



How to Optimize Thyroid Function

Guest: Dr. Izabella Wentz

Niki Gratrix Hello, everyone! This is Niki Gratrix. Welcome. Today we have a very special guest who's going to talk about her personal journey with fatigue and specifically talk about thyroid function. It's Dr. Izabella Wentz.

Dr. Wentz received her doctor of pharmacy degree in 2006 from Midwestern University and excelled in numerous professional roles, including working as a community pharmacist, a clinical consulting pharmacist, and later a medication safety pharmacist. She's a Fellow of the American Society of Consultant Pharmacists and holds certifications in medication therapy management, as well as advanced diabetes care. In 2013, she received the Excellence in Innovation award from the Illinois Pharmacist Association.

And after being diagnosed with Hashimoto's thyroiditis in 2009, Dr. Wentz was surprised at the lack of conventional medical knowledge about lifestyle interventions for Hashimoto's, hypothyroidism, and autoimmune conditions. So she basically decided to take on lifestyle interventions as a personal mission in an effort to help herself and others with Hashimoto's.

And she actually went on to author the *New York Times* bestselling patient guide—*Hashimoto's Thyroiditis: Lifestyle Interventions for Finding and Treating the Root Cause*.

So, Dr. Wentz, thank you so much for sharing your valuable time with us today! And a very warm welcome to the summit!

Dr. Izabella Wentz Thank you so much for having me and for hosting this summit. It's going to help so many people!

Niki Gratrix Thank you! And so maybe we could start with your own journey and how you felt? Where it started in terms of fatigue for you in your life and how that unfolded?

Dr. Izabella Wentz Sure. So fatigue was probably the most debilitating symptom that I experienced with my thyroid condition. And prior to my freshman year in college and undergrad, I was a pretty energetic individual. I was waking at 6 or 7 a.m. going to work out and participating in a lot of school activities. And I just was always this busy bee and full of energy until I got a bout of mono, the Epstein-Barr virus, in college. And I didn't know I had the virus. At the time, I just thought I had a pretty severe sore throat. All of a sudden, I found myself sleeping for 14 hours each night. And eventually that got a little bit better. But it got to the point where I was missing classes. I missed one exam session, which is a big deal in undergrad, because I overslept. And the fatigue just never really fully got better. I didn't have the sore throat. And I didn't have all of the Epstein-Barr virus symptoms. But I was just so tired all of the time.

I was sleeping for maybe 11 to 12 hours each night and I needed this much sleep to function. If I woke up earlier than that, then I would have gut problems. I'd be really cranky, irritable. And this continued on from the time I was 18 until I was probably 26, 27 when I started digging further. So I would say that I spent most of my 20s just pretty fatigued, sleeping half of my 20s away.

I got through undergrad. I got through pharmacy school. And it was a lot of caffeine. It was a lot of Red Bull. I missed out on so much. I missed out on having a big social life. I was always offered antidepressants and stimulant medications by my doctors. At first, I was going to the doctors and saying, "I'm so fatigued. What can I do about this?" And they said, "You're stressed out.

You're a college student. This is what's going to happen," and so on and so forth.

And it really wasn't until I was 26, 27 where I decided I had already graduated from pharmacy school. And I was getting all this amazing education, continuing education, and going to these conferences talking to some premier physicians and scientists and researchers. And, yeah, and they were all, "This is not normal. You should not be sleeping that much."

So at that point is where I decided to take things into my own hands. And I was able to recover from my fatigue. And it took some work. And we'll get into that today on how other people can do the same.

Niki Gratrix So obviously at some point you would discover that the thyroid was the issue. So how did you get to that stage of discovering? Were you always interested in thyroid? Or was it by mistake that someone mentioned it to you because this is where we get into the issues of diagnosis? Right?

Dr. Izabella Wentz Right. Absolutely. And I was never interested in the thyroid in pharmacy school. I was more interested in psychiatric disorders and diabetes and other things that get a lot more attention. The thyroid, we really covered it in a one-hour lecture. And basically, all we were told was that there were medications for thyroid disease.

And during my own health journey, I went to numerous doctors to try to get a diagnosis. At some point, somebody had mentioned chronic fatigue syndrome. And I was looking at all of the conventional medical information out there that basically said there was no cure for that. So I just got used to sleeping a lot. I was like, "Okay. Well, this is my new life. This is my new normal. I guess I'll just have to have 2 or 3 alarm clocks every morning. And I'm going to find a job that allows me to come in to work late."

