

[#76: Dr. Jill Interviews Dr. Pamela Smith on Maximizing Immunity](#)

Dr. Jill 00:13

Hey, everybody! We are live with Dr. Pam Smith. She's been on the podcast and show before and I am so excited. Not only is she a well-respected colleague and friend, but she has also been such a mentor and great influence in my life and I just have the utmost respect for her as a colleague, clinician, and writer. She's done so many things. One of my heroes, Pam, you really are. And the fact that I get to call you friend as well—it's an honor and a privilege to have that in my life. I'm happy to have you here today.

Dr. Jill 00:45

A little background before I introduce Dr. Smith. You can find us now on iTunes and YouTube. We've got over 70 interviews with great content and great experts. I always learn so much. It's kind of my little secret about this as I get to learn and interview some of my favorite people. Today we're going to talk to Dr. Smith about her new book called *Max Your Immunity*. I'll be sure to tell you where to find that. Of course, it's more relevant than ever now. If you want to find blogs or information about me, you can go to my website, JillCarnahan.com, and the retail store is DrJillHealth.com.

Dr. Jill 01:19

Without further ado, Dr. Pamela Wartian Smith spent her first 20 years of practice as an emergency room physician at the Detroit Medical Center and then 26 years as an anti-aging functional medicine specialist. She has trained almost all of us in some way, form, or another because she's been so involved with A4M and these groups. I remember Pam years ago with PCCA, probably 20 years ago, when I first heard you lecture. What I loved about your lectures was that you were so concise. There are these bullets like, "Here's a list of this," "Here's a list of this." You have such a way of simplifying complex topics. So thank you for being such a pioneer in this field.

Dr. Jill 01:57

She's a diplomat of the board of the American Academy of Anti-Aging Physicians and is an internationally known speaker and author on the subject of personalized medicine. She also holds a master's in Public Health along with a master's in Metabolic and Nutritional Medicine. She's been featured all over—on CNN, PBS, and many other television networks—and has been interviewed in numerous consumer magazines. She's hosted two of her own radio shows and was featured as a physician in the PBS series, *The Embrace of Aging*. There is so much more, but she's got a lot of books out today. We are excited to talk about her latest book, *Max Your Immunity*. So welcome, Dr. Smith! I am so glad to have you here.

Dr. Pamela Smith 02:38

Thank you so much. I appreciate the invitation.

Dr. Jill 02:41

Yes. So tell us what led you to write. This is such a relevant topic and I want to dive into what the content is and why people want to get a copy of their own. But what led you to write this next book? You've written so many and you've been so successful as a writer. Tell us more about this book, in particular.

Dr. Pamela Smith 02:59

Well, this is what the book looks like, *Max Your Immunity*. Honestly, it is a book I never thought I would write. I was writing the second edition of my book, *What You Must Know About Women's Hormones*, when, all of a sudden, God brought this book to me. And I mean that sincerely. It was like, "No, you need to write about how people can improve their immune system." What is the immune system? How do you improve it? How do you not over-improve it to the point where you develop an autoimmune disease? What 10 things can you do?—if they were just there. [And it's about] looking at nutritional status and how you can improve it through nutrients.

Dr. Jill 03:46

Wow, I love that! We both come from the perspective that we include spirituality in our practice. It's so important because [of the] mind, body, and spirit. If we just fix the physical, but we don't have a connection to people or a connection to God and what he does in our lives, we're missing part of the picture. And you and I were both talking about how that defines who we are and what we do in the world, and this is

no different. I love that you were inspired in a way to move forward. It's such a needed topic.

Dr. Jill 04:15

And who knew we were going to have the second wave? Some people did predict it. But it's even more important as people are dealing with what's coming down the pike. What I think we've had this last year is this sense of helplessness, like we can't do much about it, like we're victims. I do not believe that at all. I know this book is part of that empowerment because we do have control, to some extent, over our immune systems, don't we?

