



Dr. Jill Carnahan, MD - 00:00

Hey everybody. Welcome to Resiliency Radio, your go to podcast for the most cutting edge insights integrative and functional medicine. I'm your host, Dr. Jill and with each episode we dive into the heart of healing and personal transformation. Join me as we interview thought leaders, medical experts and all kinds of innovators bringing you information to help you on your journey to optimal performance and longevity. Today's no different. We're going to dive into meta inflammation with the foodie pharmacist Laura and I'll introduce her in just a moment. But before I do, if you haven't yet subscribed or hit the bell to be notified of future episodes, please do so. If you're on YouTube and if you're on any other platform, we'd love if you'd leave us a review.



Dr. Jill Carnahan, MD - 00:40

It helps us to reach more people and if you don't know, you can find all curated products and services, especially our new Dr. Jill Beauty line at DrJillHealth.com one of our favorites that's now back in stock is advanced picuchiol 5x with, sorry, advanced retinol 5x with bakuchiol. This is a powerhouse, one of our best anti aging products. It is absolutely amazing for glowing skin if you have any prous to acne, wrinkles, fine lines. It is probably one of the best sellers and also one of those things that you will see results if you give it 30 days or so. I only use it a couple times a week, but I'm so happy with the results and I feel like it's less drying and less likely to cause inflammation than some of the other retinols that are out there.



Dr. Jill Carnahan, MD - 01:26

Plus it's clean as you would expect from me. And if you don't know, we are accepting new patients at our clinic, Flat Iron Functional Medicine. So if you're a patient out there having difficulties and looking for a complex chronic assessment of your situation, give us a call. We are happy to see you. You can call 303-993-7910 or go to my website for more information. And that's jillcarnahan.com okay, let me introduce Laura and we will get right on with our show. Dr. Laura Zacharia is an integrative pharmacist, nutritionist and professor specializing in functional medicine and personalized nutrition. In addition to clinical practice and teaching, her work focuses on translating complex science spanning nutrition, natural products, diagnostics and health technology into clear, relevant frameworks that support education and implementation. Let's join Dr. Laura.



Dr. Jill Carnahan, MD - 02:17

Laura, so good to see you again We've been floating in the same circles and I think I saw you this last fall, December, and then sounds like we're going to be at another conference in a few weeks together. So I look forward to getting to have some more time with you. But today we're talking about meta inflammation and I'm super excited to dive into this topic with you and get your expertise. I always love to start with a little background on who you are, why you do what you do and how you got into this. So if you want to share with our listeners just a little bit about who is Laura and how did you arrive at this kind of work.



Dr. Lara Zakaria - 02:51

Absolutely. So I love telling the story because I think that it resonates for a lot of people. How we got to functional

medicine is often as a function of our own experience and our own path within healthcare itself. So my background is in pharmacy. I'm an integrated pharmacist and a CNS nutritionist. And where I started was your friendly CVS pharmacist. So I was in retail pharmacy. I was freshly graduated from pharmacy school, excited to like, help my patients feel better, help them, you know, support them answering questions and get them getting healthy. And year after year I was noticing that my patients were actually declining. They're coming in, you know, year one for maybe their liberty, Year two, they're coming in for their metformin. Year three now they've expanded, then they've added another, you know, another medication or a PPI or what have you.



Dr. Lara Zakaria - 03:47

And I kind of noticed that they weren't actually getting better. And at the same time, I'm fairly young, I'm in my mid to late twenties, I've always considered myself healthy, I've always been athletic and I thought I was eating healthy. And meanwhile, my body is breaking down on me. I'm experiencing joint pain, it's keeping me out of the gym, my stomach is always hurting me. I get home from my 12 hour shift, my eight ankles are swollen, I've got cankles, and I'm like, this does not make sense. I'm too young to feel like I am breaking down. And all of that altogether, I think came to a head for me. I was getting really burnt out, like a lot of us in healthcare do, feeling like I really wasn't contributing, I really wasn't making a difference with my patients the way I wanted to.



Dr. Lara Zakaria - 04:35

And I think in exploring how to help myself, I caught the bug first. I caught the nutrition bug, which took me down the path of learning more about what health coaching was and Then from there I was like, I need to learn the biochemistry. I really want to understand how this stuff works. So then I went and got my master's in nutrition and I followed the path of getting my CNS and getting board certified in nutrition. And then I got the pleasure to work with functional medicine practitioners and learning more about functional medicine. And I was like, this is it. This is how we put all the pieces together. Got certified as a functional medicine practitioner through ifm.



Dr. Lara Zakaria - 05:12

And here we are, you know, all these years later, I've been about 20 years on this path and finally feeling like, okay, now we finally have some of these tools to answer some of those questions that I wish I could go back and tell 26 year old.



Dr. Jill Carnahan, MD - 05:26

Me.



Dr. Lara Zakaria - 05:29

Where we're going to end up. It's been, it's been quite a ride.



Dr. Jill Carnahan, MD - 05:32

I love that because so often our journey does take these twists and turns and you know, like, I love you, hated that you had to suffer, but I my own journey too. We have these suffering episodes. We're like, okay, what I was taught in my training does not give me the answers that I need. And I know as patients out there that are listening or even our fellow colleagues, many of us started to look at integrated personalized functional principles when we came across answer that we didn't have the solution for. And it's very similar in your case, right? And then you're like, oh my gosh, there's this whole world out there that I didn't know about. And when you get, I would say you get the virus, right?



Dr. Jill Carnahan, MD - 06:07

When you like hear, like when I heard first function medicine, which of course, Jeff Bland, you know, 20 plus years ago, it was like this, wow, this is for real, like, this is what I mean for. Right?



Dr. Lara Zakaria - 06:17

Yeah, it was just all the pieces finally came together. I'll tell you a story about one of the times that I went to my doctor again. I was about 26 years old, so I was. Chronic joint pain. So what I'm doing, taking Advil. So then what's happening? My stomach's all, you know, messed up because of that. So every time I eat, I've got stomach pain. Every time I don't eat, I've got stomach pain. And meanwhile, I'm just in pain all the time. Not normal at that age, right? So I go to my doctor's like, well, you're, you're, you sure are taking a lot of Advil. I'm like, yeah, but like I'm always in pain. And she's so like, what am I supposed to do about that? And she's like, well just take Pepcid or take a Prilosec.