It wasn't until I started having hair loss...I had already had irritable bowel syndrome. And I started having hair loss. And I started having joint pains and acid reflux where I was...I just got married. I was 25 at the time. And I remember my husband saying, "It's like you're breaking apart, honey. What's happening? You're just slowly getting all of these additional things that are going worse and worse." And, of course, as a newlywed, this was devastating for me.

And at that point, I was already working as a pharmacist. And I realized that not all doctors were created equally. So I sought out the advice of additional doctors and

eventually learned that I had Hashimoto's thyroiditis, which is an autoimmune attack on the thyroid gland. And this could actually explain a lot of the symptoms I was having, including the fatigue, the hair loss. I was putting on a little bit of extra weight.

And so at first I was excited because I thought, "Finally, I have a diagnosis. I'm going to get on thyroid medications. And everything is going to be fine and dandy. I'm going to be super energetic like I was when I was 18, 19 years old."

Niki Gratrix That's incredible that you went all those years, obviously with symptoms. And you would have gone for your standard practitioner testing with doctors. And they would have just missed it constantly.

Dr. Izabella Wentz They did. They told me your thyroid is fine. You're not anemic. You don't have any other kind of issues that could lead you to have fatigue. Maybe you're depressed. And I often got suggested antidepressants. There were times in my life where I did have symptoms of depression. But most of the times, most of my annual physicals, I was, "But I'm happy today. I don't feel depressed." So that was something I turned down. And then I was also offered stimulant medications. And I didn't really like the idea of using controlled substances and that kind of thing on a daily basis.

So, yeah, I just turned those things away. And I just used my own stimulants—caffeine and Red Bull and all of those things. And eventually those unfortunately started giving me palpitations and anxiety. So, yeah, I had to find a different answer.

Niki Gratrix So this is very interesting because just focusing a little bit on the testing side. You said you had been tested for the standard stuff like thyroid stimulating hormones, say T4. Well, those things would have come back, all that time they would be normal or within the conventional reference range. And then someone would have thought, "Ah, we should test for antibodies." Somebody must have thought that. And so you did. And there you had the high antibody rating.

Dr. Izabella Wentz Absolutely. I had numerous tests. And I kept all of my test results. And I have one test that has me having a TSH of 4.5 where the doctor wrote me a note saying, "Your thyroid is normal." What I know now and what a lot of the functional medicine and even conventional medicine practitioners will tell you that TSH is just a screening test. It doesn't measure what's happening in the thyroid gland. It basically is a response to what's happening in the thyroid gland.

What is interesting is when scientists first determined the normal reference range for that test, they had people in the pool of blood who were actually had an underactive thyroid. So this reference range was very lax. And they were saying that if you had a TSH of an 8, then you were within the normal reference range.

What we know now is for most people, they feel best with a TSH between .5 and 2. And so a woman that was 25 years old, probably should have had a TSH somewhere right around 1. And for me to have that TSH of 4.5, that was making me tired and lose my hair and having joint pains, as well as putting on extra weight.

So this is something that I'm a big proponent of getting the appropriate testing. So one is making sure that if you do get tested for thyroid disease, you ask for the TSH test. And then you always ask for getting a copy of your own test results, and then look at the

reference range yourself. Even if your doctor says it's normal, even if the lab says it's normal, they may not have the updated ranges. So your TSH should not be higher than 2.5.

Another thing about the TSH is it's one of those tests that becomes elevated after you've had a thyroid condition for maybe 10, 20 years. So there's a more accurate test and more reliable test that you can do to figure out if you have the early stages of thyroid autoimmunity, which are thyroid antibody tests. And the two tests that I recommend for Hashimoto's are thyroid peroxidase antibodies—that's TPO antibodies and then thyroglobulin antibodies—TG antibodies.

And then either of those markers, when they're elevated could signify that you are attacking your own thyroid gland and could be responsible for having many of thyroid symptoms, including fatigue, without actually having a change in the TSH. So that's one thing that unfortunately my initial doctors did not test me for. Had they tested me for the thyroid antibodies, I probably would have had those elevated for many years. And I would have had an answer to what I was experiencing.

Niki Gratrix It's absolutely fascinating. And it's incredible to think that someone can be having this, an autoimmune condition like that for, like you say, 10 to 20 years. All of that time before it even shows up in the TSH. So tell us a bit more about some of the common symptoms.

I'll just point out something else for the audience. Another thing that happens is that even if you did go to the doctor and they see that you do have levels outside even their reference range, and you have the above, say 4.5, a lot of them still won't even test for Hashimoto's and the autoimmune condition, will they?

