Introduction to Thyroid Health

Hey everybody, Dr. Rob Silverman here, Proven Health Alternatives. I've got a luminary in the field of thyroid health, Dr. Anshal Gupta, who's famously known for his best-selling book, Reversing Hashimoto's.

Doc, it's a pleasure to have you. Let's talk thyroid. Absolutely. It's a really pleasure coming over here. Thank you so much for inviting me. You're doing an amazing job.

You're a great person. The content that you put out, you know, I'm sure is helping so many people. So it is actually in my honor to be over here and sharing, you know, information, a little bit of information that I have on Thyroid and Hashimoto's.

Oh, I think you have a lot of information. You've been doing the summit. You were a physician at the Cleveland Clinic, the esteemed Cleveland Clinic. You know, 1 to 2% of people in the US suffer from thyroid issues and the most common cause of thyroid is hyperthyroidism.

Women, 4 to 10 times you're going to have to address that more common to have a thyroid problem. It affects people in the ages of between 30 to 50. You're going to have to tell me why.

Global prevalence is higher than America at 7.5%. And you're gonna cover this antibody thing. What tests are we gonna do? Antibodies are positive at 10 to 12% of the population.

Help me cipher through this. What is Hashimoto's disease? Absolutely. And those are all great questions. And a lot of people who have been diagnosed with thyroid disorders are asking these questions for a long time.

So I like to start always with the basics so that people have an understanding of where we are starting off. So to start off, what is a thyroid gland?

So what people don't know is that the thyroid gland is kind of very teeny tiny gland, which is located in our neck. But it is a vital gland for our survival.

Without the thyroid gland, we would not be living. So that's the power of this thyroid hormone that this gland produces. It is a life-giving hormone because certain people, you know, like when suddenly their thyroid gland is destroyed and there is no thyroid hormone, that is a medical emergency, they land up in the hospital because of that.

And if they don't get the right intervention, that can be really fatal for them. So that's the power of this thyroid gland. Very vital produces the thyroid hormone which literally you know is important from head to toe of our body.

Hashimoto's Basics and Antibody Testing

Without the thyroid hormone, there will be no brain development. So when we are teeny tiny babies inside our mom's womb, if we do not get enough thyroid hormone, we will not be developing our brain.

Once we come out, again, very important for brain development, for cognition, as well as for brain activities. Then from brain, it goes to your gut. Again, gut have very much receptors for the thyroid hormone.

Again, that causes constipation issues, a lot of people will have overgrowth of bad bacteria, a lot of acid reflux issues which is associated with thyroid gland.

So gut is again affected because of thyroid. Then again, if you go down further into your reproductive organs, so

female reproductive organs again need thyroid hormone.

Without those, we are looking at menstrual issues or we are looking at issues with infertility which is again on a rise because we see that thyroid hormone issues are also on a rise.

Then it also regulates your temperature so a lot of people will feel cold all the time even though they might be you know and heat running all the time with them.

So that regulates your again temperature. It regulates the metabolism of the body so people do not lose weight they actually gain a lot of weight when they have thyroid hormone disorders.

People feel tired or fatigued and have a lot of mood changes because again it controls different hormones in the body and controls your mood. So as you will see literally from head to toe each and every organ needs thyroid hormones and without this thyroid hormone you will have all of these symptoms.

So that's practically everybody who is walking on the street, you know, like we'll have some of the other symptoms which might point towards the thyroid disorder.

Now there are different kinds of thyroid disorders. Okay. One is what we call as a hypothyroidism. One is a hyperthyroidism. Hypothyroidism is the most common one where your thyroid gland is not able to produce enough thyroid hormone, while hyper is the issue where the thyroid gland is producing too much, which is lesser known.

Now, even if you break it down further, the cause of hypothyroidism, the most common one, as you were mentioning correctly, is the Hashimoto's disease, which is where it is an autoimmune condition, one of the most common autoimmune condition world over.

where antibodies are destroying its own thyroid gland, which ultimately leads to hypothyroidism. So antibodies, a lot of people have listened to our podcast, watched our podcast, know about antibodies, but what specific antibodies and where are these antibodies coming from?

I mean, you just have made a case that the thyroid, I always say the gut is the epicenter of the health. And I'm sitting here and listening to you and saying, I may have to addendumize 1A is the thyroid.

Well, I still feel gut is the center because thyroid does control a whole bunch of things. But why people get thyroid disorder and which we will get into a little bit later on is that one of the key factors is actually poor gut health.

so you know like the gut health definitely affects the thyroid and destroys it and this is where this autoimmune process also starts. We have heard about leaky gut so all the autoimmune diseases you know the one of the more core factor is the leaky gut which starts in the gut.

