I hear you make really good make really good gumbo. You make such a gumbo. You make such a great stew. Let's great stew. Let's do that, okay?" And do that, okay?" And I'm like, "Oh, let I'm like, "Oh, let me make me make this amazing stew for you, okay?" And I go, I get, okay?" And I go, I get organic vegetables, organic vegetables, organic meat, and organic meat, and I say, "These are the I say, "These are the highest quality products." highest quality products." I start cooking I start cooking stew, and there is water in the pot stew, and there is water in the pot that I haven't changed in that I haven't changed in 3 days. I'm just going 3 days. I'm just going to leave that water there, I to leave that water there, I 'm going to throw some 'm going to throw some vegetables in there, I'm going to cook it all up, I'm going to vegetables in there, I'm going to cook it all up, I'm going to give you a stew, and you're like, give you a stew, and you're like, "Oh my God, this is "Oh my God, this is disgusting." And it's like, "What did you disgusting." And it's like, "What did you put in there?" And I'm like, "I put in there?" And I'm like, "I put good put good ingredients in there." This is because ingredients in there." This is because that base, that water, that base, that water, was disgusting. The water was disgusting. The water was dirty, you know, was dirty, you know, we shouldn't have we shouldn't have put those vegetables in, you shouldn't have put those vegetables in, you shouldn't have put all that in put all that in here until you at least here until you at least changed the water. And I changed the water. And I think the think the analogy here is this: analogy here is this: before I start adding before I start adding all these wonderful vegetables all these wonderful vegetables and meats to your stew, and meats to your stew, let's first let's first clean up the water a little bit clean up the water a little bit to make sure to make sure everything is going to work everything is going to work properly, properly, properly, taste great, or you're getting the taste great, or you're getting the most benefit.

most benefit. And I think that's the And I think that's the most important thing we most important thing we need to learn: it's need to learn: it's exciting, and we exciting, and we want to rush in and want to rush in and throw everything into the pot, throw everything into the pot, but sometimes you have to but sometimes you have to do the do the groundwork.

groundwork. groundwork. Dude, great Dude, great analogy. I will analogy. I will definitely quote definitely quote you to my clients. you to my clients.

I like it. I like it. Listen, I brought this Listen, I brought this to share. I to share. I came with gifts. I came with gifts. I came with gifts. So came with gifts. So now you're going away with now you're going away with fire, sturdy fire, sturdy utensils, and stew. You're utensils, and stew. You're walking away with something walking away with something valuable.

valuable. valuable. I couldn't I couldn't pay you for it, pay you for it, but damn it, you'll walk away but damn it, you'll walk away with a with a few analogies.

few analogies. It was really cool and It was really cool and I want to make sure I want to make sure we end on a we end on a great note. First of great note. First of all, I want to all, I want to thank you for taking the time to do taking the time to do this, sharing this, sharing your wisdom and your wisdom and knowledge. And I think that's knowledge. And I think that's fundamental fundamental fundamental for people who for people who are looking to are looking to are looking to optimize their optimize their health, and also health, and also to understand that you shouldn't to understand that you shouldn't take "normal " as something wonderful, and " as something wonderful, and to realize that you need to work to feel healthy.

Where to learn more about Jennifer Woodward.)

But for those who say, But for those who say, "That was great, I "That was great, I want to know more, and want to know more, and where have these FDNs been all my where have these FDNs been all my life?" Like, what is this

life?" Like, what is this FDN icon you're FDN icon you're talking about? For our talking about? For our students, where should they students, where should they start if they start if they want to work with want to work with you or learn you or learn functional functional functional diagnostics?

diagnostics? diagnostics? Yes. So, if you Yes. So, if you want to research want to research functional functional functional diagnostic diagnostic diagnostic nutrition for yourself, nutrition for yourself, I'll send you a I'll send you a link, Dr.