And then they'll just say, "Here's thyroid medicine for the rest of your life. There's no cure. That's it." And they won't even know the patient might have Hashimoto's even if they were outside the reference range. Is that your experience?

Dr. Izabella Wentz Absolutely. So that's very much true. And a lot of people will be told that they have a sluggish thyroid and that their thyroid is burning itself out or what not. And they just are told that they need to be on thyroid medications. But they're never told that the reason why their thyroid is not producing enough hormone is because it's under attack by our own immune system. So they're never told that they have an autoimmune condition. They're never told that they have Hashimoto's. They're just told that they have an underactive thyroid and that they have to take medications.

Unfortunately, with conventional medication—and that's my primary training as a pharmacist in conventional medicine—is that there's nothing that can be done about the autoimmune response, that basically, you just sit and wait until the thyroid gland gets destroyed by the immune system. And then you just give replacement thyroid medications.

In my training, we also talked about lifestyle interventions during pharmacy school. And one of the big things was whenever somebody had a chronic health condition, you would recommend different lifestyle things to do. So if somebody had a hypertension or diabetes, you would always recommend maybe better nutrition or losing weight or

exercise. And I was just surprised because there were none of those recommendations for thyroid disease or any autoimmune condition.

And I thought to myself, “Okay, I’m pretty young. I’m in my twenties. And most people that develop this condition are older. They’re usually women who are closer to menopause. And why did I develop this condition earlier. Did I do something to potentially develop this condition? And also is there anything I can do to help prevent its progression or stop its progression or maybe reverse it?” And that’s how I got on the journey of lifestyle interventions. And you know what? There’s a lot of different things people can do that can stop the autoimmune attack on the thyroid gland.

Unfortunately, they’re not going to learn this from...If they go into the average conventional medical doctor’s office, they’re not going to be told about this. They’re only going to be told about to take medications for the rest of their lives, which medicines can definitely help. But they don’t get to the root cause of the condition.

Unfortunately, what we’ll see oftentimes is a person will be diagnosed with a thyroid condition. And they’ll just take medications or another treatment. And then they’ll go on to develop other kinds of autoimmune conditions because the immune system is out of balance. And it begins to attack another organ.

So this is something that I would encourage everybody to make sure that if you have been diagnosed with a thyroid condition or if you’re having some of the symptoms that we’re going to cover during this interview, in addition to the fatigue, that you get your thyroid tested and you figure out if it’s autoimmune.

Just so everybody has a frame of reference, anywhere from 90 to 97 percent of cases of thyroid disease in the developed world, like in the United States, in the U.K., and most of Europe, Australia, this is actually going to be due to autoimmunity. So Hashimoto’s accounts for most of those.

Back in the olden days, iodine deficiency was a primary cause of an underactive thyroid. And then you give somebody some iodine and their thyroid function would restore. Nowadays, that’s not the case. Nowadays, it’s an autoimmune attack on the thyroid gland.

Niki Gratrix Fascinating. And you just answered loads of questions that I was just going to ask you. So fantastic. How about share some of the common symptoms people should be looking out for?

Dr. Izabella Wentz When we surveyed a bunch of people that are on social media with Hashimoto’s and thyroid disease, the biggest symptom really was fatigue. So about 80 percent of people experience fatigue with thyroid disease.

The other big symptom is going to be mood alterations. So people will have new onset anxiety disorders a lot of times in the early stages of Hashimoto’s because as the immune system begins to attack the thyroid gland, you get some breakdown of thyroid hormone that gets rushed into the thyroid cells. And a person may start feeling anxious or irritable or have some palpitations, not very pleasant symptoms. And then some people may experience having apathy where life is just not as exciting as it used to be. Some people may have depression.

Other people may have what's known as thyroid brain fog, which is scary. I remember when I was experiencing it, I felt like I was having Alzheimer's disease or I was just forgetting things. I was walking into rooms and forgetting what I came in there for. I was forgetting people's names, forgetting words like cats, very easy words that wasn't even complicated words. And that's another big thing that people complain about.

A lot of people, unfortunately, who have new onset thyroid disease, may be misdiagnosed with anxiety or depression, as well as potentially bipolar disorder. So I've actually seen people who were hospitalized for bipolar disorder or even psychotic mania or something like that because of the fluctuation of the thyroid hormones.

The most common thing you're going to hear—and I've heard it numerous times—is that you're depressed. You need to be an antidepressant. That's why you're tired. That's why your mood is off. And the other common symptoms are going to be hair loss, especially if you start losing hair in your upper eye brow and the upper third part of your eyebrow. And that's going to be a telltale sign.