Dr. Lara Zakaria - 06:58

And I'm like, okay, but that doesn't help my pain. And I'm still taking Advil like it was. And by the way, my stomach still hurts, right? So it was this kind of runaround where I felt like I was being dismissed. And when I tried to investing, like, but can we just ask the question, like, why am I. I work out every day, I wake up at 4:35 o', clock, I'm in the gym, I try to eat healthy, you know, And I'm sitting here and I'm. By the way, in retrospect, I was eating a lot of processed food, a lot of protein bars. Like I didn't have time to take a break to eat. I wasn't giving my digestive system a chance to actually eat without being bombarded by a million phone calls and multitasking, right?



Dr. Lara Zakaria - 07:42

All the things that in retrospect, I'm, I know aren't healthy. But in my mind I'm like, if I grab a protein bar, at least I'm not eating junk food, right? If I can just at least eat this solo cup of cereal, right? Because I would, I worked in a pharmacy, I would grab the cereal out of the aisle and I was, I remember, like I'd grab Kashi or Cheerios or something like that. And I didn't even have time to sit and eat it. So I would never add milk or anything to it. I would literally eat dry cereal because I didn't have time to take a break and actually legitimately eat. Meanwhile, my digestive system's not getting a break. I'm eating a lot of processed food, right?



Dr. Lara Zakaria - 08:23

And I would be all day without really hydrating, trying to just survive on caffeine and energy drinks, right? No wonder my stomach was a mess. No wonder I was in pain and inflamed.



Dr. Jill Carnahan, MD - 08:35

Oh, this brings up so many things I want to talk about and I want to just address. If you guys are out there and you saw the topic meta inflammation, we're going to talk about this. We're going to dive deep into what is meta inflammation, how can hormones and all that. But I want to talk about a few of these things that you brought up because I think they're so relevant. Number one, there's a lot of busy men and women out there like you and I, I can totally relate. One of the things I've just recently realized that's going to happen. And I think it's relevant to these bars and things. Protein has got its time. We went, you know, low fat for the 70s, 80s, and then all these different things, right? And now the new food pyramid and all this. And now.



Dr. Jill Carnahan, MD - 09:06

So protein is king, which is true. We need protein. I'm always recommended. Women who are especially weight training menopausal get a gram per pound, you know, which is a lot. However, what we're starting to see, have already seen, and we're going to see exponentially more is these processed foods that are high protein. I just saw this, I don't know, some sort of ice cream dessert from a fast food restaurant that said so many grams of protein. This is better than your, you know, shake or your bar. And I'm like, this is bs like, to be honest, because what's going to happen is the people who want a convenient thing are going to say, oh, high protein, let's try this. And just like your cereal. And just like when we try to grab those quick things, there is no substitute for real food.



Dr. Jill Carnahan, MD - 09:43

So maybe we just take a little offshoot for the moment and talk about how does the busy man or woman, and you and I are busy women, get real food, get hydrated in the midst. Because I'm like you, I don't take a lunch break. I go right through, how do you do it? What are some tips, you know, and.



Dr. Lara Zakaria - 10:00

And I have had to learn to have some grace with myself. So the first thing I would say is we all have to acknowledge and have grace with ourselves as to what is realistic. 80% of the time is better than 0% of the time. So if we have a bar that we want to reach that we have to be so perfect about, we're never going to get there. So we do the best that we can within the situation that we have. And I think that's really important because so many people quit when they don't do it perfectly or they can't do it perfectly. Right. So that's number one framing. Right. I think the most powerful tool that we have is preparation. Right.



Dr. Jill Carnahan, MD - 10:39

Greed. It is, Yes. I love that because it is. I always have to think about per, like a Saturday, getting those fruits and vegetables and things ready for the week.



Dr. Lara Zakaria - 10:47

Yeah, yeah. One of my favorite phrases to say is if you stay ready, you don't have to get ready. Right. If I keep some food handy, something I can grab, and that is pre done for me, and that's easy. I don't have to think, I don't have to make decisions and I don't have to prep. Yeah, Done. Super easy. So the best tool that we have is batch cooking and meal prep. It's so boring, but it's true. Right.



Dr. Jill Carnahan, MD - 11:11

I love that you're talking about this, because it really is. You have to think about it ahead of time. But then there's so easy once you do.



Dr. Lara Zakaria - 11:17

Yes. And. And look, there's different tricks. Like, there's different things that we could do. Some people get very bored eating the same thing. Some people thrive eating the same thing every single day. Right. You get into a routine, you love it, and other people get super bored. So there's different ways for us to set this up that makes it work for you. Right. That's where personalization comes. But step one is just setting up the routine, finding the time. I usually say twice a week that you're prepared to do some sort of batch cook. Larger cooking. That might mean roasting a whole bunch of vegetables. That might mean getting your insta pot or your crock pot out and making a whole batch of stew. Right. It might be taking a bunch of chicken or meat and getting that all ready for the week.



Dr. Lara Zakaria - 12:02

But you want to kind of think ahead and think about not just what days you're not going to be able to cook, but just lunch and dinner. Lunch and dinner. Right. And then once that's done and it's preset in its. Its pre containers, all you

have to do is heat it up and you're ready to go. And that makes it so much easier. Now we could get fancy later. You can add a little bit more greens to something to change it up. You could switch out one meat for another. You can, you know, put together leftovers to make a new dish out of it. There's. You could change the spices and the herbs. You could turn something from a basic plate into a stew.



Dr. Lara Zakaria - 12:38

Like, there's a lot of things from a culinary perspective that we can do to keep it interesting, but at the base of it, you got to start by carving out the time to prep. Doing it in batches.



Dr. Jill Carnahan, MD - 12:49

Yes.



Dr. Lara Zakaria - 12:50

Having it ready to go. Not in a big pot, like in small individual containers.



Dr. Jill Carnahan, MD - 12:56

Glass. Not plastic, let's say, because of it. Right, Right.