Similar is with the Hashimoto's disease that people you know first develop leaky gut And that leads to formation of these two antibodies. One of them is thyroid peroxidase antibodies and the other one is called thyroglobulin antibodies.

And what are these antibodies? So thyroglobulin actually is the molecule which is present inside the thyroid gland. That is the one which makes the thyroid hormone for us.

So, you know, antibody against the thyroglobulin molecule, you know, is one of the antibodies which is present. The second one is TPO, which is a thyroid peroxidase.

Thyroid peroxidase is actually an enzyme which is present in the thyroid gland, which is helpful in kind of, you know, removing the waste materials from the thyroid gland.

So whenever thyroid hormone is being produced, there is reactive oxygen species which get formed, which are basically waste materials. The way I explain is that if there is an industry which is making products, whenever there

is a finished product made, there is always a waste material which is generated from the industry.

If we do not remove those waste materials, they keep on accumulating and obviously kind of creates a havoc or a problem for the industry. Same thing is with our thyroid gland.

When the thyroid hormone is being produced, these reactive oxygen species also get made. If we do not remove them, they accumulate in the thyroid gland and starts damaging it and that's the role of this thyroid peroxidase enzyme.

So again, when the antibodies target against this enzyme, the reactive oxygen species are not being removed and they accumulate in the thyroid gland and that leads to the autoimmune process.

So that's where these two antibodies comes into picture, thyroglobulin and thyroid peroxidase. Outstanding. Okay, so I'm a patient. I'm coming into you.

I'm concerned about my thyroid. Tell me what's classically seen in TSH, free T4, the antibodies, and what the doctors should take because one of the biggest complaints.

Thyroid Lab Markers and Related Symptoms

is that it's a very rudimentary test. And I know you have specific markers that you're looking for for accuracy and root causes. Absolutely. So again, in conventional world, the only recommendation is to check one test, which is the TSH test to check whether you have a thyroid disorder.

But most people don't even understand that TSH is not even a thyroid hormone. It is a signaling hormone, which is coming from your pituitary gland to your thyroid gland.

to kind of go a little bit in a physiology of the thyroid hormone. We have the master endocrine gland, which is a pituitary gland in our brain, which sends the signal, which is the thyroid stimulating hormone, the TSH to the thyroid gland to start producing thyroid hormone.

And the thyroid gland produces T4 as a major hormone, which is what you can call as an inactive thyroid hormone. The T4 circulates in your blood and needs to be converted into T3, which is the active form of thyroid hormone.

So that's the whole physiology. Now, if you're checking only the TSH, then you are missing an opportunity of getting a complete analysis of actually the levels of thyroid hormone.

So that's the reason you need to check free T4 and free T3. So you will get a complete picture of your thyroid gland, how it is functioning and how much hormone is actually reaching your body.

And then plus at the same time, it is also very important to order these two antibodies because what research shows is that these antibodies can be positive minimum of four to five years even before your thyroid gland become hypothyroid.

So what we call as a stage one of Hashimoto's disease or early stages of Hashimoto's disease, a lot of times are missed because again, we do not check these antibodies.

So to kind of do a complete panel TSH, free T3, free T4 are definitely a must. If your doctor is willing, then order these two antibodies on top of it, the TPO antibodies and the thyroglobulin antibodies.

And the last test over here, which is a lesser known test is reverse T3. Now reverse T3 is a very controversial test, you know, like a lot of people or even endocrine doctors do not believe that it actually adds any value.

So just kind of given context, what is reverse T3? So if you can say that your body produces T3 hormone, which does the positive effect on the body, the reverse T3 is the opposite of T3.

So T3 is your gas pedal for your car. Your reverse T3 is the brakes of your car. So what we realize is that people might have like normal levels of T3 hormone and T4 hormone, but the reverse T3, if they're too high, they can still have symptoms of thyroid disorder.

So that's the reason it is important to check a reverse T3 also to kind of know if you have symptoms, then the reverse T3 high levels might be the reason.

And some of these symptoms would be tiredness, weight gain, cold sensitivity, constipation, dry skin, hair loss, please, not me. brain fog and the like.

So the segue question is simple. Let's say a doctor neglects to take a thyroid panel. What other panels, what other markers may indicate a thyroid where they would have to go back and reorder the thyroid panel for more of a reveal?

So symptoms definitely are one way that if the symptoms are consistent and persistent, they are not going away depending like doesn't matter what you do.

So if you continue to gain weight, you still feel tired, you know, you have mood changes, you know, like stress, anxiety, depression. So these symptoms persist, then that will be an important reason to do a more complete panel in your body.

Parathyroid Function and Calcium Balance

Some of the other ways, you know, you can also look at is that most doctors will at least order a basic lipid panel, looking at the cholesterol and things.