If you are somebody that is in your office and everybody is in a short-sleeve shirt and you've got a sweater on, that could be an indication that something is off about your thyroid. Our thyroid regulates our metabolism and heat throughout the body. So cold hands, cold feet, being more colder than the average person or just not even regulating your temperatures correctly. So even if you're experiencing times where you're feeling very hot, where everybody else is feeling normal, that could be an indication.

Weight gain or an inability to lose weight. So the thyroid once it slows down, it doesn't control our metabolism as well. And then people will basically gain weight even though they haven't changed their eating habits or their exercise habits. They'll just be gradually putting on some weight.

Those are some of the most common symptoms. There is a list of probably 1,000 plus symptoms that can be attributed to thyroid disease. And when I think about what the thyroid does is it stimulates our metabolism. And we have thyroid receptors in just about every cell.

So you can see any lack of having a good metabolism, that's going to have an effect on the body, whether that goes from our memory to our hair growth to skin texture. Skin may look more dull to putting on weight to not having enough energy to not digesting food correctly to being constipated to having joint pains.

And I often tell people that a lot of the symptoms are very nonspecific. And it's really easy to talk yourself out of the symptoms. So it's best just to do a test for that.

Niki Gratrix Exactly. Very interesting, because it's very useful, as well. So what's your view on thyroid medications? And any particular ones that you do think are okay? Do you prefer some against others or have any advice on that, especially as we start to talk about possible lifestyle interventions and how the meds might be used if someone's also doing lifestyle work?

Dr. Izabella Wentz So thyroid medications are absolutely very, very important. And I would say the thing to consider is thyroid receptors are in every cell of the body. So if somebody is hypothyroid, that's going to impact every system in their body. And I always

recommend making sure that your thyroid hormone levels are optimized. And the quickest and best way to do that is through using medications. So as a pharmacist, I'm very passionate about appropriate medication use and making sure that people are getting the best outcomes from their medications and that they're also not using medications when they shouldn't be using medication. So to suggest that somebody with a thyroid disorder take antidepressant may not be the best suggestion. But a person who has Hashimoto's would definitely benefit from taking thyroid medications.

And what thyroid medications do is basically they replenish the body with thyroid hormones as our immune system is attacking the thyroid gland. And the thyroid gland can't keep up with the demands of what the body needs. So basically thyroid medications, the ones that are on the market, a lot of times people get a little in the natural medicine space. They get a little bit iffy and then say that, "Oh, that medication may have side effects and they block different kinds of receptors. And they do more harm than good."

And in some cases that may be true. However, with thyroid medications, chemically they're the identical same structure as the naturally occurring hormones that we make in our bodies. And then the side effects that you're going to see from thyroid medications, the majority of them are going to be due to either over-treatment or under-treatment. So really getting on the right medication at the right dose is going to be the key to making sure that you're getting the optimal response from your medication.

I just wanted to say that the conventional medical approach is to prescribe levothyroxine, which is commonly known as Synthroid. And it's a T4-containing medication. And this contains one of the active thyroid hormones. And this thyroid hormone needs to be converted to T3, which is actually the more active thyroid hormone in the body. So some people do very well on this medication. And then they convert the T4 to T3 just fine in their body. But research will say that about 10 percent of people don't do this correctly so that 10 percent of people will basically take the T4 medications. And then they'll continue to have thyroid symptoms.

With my website and with my work with clients and just as my work as a pharmacist, I'm sure I'm biased because I get all the people that don't do well on these medications. But in my experience, it's probably the other way around where most people don't do as well on these T4-containing medications. So if anybody at home is listening and is already on thyroid medication but is continuing to have fatigue, I want you to know that there's actually other types of medication options out there for thyroid that may be a little bit more effective.

So the medications that may be more effective are T4 and T3-containing medications. So the T3 is the active component of thyroid hormone. And that is supplied in the medication so you don't have to convert it in your body. It just comes that way. And some of the names are going to be like Armour Thyroid, Nature-Thyroid. Or you can get compounded medications from your compounding pharmacist.

This is something that I found a lot of people will do much better on. And they'll say, "Finally, I got on this medication. And I finally have enough energy. And my brain is working better. And I'm losing weight where I haven't been able to lose weight." And another thing they'll say is, "My hair is finally growing back when for many years on just these T4 medications, it wasn't growing."

So this is something I want everybody to keep in the back of their mind that if you're already on a medication, but you're still not feeling better, there's alternate medications that can be tried to help you feel better.

