

[178: Resiliency Radio with Dr. Jill: Treat & Heal Autoimmunity with Dr. Akil's T.I.G.E.R protocol!](#)

Dr. Jill 00:12

Well, hello, and welcome to another episode of Resiliency Radio with Dr. Jill! Today I have a special guest who has a new book called *The T.I.G.E.R. Protocol*. We're going to dive into how this can help your health, whether you have inflammation, autoimmunity, or are suffering from a chronic, complex disease. I'm super excited to introduce our guest today. Doctor, may I ask how you pronounce your name? I want to say it correctly.

Dr. Akil 00:38

Akil.

Dr. Jill 00:39

Akil. Dr. Akil is a Harvard-trained physician who practices integrative medicine, blending his conventional medical expertise with holistic approaches, including functional medicine and Ayurveda. He attended Harvard University and graduated magna cum laude with a Bachelor of Arts in Biochemical Sciences. He earned his medical degree at the University of California, San Francisco, and completed family medicine residency training at Stanford University. He then graduated from a fellowship in integrative medicine with Dr. Andrew Weil at the University of Arizona and received a certification in mind-body medicine from Georgetown University Center. He is the Department Chair for Integrative Medicine at the Sutter Health Institute for Health and Healing (IHH). He also serves as the IHH Physician Director for Community Education. He has been a consultant with the Medical Board of California for many years.

Dr. Jill 01:29

What an amazing history! I always love to start with: How did you get into medicine? Did you always want a more holistic route? Tell us a little bit about your journey to where you're at now.

Dr. Akil 01:40

Thank you, Dr. Jill. I'm happy to share. Like many of us functional medicine providers, I came to this field through my own illness. This was more than 20 years ago, when I was in medical school. I grew up with a very straight-based, conventional approach to life and studied biochemistry in college. But during medical school, I developed this mystery illness after about a year. I started getting

unexplained weight loss, fatigue, back pain, and neck pain. It got to the point where I could not sit up in a chair, continue my classes, or even use a computer. I had to stop my medical training and take a year off because all the conventional treatments, physical therapy, and anti-inflammatories were not really helping.

Dr. Akil 02:33

It was during that year that I was forced to explore other options. For the first time, I saw an Ayurvedic practitioner, which changed my whole approach and my whole life. I also saw a functional medicine practitioner and started changing my diet, sleep, and stress. By the end of that year, I felt better than I'd ever felt before. I realized I really needed to get trained in these things because I felt the difference. That was when I decided I needed to go into integrative medicine. And that's been the journey.

Dr. Jill 03:07

Wow, that's amazing! And I'm sorry you had to go through that, but what a blessing that it transformed your life. And I have the same story. I remember years ago, when I was at Loyola University and I started the first-ever integrative medical club. We brought in practitioners of Ayurveda, massage therapy, and chiropractic. I was considered the weird one. And nowadays, I often have colleagues that have been in conventional medicine and they'll be like: "Jill, my husband has" this thing, "and the medicines haven't worked. Do you have any ideas?"

Dr. Jill 03:33

It is this shift often. We have wonderful training in surgery and medications, and there's a perfectly appropriate place for that, but then there are these complex chronic things like autoimmunity, obesity, and diabetes—the epidemics that are happening. Our conventional medical system isn't necessarily curative for those things through drugs. So, it's so powerful—your own story. You've written this book, *The T.I.G.E.R. Protocol*. We're going to talk about that today. Let's just dive in. Tell us, what is the T.I.G.E.R. Protocol? And what does the T.I.G.E.R. stand for?

Dr. Akil 04:10

The T.I.G.E.R. Protocol is my approach to all chronic diseases, including autoimmune disease, but also metabolic disease and any inflammatory condition. These are the five drivers of inflammation that I have found in my research that are fundamental. It is an acronym. 'T' is for toxins. 'I' is for infections. 'G' is for the gut. 'E' is for eating and managing a diet. And 'R' is for rest, including sleep and

managing stress. Those are the five pillars of chronic disease, I feel, that we need to address and that are not getting enough attention in our modern world.