Dr. Pamela Smith 04:40

We absolutely do. We really are the keepers of it. And if we do bad things, it makes the immune system worse. There are so many things that we can do. Of course, it's great to see a healthcare practitioner. But that's not what it's all about. We can do many of these things all on our own. It's a very positive book and it's a very exciting book to have written because there are so many things that we can do to help our immune system be balanced. And really, that's what it's all about: Balance. You have to have the immune system working the right way.

Dr. Jill 05:18

First of all, I love that you mentioned balance because an overactive immune system is just as bad as an underactive [one]. You have this balance and you want the immune system to fight infections, but if it gets triggered or you do something way too extensively, you can go in the other direction and fight yourself. Do you want to frame that just a little bit for people listening to what that means in the balance aspect?

Dr. Pamela Smith 05:41

Absolutely. First of all, your immune system has two parts. There's the innate immune system. That's what happens when you get a neurotoxin or infection. Your body has an immediate response. This is something that you inherit. How healthy your mother was and how healthy she was during pregnancy does play a role in that innate immune system.

Dr. Pamela Smith 06:07

Then you have the adaptive immune system. This is a system that takes over after a while so that you create antibodies to the antigen and fight the infection, for example, COVID. Both of those have to be working. However, if you do things that make it hyperimmune, meaning you overdrive the system, then the body starts attacking itself and you develop what we call an autoimmune disease. There are now 105 autoimmune diseases. In my 44 years of practice, this number has grown dramatically. It really has. Anywhere from Hashimoto's thyroiditis to Graves' disease, to MS, to Crohn's, and the 105th is chronic Lyme disease. There are so many of them.

Dr. Pamela Smith 07:02

The good news is that you can work on that. And you and I do. We very much do three things when it comes to autoimmune diseases: 1) Stop all gluten 2) fix the gut, and 3) prescribe something called low-dose naltrexone.

Dr. Pamela Smith 07:21

I'm happy to report that one of my patients... She never took me seriously. She's been my patient for 17 years and she had Hashimoto's thyroiditis. As of last year, she ended up with four autoimmune diseases. Her ANA was positive, which is like a pre-lupus state, and then she developed lupus. It affected her kidneys. It's called lupus nephritis. I asked her to please see a rheumatologist or immunologist about this because we need their help as well—as things we're going to do. She finally, at 45, woke up and she said: "You know what? I'm not going to eat that gluten. I am going to fix my gut." She had been taking low-dose naltrexone for five years. "And I'm going to take it diligently." And today, four hours ago, I called her with some results and she said: "I went to see that rheumatologist, and guess what? Because I've been gluten-free, my ANA is now negative, and my kidney function is normal." So yes, you can even reverse some of the disease processes as well. But that was all under her control.

Dr. Jill 08:37

Oh, I love that! You can do gluten-free. You can talk to your doctor about low-dose naltrexone. You can do these things. And, Pam, sometimes I share little personal experiences. I am the poster child. Briefly, in 30 seconds or so: I had breast cancer at 25. And with that, [I had] really toxic chemotherapy that saved my life but also damaged my gut. Unbeknownst to me, I had celiac [disease], so gluten was a

massive trigger. With that drug plus the celiac, I went on six months later to develop Crohn's disease. That was my first official diagnosis at 26 of an autoimmune disease, and I was bent and determined to figure out how to fix it.

Dr. Jill 08:37

I'm considered completely cured 20 years later because I went off gluten. I fixed the microbiome; I fixed the gut. In the subsequent years, I developed Hashimoto's thyroiditis, which is now reversed. I also developed type 1 diabetes. This was after the mold exposure. Not many people know this: It was adult-onset, latent, and autoimmune-driven. I had GAD autoantibodies and went to an endocrinologist. She said: "Yes, Jill, your A1C is high. You have this latent adult onset." I was bound and determined, even though that's considered incurable, to figure out what was going on. By detoxing from mold, going back to the gut, and doing a number of things that you talk about in your book, I am no longer considered to have that. I don't require insulin. I eat a low-glycemic diet. But other than that and my healthy nutrition, I don't consider myself to have those diseases anymore. So I am a walking testimony if anyone is of this exact principle. And really, we have control.