Niki Gratrix Fantastic. Just as we get to start talking a little bit more about lifestyle intervention. I'm very interested in your view about whether you recommend anything direct for thyroid function that's on the natural nutrition side.

I'm especially interested in what your view is on iodine, for example, especially if someone does have Hashimoto's. And, for example, have you had much experience with recommending... There are certain minerals. Can I remember these off of the top of my head? The minerals that help convert T4 to T3. And if the person's low in those particular minerals, they would not convert as well. So just in terms of direct support, natural support for thyroid, your experience with that?

Dr. Izabella Wentz Absolutely. And so we mentioned a little bit before that the different kind of causes of hypothyroidism, and back in the early 1900s before iodine was added to the salt supply in various countries, the primary reason for hypothyroidism was due to iodine deficiency.

However, now that most of the countries do have an adequate iodine supply due to the addition of iodine in the salt, we've actually seen a different pattern emerge of hypothyroidism. And most of it is actually due to Hashimoto's, which is not thought to be an iodine deficiency disorder. In fact, a lot of researchers have connected iodine levels to Hashimoto's. So iodine excess has actually been considered as a potential trigger for Hashimoto's, as well as another important mineral is selenium. So selenium deficiency in the presence of iodine excess seems to be something that contributes to Hashimoto's.

And the way that works is basically whenever somebody takes iodine, their thyroid gland has to convert it properly so that it can be used in the thyroid and in the body. And when this conversion takes place, basically hydrogen peroxide, a reactive oxygen species, is produced within the thyroid gland.

And if there's not enough selenium, which produces glutathione—an antioxidant to take care of that hydrogen peroxide—if you don't have enough of the glutathione or selenium present, this hydrogen peroxide is going to go unchecked. And it could damage the surrounding thyroid tissue.

And this thyroid tissue damage can be actually a trigger for the immune system to start coming in and aggregating immune cells within the thyroid gland, which has been described as a mechanism for how thyroid autoimmunity may develop.

So my view, to make a long story short, my view on iodine is basically I would say that it's something that I consider to be a narrow therapeutic index nutrient. And you want to make sure that you don't get too much of it. And then you want to make sure that you get enough of it so you don't have the hypothyroidism due to deficiency. And then you also don't want to have excess so that you don't have the extra production of reactive oxygen species that cannot be neutralized within your body.

So basically different people can tolerate different dosages. What research has found is that people with Hashimoto's are going to be more sensitive to iodine.

And I would say doses below 400 micrograms or below 350 micrograms are going to be appropriate for people with Hashimoto's. Any higher than that can actually produce, exacerbate or accelerate the autoimmune attack on the thyroid gland. Generally speaking, if you are taking a multivitamin with iodine, that should be okay for most people with Hashimoto's.

The other important nutrient to consider is actually going to be selenium. So selenium is something that is often deficient in people with Hashimoto's. And I recommend doing a dosage between 200 and 400 micrograms per day as selenium methionine. And that's been very, very helpful for a lot of people on converting the T4 to T3.

And people have also noted that it reduces their thyroid antibodies. And this is also supported by research. So over a course of 3 months, a dosage of 200 micrograms has been found time and time again to reduce thyroid antibodies by about half. And for people listening at home, the higher the number of thyroid antibodies, the more aggressive the attack on the thyroid gland.

So we're going to see a really big improvement in symptoms like anxiety and mood and some of the hair loss, as well as fatigue with the selenium supplement. And that's one that most people with Hashimoto's have found to be very, very beneficial.

With iodine, I get a little bit nervous with recommending that. And I definitely don't recommend that people do the ultra-high doses like the 50 milligrams or anything like that, unless they're working with a very qualified healthcare practitioner. And you can get yourself in a lot of trouble when you just dose yourself with high doses of iodine. I've seen people who had a huge 10 times influx of their thyroid antibodies. And they've also had an acceleration of thyroid tissue damage. And just one person was almost bedridden after unfortunately self-experimenting with high doses of iodine.

Niki Gratrix Wow! Very interesting and superb information. And thank you so much. It was excellent!

Let's move on to this idea of lifestyle intervention and the top interventions or imbalances that you see commonly in your experience. And this is very interesting because the audience is going to notice it's going to tie in for the rest of everything in the summit because we're starting to branch out into, "Well, what makes the immune system attack the body?" But it would be very interesting to hear what your top most important things are that you would be checking for and intervening on the lifestyle related?

