Introduction to Dr. Christianson

Hello. Welcome back to the Heal. Your thyroid and reverse Hashimoto's summit. Your host, Dr. Jen. Today, I'm super excited to talk to Dr. Alan Christianson.

He's a board certified naturopathic endocrinologist who focuses on thyroid care. And we're going to talk about the thyroid reset diet today. And he's a New York Times bestselling author.

And one of his books is The Thyroid Reset Diet and also the Metabolism Reset Diet, both which are so important with the thyroid because it's all connected.

So Dr. Christianson has been on countless media appearances, including Dr. Oz, the doctors and The Today Show. So thank you so much for being here. I would love for you to share with our audience how you got involved in this kind of medicine and specifically your thyroid, your passion.

For sure. You know, for starters, Dr. Jen, thank you for hosting this event. It's great to get more information out there in the world needs this. Yeah.

My my first possible direction was astrophysics. That was my first interest early in life, but I was a really unhealthy kid. I had problems related to cerebral palsy.

I had recurrent grand mal seizures, and I put on a ton of weight as an adolescent for a while.

How He Entered Thyroid Medicine

I started focusing on books besides the space books, and realized that what I did with my health could make a difference. And it, you know, changed my diet.

I started exercising slowly and it just radically transformed my life. And I realized what a big thing health was. And I wanted to go into medicine. I wanted to help close that gap between, you know, what people knew and what they could do for others.

And in that journey, I realized that there were so many struggling with thyroid disease and they were trying lifestyle things. They were trying to change your diet and move more, but it didn't work.

There was things holding them back, and I saw radically different views between the conventional world and the natural world. And I don't know, I really felt like each side had some strengths, had some weaknesses, and I wanted to help close that gap for these people specifically.

So that's been the journey ever since about the early nineties. And it's so needed. So many people out there are struggling, like you said, and there is such a gap between natural and conventional medicine.

So what are some new findings about the causes of thyroid disease? Yeah, this has been fascinating. Most everything that we've thought about thyroid disease has radically changed in the last several years.

So I would pull apart causes and triggers for this discussion. You know, there's there's things that cause it, which means that they are sufficient onto themselves and there's triggers, which means that if it's about to happen anyway, they make it.

Come on, might make it come on Tuesday rather than Friday or, you know, like this year rather than somewhere down the road and causes. Sometimes changing a cause can make something go away.

Sometimes it can't. We'll talk more about that. Like the horse is out of the barn. Closing the barn door won't bring the horse back, but it might have kept her from getting out.

So yeah. So it's a complicated idea, this cause and trigger. And you hear all the time about various things that cause thyroid disease, that are relevant, that are important, that can affect people's health.

It probably triggers most of them are probably triggers as far as causes. All we really have irrefutably are genetics, age and iodine exposure. Genetics has some overlap with gender.

You know, gender is genetically determined, but there's certain genes that may be more apt to get it than others, and these genes are more apt to act in those ways the more years we're around.

And that's how age comes into play. But the weird thing is that we've got this narrow range of iodine tolerance, and for some people it's even narrower than others.

And if we have too little or too much, that can be the thing that causes our genes to act in ways that makes the disease start up.

What Causes Thyroid Disease

Yeah, iodine is something that is very tricky in the thyroid world and a lot of people argue and have different opinions on so I guess when we talk about iodine, what is your view on, you know, what is too much, what is too little?

Because the thyroid does need iodine to make thyroid hormones. Mm hmm. Yeah. Yeah. I would step back a bit and talk about how we can make claims about things.

So we look for converging lines of evidence, and there's there's three big lines that are relevant when we talk about nutrients in disease correlations, one of which is mechanisms of action.

If we can say that there's certain ways in which the wrong amount can cause harm, like in the case of iodine, we know that this is the thing we need to make hormone.

So there's a carrier protein called thyroid globulin and iodine attaches on to that. It bends and folds and basically sticks those together in ways that make T3 and T4. So that's cool.

There's actually 13 spots in that molecule that iodine can fit like proper seats for it. But if you think about like, you know, the clowns that cram into a bus like like 60, I'm piling out this little tiny bus.

They're not all sitting in a seat, but they still got in there. And that's the story with iodine and 32 globulin, you got 13 seats. You can have 66 zero atoms associated with this molecule.

And in that state, it creates more free radicals and causes the immune system to attack that molecule. So that's our mechanism of action. The next line we think about is epidemiology.

You know, what happens to big groups of people when they do that? You know, back in the 1924, we added iodine to our salt and we did lower the rate of pediatric goiter.