And if your thyroid is not functioning properly, your cholesterol might be elevated. you might have higher amount of LDL, which is the bad cholesterol.

Plus your triglyceride might also be elevated. So again, if you're that person who is eating healthy, you know, like, you know, working out and there is no apparent reason for your cholesterol to be elevated, but it still it is.

Then again, it can be an underlying thyroid issue, which is causing that to go high. And again, going back to your doctor and asking for a complete thyroid panel might be important over there.

How does the thyroid differ from the parathyroid? so thyroid gland you know is a major gland and there is a very even smaller gland around it which is called the parathyroid gland so thyroid gland produces the thyroid hormone and the parathyroid gland actually produces the parathyroid hormone so the parathyroid hormone so parathyroid gland produces the parathyroid hormone the role of parathyroid hormone is basically controlling the calcium levels in your body so different roles that is there you know of both the glands I had a friend of mine in my field and he unfortunately had some thyroid cancer.

Now they not only removed the thyroid, they also removed the parathyroid. And that seemed to be very detrimental for his overall homostasis, if you will.

That is correct. So again, it is sometimes depending on the thyroid cancer, if it does, because the parathyroid glands are very close to the thyroid gland.

And sometimes they have to remove the whole gland to make sure that they're getting all the cancer out. And calcium actually is very difficult to control in our body.

So once the parathyroid hormone is gone, the body has to recreate that homeostasis of controlling the calcium levels in a good level. So if that doesn't happen, that creates a whole bunch of problems because high calcium levels can cause issues with your heart, with your muscles, and a whole bunch of other things.

And the low calcium again can cause issues with your bones and other problems. So you have to maintain that you know, like, you know, right balance of calcium in your body, which once the parathyroid gland are gone, it does become a challenge.

Now you're a classically trained medical doctor at the highest level. And not that thyroid is odd, but your vantage point of root cause resolutions, functional medicine is quite unique.

Dr. Gupta's Personal Health Journey

What's your personal story that drove you into this because there's gotta be some sort of a backdrop. Absolutely. So, you know, this is always an interesting point or introduction point with any functional medicine provider, you know, because we have gone to the conventional medical school where we are taught that, okay, the only way to treat a patient is by giving them drugs, right?

If you, you know, like we are not tech talk anything about nutrition, supplements or any of the natural ways. So I was very similar. So I completed my family medicine residency.

I was working in a private clinic in Richmond area. But what I realized was that a couple of years into my practice, I started gaining a lot of weight without changing my diet, without doing anything.

I was gaining a lot of weight. I was feeling very tired during the afternoon times and I had to even take a nap during the lunch hour just to function through the whole day.

After I completed my work day, I was kind of brain foggy where I could not just pay attention to a lot of things. And then what was the final symptom that came into my life was this horrible, horrible stomach pain.

So I had this horrible stomach pain which would just come random to me. You know, I tried different kinds of antacids. I was literally like eating 10 to 12 times in a day and the pain will not go away.

I was taking Xanthax. You know, I was taking PPIs. It was just not getting better. And I had no idea what was causing it. You know, like, you know, tried all the medications.

So I thought maybe I'm not a smart physician. Let me go to my specialist friends who can do a better job for me. So I went to my GI friend, you know, who did endoscopies, you know, ultrasounds, blood work.

He did literally everything. everything came back normal. And he had no idea that why I was having this kind of horrible stomach pain. He added even more medications.

I was taking PPIs like twice a day, you know, in between that breakthrough Xanthax and Tums. And I was like, I was only 32 years of age at that point of time.

I said, I cannot live with like seven medications in my life forever. This is not making sense. So that's where somebody introduced me to functional medicines is that, well, you know, people like you who do not get an answer, go to functional medicine.

So why don't you look into that? So I got trained into it and I started implementing a protocol on my own. So made some changes to my diet, you know, started like, you know, some changes to my stress management routine, some workouts, some basic supplements.

And within one month, you know, my pain was completely gone. And within six months, I was off all medications. I lost more than 40 pounds during that time.

And my energy level increased so much that I even participated in a 5K rugged maniac. And I was never an authentic person. So for me to do that was like a big moment that, you know, like my body was giving me a signal that, you know, finally something is changing.

So then I realized, you know, like just a few changes, you know, was huge that literally changed my life. So I'm sure there are other people like me who are looking for answers.

So I should be doing something. So that's where, you know, like, you know, I got this opportunity to work at the Cleveland Clinic functional medicine department.

And then I realized that, you know, I was attracting time and again, these middle aged female patients who had very similar symptoms as mine. You know, they were all gaining weight.

They were all tired. They had brain fog issues, a lot of gut problems. And one thing was common. They all had thyroid issues. They were all taking medications and their numbers were perfect, but still they had symptoms.