Dr. Lara Zakaria - 12:59


And glass. Yep, exactly. Individual glass containers or stainless steel containers so that you could just grab. And there's zero excuse. I like glass over. Over stainless steel. Just because if you have to microwave it, you can, but you can also stick it in the oven. Especially if you've got the good Pyrex.




Dr. Jill Carnahan, MD - 13:17

Yes. Okay. Love that. And I'm just thinking really practically some things I've learned of super simple tip trip tips and tricks. Because I'm just like you, super busy woman. I'm sure many of our listeners relate. So at work I'm busy, right? I need protein. I buy the mercury free tuna and I'll throw a little organic avocado oil and almonds and some olive oil, you know, some healthy oils on top of there, a little sea salt and literally like I can have a meal that's mostly protein, very quick to get by and it's clean because it's mercury free. Tested Fish second is in. I do dairy free,


so I do coconut cashew yogurt and some of the new brands have added like coconut butter or something to increase protein. So I look at like 10 grams or more per serving of protein.

 Dr. Jill Carnahan, MD - 13:59


But then I take a scoop of organic bone broth protein and stir it in my yogurt so that's like superpower protein on top of berries or grain free granola or so again, it's like getting in these. Not a bar, but actually really truly healthier ways to get that protein. And then talk about greens and veggies. We none of us get enough. I have fresh sprouts from a local farmer delivered every week. So I have every week I throw them in everything. And I feel like that's a little cheat that you can do. You can buy these at the grocery store if you don't have a local farmer who delivers it. I'm so lucky. But just 20 minutes before we got on here, it got delivered to my door. My God, my fresh sprouts. And then throw those on everything.

 Dr. Jill Carnahan, MD - 14:35


And sometimes with that tuna, I'll just throw a handful of sprouts on there. So this. Yes, because those are power packed and they're so. And of course, like literally this is grown and harvested and at my door, probably minutes from them clipping it off. So it's as fresh as it can be.

 Dr. Lara Zakaria - 14:49


Yes.

 Dr. Jill Carnahan, MD - 14:50

You can't. You could go to farmer's market. So those sprouts are my trick because I add that nutrient dense food. There's the tuna. And then like you said with batches, I don't eat red meat. That's just a personal choice. But chicken and fish are my things. Fish is hard to prepare if you have histamine issues and it doesn't smell very good leftovers. So I do more the canned or that. And then I cook the chicken in batches and have lots of fresh organic grass.

 Dr. Lara Zakaria - 15:14

My, my tip on the fish. I love the low mercury tuna idea. I also really like anchovies for that because they're smaller fish and anchovies.

 Dr. Jill Carnahan, MD - 15:23

Yes.



Dr. Lara Zakaria - 15:23

And they're small, so power packed. Those are like, you know, everybody's like, all about liver because it's so nutritious and it is. I call anchovies the liver of the.



Dr. Jill Carnahan, MD - 15:32

Sea because they're like, very similar. Because that when I'll tell you for years, because I would smell the tuna, I was like, that's gross. I'll never eat that up until like just a few years ago. And then I'm like, this is really good.



Dr. Lara Zakaria - 15:42

It really is. And it is an acquired taste. And I want to remind folks, listen, sprouts are very powerful flavor. Anchovies, sardines and anchovies, really powerful, strong flavor. You know, if you're not used to bitter vegetables, all of those are going to take some getting used to. And the good news is that with more exposures, the more often you taste a food, the more likely you are to become accustomed to it and eventually to start to like it. So if something's not currently part of your palette, it's not something that you love or crave, you have to give yourself a chance. They say it could take up to 30 exposures to a food. The good news is that could be like once a week you have a food that you're trying to learn to enjoy. Personally, I'm a super taster.



Dr. Lara Zakaria - 16:29

I am not naturally, like, inclined to want to eat bitter foods. To me, they taste really harsh. So in order for me to start eating more vegetables, right, to eat especially those very, like, strong flavored vegetables, I had to learn to do that. It was something I had to consciously make a decision that I'm going to slurp to slowly expand these vegetables in my diet. Until this day, I am proud to say I don't love beets, but I learned to appreciate them. I will never say they're my favorite. Everybody else is there. So sweet. I can't believe you don't like them. They don't taste sweet to me, but I've learned to pair them and appreciate them the way that they're prepared. And I will eat them occasionally. They're not my go to.



Dr. Lara Zakaria - 17:12

So I just want people to understand that because I think a lot of times we go to the same habitual foods all the time and we might shy away from trying new things because we think we might not like them. But even if you just try a couple bites of them, over time, your palate will start to adjust. You just need consistent exposure to that

food. It may not like me. You might be like, beets like me. Like, it's not my favorite, but I can eat it and I can appreciate it.



Dr. Jill Carnahan, MD - 17:37

Hey, guys, just a reminder to hop over to doctorjillhealth.com for great products and services that are vetted and curated especially for you. In today's episode, you might find our Cortisol Essentials really a powerful support for your adrenals. If you're under stress and life seems a bit hectic, it's again, cortisol.essentials@drjillhealth.com head right over and take a peek. I love that because I like arugula super bitter. It's one of my favorites. Now, like, I love a full arugula salad. It is like. And bitters are so good. If you're out there listening, if you can get some of these. My sprouts, a lot of them are very bitter, very spicy. But I actually am like, oh, my liver, my gallbladder is so happy with this food. And.



Dr. Lara Zakaria - 18:17

Exactly. I eat it and I just think of how the bitters are just stimulating all the bitter receptors in my digestive tract and they're helping stimulate the production of my digestive enzymes. And my happy little liver is. Is excited to see these bitters. And it's, it really is interesting because, like, arugula is a great example. It's now to the point, like, I have to remind myself to get a different green because I just automatically go.



Dr. Jill Carnahan, MD - 18:41

To the arugul, like, love it so much. Now I'm. Same way I'm like, now I'm addicted to rugal and sprouts. But so let's go. We talked about. So inflammation is very relevant because what we're talking about is ways to, number one, sustain a busy life with nutrients and phytochemicals, which are part of the way to quench this inflammation. But let's talk for those who got on here for the title. What is I. I've had a trainer I work with is always saying, what is inflammation, Joe? What is it really like? Let's go deep. What inflammation. Give us a really good definition of that idea.