Dr. Jill 04:49

I love that! I do functional medicine like you do, and I have to say that at the root of most of these complex chronic things is the balance between infection and toxin and then they drive inflammation. And of course, diet, lifestyle, sleep, and all the other parts of the T.I.G.E.R. acronym. That makes so much sense. Let's start with toxins because, in my mind, this is the elephant in the room. Most patients aren't even aware that they're breathing air that's toxic, eating food that's toxic, or drinking water that's toxic. Give us your overview of toxic exposures. How do we assess that? And then, what can we do about it?

Dr. Akil 05:23

I totally agree. I put the 'T' first because I think it's the primary issue. In the book, I focus on autoimmune disease. I write about 20 different categories of toxins that have each been individually linked to an increased risk of autoimmunity—things like heavy metals, BPA, pesticides, endocrine-disrupting compounds, airborne pollutants like air pollution, and waterborne toxins. These have all been studied individually for their link to inflammation. But all of us have multiple toxins, so there's a synergistic effect.

Dr. Akil 06:03

In some of the studies, there were between 100 and 200 different detectable levels of toxins in the average person without any exposure—not in a factory worker or [someone] living near a toxic waste site. But the reality is, we're all in this together. My approach is to teach people how to reduce exposure to toxins by living clean, looking at their water, food, air, personal care products, home, and all these [other] things that they might not think of.

Dr. Akil 06:34

One of my favorite tips is that I found that there's research about shoes and the bottoms of shoes that often contain pesticides and even drug-resistant bacteria. If you leave the shoes at the door when you enter, that's a simple way to prevent tracking in all those toxins through the rest of the house. I think that, like that, there are many simple things people can do.

Dr. Akil 07:00

I emphasize boosting your detox capacity, because our bodies are designed to detoxify, and supporting them with healthy cruciferous vegetables. I love beet greens and the leafy tops of beetroots as a liver support, and then potentially supplements like glutathione and sulforaphane.

Dr. Akil 07:23

I'm a really big fan of sweating in a sauna. They studied sweating in a sauna compared to sweating from exercise and found that sweating in a sauna was better for excreting a number of measurable toxins. I recommend all my patients incorporate some type of sauna practice.

Dr. Jill 07:40

Wow, I love that! And you're right, out of Europe, we've gotten some really good data from Turkish saunas and stuff. Cardiovascular risk, autoimmune risk—you can name a disease and there's probably a decreased risk from that [type of] sweating. I love that you mentioned that because a lot of patients will say: "I exercise and I sweat a lot. What about that?" I love that you specifically said there is a benefit to [using a] sauna above and beyond just the sweating of exercise. I totally agree.

Dr. Jill 08:04

One of the things I hear you saying that I think is so critical is... At least years ago, it was really popular to do a 21-day detox in January or "Think about this like a new year, a new you." But the truth is, if we're not teaching our patients and even ourselves to do daily habits that incorporate detox—whether it's Epsom salt baths, infrared saunas, or eating beet greens—we're behind the eight-ball. We're all filling up with toxic loads from exposures, and we have to incorporate these daily habits to bring that down.

Dr. Akil 08:35

Yes, I totally agree. Surprisingly, with the sauna research, there's a Canadian group that's very active in studying saunas, even though it's not like Finland, where it's super popular. But what they found was that any type of sauna is fairly equivalent, like a steam sauna or an infrared dry sauna. I tell patients that it doesn't matter the type of sauna and that they just get warmth.

Dr. Jill 08:58

That's another good answer to a question that we haven't asked because so many patients are like: "What about the infrared?" or "What about this \$20,000" expensive "sauna?" You don't need something that expensive. You just need that good heat and that sweating. I love that you mentioned steam saunas because I have wondered myself: "Can you sweat as much? Are they effective?" But it sounds like any sort of sauna can be a beneficial part [of detoxification]. So that's the "T" [for toxicity]. [Next is] infections. You and I both know that they're very common and hidden. Talk a little bit about infections; how do patients know they might have them? And what do we do about it?