Dr. Pamela Smith 10:10

You do. My mother-in-law is a very interesting woman. I always remember her birth date. It's 10/20/30. As you can see, she's going to be 91 this year. When she was 25, she had a really bad virus that landed her in the hospital. When she left, she was a type 1 diabetic and she's required insulin all these years. But because she does take bioidentical hormones, watch her diet, and check her insulin all the time, she is going to be 91 in October. Most people don't live that long when they have type 1 diabetes. But you can! You can actually balance these things.

Dr. Jill 10:55

Pam, I love that story. I'm almost afraid to say it because I know people look at me like, "Well, that's incurable." There are a lot of people who are going to even hear this and say, "Jill, that can't be true." I know it's true; you know it's true. But it's such an unheard-of story because our conventional system doesn't teach us that there are solutions.

Dr. Jill 11:15

So let's dive more into your book. Did you say there are 10 different things? Let's talk about some of the things in your book about how to maximize your immunity.

Dr. Pamela Smith 11:22

Absolutely. The first one is an interesting subject. They're in alphabetical order. The first one is alcohol. It doesn't mean don't drink. I don't happen to drink alcohol. But the reason I'm a teetotaler is that I have a very strong family history on both sides of breast cancer. The studies are now definitive: Women metabolize alcohol differently than men. Because of that—any woman, honestly—the studies show you should not have more than one drink in a day. If you have a family history like I do or you've had breast cancer, then eliminating alcohol is beneficial. But as it pertains to the book, if you drink a lot of alcohol and abuse it, it does compromise your immune system. That's been shown positively for sure.

Dr. Jill 12:19

Yes. I couldn't agree more. And I'm like you because of my history of breast cancer—and I have no judgment on people who do have a drink a day—I have just chosen to have steam because I feel better. I don't find the need to add that. From an interesting perspective, too, acetaldehyde, which is the thing that causes a hangover feeling, is also a toxic byproduct of fungal and yeast infections. If you have a predisposition like I did for fungal overgrowth with Crohn's and some of my gut issues, then you're also producing that in another form from your intestines. If you add alcohol to that, they have to compete for your detox pathways. And for me, there's no reason to add that in.

Dr. Pamela Smith 12:56

No, I totally agree with you. The second one is exercise. This is the one that I personally have a problem with. I know you don't, Jill, but I do. Honestly, I don't get a high from exercise. A lot of you out there do. And bless you. I'm so glad you do. I exercise for one reason only, and that is to maintain memory. I don't want to have cognitive decline. So I do exercise. But there are great studies on how exercise builds the immune system. If people are staying home and they're not going out as much because of COVID, please still exercise. You could exercise anywhere. I could exercise right here at my desk. Exercise builds the immune system.

Dr. Jill 13:41

Oh, I love that. And just a really practical tip, because I used to go out and do the high intensity and the running. What I've done a lot, and this is so simple, is incorporate it into daily activities. While I'm brushing my teeth, I might do calf

raises. When I'm walking the dogs, I might do lunges. Maybe push-ups after I wake up. I do different things. But I've incorporated them secretly into my life, so I never feel like I'm doing a big program. It's so freeing because I'm getting the exercise, but I'm not going to a gym for 60 minutes and feeling burdened by it.

Dr. Pamela Smith 14:14

That's all parts of your body. You may laugh. I just turned 67 and it's so funny to me because obviously no one wants to "age not gracefully." For years, I have exercised my jaw when I brush my teeth to try and decrease any wrinkling in here. Of course I have some—I'm 67—but I don't have a lot. And it's because of exercising my jaw when I brush my teeth.

Dr. Jill 14:43

I love it. And Pam, you look amazing! You should be a role model for all of us. What's number three?