link, Dr. Jones. I get Jones. I get asked this asked this question all the time, so I question all the time, so I wrote a wrote a blog post about it, and I also have a blog post about it, and I also have a coupon for coupon for $1,000 off the course. So $1,000 off the course. So every question every question I've ever been asked I've ever been asked, I've answered, I've answered in this post. You in this post. You can simply can simply google “Jennifer Woodward google “Jennifer Woodward Nutrition, is the Nutrition, is the FDN certification program worth it?” But FDN certification program worth it?” But I will also send you a I will also send you a link. Because she is link. Because she is worth it. In worth it. In short, yes. And short, yes. And then, if you want then, if you want to work with someone to work with someone like me, you like me, you can go to my can go to my Instagram. This is Instagram. This is @jenniferwoodwardnutrition or @jenniferwoodwardnutrition or my website, my website, jenniferwoodwardnutrition.com. This is what jenniferwoodwardnutrition.com. This is what I have been doing for I have been doing for 11 years. I love it.

11 years. I love it. I love it. I love it. And I I love it. I love it. And I would be happy would be happy to talk to to talk to anyone who has anyone who has questions. And Dr.

questions. And Dr. Jones, it's been a Jones, it's been a real pleasure real pleasure to be here with you, to be here with you, so thank you for so thank you for inviting me and giving me inviting me and giving me the opportunity to speak the opportunity to speak today.

today. today. Oh, great. No, I Oh, great. No, I appreciate it, and we'll appreciate it, and we'll put all of these put all of these notes and all of notes and all of the information right in the the information right in the release description so release description so our listeners can our listeners can learn about your learn about your book, YouTube, Instagram, book, YouTube, Instagram, working with you, and working with you, and more about more about functional functional functional diagnostic diagnostic diagnostic nutrition. So I nutrition. So I want all of this to be want all of this to be there, because chances are, there, because chances are, someone someone someone listening was you listening was you many, many years many, many years ago or a few years ago or a few years ago and thought, "Oh my God, ago and thought, "Oh my God, I want to do this.

I want to do this. This is exactly what I've been looking for, This is exactly what I've been looking for, and you may and you may have inspired another have inspired another generation of generation of FDN professionals." And I hope FDN professionals." And I hope you did. So, you did. So, how do we do this? How will how do we do this? How will we do this? So we do this? So before I let before I let you go, I want to give you go, I want to give you my warmest you my warmest thanks and show thanks and show my appreciation, and I my appreciation, and I want to say that it want to say that it was incredible, and I was incredible, and I can't wait for can't wait for this episode to come out so our listeners so our listeners can learn about can learn about you and the work that you and the work that you do.

you do. I can't I can't wait either. And know wait either. And know that I will definitely that I will definitely drag you back into drag you back into my podcast, Dr.

my podcast, Dr. Jones, so we can Jones, so we can dig deeper and dig deeper and figure out figure out peptides together. peptides together. Okay, let's Okay, let's do this. I know do this. I know we didn't… I know I was holding back we didn't… I know I was holding back. I. I just wanted to just wanted to spend this hour spend this hour talking about talking about peptides, but I thought : you know what? I've done this so many times. We're going to…we're going to…we're going to go a little bit beyond that and go a little bit beyond that and end it there.

end it there. This is our icing on the This is our icing on the cake, if you will. cake, if you will. Organic [__]. Organic

[__]. So fun. Funny So fun. Funny things.

things. things. Not so strange. Not so strange. What they add, uh, to the martini. OK., to the martini. OK. So, okay, guys. I So, okay, guys. I want to thank all of want to thank all of you for listening you for listening and watching. And if you and watching. And if you want to think about want to think about your health differently —not just managing —not just managing symptoms, but symptoms, but measuring and measuring and optimizing your optimizing your biological factory, biological factory, Jennifer's work is a Jennifer's work is a masterclass in that. So please. So please look at the look at the release descriptions, check out release descriptions, check out her website, check out her website, check out her information. And it will all be her information. And it will all be there. I'm Dr.

there. I'm Dr. Greg Jones. I want Greg Jones. I want to thank all of you to thank all of you for listening and for listening and watching. Until the watching. Until the next meeting— stay healthy, stay healthy, stay on top of things, and stay on top of things, and keep everything under keep everything under control.