Dr. Lara Zakaria - 19:11

Great. Okay, so I'm going to draw a picture here. Okay. We've all seen an orchestra play, right? We've all seen the different instruments, the different sections. Some of us might be musicians, and we can appreciate how every part of the orchestra has its own role to play. And then you've got the orchestra leader at the front that is sort of making sure that everybody is cohesively playing together, that everybody's in harmony and no section is overpowering another section. That's what makes an excellent performance professionally put on orchestral piece. Right? So if you think of your immune system like an orchestra, we have multiple aspects of the immune system that is playing at the same time, that receives signals from other parts of the orchestra and uses it to then harmonize with that in order to get to our end goal. Right.



Dr. Lara Zakaria - 20:01

And we all know the primary purpose of our immune system is to defend our body from foreign invaders. And we have multiple mechanisms in which we do that. And all of that is basically coordinated by, let's call it the orchestra, making sure everything is in tune, everything is working efficiently. Now we can have two things going on. We can have the immune system under activated where it's too low, the orchestral pieces, some parts of the orchestra are not loud enough. Right. And that is an underactive immune system. Or we could be on the other end of that spectrum where it's too loud. You've overpowering, it's out of tune, it's out of sync, and it's not turning off. And that's usually what we call autoimmune disease or autoinflammatory disease, or histamine sensitivities or all those I put in that latter category.



Dr. Lara Zakaria - 20:49

So when we talk about inflammation, what we're talking about essentially is that disjointedness that the orchestra is not in harmony and it sounds less like a orchestra in a professional, like philharmonic setting and more like the seventh grade band recital. Right. And that to me, that's kind of, of helps to explain why these complex pieces, it's not always just about the immune systems over activated or under activated. Certain aspects are just not aligned with other aspects. And what we, when we think about inflammation, we think about chronic inflammation or immune disorders. What we're talking about essentially is that this is then disrupting other systems that rely on the immune system. For example, our gut heavily relies on the immune system in order to protect us from infections that come in when we're eating.



Dr. Lara Zakaria - 21:45

If our immune system wasn't in place, we would be sick all the time from the food that we're eating, from the air that we're breathing.



Dr. Jill Carnahan, MD - 21:52

Right.



Dr. Lara Zakaria - 21:52

It's constantly making sure that we're being defended from all these potential invaders. However, when it's under acting, under behaving, it starts to throw off not only the immune system, it starts to then also throw off the environment of the microbiome, the natural balance of the bugs that are in our GI tract that are part of that symbiotic relationship with the orchestra. So part. That's part of it. The other aspect of it is the way that we utilize our nutrients in order to fuel and feed the immune system. For example, vitamin D is a major player, and I would say one of the major orchestra leaders. Vitamin A is another one. Zinc, vitamin C, they all kind of help to make sure that those aspects of the immune system are in play. And then there is how do we actually power it?



Dr. Lara Zakaria - 22:40

How do we actually make. Make sure that all of this is running and that's where our metabolism and our energy expenditure comes in to feed into that orchestra?



Dr. Jill Carnahan, MD - 22:49

Very good analogy. And I know people can relate and they're like, oh, yeah, my orchestra is not playing well right now. One of the. Again, the topic we talked about is this meta inflammation, but particularly women. All the men and women listen to this. So if you're a man listening, you might make sure your wife hears this or your partner or your daughter or your mother, whatever. But I want to talk a little bit about hormones because a lot of these. These complexities can be perpetuated by hormone imbalances or made better by hormone balance. Do you want to talk a little bit about. Let's start with, say a woman comes into a doctor and she's like, I just don't feel right. I, you know, skipped a couple cycles the last year. I'm gaining weight and I'm eating the same and exercising the same.



Dr. Jill Carnahan, MD - 23:29

I'm a little more puffy around the belly. My brain is foggy. We've both heard this, right? So this whole, like, I'm not myself and their conventional doctor might do basic labs and everything looks great. And they're like, you look really good. Why don't you come back in a year? What would you say to this woman as far as what might be going on and how she could dive deeper into the root cause of these kinds of symptoms?



Dr. Lara Zakaria - 23:50

Yeah, the first thing that jumps to mind, I think, when we think about energy in particular, is we start thinking about the way the body is utilizing fuel. Right? So the first thing I'm thinking about is how efficient is your body able to take the fuel from your food and actually use it to power the system? So another analogy coming our way, right? So I think of our energy system, our mitochondria, if you remember that word from science class, as the energy factory of the cells. And I think of it like A bank, right? It's in there, it's making all the money. And the money is in the form of something called ATP. And ATP is needed to run every system in the body in order for this bank to operate, to make sure that we're feeding it.



Dr. Lara Zakaria - 24:35

And it takes usually two things to, to fuel it, to feed it. One, our carbohydrates. Two, our fats, our. And. And whether or not we're able to efficiently use carbohydrates and fats at the appropriate time is what we call metabolic flexibility. When somebody is metabolically flexible, they're able to switch gears and use fat when needed or use carbs when needed. When somebody's metabolically inflexible, they're stuck in one mode or the other. It's usually in carb mode. And they end up feeling tired, crashing in the middle of the day. They need a ton of caffeine, they get

hangry. That's usually a really good sign that you're probably metabolically inflexible. It's normal to get a little peckish and to like, start to like, not maybe operate at 100. That's totally normal.



Dr. Lara Zakaria - 25:25

But when you start being unpleasant, like, everyone's watching out, they're avoiding you because you haven't eaten in a few hours. Right. Or you're snapping at your partner or at your kids because you know your blood sugar is low, that is usually a pretty good sign that your body is not efficiently switching from using carbs to using stored fat in order to sustain you and keep you going.



Dr. Jill Carnahan, MD - 25:49

Excellent and great explanation. So what do we do? Obviously we have deeper testing and that, but is there some things you might recommend to begin with, whether it's diet or lifestyle changes, that this woman might start to see a benefit even without additional testing?



Dr. Lara Zakaria - 26:04

Yeah, I think that's a great point. Right. There's a, There are demo. We could talk about more advanced tests. We could talk about things like continuous glucose monitors that people are getting really interested in. And more data sometimes could be really helpful. But just as a starting point, I think experimenting with how you proportion things like protein, carbohydrates and fats. Number one, are you skipping breakfast? I think that most people benefit from making sure that they have breakfast within one to two hours of waking up.