Dr. Pamela Smith 14:50

Number three is to fix the gut. We could spend five hours talking about this, but 70% of the immune system is in the gut. Some of the symptoms—if you have reflux, GERD, constipation, diarrhea, or loose stools, it's obvious that there's a gut problem. But many people have a gut problem and they don't realize it. They may just have muscle aches and pains. They may have brain fog. They may just have fatigue. I know you've talked about this many times on your show, but you can't talk about it enough because 70% of your immune system is in the gut. It's imperative that it's healthy.

Dr. Jill 15:39

Yes. And how many patients do you have that are like, "Oh, I thought that was normal to go to the bathroom every three days"? People just assume that what their function is is normal. And then, when they start to realize, "Wait, it could be different," it's pretty astounding, isn't it?

Dr. Pamela Smith 15:51

It is. And optimal health of your GI tract is two bowel movements a day. That usually shocks people.

Dr. Jill 16:00

Absolutely. I totally agree. So, number four?

Dr. Pamela Smith 16:04

Number four has to do with inflammation. Inflammation, [in] a small amount, is a really good thing because it helps the body heal. But when it gets way out of whack, then the inflammatory response goes crazy, and that's what causes disease. Most diseases—whether it's breast cancer, cognitive decline, or COVID—are inflammatory in nature. And with COVID, it's particularly interesting because some people can get what we call a cytokine storm. I'm sure you've heard people mention that. Cytokines are proteins that produce an inflammatory reaction. Cytokine storms are things like cough, fever, fatigue, muscle aches and pains, being too tired to walk, rapid breathing, rashes, seizures, and shortness of breath. A lot of these symptoms that you hear related to COVID are from the cytokine storm. We want to settle that down. That's a major inflammatory reaction. We do want to work with patients—I know you do, I do, and other people do—to try and settle down that inflammatory reaction.

Dr. Jill 17:24

Yes. And would that be where low-dose naltrexone can play in?

Dr. Pamela Smith 17:28

Absolutely. With my patients who have COVID, I do put them on low-dose naltrexone to prevent [a cytokine storm] and, if they already have a cytokine storm, to treat it. They usually treat cytokine storms with steroids and people get very concerned: "Can you take low-dose naltrexone and steroids at the same time?" You can. Their conventional doctor will say: "Oh, no, you can't stop steroids. That's the only way to treat inflammatory conditions." But yes, you can take low-dose naltrexone (LDN) and steroids at the same time. Some of my patients have stopped the LDN if they've gone to the hospital and done the steroids, and when they came back, we restarted the low-dose naltrexone. We don't want them to get what we call long-haul COVID, where the symptoms drag on for months and even years.

Dr. Jill 18:20

This is great and such a practical tip because we've used LDN with autoimmunity, like we mentioned. The first studies, I think, were in the 80s with HIV patients and they, all of a sudden, found some really big improvements because when you block

that opioid production endogenously, which means in your own body, then all of a sudden your body's like: Wait, we need to make more! So not only do you make more endorphins, which make you feel good, but that endorphin calms the cytokine response. And I might be oversimplifying, but the mechanism is pretty fascinating, isn't it?

Dr. Pamela Smith 18:49

I think that's a great way to explain it. And people don't realize that we even use low-dose naltrexone for cancer. All kinds of cancer are inflammatory in nature. I have a friend of mine who is an oncologist. He uses a lot of low-dose naltrexone. He is taking a baby dose to prevent cancer. There are no studies on that, but I thought it was interesting that an oncologist would do that because cancer is so inflammatory.

Dr. Jill 19:18

Yes. So what's number five?

Dr. Pamela Smith 19:21

Number five is to get a good night's sleep. Have great sleep hygiene. If you don't sleep well, then your immune system is compromised. Perfect sleep is six and a half to eight hours, not less, not more. Some people are like me; you're a power sleeper. Your head hits the pillow and you're out. Some people go to bed like my husband and he stays awake for a while and his brain doesn't turn off. But it really is good REM sleep. A lot of that has to do with the hormone melatonin.