Dr. Akil 09:33

There are multiple different categories of infections. There are chronic bacterial infections, which could be Lyme disease or other bacterial overgrowth in the intestine. There could be viruses either in the virome in the gut or systemic viruses. There can be fungal organisms, [such as] candida and yeast species as well. There could be parasites. Also, we look at archaea, which are methane-producing organisms often implicated in SIBO, or small intestine bacterial overgrowth.

Dr. Akil 10:09

It's possible to test for a number of these. Also, simultaneously, I like to focus on the terrain of the body because I think we have to make the body inhospitable to infections. One of the ways I found to do that in my research is by optimizing the pH of the stool, because that tells us about the pH of the large intestine. A lot of these bad bugs, like yeast or bad bacteria, can only overgrow if the pH becomes alkaline, like when it starts getting above 7.5. The optimal gut is a little bit acidic in the intestine. It should have a pH of 6.5 or lower. I use a stool pH, which is a conventional test through regular labs, to assess that and then help people make their bodies inhospitable to infections.

Dr. Jill 10:56

That's really, really powerful information. I don't know that I've heard a lot about the pH of the stool, but I can see that being really important and easy to assess, which makes it nice. So you're saying that in a conventional lab, you can check stool pH and do a sample.

Dr. Akil 11:08

Yes, pretty much. Quest, Labcorp, or any type of conventional lab will do it. But the key thing is that it also speaks to the issue of normal versus optimal. Their normal range is set based on population averages: [inaudible] to 7.5. So patients tell me: "Look, my pH is 7.2. I'm normal." And I say, "No, that is not optimal because the research shows it should be 6.5 or lower." And almost nobody's there. So, normal is considered alkaline.

Dr. Jill 11:38

Amazing. And what can patients do? Say their pH is 7.5 and they're like, "We need to be more acidic." What would you have them do to start changing it?

Dr. Akil 11:46

There are many things. Boosting fiber in the diet is a way because the main determinants of pH are the short-chain fatty acids, which are produced by the good bacteria in your microbiome. Then [it's about] boosting prebiotic foods—specific foods that can be used and fermented by the microbiome. I go through the resistant starch, the arabinogalactans, and the polyphenols. I list hundreds of foods so people can choose what they are willing to eat. Also, fermented foods [are beneficial] because they contain organic acids [like] lactic acid and acetic acid. That can help acidify the colon. I think apple cider vinegar is also a good option to support that. Finally, for some patients, I do recommend additional prebiotics. Things like psyllium husk have been shown to boost short-chain fatty acids. Partially hydrolyzed guar gum is another good option as well. A combination diet, prebiotic foods, fermented foods, and then prebiotic supplements—all of the above can help.

Dr. Jill 12:55

That's fantastic because I think the old school 20 years ago, when we first started, was more like, "Just take a probiotic," "and this can be helpful." But you're saying to actually get foods that either have probiotics, are fermented, or are sources of fuel for the enterocytes and the bacteria in the gut so that they can make things like butyric acid. That's so powerful.

Dr. Jill 12:55

One other thought as we were talking about the "T" and the "I" in the T.I.G.E.R. Protocol—we have toxins and infections—when you have infections inside your body, you can have endotoxin production. You can have a toxic effect from the

infections in your body, like bacteria, yeast, or whatever. It's interesting because we often think of toxins as outside of ourselves. But you can have a toxic load inside as well, depending on what kind of microbiome you have.

Dr. Akil 13:36

Yes. And that's a great point. I think it highlights that all of these five causes are interconnected and they do overlap. For example, glyphosate, which is a toxin, has a negative effect on the microbiome. When they first brought it to the market, it was as an antibiotic. But then the company found that it was pretty poor as an antibiotic. It only kills the good bacteria and doesn't kill the bad bacteria, so they switched to marketing it as a pesticide. But it has effects on the microbiome. So toxins and the microbiome are closely connected.