So that prompted me, okay, well, I need to help these females because they're literally like me. So then I started my research into Hashimoto's disease and thyroid disorders and developed my three step process, which I implemented in them.

And we saw great results, you know, like again, phenomenal results. They were able to gain their life back, energy improved, mental clarity was better.

They were able to lose weight. mood was good and plus the thyroid numbers also improved. So that was a big win that I realized that even a disease like thyroid and Hashimoto's, which was told that nothing can be done about it, your numbers are good, this is the way you probably will have to live your life, And I was able to reverse a lot of those conditions with them.

So that prompted me to share the message of hope that even people with thyroid and Hashimoto's can get better. So for you, what was the root cause? It was your gut, it sounds like.

So again, that's what I realized it is always multiple things. So gut was definitely that's where everybody starts with, you know, but again, you know, like, as you know, once you enter, you know, a busy practice stress creeps in, you know, like, you know, you don't take care of yourself, you know, you know, so stress was definitely a second factor.

And poor diet, you know, you're on the run, you know, like you're living literally on like four or five cups of coffee a day, you know, and you're just grabbing food wherever you can.

So I think those were our major factors, gut being the number one, second being the stress and third was a poor diet.

Mitochondria and Thyroid Dysfunction

Let's play a little rapid fire. I think you like that. I told you I'm from New York. So I'll give you something. We'll try and do it in a very epigrammatic fashion.

Here we go. The drug for thyroid, effective or ineffective? In some cases, it is effective. Where are you on iodine with thyroid? Well, some people need it if there is no iodine in their diet.

Why women over men getting thyroid issues? Because the hormonal complexity of females is much higher than men. And that's why 80% of people that have autoimmunity are females.

Bing, bing, bing. Ring the bell. I love it. Give me your number. top three symptoms of thyroid. We've talked about them, but something that would really point you towards thyroid.

Fatigue, brain fog, and constipation. How about visually? Aren't there some visual or physical exam tits? So in hyperthyroidism, definitely it affects their eyes much more than that.

So we will see those bulging eyes with that. But yes, even with hypothyroidism, people have higher chances of

having vision issues like blurry vision and stuff.

How long, once they come under your veil, does it take to help with Hashimoto's? Some people are really good within four to six weeks we see a difference, but for maximum benefit it is four months.

So if I were to say Hashimoto's disease is a lifelong disease, can it go into remission? Can we stop it? Can we reverse it? Where are we on the trajectory?

So for a lot of people, we are able to reverse it. Definitely majority of the people, we can put them in remission. Let's take some time now. We'll talk about mitochondria.

Mitochondria, the key component. It's a conversation of 2026. We go from longevity, but even if we're still talking about longevity, right under that is mitochondrial function slash dysfunction.

So mitochondrial dysfunction has been attributed to many of the neurodegenerative diseases. You make a great point in your book about a myelothyroid connection.

Could you expand on that for us? Absolutely. So again, as we realize, mitochondria is, again, one of those things which is lifeline for us. Without mitochondria, we will not all be living over here.

So what people thought was that whenever you have a thyroid disorder or hypothyroidism because thyroid hormone controls the metabolism, it also controls the mitochondrial health.

Well, what I realized was that is actually the opposite is the mitochondria which is responsible for powering the thyroid cells to make the thyroid hormone.

And what I realized was that when I looked into the research was that even you know like when we did the research on Hashimoto's disease and they actually took you know like samples from thyroid gland from dead people you know who had Hashimoto's disease and looked it under the microscope and what they realized was that there was clusters and clusters of dysfunctional mitochondria much higher than they expected in the thyroid gland collected together.

So what that tells us is that it's the dysfunctional mitochondria. The mitochondria, which was destroyed for a very, very long time, ultimately causes this hypothyroidism issue.

And if you will see, all the symptoms of hypothyroidism are mitochondrial symptoms. Mitochondria is the power of the cell. So fatigue is the number one symptom.

Mitochondria controls your metabolism. That produces energy, determines what is your BMR. Again, that's the weight issue. Mitochondria powers your brain.

So again, that's the highest concentration of mitochondria. So like, you know, brain fog is a very major problem. So that's where if you kind of dissect all the symptoms of thyroid disorder, you will realize those are actually mitochondrial symptoms.

And the biggest thing is, let's say for it was deficiency of thyroid hormone that would have led to these symptoms. Then the science will say that let's replenish the thyroid hormone to a person's body and all the symptoms will get better.

Well, it doesn't. 70% of people with Hashimoto's disease who have been given thyroid hormone and their levels are normal still can have symptoms. So that is telling us there is much more beyond, you know, the thyroid hormone replacement that needs to be fixed for this thyroid issue.

And that's where this mitochondria comes into picture that unless you work on the mitochondria, your symptoms are not going to get better. First of all, we need to find why your mitochondria is being damaged.