Dr. Izabella Wentz Yeah, so this is really great information. Everybody should do this, and definitely people with autoimmune thyroid disease. And getting to your doctor and getting checking for anemia, but not just doing the basic tests, but doing some advanced testing because that can really steal your energy.

So one of the most common nutrient deficiencies I'll see in people with Hashimoto's are going to be deficiency in iron. And the best way to test for that is through Ferritin. This is an iron storage protein. And when you see that's low, then you could be anemic, where all of your other labs are maybe normal. This can often be responsible for having poor energy levels or being short of breathe, as well as losing hair. So you want to get checked for that.

Getting checked for your B12. So B12 is going to be something that could also rob you of your energy. And you may have some tingling and neuropathy if you are low in that. The reference range is actually, again pretty lax for that. I would say that most people should have a level somewhere around 800. Whereas, if you go to a lab, they might say that a level of 200 or 300 or 400 is normal where you'll actually see people at those levels experiencing significant symptoms. So getting that checked and also looking at whether or not you have the MTHFR gene mutation, which prevents you from properly converting folic acid in the supplement form or it's present in processed foods, to folate within your body.

And then these are the things to check for. And then as appropriate, you might want to do supplementation. So if you're low in ferritin, you may want to do an iron supplement. If you're low in the B12, I would recommend doing a methylcobalamin supplement or maybe some B12 injections. And if you have the MTHFR gene mutation, you want to do a methylated folate supplement.

Another common nutrient deficiency that can be responsible for fatigue, as well as can contribute to the autoimmune paradigm is the vitamin D deficiency. So looking at your levels for that and making sure that they're within around 60 to 80 and then appropriately supplementing with vitamin D3 if that's an issue for you, so probably about 70 percent of people with Hashimoto's were also found to have vitamin D levels that were deficient.

I say let's get your ducks in a row. So you want to make sure that you get these nutrient deficiencies addressed and get them supplemented as necessary. While I primarily will say you should get most of your nutrients from food, I think that's really, really for maintenance. But if you're somebody that's been deficient in ferritin for a very long time, then you may have a hard time. Just if you eat more beef, that's wonderful. But you may actually need to be on a supplement, as well.

Getting to other types of things that I recommend is actually looking at the foods and nutrition that you're putting into your body. So with Hashimoto's, I found that gluten, dairy, and soy seem to be the common food triggers. Gluten has been very well described as contributing to autoimmune thyroid disease. And some people have been able to actually get off of their thyroid antibodies and normalize their thyroid function just by getting off of gluten.

Most people, however, they'll see an improvement in thyroid function, and they'll see a drastic improvement in their symptoms. They'll have more energy. They'll have less stomach issues. They'll have less pain. So that's one big thing that I recommend is really looking at what foods that you're eating and what foods are potentially triggering your symptoms.

I talk about this a great deal. So there's a ton of information on my website about it, but basically, making sure that you find out which foods nourish you and which ones cause you harm and making sure that you're eating a nutrient-dense diet and cutting out processed foods. It's going to help just about everybody with how they feel.

And for some people, it can be the difference between feeling fatigue and awful and having a ton of energy. For other people, it may be the difference between your body

attacking itself and then, your body no longer attacking itself just when you get on this nutrient-dense diet.

And the other big thing, and this was a big aha moment for me, was looking at how well you were digesting your foods. So one of the common things that I see in people with thyroid disease is that they will often be prescribed acid-blocking medications. Or they'll be diagnosed with acid-reflux, where the symptoms in acid reflux actually may be the same as the symptoms of not having enough stomach acid. So not having enough stomach acid or having no stomach acid have actually been recognized as very common occurrences in most people with autoimmune thyroid disease, as well as other types of autoimmune conditions.

And what happens when you don't have enough stomach acid is that your body basically becomes very burdened. When we think about the biggest job our body has to do, it's actually digestion. So when we're not digesting our food properly, the body can become very, very tired because it's trying to process all this food. So for many people taking a stomach acid supplement—the one I like is betaine with pepsin—can make a dramatic difference in how they feel.

For me, I had already been on thyroid medications. And I had already seen some improvement with those. And I saw improvement with getting some of my vitamin levels up and saw improvement with my nutrition. But when I started the betaine with pepsin supplement, it was, "Wow!" I really woke up the next day bright-eyed and bushy-tailed and full of energy.

And at that point, I realized that I could overcome thyroid disease because it was really that ended my fatigue because I was finally digesting my foods. And my body wasn't stuck in this digestive mode because it was finally able to utilize the food that I was eating.