Dr. Jill 14:13

Hey, everybody. I just stopped by to let you know that my new book, *Unexpected: Finding Resilience through Functional Medicine, Science, and Faith*, is now available for order wherever you purchase books. In this book, I share my own journey of overcoming a life-threatening illness and the tools, tips, tricks, hope, and resilience I found along the way. This book includes practical advice for things like cancer and Crohn's disease and other autoimmune conditions, infections like Lyme or Epstein-Barr, and mold- and biotoxin-related illnesses. What I really hope is that as you read this book, you find transformational wisdom for health and healing. If you want to get your own copy, stop by ReadUnexpected.com. There, you can also collect your free bonuses. So grab your copy today and begin your own transformational journey through functional medicine and finding resilience.

Dr. Jill 15:10

Yes. I love that you say that because it is everywhere in the US. I was just talking to another guest about wheat and how it's sprayed before harvest, so most of the wheat in the US is contaminated with glyphosate. I think even recent studies showed organic California wines had traces, so it's everywhere. It's getting all over the place, so you really have to choose your food non-GMO whenever possible. It means that it's not genetically modified and there's likely less or no glyphosate.

Dr. Jill 15:37

So, 'G' is gut, right? Talk about the gut. You already gave us some pearls, but let's dive a little deeper. I do agree with you; the gut is so core to the immune system and every system in the body. What kind of pearls would you give us for gut health?

Dr. Akil 15:52

With the gut, I like to teach people about keystone bacteria, which are the foundational bacteria in the microbiome. I describe in detail five different species of keystone bacteria, including Akkermansia, which is important for metabolism. And then, of course, bifidobacterium and lactobacillus; people have heard of those. But Bacteroides can often be the most abundant bacteria in the microbiome. That's a pathobiont. In certain conditions, it's benign and in certain conditions, it's harmful. I also mentioned Faecalibacterium prausnitzii, which could be up to 15% of the microbiome in healthy individuals.

Dr. Akil 16:33

I'm teaching people what these bacteria are, how they work, and how to boost their levels through food, which is definitely doable. For example, Akkermansia responds really well to red polyphenol-rich foods like pomegranate, cranberry, dragon fruit, red rice, red quinoa, and so forth. That's one example. And under gut, I do include the oral microbiome because digestion starts in the mouth. The oral microbiome is being increasingly studied for its role in regulating inflammation, the immune system, and a lot of systemic issues.

Dr. Jill 17:10

Wow. What a great overview. And most of those keystone strains are mucus producers, which means they protect the barrier so that there's less likelihood of ulceration or inflammation. It's so crucial. It's interesting because you and I can do the stool test and look at a patient's gut microbiome, and based on some of the ones you mentioned—Akkermansia [and] Faecalibacterium Prausnitzii—we can determine if they have a diverse gut microbiome or not with the keystone strains.

Dr. Akil 17:37

Yes. One interesting thing about Akkermansia is that it feeds on mucus, so it can consume mucus. What that does is trigger the remodeling of the gut lining and the production of more mucus so that the barrier becomes thicker and [more] protective. This is one of the interesting mechanisms at work.

Dr. Jill 17:54

It is. For years, when I'd see someone who had no Akkermansia, I was like, "Uh-oh, we need to do something about it." I did not know about the red foods and the polyphenols. That's a really great pearl. I've seen a little bit of evidence that spore probiotics can also help a little bit with diversity, which I think is powerful. So the 'E'—tell us about the 'E' in the T.I.G.E.R. Protocol.

Dr. Akil 18:14

I believe food is medicine. This is my favorite topic. I break it down into two diets: The phase 1 diet and the phase 2 diet. The phase 1 diet is an elimination diet where people eliminate a list of food sensitivities like gluten, dairy, alcohol, and nightshades. It's fairly restrictive, but the only way to tell whether you have food sensitivities is by doing the reintroduction. The reintroduction is very important because we don't want people to be on the restricted diet long-term because that will hinder the diversity of their microbiome.