And then second of all, you need to start working on this process of fixing the mitochondria. I think that if we do things to imbue the mitochondria with energy, I mean, they are without question, there are battery cells.

One of the lost functions of mitochondria is its support of the immune system, cellular danger response and all that, not trying to get too heady. So we have a mitochondria to thyroid axis, usually if axis is bi-directional.

So how does the thyroid or thyroid dysfunction, if that's the origin of it, damage the mitochondria? So because thyroid hormone does have some control of the metabolic machinery of the body.

So basically the BMR is being determined a little bit by the thyroid hormone.

Toxins, Viruses, and Autoimmune Triggers

So a classical example is when we go into starvation mode, let's say, you know, like when we were ancestors, you know, like we were in the jungle, we would not get food for an extended amount of time.

Our body needs to go into starvation mode. And what the body will do is that it will reduce the basic metabolic rate to the bare minimum so that we are not kind of, you know, utilizing too much energy.

And the way to do that was to send a signal to the thyroid gland to produce less and less of the thyroid hormone so that the basic metabolic rate reduces and that ultimately will, you know, be affecting the mitochondrial disease.

So that's the way the thyroid controls the mitochondria by kind of regulating the basic metabolic rate. I'm getting a masterclass in thyroid. I'm excited about it.

So here's a true false question. There's a receptor site for thyroid on every cell of the body. True or false? True. That's how much. So there's a receptor site for thyroid, omega-3 fatty acids, and vitamin D3.

That's correct. Boom. Okay. So if anybody's listening, that's something to write down. Let's get into the idea of toxins. We're talking about toxins that we consume, toxins we put on our skin.

Unfortunately, toxins that we breathe in, this is the conversation piece, air pollution, lung pollution and the like. How are these toxins adversely affecting the thyroid and increasing the incidence of thyroid disease?

So thyroid gland is the most sensitive gland in our body. That's what you realize. And plus the other problem is that there is too much blood supply that goes to the thyroid gland day in, day out.

So whenever our body gets exposed to even small amount of toxins and that goes to our bloodstream and circulates through our body, a lot of it does go through your thyroid gland.

And that toxin starts accumulating in the thyroid gland as the time goes on and starts damaging the thyroid gland. So these toxins being we have known about heavy metals like lead and mercury for a very, very long time.

that they negatively affect the thyroid gland. So they damage the thyroid gland that ultimately leads to hypothyroidism. We know that. Plus, you know, like as you were mentioning about environmental toxins, each and every day, you know, we are putting out a new toxins or a new chemical into the environment.

Right. So then ultimately reaches our food chain, you know, or ultimately goes to our bloodstream and again kind of adds to the total toxin burden. And now we're also knowing that the mycotoxins, the mold toxins are very importantly also affecting the thyroid gland.

In fact, there were a couple of research studies that water damage building had one kind of mycotoxin called eflatoxin. which completely hijacks the immune system of the thyroid gland and destroys the thyroid gland and specifically lowers the T3 hormone in those people.

So similarly, these toxins, what they do is that, you know, by multiple different mechanisms, they actually affect the thyroid gland. One of them, what we call is a molecular mimicry.

Basically these toxins, when they enter our bloodstream, our body kind of confuses them with a lot of times with thyroid tissues. and then starts producing antibodies against them because they feel they are foreign invaders and they want to remove them.

But because their molecular is very similar to the thyroid tissue, they actually infant, you know, in friendifier destroy the thyroid gland itself. So that's one of the ways they do it.

The second way is these toxins, you know, like work against the thyroid gland is basically again, hijacking our immune system and turning it against our own body.

Okay. How are you talking about the cell danger response and also the breakdown of the immune resilience of the body toxins do that. And again, once your immunity is broken down, then certain viruses like Epstein-Barr virus or even COVID virus and things can easily again hijack our immunity and again lead to this whole autoimmune cascade and that destroys the thyroid gland.

You mentioned viruses, so let's go down that pathway, if you will. So let's talk about the COVID virus and its effect on thyroid and its interplay. So we have known about different kinds of viruses even before the COVID virus, which has been linked to thyroid disorders, one of them being the Epstein-Barr virus.

We have at least 15, 20 research papers which clearly mention that reactivation of Epstein-Barr virus can lead to Hashimoto's disease. Okay. So similar mechanism is what we're realizing that is happening with the COVID virus is that, you know, because COVID is just like, you know, like five or six years old.

So we are still like, you know, looking at the pathophysiology. But what we realize that people who have had COVID disease, they have higher chances of having Hashimoto's disease too.

Now that's what you're realizing. Again, the COVID virus turns what it does is basically turns our own body's immune system against our own body. And now what we have is genetic weak points.