Niki Gratrix Everything comes back to the gut. Usually, on this summit, everything comes back to the gut. So that's hugely important. And gosh, yes, the low stomach acid, a huge thing we see in chronic fatigue, would lead on to all those problems. Dysbiosis in the gut, malabsorption like you said, and the leaky gut, and the gut permeability.

And that's one of the pillars of autoimmunity, isn't it? The leaky gut that that would lead on to, which then all triggers the rest of the autoimmune response?

Dr. Izabella Wentz Absolutely. So when we talked about what causes autoimmune disease, and a lot of scientists focus on genes. And they'll say okay, this is a genetic condition. But even if you have the genes for an autoimmune condition, about 50 percent of the time, you see a difference between identical twins.

So that means if it was a purely genetic condition, you would have both of the twins develop the condition 100 percent of the time. If one had it, then, of course, the other one would have it. But you only see that about half of the time. So if one twin has Hashimoto's, there's a 50 percent chance that the other twin will have it, as well.

So you think about, okay, you have to have the right genes. And then you have to have the right triggers. So the triggers could be the iodine access or selenium deficiency. It could be a toxin. It could actually be a virus or some other infection that looks like the thyroid

gland to our immune system. So then through a process called molecular mimicry, the immune system will attack both the infection and your thyroid gland. And those two things need to be in place.

But also, the very third important emerging piece of the puzzle of autoimmunity is the intestinal permeability or the leaky gut that we talked about. And I'm sure many of your other presenters will cover because it's so important. And researchers have found that this intestinal permeability is present in every case of autoimmunity. And what's more exciting or interesting is that once you take care off or address the intestinal permeability, you can actually put the autoimmune conditions into remission.

And for me, that was a big a-ha moment, too, because after my fatigue started, I also developed irritable bowel syndrome. And then a few years later, things just went down the line from that. And that really led me to look for the root cause or the triggers within my gut. And I was found to have multiple gut infections, which many people with fatigue and Hashimoto's will find that they have, as well. And treating these gut infections can actually help reverse many of the fatigue symptoms, as well as in some cases reverse autoimmunity.

Niki Gratrix Wow! And do you have a view about one of the other major triggers, and it's a huge theme on this summit of autoimmunity, is the levels of chemicals we have in the environment and the pesticides and so on, so chemical toxicity. That's going to affect the gut for sure and can lead to leaky gut. Is there much correlation between that and autoimmune thyroid, specifically? I know gluten is linked. It seems to be the top one. But toxins?

Dr. Izabella Wentz Absolutely. So any kind of toxins that are brominated, chlorinated, or fluoridated, so these different compounds out there, they can actually take up residence within the thyroid gland. There was a study done actually in the U.K. that looked at the levels of fluoride in the different waters and different communities. And they found that people who lived in communities that had more fluoride in their water supplies, actually had higher rates of hypothyroidism.

So one of the things that I recommend for people is that they filter their water. They get a reverse osmosis filter if they do live in a fluoridated community. I hate to say this, but reducing the amount of black tea that you drink, looking at your medications and supplements to make sure that they don't have excess fluoride, even looking at your toothpaste, that can be something that can be a potential trigger.

Obviously, living in close proximity to petroleum complexes. Or I personally was living very closely to the Chernobyl nuclear accident. Disaster, I guess. Accident is not a strong enough word. Things like that can definitely upregulate the autoimmune response on the thyroid gland, any kind of radiation.

So we are constantly bombarded with toxins within our environment. So these all play a very, very important role in inducing autoimmunity, either through direct thyroid damage or through affecting the gut microbiota.

So we are in the world that we live in. And we have to do our best to try to survive in it. Definitely looking at reducing your exposure. Doing things like using actually vegetable sprouts. Broccoli sprouts help detoxify, making sure that you have plenty of your good

nutrients onboard and that you have plenty of rest, drinking clean water, eating organic foods, making sure that your home, you filter the air properly. Doing all these things can really make a drastic change in the amount of your chemical exposure.

And sometimes for some people, I'll recommend that they do a detox protocol for maybe a week or two where it'll take certain supplements that help support the liver detox. And then they'll take different powders that help with the detox to just try to support the body and helping to excrete some of these toxins.

One of the things that happens in autoimmune disease is that basically as the gut becomes permeable, the person can no longer properly get rid of toxins that way. And then in hypothyroidism, a person also doesn't sweat as much. And that prevents them from getting rid of toxins through their skin. And so they end up having this unfair burden on the liver. And the liver often becomes congested. Doing things like Epsom salt baths and saunas can be of great benefit in mobilizing some of those toxins, as well.