Dr. Akil 18:52

Then, in the phase 2 diet, we do all the systematic reintroductions over an eight-week time period. And then we're focusing on the prebiotic foods and the fermented foods. There are a couple of prebiotic foods that I think are surprising to people. When it comes to polyphenols, we know blueberries, or berries of all types, are great. But the fruit that's the richest source of polyphenols is elderberry. I tell my patients to make elderberry infusions or have dried elderberries, whatever way they can get them. Among all nuts and seeds, ground flax seed is number one. A close second is chestnut. Chestnuts are very high in polyphenols and are very good for the microbiome. You might only eat them for the holidays, but I think they're great for year-round intake because they're so good for the microbiome.

Dr. Jill 19:42

These are some great pearls and foods that people may not think of frequently but are so important. That's also part of the key to diversity: Diverse foods—the colors and the types of foods. I get so into the same old foods that I like and eat over and over again, so that's a good call to action.

Dr. Jill 20:02

You have a background in Ayurvedic medicine and bring those principles in. Tell us maybe a few of the unique principles about that. Are there some things about cold or hot foods or different types of combining? Are there any particular principles that you'd like to share from Ayurvedic medicine?

Dr. Akil 20:16

Oh, yes. Ayurveda is like an ocean, so we could talk for hours about that. But I'll just pick a few things to highlight. I do think eating seasonally is very important. With Ayurveda, they always emphasize getting your local food and eating locally, which automatically means you're eating seasonally. In colder seasons, there are foods that are available that are more warming to balance your body. And then in the spring and summer, the foods that are coming to crop are more cooling. Naturally, nature arranges that, so eating locally is very important.

Dr. Akil 20:53

I think a number of the tips that Ayurveda gives for oral health are very good for the oral microbiome. For example, oil pulling with coconut oil—where you take some coconut oil, swish it around your mouth, and then spit it out after 5–10 minutes—has been shown to be beneficial for your oral microbiome bacteria. It's antimicrobial against bad bacteria. Oil pulling is powerful. Tongue scraping is also really great because it's been proven to reduce the bacterial load on the tongue, which can contribute to dysbiosis, potentially. Simple daily practices: Tongue scraping, oil pulling. I love the neti pot as well because you are irrigating the sinuses and that helps the sinus microbiome. It's great to see how modern research is confirming a lot of these ancient practices.

Dr. Jill 21:48

I love those things on all fronts. Recently, I've dove into research on nitric oxide production. As we age, we decrease production, but we need to have a healthy microbiome in the mouth to produce nitric oxide from foods like beets, arugula, bok choy, and all those nitrate-rich foods. So it's a core thing. I think, at least as Americans, we've gotten to think that we have to sterilize with high-potency mouthwashes that destroy the whole microbiome in the mouth, [such as] chlorhexidine. I won't name any brands, but some of the ones on the market are not good for the microbiome in our mouths. I love the oil pulling, the tongue scraping,

and brushing your teeth with a good hydroxyapatite toothpaste. That's really, really important. And, like you said, the digestion process starts with the microbiome.

Dr. Akil 22:39

One other food that's supporting the oral microbiome is green tea. It's a very good prebiotic for your gut bacteria as well as the oral bacteria in the mouth. I tell people to just swish the green tea around your mouth before you swallow, and then you'll get that prebiotic benefit for both the oral microbiome and then the gut microbiome too.

Dr. Jill 23:02

Fantastic. It's such a good way to start the day, especially if you're not a coffee drinker, with a little bit of green tea. That just comes to a question. I wonder what you think about chewing gum. Are there good chewing gums? Do you recommend not chewing gum? Any thoughts on chewing gum?

Dr. Akil 23:16

Potentially, chewing gum has been shown to boost saliva production. Healthy saliva is really important for the oral microbiome and maintaining a good balance. I like chewing gums with xylitol. Xylitol is also a prebiotic. It has been shown to work on your oral biofilms and have multiple dental benefits. Finding a chewing gum with xylitol is what I recommend.