So when this body's immunity is turned against our own body, and depending on our genetic makeup, that immunity is going to destroy that particular part of the body.

And for a lot of people, that weak genetic point is their thyroid gland. So all that COVID virus, which is, you know, like riling up our body's immunity, kind of turns against our own body.

And that starts the damaging of the thyroid gland, leads to Hashimoto's and then hypothyroidism. I think we just covered something that's the white cloud in that you just mentioned about viruses stimulating other dormant viruses, many of which are in the central nervous system that goes under, Harvard put that out, that's poly reactivity.

So you're skating on poly reactivity. You're talking about antibodies that are attacking other antibodies and they're called auto antibodies. And also in that paper that you're referring to, you're talking about Idiopathic antibodies where the antibody actually mimics the antigen.

So you're saying that the thyroid has a direct interplay with the immune system. It does. Yes, you know, so that is again one of the you know, like, you know, functions of the thyroid gland.

is that it does help to mature our immune system and keep it in a well-balanced state. Because for a lot of people, our immune system, there is a TH1 response and there is a TH2 response.

One response is great, which is very protective for our body, removes or fights against the viruses and things.

Three-Step Hashimoto's Reversal Strategy

And the other response is basically kind of keeping a body safe. Now, if the one response once the viruses and bacteria as a battle is like, you know, not shut off, that will ultimately kind of, you know, causes the destruction to the body.

So that's where that balance in the TH1 and TH2 response is very important. And thyroid hormone does play a very significant role in kind of, you know, keeping that balance between our immune system.

To me, this is truly exciting. I wrote a book on immune reboot. And I believe one of the black clouds behind the idea of longevity is to keeping a robust, resilient immune system.

You did a great job in your book, the three-step reversal strategy. Why don't you unpack the three core stages of the reversal that you outlined in your book, reversing Hashimoto's?

Absolutely. So again, the core of Hashimoto's disease is not just dealing with thyroid hormone. What I ask people is that just consider it as a systemic disease.

And you have to work at a systemic level of improving your body. Then only your thyroid will get better. So the very first step over here is to understanding what are those root causes which ultimately started this whole inflammation cascade, autoimmune cascade which is now destroying your thyroid gland.

So this is where you need to look at root causes and there are five major root causes which has been linked to kind of causing Hashimoto's disease. So the number one is food sensitivities.

You know, we know that more and more people are becoming sensitive to gluten, dairy, soy, you know, all of those foods. So we need to kind of understand that food sensitivity remove those, you know, like sensitive foods from our diet.

So that's the first root cause. This food sensitivity obviously ultimately leads to leaky gut and gut destruction. So that's the downstream effect of it.

The second is nutritional deficiencies. Now there are specific nutrients which your thyroid gland needs, specifically certain minerals. Like, you know, we were talking about iodine, zinc, selenium, magnesium, all of these vitamins and minerals, you know, has been deficient into our diet for a very, very long time.

And we know the deficiency of these vitamins and minerals again causes Hashimoto's disease. So we need to look at, are we dealing with nutritional deficiencies?

The third one over here is stress. Now stress being whether it's physiological stress, emotional stress, spiritual stress, any kind of stress your body goes through that kind of raises your cortisol levels which again affects your immunity in the negative way and again damages your thyroid gland.

So you definitely need to look at those stressful moments in your life. Even childbirth is stressful. So like what we realize is that, you know, post pregnancy, a lot of females do get diagnosed with Hashimoto's disease because there is a big hormonal shift suddenly from your pregnancy hormones to post pregnancy hormone.

And that is again, very much stressful for females body. Similar thing happens with menopause. Again, more and more females are being diagnosed with hydro disordered menopause because again, a big hormonal shift is happening.

So these stressful moments, you know, like we need to look. one to two years before your diagnosis of thyroid, did you go through any stressful moments?

So that is the third root cause. The fourth one that we already spoke about was the toxins. you know, whether it's

heavy metals or mold toxins, you move to a new house or you had a water damage or a water leak, you know, the mold toxins, whether they cause damage to your thyroid gland, those toxins.

And the last fifth one being the infections. And this is where, as we discussed about different kinds of viral infections, COVID or Epstein virus, even parasites in your gut, as well as candida in your gut.

all of these things can lead to again Hashimoto's disease. So that's a very step one about identifying the root causes and the terminology important over here is causes and not cause because people have been trained to think that it's unidirectional.

There is only one root cause And what I realized was that it is generally two to three root causes coming together and leading to thyroid disease. So that's where you need to look at all the root causes, identify all of them.

So that's where you know what you need to start working on. Multiple root causes. Root causes lead to multimodality approach. not symptom based, more system based, if you will.

So that really begs the question this too, but what supplements do you typically recommend for somebody? I know you want to individualize and personalize it per person.