Dr. Jill Carnahan, MD - 26:32

I agree.



Dr. Lara Zakaria - 26:33

If you tell me you're not hungry in the morning, that's another clue that you're probably metabolically inflexible or, and, or that you are stressed out and that you are not your Other hormones like your cortisol and your other stress hormones are probably out of whack, right? So starting out the morning with at least some protein is usually a great way to one recalibrate some of those stress hormones and your circadian rhythm. And at the same time, to help fuel your morning. Now from there, I would really prefer that we also add a little bit of fiber to help make that more sustainable and help you start training your stomach to feel more satiated with more fiber to kind of expand and take up room in your belly.



Dr. Lara Zakaria - 27:20

It's also going to help feed and fuel all those gut microbiome bugs that living in our GI tract. So usually I say protein plus rainbow. So what I ideally like you to do is find something colorful. It could berries. Those are some of my favorite. Go to if you prefer something sweet in the morning. So you could do berries. If you can do dairy, you can do like a Greek yogurt. That's usually a good combo. Cottage cheese is making a comeback because of its relatively high protein content. What we want is usually, I say start at least 15 grams of protein at breakfast. What I ultimately want you to get to is usually about 25 to 30 grams. 35 grams of protein at breakfast, plus some fiber and something colorful. The more variety in that color, you the better.



Dr. Lara Zakaria - 28:08

If you're somebody who prefers something a little savory and you're feeling a little bit more adventurous, then try like a salad for breakfast, try some soup for breakfast, right? But just the idea is to combine something that is going to sustain your blood sugar and that's going to make you feel satiated. So hence the combination of the fiber and the protein. And then of course, if you could drizzle on some olive oil or avocado, some other healthy fat, that is a bonus.



Dr. Jill Carnahan, MD - 28:33

Oh, that was really well said. And I couldn't agree with you more because our traditional American system has given us carbs for breakfast that are refined, looking like your cereal in this, in the little solo cup, right? Like, and this is the worst thing people could do. And I'm always saying, I want to go to this next as far as like, adrenal dysfunction, cortisol curves and how we modulate that because a lot of us are working with a dysfunctional cortisol curve. And that can manifest with that afternoon fatigue or this second wind at night from, you know, 7 to 9, where all of a sudden it's your most wide awake time and you should be starting to get ready for bed or you Just cannot get out of bed. And all those are signs of a dysfunctional cortisol curve.



Dr. Jill Carnahan, MD - 29:11

Now, I want to talk food, because I think food can very much help on that level. But before we do, if you're struggling from any of those things, and maybe you can add to that, Laura, from some other symptoms I don't want to forget to talk about, like, how do we. A lot of people out there are stressed and our world is going faster than ever before. And I think we would be amiss if we didn't talk about, like, how do we actually take care of ourselves and say no. And for me, what it's been is before I was the response one, which meant every time, text, every email, everything that ever came my way, I would respond probably within 24 hours, and people could count on me. And I found in the last couple years, I can't do that.



Dr. Jill Carnahan, MD - 29:47

And I don't even try to anymore. And what it ends up is there are people who are disappointed in me, there are people who let down, or there's some emails that I don't look at for two weeks. And it is just the way it is. Because

in this world, that is the only way that I can maintain harmony, that I can get outside in nature, that I can work out, that I can sleep, I can take care of my patients and my friends and family and do those as priorities and take care of myself before I feel like I have to respond to every need that's out there. Talk a little about that, because I think you nodding you can relate to.



Dr. Lara Zakaria - 30:16

I would love to. I think that particularly I'm gonna speak for myself. I'm an only child, and I feel like growing up as an only child, there was a lot of expectation on my shoulder, right? I was like, the one kind of shining example of what was, you know, what my parents. I would be. And I think I grew up thinking that meant being agreeable, that meant always showing up, that meant going above and beyond, that meant answering everything immediately, as quickly as possible. And it took me 38 years, 39 years to figure out that it was happening at the expense of my nervous system, right? And not only was I exhausted, I had hit major burnout mode by that time. I was the sole caretaker for my mom who was ill. I had just transitioned and started my own practice and a business.



Dr. Lara Zakaria - 31:22

And I was transitioning away from traditional retail pharmacy into this business. And I was doing this, like, again solo. And I was completely and utterly burnt out. I gained a bunch of weight. I was having trouble getting up in the morning, I was doing the exact thing, like you're saying, like, wide awake at 7pm and cannot open my eyes at 10am, right. Like, that was exactly me. So, so out of whack. And the reality is, I thought in order to succeed and in order to kind of prove myself, that I had to constantly say yes to everything.



Dr. Jill Carnahan, MD - 31:56

Yes.



Dr. Lara Zakaria - 31:57

Not only was I disappointing myself, I was disappointing everybody around me because I couldn't keep up. I was late all the time. I couldn't respond to anything. I was delayed. I was late sending things in. Right. Like, I was not even. With all that pressure, I still wasn't even. Right. So I realized at some point that you have to. In order to be kind to everybody else, you have to be kind to yourself first. You have to learn how to set up boundaries. And by the way, this is probably triply worse when you've got children, small children, relying on you've got extended family relying on you. Right? Because at the end of the day, it's sometimes easier not to delegate. Sometimes it's easier to avoid conflict and just say yes. Right.



Dr. Lara Zakaria - 32:42

Sometimes it's easier just to give in and say, well, this is what's expected and it's not going to change. They're not going to change. Right. And I think ultimately it's good to work on yourself, but you have to also work on those relationships and those expectations. And that is harder than any. Any protocol, any diet I can recommend, any. Anything else I could potentially do. All the fancy, fun things, the gadgets we could talk about, the labs we could talk about. Right. All of those things are distractions from the reality that until you learn how to really dig in and stand up for yourself and decide what's important, what's a priority and what gets your attention, you're always going to be in this loop. And at the end of the day, I feel like, you know, as a.



Dr. Lara Zakaria - 33:30

As a nutritionist, I always have to be like, hey, it's all about nutrition. But honestly, a lot of times we have to start with this piece or else things are not going to improve.