Dr. Jill 23:41

Oh, excellent. I couldn't agree more. It's really good stuff. The 'R'—the last part of your protocol. Let's dive into that. Tell us more about the 'R.'

Dr. Akil 23:51

This is also one of my favorite topics because I think the mind-body connection is so powerful. In the book, I try to present newer data that may not be widely known. Everybody knows about stress. When I talk about stress with my patients, their eyes glaze over, so I try to present unorthodox findings like novel research. Some of the research on mindset and how that impacts your physiology is really powerful. For example, they've shown that your beliefs about food, independent of how many calories it has, change your hunger hormones. If you believe that you're having a very high-calorie shake versus if you're told that the shake is a diet shake—and they have identical calories—the one group with the high shake had three times the level of hunger hormone produced. Just the belief about the food makes a big difference.

Dr. Akil 24:47

Even your mindset about stress. Whether you believe stress can potentially enhance and boost your productivity, or if you believe stress is always bad and debilitating and is going to ruin your life, that belief about stress literally changes your stress hormones during stressful situations. How your cortisol [inaudible] responds, how your DHEA responds—all of that is affected by your beliefs. I think there's so much untapped data in this world of neuroplasticity and mind-body understanding. I think it's a really powerful way to impact health.

Dr. Jill 25:24

I really like that because I've seen it in my own practice. I've done function medicine, gut health, and all these really deep dives into supplements, nutrition, diet, and lifestyle. As I've gotten further and further into it, I've started to realize there are a few patients who aren't getting well. Often, it's their mindset, their identity around illness or health, or there are some beliefs that they've gotten attached to that maybe don't serve them well anymore. Including myself too, I've learned through that. But we often attach to something, whether it's an identity, an illness, a belief about our diet, a belief about stress or fears. Fears like, "I'm going to die from this thing" or whatever. Often, those beliefs don't serve us and they perpetuate the illness. I found some pretty profound shifts with patients as we talked about those and as I did programs that are [involved with] limbic retraining. How do we desensitize our bodies to stress? I love that you end with this rest, but it encompasses so much more, doesn't it?

Dr. Akil 26:19

Yes. And [that] even [includes] your beliefs about physical activity, which determine how your body responds to physical activity, as well as your beliefs about sleep, which can have an impact on how you're feeling.

Dr. Jill 26:28

Yes. Let's talk [about] sleep a little because I feel like that's such a core. Whenever I'm asked what's the one thing that I think is most important, I always say sleep. I'm sure that you agree as well. Any tips or hints? I think some people, if they're not sleeping well, get into a panic state. What would you say would be the top three pearls about how to get a good night's sleep? What do you teach your patients?

Dr. Akil 26:51

This might be an unpopular opinion, but my view is not to use a sleep tracker. The reason for that is that there was a randomized study where half the group was told, "You guys had a great night of sleep the night before." Then half the other group was told, "You guys had a very poor, terrible night of sleep." That was independent of their actual sleep. They were in a sleep lab. Those who were told—there was no correlation—that they slept well, regardless of how they actually slept, had less fatigue, more energy, less sleepiness—all those positive things. And vice versa.

Dr. Akil 27:26

That's why I see so many of my patients tell me, "This morning my Oura ring told me I slept poorly and I started feeling badly." Then I explain the research. I tell them: "Just keep a journal and track your perception of how the sleep was. How did you feel? How did you rate your sleep? How are you feeling in terms of being well-rested?" I think that's better for most people. Some people can handle all that data effectively and are fine. But for many people, I see the other problem. Too much data can be an issue as well, so that's one thing I would probably start with.

Dr. Akil 28:07

From Ayurveda, I think there are a couple of tips for improving your sleep. At night, by applying a healthy oil like sesame oil or coconut oil to the soles of the feet, that could be very grounding. In Ayurveda, it's believed that it helps sleep. Especially my pediatric patients, for kids, I [inaudible] their moms massage their feet and put on some almond oil or something benign at night. That often helps [with] sleep. It is very grounding and calming.