So it'll be a general recipe. I apologize. What, which supplements do you like and which ones do you say, no, don't do that. Don't listen to that. influencer.

Okay. So there are some basic supplements we know that everybody, majority of people, at least with thyroid disorder should use. One of them is vitamin D.

We have tons of research studies, which shows that people who are deficient in vitamin D has high chance of thyroid disorders. And once you go on vitamin D, that does improve your thyroid numbers.

So, you know, vitamin D is very critical over here. So make sure you get your levels checked. You know, the levels are in the low normal also. Then also you need to take vitamin D.

So that is in good shape and things. So that's the first vitamin. The second one is selenium. Again, selenium is one of those minerals which a lot of people are deficient into and selenium plays a very critical role in conversion of T4 to T3.

And again, research proves that deficiency of selenium will lead to Hashimoto's disease. So that's the second vitamin or mineral you should add. The third one over here is zinc.

Again, zinc plays a very very significant role in production of thyroid hormone as well as conversion. And again, a lot of people are deficient into zinc these days.

So again, having zinc as a supplement will be very very useful to supporting your thyroid gland.

Supplements, Peptides, and Mold Testing

The next one comes over here is magnesium. Now magnesium is one of those minerals that literally kind of takes part in 300 enzymatic processes all over your body.

So literally for anything in your body, magnesium supplement is good, including your thyroid hormone. So, you know, again, magnesium is one of that supplement that I will recommend for majority of people to include that.

Now the controversial supplement over here is iodine. Okay. And we have two camps of thought. One camps of thought is that we need to have very high dose of iodine to treat thyroid disorders.

And the other camp of thought is that you should not touch iodine because iodine is going to destroy your thyroid

gland. And I looked into the research, okay?

And the research is very, very clear. We have really big research, you know, of at least 200,000 people, which suggests that too little of iodine is bad and too much of iodine is bad for your thyroid too.

So you have to be in the middle zone. So how do you kind of be in the middle zone? Is that if you do have iodine containing foods in your diet, like if you're that person who is eating seafood, sea vegetables, you know, like all those things on the regular basis, then you might you know don't need to consume iodine supplements but if you're that person you know who is just eating iodized salt and you don't eat too much seafood like once in a while or you don't eat sea vegetables on the regular basis then you do need iodine supplementation from external sources so that you can get adequate amount of iodine to your thyroid gland.

So that's where the iodine is the controversial thing. There is no straight right answer over here. So you have to be middle and you have to individualize that supplement on your own.

So I asked some of the hotter supplements in reference to thyroid and overall performance within thyroid. Let's just go for NAD. You know, the precursors NMN and NR.

So NAD is great, you know, because as you said, that is a precursor for kind of that's energy currency for our body supports our mitochondrial health.

So we do see improvement. Specifically, if you do have brain fog issues, I've seen that people will see improvement in their brain functioning with the NAD supplement.

Another new, really new one. It's not new, but we're talking about it now is Saffron. How does that play in thyroid health? So saffron, you know, like, you know, I'm from Indian origin, right?

So saffron or these spices have been used in our culture for a very, very long time, right? And saffron has very unique set of antioxidant compounds, you know, and polyphenols and things, which is really good for reducing inflammation, as well as working on the brain.

It actually also has powerful compounds, which can rebalance your brain hormones, like serotonin, dopamine, or a preference. So again, very good. If you can include saffron, there is no downside to it.

It will definitely improve the energy as well as the again, mental clarity for sure. Maybe the biggest conversation piece on social media, the Instagram with the influences would be peptides, most precisely BPC 157, TB4 frag.

How do you feel about that for thyroid health? So what are peptides, right? So just for people to know, peptides are small connection of amino acids, which are naturally produced by our own body.

So these are not external things. These are produced by our body. Most common peptide everybody knows about is insulin. So a decade ago, we came to know about insulin that has changed completely life of a lot of people who have diabetes.

So similarly, we've identified new peptides, which have different roles to play in our body. Now, BPC-157 is a peptide which is made by our gut. It is a very gut healing peptide and again helps with leaky gut issues as well as reducing gut inflammation.

So we use it in a lot of our thyroid patients because as we were discussing before everything starts in the gut and BBC 157 heals the gut and reduces the leaky gut issues.

Very nice peptide definitely we use it a lot. The next one is immunomodulators. This is where TB4 frag as well as you know thymus and alpha 1 when we had it before also used to work a lot.

So TB4 again is a healing peptide. It helps you know in healing processes specifically if you have muscle injuries or

nervous injuries and things plus it also retrains your immune system you know that TH1 and TH2 balance that you're talking about it does have some effect on it.

So again, if definitely you have muscle pain, if you had some injuries before, or if you feel there is too much inflammation in the body, then TB4 FRAG peptide can also be very useful for thyroid patients.