Dr. Jill Carnahan, MD - 33:39

Oh, Laura, you did such a great job of adding to what I said, too, because I think this is. And like you, I feel like we can go a lot of nutrients, a lot of lab testing, but if people aren't going to this place, and I know more than ever before, every patient that comes in nowadays is feeling the sense of overwhelm because our world is exponentially increasing the speed and the chaos and the insecure, like everything that creates Insecurity and stress is exponentially increasing. So we have to have a very groundedness about who we are, what our purpose is in this world. How do we like for me, sleep is non negotiable. I will say no to a million things if it affects my sleep and my morning routine.



Dr. Jill Carnahan, MD - 34:17

Now I do red light and PEMF and journal and pray and that is non negotiable. And so and exercise in a healthy way. Whereas I used to, I think we talked about this too. I used to do CrossFit orange theory and it was way too much for my system. And I walk and I jog a little, but I keep my heart rate in zone too. Like there's so many things I do differently that are so much kinder and.



Dr. Lara Zakaria - 34:39

I think there's so much out there that you're supposed to do a certain thing, a certain way. For example, I will stand on the soapbox. Not everybody's a morning person. And that's okay.



Dr. Jill Carnahan, MD - 34:49

Okay, right.



Dr. Lara Zakaria - 34:50

It's okay. We don't all to be up at 5am, 6am doing all the things. Maybe you get up at 7, 8, 9 and that's your rhythm. There are different chronotypes that thrive at different. With different schedules and that's okay. Sometimes you have to give yourself the grace as you're healing your adrenals and you're healing your hormones to take time in the morning that you're not going to jump out of bed and immediately get started and give yourself a ramp up to before you get started with your day. Yes, some, for some people hit workouts and orange theory totally handle it.



Dr. Jill Carnahan, MD - 35:27

I couldn't after 40.



Dr. Lara Zakaria - 35:28

When I tell you it took me, I'm no joke. It took me at least three years to ramp up. And again, I was a former athlete, I was a former dancer, I'm a snowboarder. I was in the gym. I was a, I was a self certified gym rat. Right. I was in soul cycle. I would do 90 minute like you know, bike rides, all these things, right? Like I was no, like I was not an out of shape or like somebody that was against the gym or anything like that. But when I crashed in my late 30s, I, it took me, no joke, three years just to get past being able to do ten 15 minute workouts. Yeah, right.



Dr. Lara Zakaria - 36:05

And I was doing pilates, I was walking and it took me another year to build up to where I could do significant second weight lifting and to the point where now I could do about like 30, 40 minutes of working out. Right.



Dr. Jill Carnahan, MD - 36:20

And the truth is when that cortisol goes up and you're in a high stress. So if you're out there listening, you have a massive amount of obligation and stress and you're taking care of people. You should not be using your workouts to add cortisol to that. Like, so what that means is the high intensity is maybe not the right thing at this time for you. Although when we're in our 20s and 30s, it might be the perfect thing. So. So it's very variable and that listening to themselves and then something that you as. As only child and I'm oldest girl. So a lot of similarities.



Dr. Lara Zakaria - 36:47

Very much, yes. All my favorite people are oldest daughters.



Dr. Jill Carnahan, MD - 36:50

Totally. The oldest girl. Our only children are totally. Because we're very productive and we're very efficient. But I want to speak to that if you're out there listening, because what I had to do is I had such. I was farm girl, which means, you know, buck up, do the work, highly productive, don't complain. All of those things which made me who I am. However, I had to rewrite the script. And the importance here is what used to happen is productivity was valued and need to go for a walk or to just play with someone or color or something that was non productive had less value. So if you were to assign a value, these things that were actually nourishing for my soul had very little value according to how my mind took in how I was. And I'm just saying how I was raised.



Dr. Jill Carnahan, MD - 37:32

Parents are amazing, but according to the ethic of how I was raised, right?



Dr. Lara Zakaria - 37:36

Yes.



Dr. Jill Carnahan, MD - 37:36

I had to rewrite that script and create value around play. Like again, growing up, there was, you don't play, you work. In fact, I remember I tell the story sometimes my mom and dad laugh. You know, when I was like, you know, 10 or 8, I'd have chores, mom would give me a list. I go into the ironing and do the chores and. And all great. Like, I had this great work ethic. When I'd get done, I'd sneak off and do all the chores, check them off, and then go to my room and sneak off because I love to read. Read and I read. But I literally get in trouble because there was always more chores to do. Yeah, I would get in trouble for reading, which nowadays, like, what kid would you scold for reading? Right? This thing of like resting, even reading.



Dr. Jill Carnahan, MD - 38:13

Like education was right.



Dr. Lara Zakaria - 38:14

But it wasn't for homework, it was reading for pleasure. So therefore it was unnecessary.



Dr. Jill Carnahan, MD - 38:19

It's not productive again. Yeah, it comes from like a German Ethic of hard work and all that. But I, I'm saying that because you may need, if you're listening out there, to rewrite your script.



Dr. Lara Zakaria - 38:28

Yes.



Dr. Jill Carnahan, MD - 38:28

Literally, when you're sitting on the floor playing with your kids, that might be the most valuable, productive thing that you do all day for your nervous system. Or, you know, someone calls and interrupts your busy schedule and they're in desperate need because someone they love just died or whatever, you might stop and have a call with a friend and share tears with them or give them a hug. And once again, those things are so valuable. But we have to rewrite the script around it, don't we?



Dr. Lara Zakaria - 38:54

Yeah, yeah. You know, you made me think of how right now. And by the way, I love this narrative, right. The idea that as women, we've been historically told not to bulk up, not to gain weight, not to build muscle. Right. And so historically, all the exercise that most women do tends to be like, let's get leaner, let's tone, let's avoid heavy weights, let's not get bulky. And I love right now that there are a lot of women in our space are advocating for lifting heavier weights, building more muscle. Right. Training for our 80 year old body so that we still have mobility and strength. And I could open jars by myself, thank you very much. Right. I love this rhetoric so much.