Dr. Jill 28:37

Those are some great tips. I'm a biohacker, so I love the data, but I completely agree with you. I was joking with a friend the other day. I get up, and before I say, "Did I sleep well?" I look at my app. If it ever isn't very good, I'm like, "Oh, no!" I laugh because I don't think it completely disarrays me. But it's also interesting because I think there's power there. Or the opposite is that at night you're trying to go to sleep and you're starting to worry: "What if I don't fall asleep? What if I don't get a good night's sleep?" That rumination at night can keep you up and affect your sleep. So often we're teaching patients that at the beginning of the night: Take away the alarm clock, take away the time, and let yourself just be; if you just lie there for a

few hours, you're going to be fine. And you do that self-talk, or some of these new things that have stories, music, or apps that are calming. There's all this stuff. But then we have the technology, the Bluetooth, and the Wi-Fi too. I don't know the best answer, but I really like that you said to get rid of the apps if it's bothering you. It's really important.

Dr. Akil 29:36

With the Wi-Fi, I tell my patients to put it on a timer so that when they're sleeping, it goes off; just minimize any EMFs or other exposure [inaudible].

Dr. Jill 29:46

I couldn't agree more. In our last few minutes, I want to go back. You had an illness in medical school and that really transformed your life. If you could go back and talk to your younger self, what tips, one, two, or three things would you want to tell your younger self before you knew what you know now?

Dr. Akil 30:05

I think the first thing would be that "This too shall pass," because at the time I was really depressed. I was really in despair. My dream was to become a doctor and I thought I was not going back to medical school. It was very, very depressing. I think that encouragement was helpful. The other message would be to know that things happen for a reason. Looking back now, I can see how, even though it was very painful, that was a great turning point. Part of what occurred was that I had become a vegan a few years before medical school. According to Ayurveda, that's actually not a good diet for my body type. I should have some animal protein. Before I knew that, I tested it out by—after being vegan for so many years—eating a chicken sandwich in the UCSF cafeteria one day. At the end of that sandwich, I bit into something and I pulled it out. It was a piece of paper, and it had the word 'ration' on it. I interpreted that as: "A ration is something really vital in a time of need that you consume in a small quantity." I realized it's the universe telling me to incorporate animal protein again. So I did that, and that was key to my healing as well.

Dr. Jill 31:27

Wow! I love those kinds of stories because I do believe there's nothing coincidental. In the midst of it, it feels like randomness. And it feels so scary, like you said. I have such a similar journey because I had breast cancer in medical school. About 10 years prior, I had become vegan because I didn't like meat. I look back and I'm sure it was

low stomach acid, so meat never felt well. I was extremely low in zinc, which usually leads to young women not having a taste for meat. So now I'm like: "Oh, no wonder! Had I known any of those things..." Then, when I got cancer and was severely deficient in B12, zinc, and [vitamin] D and some of these things, I realized the same as you: "Maybe for my body, animal protein is a good thing." I still limit it. It's not a huge amount of my diet; plants are so key, as you mentioned. But it's such a similar journey because I realized, "For me, that was not the right thing at all."

Dr. Akil 32:17

Yes, exactly. I love how we learned through our own experience and our own bodies, because that's how a lot of the learning first originates.

Dr. Jill 32:25

Yes. Thank you for taking your learning and putting it into a wonderful protocol. I've got it right here. And of course, it's right behind you there. Where can patients find you and [where can they] find the book? Give us a little information about how to get more information about your practice and your work.

Dr. Akil 32:42

I'm available on social media at @DoctorAkil—[the word doctor] is all spelled out, [not abbreviated]. Also, patients can connect with me through my website, which is DoctorAkil.com. Again, it's all spelled out. And the book is available wherever books are sold, [such as] bookstores, Amazon, and all the usual channels.

Dr. Jill 33:03

It sounds like a really wonderful, easy way for patients to get some practical advice for almost any complex chronic disease. Thanks again for taking the time today to talk to us!

Dr. Akil 33:12

It's my pleasure, Dr. Jill. Thank you so much for inviting me!