Niki Gratrix So that's fantastic. And perhaps just as the final comment about can the condition be reversed? And you mentioned there that it could be if you cleared up the leaky gut. Is it possible that people can start slowly reducing down their medications as they bring in all the lifestyle interventions? And is there a percentage of people who can come off them completely? Or do you have any figures on that?

Dr. Izabella Wentz That's a really, really great question. And this is something that I really wanted to know when I first set off on my journey because I wanted to know what to expect. And there's actually research that supports people who have autoimmune thyroid disease, about 20 percent of them may actually go into spontaneous remission and may be able to get off of their medications. Which, I had never heard from any doctor that I went to. But there's actually research that supports this. So that's very exciting.

As far as rates within clients or people that I've worked with or readers that have read my book or reached out to me through my website, there are many people that will see just through changing their lifestyle, I would say the majority of people will see an improvement in how they feel.

Then another subset of people will actually be able to go on to a complete remission from their Hashimoto's where they'll no longer have thyroid antibodies. And they may be able to gradually reduce medications over time.

And then we have those that within a very quick time period, they'll actually be able to get off of thyroid medications within 3 to 6 months where they'll basically become hyperthyroid as they start doing lifestyle interventions.

And I wish I had specific rates for this. But I don't. And it's a mystery to me. I used to think that it was people who were younger and that who had the condition for a shorter amount of time that were more likely to regenerate their thyroid tissue quicker.

But recently, I've had people in their 50s and 60s who've had the condition for 20-plus years who basically were able to eliminate a trigger. For one lady, it was gluten. For another lady, it was an H. pylori infection. Another lady, it was actually a dental infection, which was draining into the gut and causing leaky gut. And they were able to get off of their thyroid medications rather quickly.

So I would say the positive predictor factors are going to be getting rid of your triggers, optimizing your bowel function, making sure that all of your vitamins and minerals are well-balanced. So making sure you have enough iron and selenium on board. Those are very important for production of thyroid hormones.

We didn't talk about adrenals—and I'm sure some of your other presenters will—but making sure that you are in a rest and digest mode that helps your body heal versus a fight and flight mode, which basically puts your body on alert and may prevent your body from shunting nutrients towards healing. So these are some of the things you can do.

I wish I had a magic formula to say that everybody that does X, Y, and Z can get off of thyroid medications. But that's unfortunately not the information I have at the time. So I would say doing all these things is going to really, really help you with feeling better. And in some cases, it may help people get off of their medications. But optimizing your medications should be the focus. And feeling your best should be the focus.

Niki Gratrix That's absolutely superb information. Thank you so much, Dr. Wentz, for sharing your time with us.

You have a fantastic website. And it's very popular. Loads of information on there for people who want to get more information in an expanded way and so does your book. So please share where people can go to find out more about you and your book.

Dr. Izabella Wentz Sure. So my book I think has got the longest title ever. It's called *Hashimoto's Thyroiditis: Lifestyle Interventions for Finding and Treating the Root Cause*. And they can get that on Amazon. And they can look for Hashimoto's root cause or Izabella Wentz. And that will pop up. They don't have to put the whole title.

And also, I have a website called ThyroidPharmacist.com where I have a lot of information about Hashimoto's and I share different people's success stories. So we've got some stories of people being able to get off of thyroid meds, people overcoming fatigue. I've got just different new research that comes out on the various different triggers, as well as some of the most helpful things people can do.

So your Hashimoto's may not be the same as my Hashimoto's. You might have different triggers, but eating a nutrient-dense diet and optimizing your medications and nutrients, getting all of your ducks in a row is going to help just about everybody. So I've got a ton of information about that.

For people that are more interested in maybe the betaine with pepsin protocol and addressing their nutrient depletions, which is a very, very important step, I actually have some information that people can go to by going to ThyroidPharmacist.com/gift. And that will give them my nutrient depletions and digestion chapter on optimizing digestion and nutrition depletions.

I have a gluten-free quick start guide for people because when I did it, I did it all wrong. And I got on all this junk food. And a long story short, my healing plateaued. And then I have recipes to get people started with eating these nutrient-dense foods that can make a big difference in how people feel.

Niki Gratrix There's so much support for people. So I hope they come to your website and check it out because it's fantastic. And the book's brilliant, as well.

So, Dr. Wentz, thank you so much! It's been fantastic! Absolutely brilliant information. And I hope our audience has really gained a lot out of that, as well!

Thank you so much for your time!

Dr. Izabella Wentz Thank you so much, Niki! It's been such a pleasure!