Dr. Lara Zakaria - 39:34

However, for some of us, especially those of us through middle age, going through perimenopause and menopause, you may not be ready for that right now because your nervous system may not be ready for it right now. And there's this idea that if you're not burning enough calories and this is like such a 90s thing, right? You have to. How many calories did I burn? And therefore was that an effective enough workout? Did I sweat enough? Was that a. I'll all for sweating. Don't get me wrong, I think great sweat is great for a lot of different reasons. However, the barometer of how hard you worked, how much you sweat or how many calories you burn is not the barometer of whether or not that workout was worth it.



Dr. Lara Zakaria - 40:11

Yes, you might really benefit from beginning to lift more weight, but you may not be ready for that today. That's what you're going to build towards. And today what you need might be a walk, right? Might be a walk and talk, as I like to call it with my friends. Hey, what are you doing? I'm going to go take a quick walk. You want, you want to get on the call with me? Me, right? What you might need is to sit down and play with your kids and roll around on the play mat. Right? What you might need is just to do some deep breathing right to that. Sometimes I just sit on my vibration plane. I just sit like plop down on it because that's what my body needs in this moment. Right.



Dr. Lara Zakaria - 40:46

And not to put a value on it because something got accomplished or you burnt something or you hit the goal on your already guilty. Right.



Dr. Jill Carnahan, MD - 40:53

Me too.



Dr. Lara Zakaria - 40:54

Sometimes what you need is to actually learn how to tap back into your body and be like, what I need right now is this. What would nourish me right now is this.



Dr. Jill Carnahan, MD - 41:03

Oh, love, love. Because I know women. And again, this is. Be you believe it or not, this is all related to inflammation. Because inflammation is a signal, whether it's the foods or the environmental toxicants or the inputs that we're putting including our. Our language around our self recording of what we tell ourselves every day. Those things drive our immune system. And so this really does matter on meta inflammation and that self talk and telling us, you know, we're enough or whatever, you just reminded me. And I've said this before on the podcast, but I have a little sticky note that years ago I put in my mirror and it said, what does she need from me today? And it was a rewriting of the script around. I take care of everybody else really well, I think, for the most part.



Dr. Jill Carnahan, MD - 41:40

And this was rewriting the script around, like, what do I need? Because I was so disconnected from my ownness

for many years and many decades, I had to literally relearn, learn how to assess what do I need? And just like you, some nights I just need a walk with a friend, or some nights I need to walk alone, or some nights I need, you know, the coloring or sitting on the vibration plater. So it's really neat to reconnect. If you're out there and you're. You're kind of like, as you hear me talk, you're like, well, I'm not sure what I need. That's an important thing to relearn and reconnect because we so often get so disconnected, we lose track of what we truly need to be healthy and well.



Dr. Jill Carnahan, MD - 42:15

And even though you can get a great function medicine doctor, a great pharmacist, a great nutritionist, all of these things, our most power lies in. In our own rhythms and knowing what we need. And most people can be empowered to know for themselves without having to access an outer authority. Right? Yeah.



Dr. Lara Zakaria - 42:34

I want to kind of also plug it back to what we're talking before about preparation and meal prepping and planning. One of the, one of the things that I find people struggle with when they want to eat healthier, they want to change their diet, which obviously I'm all for getting them to eat fresh food, to prepare as much as possible at home. But if your nervous system is so out of whack that your cravings are all over the place. Right. That your energy's all over the place, that the idea of coming home from work or after a long day standing in the kitchen and cooking is not accessible, I think this is where we start to want to also think about other tools that we could use. Right. If you could get pre made meals. Right. There's a lot of great meal delivery services.



Dr. Lara Zakaria - 43:18

For example, if you have access to. There are fairly financially accessible cooking services too, and chefs that will do that you could order pre made meals from. And the big one is asking for help.



Dr. Jill Carnahan, MD - 43:35

Help. Yes.



Dr. Lara Zakaria - 43:36

The number of times that I have heard women tell me that they feel so responsible to feed their family, like they are not, they don't feel like they're fulfilling their obligation to their family. If they ask their family to help them in the meal preparation tells me that's, that's a red flag, that there's a signal beyond the fact that they're not able to, that they're not getting help.



Dr. Jill Carnahan, MD - 43:59

Right.



Dr. Lara Zakaria - 44:00

And that they're responsible for all the cooking, which is exhausting, but that they're going back to this, asking for help, re. Reimagining what you need to support you and leveraging the people around you. Because cooking is communal. It's a way for us to connect with the people around us. And it's part of practicing how to show up more for yourself. And to ask for something I think is a muscle that has to be trained just as much as a bicep or a quad. Right.



Dr. Jill Carnahan, MD - 44:32

Oh, I can.



Dr. Lara Zakaria - 44:34

That's a great way, I think, to like kind of do both at the same time. To both nourish your body through food, but also nourish your soul by. By asking for help.



Dr. Jill Carnahan, MD - 44:43

Yeah. Wow, this is so great. We could talk for another hour. But I want to end with some, you know, top tips, maybe some quick tips of nutrition, lifestyle, diet. What have you personally found to be the most. But I did want to mention, and I actually pulled up this statistic because as you were talking, I remember The Gottman sharing 15 year study indicated that women who do not cook daily for their husbands have a higher Relationship satisfaction average of 8.4 out of 10 compared to those who did, which were 6 out of 10. And this is from a validated study, 15 year study. So I thought that was so interesting.



Dr. Lara Zakaria - 45:17

That is so interesting.



Dr. Jill Carnahan, MD - 45:19

Yeah, it's true. I mean really validated. I think it was some of the, I don't know, I should actually find that. I'll find for the those of you who want show notes, I'll make sure and include that study there.



Dr. Lara Zakaria - 45:27

But I want to see that study that is. I know, right.



Dr. Jill Carnahan, MD - 45:31

The opposite. And it's actually men and women. It's not just men are. I mean of course the women might be happier because they're not having to cook if they don't like that. But both, even the male satisfaction in the relationship was greater when the woman didn't cook for him.



Dr. Lara Zakaria - 45:43

That's amazing.



Dr. Jill Carnahan, MD - 45:44

That's very sexist. I know there's lots of different relationships nowadays, so. But that was just 100%.