Dr. Pamela Smith 19:59

Melatonin is so important for the immune system. In fact, we use melatonin to even treat some kinds of cancer, like breast cancer. We use melatonin to treat it. It's huge. It's a hormone. You can overdo it. If you take too much melatonin or serotonin, your happy neurotransmitter goes down. The good news is that there's a very inexpensive test to measure melatonin levels. It's a saliva test. We measure at 8:00 in the morning, 5:00 PM, and 3:00 AM with the lights off so that you can know if you have too much melatonin. It's very scientific but important.

Dr. Pamela Smith 20:42

Another thing I want to point out is that there's a lot of hormonal function in the gut. We used to talk about the pineal gland that's up here. It's in your brain and it

makes melatonin. And we thought, "Baby amounts are made in the gut, the GI tract." That's not true. A lot of melatonin is made in the gut, so if your gut's not healthy, you're not even making as much melatonin to keep the circadian rhythm so that you eat at the right time and sleep at the right time. [Even if the] gut is healthy, you have to sleep to have a great immune system.

Dr. Jill 21:20

I love this. And you're right. Sleep is the number-one thing. When I start getting patients well or trying to help them, I'm like, "How are you sleeping?" And I'm a big fan of the tracking devices. We get a little Bluetooth so you might want to turn them off at certain times for the transmission. But I wear an Oura ring; there are the Fitbits or the Apple watches. You have to weigh [matters]. If you're electromagnetically sensitive, you may not want to wear those devices all the time.

Dr. Jill 21:44

I found that because I have a tracking device, I can do an intervention like lie on my PEMF mat, take melatonin, or stop coffee earlier, and then look at the data of how my sleep is affected. I learned so much through that because each person is different. What you want to do is hack your sleep, your patterns, and what works for you. One question on melatonin that I get a lot, Dr. Smith, from patients is that there was some talk on the news or media about it suppressing your natural production and being worried about it or maybe "don't give it to younger people." Are there any contraindications or concerns that you have about using melatonin?

Dr. Pamela Smith 22:18

That's only if you take too much. The good news is that the body is very smart because melatonin also modulates the immune system. It helps it. If you take a big dose, like 20 milligrams—which is what we use for stage 4 breast cancer—instead of half a milligram or a milligram, which would be a more traditional dose, the body, when you measure melatonin, does not overdose. The body, if you have cancer, goes: Oh, I need this for my immune system, and I'm going to use it for that. And we will go back and measure, and the body will have a very normal melatonin level. It usually figures it out. Melatonin also has a lot to do with that sleep-wake cycle and how you intake food. We've helped people have normal melatonin levels in the gut. It's helped them lose weight. There are so many reasons why you can't lose weight, but that's one I don't think we talk about very often.

Dr. Jill 23:17

I love that. It's so practical and so easy. Number six. Let's talk about number six.

Dr. Pamela Smith 23:24

Smoking. It's hard to believe, but one billion people in the world still smoke cigarettes, cigars, etc. I would be lying to say that everybody who smokes gets lung cancer. That, honestly, is just not true. They don't get lung cancer. But almost everybody who smokes has cognitive decline. Many people who smoke get macular degeneration. It decreases their vision or they can lose their vision. If you smoke, it does increase your risk of heart disease and stroke. It severely compromises your immune system. Nicotine is a toxin to the body.

Dr. Jill 24:12

Yes. I'm glad you brought that up because it's so critical. Sadly, billions are still smoking. It's so highly addictive that it tends to be one of the issues. I wonder; I am completely out there postulating, but I have a thought and I love throwing out new thoughts. We know that nicotine hits the acetylcholine receptor and acetylcholine can downregulate inflammation. I often wonder if some of that addiction is because they secretly have inflammation and it's not helping. This is not a solution, but it has that effect. And I wonder if LDN might be a piece of the puzzle in helping. I have no idea. I have no data to support this. I'm just talking off the top of my head. But I just have this wonder. I wonder if LDN could be a solution to helping people who are addicted to nicotine. Who knows? I don't know that for a fact. I'm just curious.