Now you mentioned before mold. mold and we'll just say mold and microtoxins. So how do you check for it and how do you attenuate the issue? So again a couple of misconceptions that I feel about mold in a lot of my patients is that like they have been checked you know before by going to an allergist that they are sensitive to mold spores Or doc, you know, I've been told that I am allergic to mold.

So that means I am mold in my body. No, we are talking about a totally different concept. It is not about being allergic to mold. What we are telling is that you have been exposed to mold for a long time and that mold colonizes or lives in your system and starts production of these toxins which we call as mycotoxins.

And these mycotoxins actually which are present inside of your body are the ones which are destroying your body because they lead to something called SERS.

which is chronic inflammatory response syndrome and this ultimately causes inflammation and damages different parts of your body which is being the thyroid gland.

So that's the reason we need to know whether these mold toxins are living in your system or not. So there are only a couple of companies which are doing this urine test which can actually check for different kinds of mycotoxins which have been associated with poor health.

So that is the only way, unfortunately, right now to know that advanced mycotoxin tests, whether you have been exposed to mold and whether you have high amount of mycotoxins in your system or not.

Well, I'm going to pull out the Pierre resistance just for you because you're doing such a great job. A lot of my patients talk about methylation. This is not new.

This is something that we learned 15, 20 years ago. So the inability to methylate appropriately increases the incidence of histamine. We in functional medicine world don't talk about histamine enough.

So how does histamine or the elevation of histamine play with thyroid health? So again, histamine is being released because there are triggers which are affecting your body, right?

You know, which again, poor methylation can be an issue again, you know, heavy load of toxins can be an issue, poor gut health can be an issue.

Histamine, Stress Management, and Closing Advice

And whenever there is a release of histamine and when there is chronically elevated histamine, it increases inflammation markers in your body. and those inflammation markers ultimately will again affect your body which can be your thyroid in turn.

So people who do have histamine intolerance or have been diagnosed with MCAS again you know most commonly sooner or later they will start developing thyroid disorders because those will chronic elevation of those issues will cause your thyroid damage.

Now, your bio says, and I'm compelled by this, and I believe you, your mission is to help 1 billion people reverse their health conditions. Talk about scalability and public health vision about that.

How are you going to do that? People think that improving your health has to be very complicated. You have to take 100 different supplements, you have to buy expensive gadgets, or you have to do IV therapies and things.

What I already know is that 70% to 80% of people if they just do basic things, they can improve their health condition. And that is a scalable thing. That's what I want to kind of show people and know people is that by basic changes of improving your diet, working on stress management, doing some body exercising and things, that itself is very, very powerful, which can literally change your disease process.

Right. and that's the goal that I've been following for some time because yes you know we do help people one-to-one but the goal is to kind of help people educate with small things they can do on the daily basis you know which has profound effect on their health so that's where you know like you know on my youtube channel you know we give them bite-size information okay well you know you do this in the morning for five minutes but before you go to bed just do this for 10 minutes so those are powerful things that people utilize and we see great results with those So that's the goal, that's the only way I want to reach those 1 billion people to affect their health is by sharing them things which they can do on their own on the daily life which will have profound effect on their health including thyroid, inflammation, everything.

Right. Well, you just walked right into my last question. I have a buddy of mine, he lives out in Switzerland, and he listens to all my podcasts and asks every guest this question.

He wants one thing to do differently to make an indelible mark on his health outcome. I think the only thing that is going to make a huge difference right now is working on or incorporating at least 15 minutes of some stress management technique on a daily basis.

The world we are living in, you know, like we get bombarded with so much stressful situations, news, information and stuff. And we are not doing enough to kind of, you know, combatic, you know, that, you know, effects of stress.

We cannot change the world, maybe one day we can, but at least we can make our body more resilient towards stress and that's what I tell people. So 10 to 15 minutes, just some deep breathing or some guided relaxation or meditation.

Anything that you love or like journaling, any of those things, just 15 minutes in a day is so powerful that will kind of, you know, take this whole trajectory of stress from destroying your body to kind of, you know, being a friend of your body.

So that's the only thing I want people to pay attention to, you know, if they can start today. I think that's great. People don't talk enough about stress.

We're mentioning sleep a lot. And I always tell everybody it is better to be proactive in health than to be reactive. And unfortunately, our healthcare system is built right now in a very reactive symptom-led mode.

This has been great. We've got to do this again. There's a lot more to uncover without question. Dr. Anshu Gupta, author of Reversing Hashimoto's. If you've got a thyroid problem, he's the man to go to.

Thank you so much. Again, it was really a pleasure coming over here. And thank you so much for inviting me. Oh, my pleasure. We'll see you soon.