Dr. Lara Zakaria - 45:49

But that, let's be honest, I, that is ideally there are different kinds of relationships and everybody within their partnership finds the best way. But the reality is we still live in a society that usually the women.



Dr. Jill Carnahan, MD - 46:02

Are still a little bit bent out.



Dr. Lara Zakaria - 46:03

It's so weird if she's not the primary person who's cooking. Right. Like we still go, oh, that's different. Right. We have not evolved to a place.



Dr. Jill Carnahan, MD - 46:10

Where we like there's more. So let's just end in the last couple minutes here. I want to wrap up but I want to make sure like for you, what have you found with meta inflammation with our topic here and with all of these things. We've talked about so many things what are kind of your non negotiable habits or things that have been most powerful in shifting the stress curve and just your life and happiness in general.



Dr. Lara Zakaria - 46:32

Okay, all right, just three. Oh my gosh. Okay. I'm going to start with something that's super basic and I think super easy because I think this is something that most of us can do and that is early light exposure in the morning. That is going to anchor a couple of things that we talked about today. It's going to anchor number one, our circadian rhythm. It's one of the simplest ways to make sure that we are activating our waking response in the morning. So I usually tell my patients, eyes, eyeballs on some sunlight, look at the light outside, open the window is number one. Number two level up from there is to actually step outside. Open the door and step outside. That's even Better. Number three is if you can walk outside.



Dr. Lara Zakaria - 47:21

I don't care if you actually take a walk or you just walk out to the mailbox and you get the mail. But just taking that extra movement, all of that helps to set off our cortisol in a good way. We want our morning cortisol to rise and we want it to within 30 minutes of the time that we rise. We want it to hit, to start to hit a aggressive peak. It's kind of like a roller coaster starting to go up. And so that is a really simple way that most of us, even if you're in a state of burnout, not only is that going to be a powerful way to hopefully get you out of that burnout, but it's a simple thing that you could find a routine in.



Dr. Lara Zakaria - 47:56

And I think anchoring that routine just not only helps set up your morning, but helps to set up the rest of the circadian rhythm for the rest of the day. Number two, I'm going to go back to what I said about protein and rainbow. I think number two is going to be, once you kind of get your eyeballs on that light, is to then go ahead and make sure that you get your protein and your colorful fiber rich rainbow. Now I don't, I, I, I, I know I'm not going to be

popular for saying this, but coffee is not breakfast. I'm sorry, I don't care how much protein you put in it, coffee is not breakfast. It is polyphenols. I will give you credit for that.



Dr. Lara Zakaria - 48:34

There's some great antioxidants in coffee and if you add some, you know, collagen or something in there, sure that's going to help. But for a lot of us, especially if our nervous system is really amped up, that caffeine on an empty stomach right in the beginning is too stimulating and potentially could be really harsh on our digestive system. So make your coffee in the morning, that's fine. I would like you to have a solid meal next to that. Something with start if you're not super hungry, with at least 15 grams of protein and a little bit of color next to it. And then if you can, try to aim for, like I said, 25 to 35 grams of protein from there. And keep in mind that the amount of protein you can tolerate is going to depend on how active your digestive system is.



Dr. Lara Zakaria - 49:21

So listen to your body, do not overshoot the protein just because you're supposed to hit a certain number. We need to start working on your digestive fire first so that you can start tolerate more and more protein and to hit that goal that you mentioned before, which was one gram per pound or yeah, one gram per pound. So that's number two. Number three would be to get in some form of movement. Whether that's in the form of a gentle walk after meals. I usually tell folks, if you're going to pick a time to walk, do it after dinner. That's going to give you the most bang for your buck for balancing your blood sugar. Not just tonight, post dinner, but to overnight and then tomorrow during the day.



Dr. Lara Zakaria - 50:06

However, if you can, what I usually say, especially if you're new to working out, you're still kind of getting your rhythm and groove in or maybe you're just too tired to get a full workout in are what I call exercise snacks. So the idea there is to do some form of movement. It doesn't even have to take 10 minutes. It could be like literally 30 seconds of movement throughout the day so that you are consistently moving your body. One of the easiest and most evidence based methods to do this is to do squats every hour on the hour. So you set your alarm, you get up, you do 10 squats, you sit back down and that's it, that's all you have to do. And that has actually been shown to be as effective as taking a walk.



Dr. Lara Zakaria - 50:47

And that helps to improve your insulin sensitivity. It gets blood flowing. I promise you. Your focus and your concentration is going to get better because you're going to get more oxygen to your brain and your body is going to be so thankful that you're not just hunched over your keyboard all day, that you're getting up and you're moving. And so that accomplishes a few different things because we're not being sedentary all day. You're getting a little bit of air and oxygen, which is important. We need that. And you are also improving your muscle tone over the course of the day.



Dr. Jill Carnahan, MD - 51:21

Awesome tips. So the daylight in the morning, the protein in the morning, with your breakfast. Breakfast and the movement, the little exercise snacks, I think those are. I couldn't agree more. I really like your tips, Laura. This has been so fun. Like I said, we could keep going for another hour, but where can people, they want to know more about you, the work that you do, anything you're working on. Give us a little update on that real quickly.



Dr. Lara Zakaria - 51:42

Yeah, absolutely. So you can find me on my website, larazakaria.com just my first name and my last name. You can also come find me on instagram where I take I tend to spend too much time probably, but I love connecting with people there. Please reach out, comment, respond. That's me answering back. So I love hearing from folks there, but I love to talk about all of these same things. And I'm also on TikTok, on Substack and on LinkedIn.



Dr. Jill Carnahan, MD - 52:11

Fabulous. Thanks again for coming on Laura. It was so much fun. Hey everybody. I hope you enjoyed that great episode with the foodie pharmacist Laura. It was really fun and you can see her energy is just contagious. Just if you guys don't know and are looking for a functional medicine expert, our office is actually accepting new patients. You can always call 303-993-7910 or visit jillcarnahan.com for more information. We have multiple mid levels that are trained by me and work with me in all cases and we are would be glad to consult with you on a case if you have a medical need. Just get a hold of us. As you know, our new episodes are coming out every single week on Wednesdays. So please stay tuned for next week's new episode.



Dr. Jill Carnahan, MD - 52:51

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