Dr. Pamela Smith 25:00

That's a great question. I have thought of the same thing myself. I have two patients in my practice who smoke. And right now, that's the sole reason why I put both of them on LDN. I'll be happy to look at it again at some time because I do think part of it is the inflammatory response.

Dr. Jill 25:19

I do, too. I think they're inflamed and they're self-medicating in a very dangerous way. It's very important. Number seven, where are we at here?

Dr. Pamela Smith 25:28

Stress. That's another one you could talk about forever. When you're stressed, it does compromise the immune system. Everybody has stress—we all do—but it's up

to you whether you let it affect you or not. At my office here at home, I have a sign right across from me, and it says the following: "God calms all storms. When he doesn't calm the storm, he will calm you." Everybody has many ways to decrease stress. Stress reduction techniques are key: Prayer, meditation, Tai Chi, yoga, qigong, exercise, massage, breathing techniques, and acupuncture. There are many more. [It's about] modulating stress because if the cortisol and the stress hormones are too high or too low, either way, the immune system becomes compromised.

Dr. Jill 26:31

Yes. Gosh, and I love that. Like we started in the beginning, we were even talking before the show just about "How do we deal with these stresses?" at the office or with different things. We were both saying that ultimately, prayer and surrender, for you and me, really do help with that. So often, at least I'll just speak for myself, if we get into fear or controlling... We feel like we have to control the situation. I learned this a long time ago from Hans Selye's research on cortisol and what regulates the cortisol response. It's an acronym called NUTS: Novelty—something new—unpredictability, threat to self, health, or ego, and sense of control. And right now, in the pandemic and our lives in general, that NUTS acronym is quite accurate. All four of those are activated. But for you and me, part of the solution is surrender and knowing that we have a God who really does have things under control and that we can trust that. For me, that's a really powerful stress reliever.

Dr. Pamela Smith 27:27

It really is. We also give people adaptogenic herbs: Ashwagandha, jinsing, and rhodiola. That does help cortisol if it's too high or too low. Calming herbs are fabulous: Lemon balm and chamomile. I keep a bottle in my desk. If my day is not going great, fortunately, most of them don't make you sleepy. They work right away. You can take them. They're fabulous. A lot of it is just knowing your triggers and what triggered you to have that stress response and trying to settle down that trigger for you.

Dr. Jill 28:08

I love that. And I have at my desk L-theanine, which is another one of those, so we each have our own little adaptogens that we use. Let's see. Number seven? Did I miss a number? Are we on the right number?

Dr. Pamela Smith 28:19

We are. Number eight is sugar. This is my second one, which is a personal issue. I have gotten much better because I knew Nancy Appleton when she was alive. Dr. Appleton, if you're not familiar with her work, was a Ph.D. Unfortunately, she died of cancer about three years ago. But I had the privilege of knowing her because we share publishers. She really did teach me that sugar is a toxin. It sets up an inflammatory response. Sugar comes in many forms. Alcohol is liquid sugar. Soft drinks, or what we say here in the Midwest, 'pop,' really is just sugar. That also includes sugar substitutes, because aspartame is 200 times sweeter than sugar.

Dr. Pamela Smith 29:13

But Dr. Appleton spent her life looking at this. One hundred and sixty-seven different diseases are either caused by or you'll have an increased risk for them by ingesting a lot of sugar. That's something everybody can do. Everybody who's on with us—we can all cut down on sugar intake. It sounds like, "Well, you can't cut it out." It's very addicting, but you can certainly cut it down. They did a study. I mentioned it last time when I was on your podcast, but I'd like to take a second to mention it again. They did a great study. They took little laboratory animals. Two bowls. In one bowl over here, they put cocaine; in this bowl, they put sugar. Guess what happened? The little laboratory animals all went to the sugar, not the cocaine. So it is addicting, but it very, very much compromises your immune system.

Dr. Jill 30:12

Yes. Gosh, I love that study. And I think it's so relevant because, when we think about that, to be more addicted than cocaine, that's a pretty big deal. First of all, have compassion for yourself if you're a little bit addicted to sugar. I find it's better for patients to completely eliminate it as best as possible because if you get a little sugar, you'll want more. I try to keep cane sugar and most other sources completely out because if I have some, I want more. And if you're struggling with that sense of craving—back to the gut, back to number three, I think—you're probably dealing with dysbiosis. It's driving those cravings because we've shown that microbiome changes can cause some of the cravings to increase.

Dr. Jill 30:52

Another interesting thing is that, like you said, with aspartame or some of the artificial sweeteners, we're told they're harmless. But what we know now is that

they have a massive effect on the gut microbiome, which affects us, which affects our cravings, which affects inflammation. They really, really do have an effect. And there is study after study that shows artificial sweeteners will decrease diversity and alter the microbiome, so there are some pretty big impacts there. And as you mentioned, Dr. Smith, just the sweet taste, even if it's non-caloric, will stimulate the pancreas to secrete insulin, and then we're dealing with metabolic issues.

Dr. Pamela Smith 31:27

Absolutely. Dr. Carnahan, you are pointing out all the things that go down this road. I do want to give you an actual report. I've been speaking for many years. I've been very blessed to be invited to speak around the world. And those who know me well know that I love Krispy Kreme donuts. I really do. So every year on my birthday, I get two Krispy Kreme donuts. I just love them. This is the first year. It took me 67 years. But guess what? I did not have Krispy Kreme donuts on July 24th. So anybody can; it may take you 67 years, but that's okay. Work toward it. No Krispy Kremes!

Dr. Jill 32:12

I love it! We are never at a point where we can't make these little [changes]. I love it. And I do the same every year. I'm like, "Okay, I can take this next step." I remember back in the day when I took out gluten and all the different foods that I was sensitive to. The last frontier for me was cheese. I was like, 'Oh!' and I finally gave it up. I'm fine now. That was an allergen to me. But we can always make those changes, and it still makes a difference, so thanks for sharing. So number nine—what's number nine?

Dr. Pamela Smith 32:41

The regulator of the whole body is the thyroid. The thyroid has to be functioning perfectly and optimally in order for you to have a great immune system. If it's under-functioning or over-functioning, both ways compromise your immune system. For those of you who are not familiar with the thyroid: Hypothyroidism—meaning low thyroid function—70% of people who have it have an autoimmune disease called Hashimoto's thyroiditis. The majority of people who have a hypersystem—it's overfunctioning—have Graves' disease, which is also an autoimmune disease. Both ways, the body is attacking the thyroid gland, and when it does that, your immune system is compromised.

Dr. Pamela Smith 33:34

Please see your healthcare provider and make sure that they measure the right things. If you're out there, write these down or type them on your tablet. TSH, thyroid stimulating hormone. You do have to measure both hormones, free T3—the free component—and free T4. What rarely gets measured unless you're seeing someone in Dr. Carnahan and my field is reverse T3, stored thyroid, and thyroid antibodies. Of course, you don't know if you have Hashimoto's or Graves' [disease] if you don't ever measure the antibodies. [For] autoimmune diseases: Fix the gut, no gluten, and [use] low-dose naltrexone.

Dr. Jill 34:20

Excellent. The thyroid is like the canary. Back in the old days—you've probably heard this—in the coal mines, they'd take a little bird down with them. Since there are gases and toxins in the mines, that poor little canary would keel right over, and the guys were like, "We've got to head up." That was the indicator that there was something toxic because that canary was more susceptible than the men or the women down there. So we call the thyroid the canary gland because it's very susceptible to endocrine disruptors.

Dr. Jill 34:49

Pam, I don't know if you know this—I had breast cancer at 25, you know that—but my sister had thyroid cancer at 28. What does that tell you about our genetics and our environment? These are two endocrine organs that were affected in our 20s. It's an interesting little story because clearly, we had some environmental toxicity and also genetic predisposition towards those endocrine issues.

Dr. Pamela Smith 35:10

Absolutely. There is a lot of genetic predisposition to all of these things. But the good news is that you don't have to turn on a bad gene. If you start young enough, even if you're predisposed to type 2 diabetes, if you change your diet, exercise, etc., and you don't fall off the wagon, by the age of 25, you don't even have to turn on the gene. You can inherit it, but they've proven you don't ever have to get the disease. The science is here to help people be healthy.

Dr. Jill 35:49

It really is. So we are up to number 10. What's the last thing from *Max Your Immunity*?

Dr. Pamela Smith 35:54

It's something we can all do. They're in alphabetical order. It's water—drink enough water. You do have to hydrate. If you're not hydrated well, then your immune system does become compromised. And there's no substitute for water. I really do mean water. If you find water boring, then put a lemon in it, lime, raspberries, or strawberries—organic, of course. Zest it up a little bit. But there's just no substitute whatsoever for water. If you want youthful-looking skin, drink more water.

Dr. Jill 36:31

I love it. It's so practical. Clean air, clean water, and clean food is something people hear me say a lot. With clean water, you cannot even underestimate the power. You want to make sure you have filtered water. And if you're using an RO system, you're taking out minerals, so you want to replace those minerals. There's nothing wrong with RO systems. They're amazing. But [use] any sort of filtration system that's of good quality?

Dr. Jill 36:51

I've been doing some research for years. I've had a Berkey filter. I love that. Recently, I've been using some Clearly filtered products. And it [works for], I think, 201 different contaminants. There are others out there. But find a good filtration system because, sadly, much of our water supply is also contaminated, so you don't want to be adding to your toxic load by drinking unfiltered water.

Dr. Pamela Smith 37:13

No. And because of my family history of breast cancer, my water filtration system, honestly, is my whole house. I don't even want to shower in water that is toxic to my body and has things in it that don't belong.

Dr. Jill 37:25

I could not agree more. You may or may not have any answer to this, but I'd love to know and I'm sure listeners would love to know, have you found a particular RO or a whole house system that you like?

Dr. Pamela Smith 37:35

I'm still looking. I truly am. I haven't found the perfect one yet. I'm still looking for the perfect mat too, to put next to my computer.

Dr. Jill 37:46

Yes, me too. Both of these things [are things] you get asked about. That's why I asked you. I'm like, "Maybe Pam knows," because I'm the same way. I'm like, "I haven't found the perfect system for the whole house, but it's really important." Pam, this is such important and needed information. As is no surprise, you always make it so clear and simple. Anyone could take these things and start to implement them. Where can they find your book? Where can they find more information about you?

Dr. Pamela Smith 38:09

You can certainly find my book on Amazon. You can find it at Barnes & Noble. You can find it at every major bookstore. I love to put a plug in for independent bookstores because they're grand. I love to spend my time in them. They're just fun. If they don't have it on the shelf, they can always order it, so that's a great thing. From my landing page, there is a little bit more about me. Actually, you just heard about me. I do have a landing page. Dr. Carnahan is going to put that up for you. But I'd really just love everybody to read the book, *Max Your Immunity*. I made it paperback so it's affordable for everybody so that you can understand the balance. You don't want to overmaximize it, but there are a lot of things you can do to help prevent disease.

Dr. Jill 38:57

Wow, Pam, this is amazing and so practical! I don't know if I've ever heard a lecture that was so simple, concise, and practical. I am glad you were inspired to write this book. So you guys get your copy and share it with friends and family because it's a super simple way to empower people to take charge of their health, especially this fall as we continue to see cases and things out there. And people are in a lot of fear, which doesn't help the immune system at all.

Dr. Pamela Smith 38:23

It does not.

Dr. Jill 39:24

Yes. Thank you. Thank you from the bottom of my heart. You are a blessing to the world. Thanks for all you do and thanks for sharing your time with us today.

Dr. Pamela Smith 39:33

Thank you so much for the opportunity. I really am blessed to know Dr. Carnahan. I truly would never be able to be and do what I have done without her help and many other people's help. So thank you very much!

Dr. Jill 39:47

You're welcome! Thanks, Pam.