And that was a cool win. But among women in their forties and fifties, the rates of autoimmune thyroid disease increased 26 fold, not percent fold in those following decades.

The same thing has happened everywhere around the world that's had iodine fortification. Denmark did it last. They did it in the year 2000. The same thing played out there.

So that's our epidemiology. And then last line is actual intervention. And there now have been multiple published

studies in which people have been given supplemental iodine at varying doses.

And there's a dose related effect of elevating rates of autoimmune thyroid disease from exposure. So yeah, not so much like I guess my thoughts or my opinions per se, but like these three lines of evidence all converge.

And what we see is that every human has a requirement, you know, are too little, is bad, and every human has a point where there's toxicity. But some people have an intolerance that's lower than the toxicity.

And those are the ones that are more apt to develop thyroid disease. So when we look at this iodine, you know, where is your right spot? Where's the sweet spot?

Because we're all kind of different how we absorb things. What are some good tests that how does that work exactly? If we had a fair world, there would be easy tests.

There are not there are great tests for groups, but there actually are not great tests for individuals.

Iodine: Too Little vs Too Much

Thankfully, we know from group data that individuals are largely predictable as far as their minimal requirements and the rate. And it's also different for kids and adults.

We're really talking about adults here, adults who are consistently below 50 or 20 micrograms per day can develop a deficiency. It totally can happen.

And since 1980, the United States has had that happen six times. We've had six documented cases of ID Sea since 1980. So totally possible. But it's exceedingly rare now as far as amounts and excess.

The World Health Organization has said that most adults can occasionally tolerate 1100 micrograms and with without harm to them. That's true for most.

But those who are genetically prone to thyroid disease, they can't they can't have an ongoing exposure of more than about 200 micrograms. So, yeah, recurrent daily exposure above 200 micrograms for those prone to thyroid disease can be a problem.

And there is a big paper done by the American Third Association looking at what percent of the US population is above that threshold. And of course not everyone is.

But per age, ethnicity and gender, some are between 30 to 40% of people are above that window. Yeah. So when someone's like, wow, this is confusing, you know, what do I do?

So where are people getting iodine from? So we know if people are just using commercial table salt or if they're eating a lot of fast food and that salt is getting you know, they're having that that conventional salt.

Where else could they be getting iodine from? We know it's in certain foods. Also. Salt is fascinating. And yeah, processed foods can have a bunch of iodine, not so much from the salt.

Oddly, this is weird, but the one place for fast food that may occasionally use iodized salt is Burger King. Don't ask me why, but that's been documented pretty much every other version of Fast food uses non-native salt.

Now they can solve a lot of it in from other sources. So we'll talk about where it comes from. The main sources are going to be dairy foods, processed grains.

You mentioned salt, seafood, sea vegetables, egg yolks and supplements. Those are the top seven now over the last many decades. Some of those foods are different, meaning that we consume more of them, or the iodine in those foods has changed.

And then on some of those foods has not changed, meaning we consume about the same amounts and the amount of protein is similar. So the two that have changed the most in the last several decades has been dairy foods and processed grains.

So the amount of iodine in many of them has about tripled. In fact, one assay by the USDA showed that of the 23 of the 25 dense the sources of iodine in the American diet, 23 of them have doubled or tripled over the last several decades.

And yeah, that's from dairy foods and processed grains. So we're getting it from our diet. Can we get it from our skin? Can we absorb iodine through our skin?

Because a lot of times we you know, I've heard this that if you you drip it on your skin and if it if it disappears, your iodine. So go into that science for us a little bit, please.

Sure. So two things. The first one is the skin test. I'll talk about that and we'll talk about other sources that might come in your body and your skin.

So the skin test, you know, this is something that seems really intuitive. And the story is that you paint some on your skin and you got this really clear.

If you're a Caucasian, you can see a real clear color change if your skin is light enough. And then over time, that color change fades. And the idea is that maybe if your body wants it, absorbs it faster, if you don't want it, absorbs it more slowly.

And that sounds plausible. And there are there are examples to where like in the case of iron, for example, your gut will absorb more if you're low and not so much if you don't need it.

But our inner skin does absorb a lot of nutrients. That's true, too, but our skin can't pick and choose our skin has no way of selective absorption of nutrients.

We now know that. And iodine, when you put on your skin, a lot of it interacts with the air and oxidizes. When it does that, it turns invisible. So most of that fading away is just exposure to the air.

But we do absorb some somewhere around 4%. How much we absorb, though, is not a function of whether we need it or not. So that's relevant in terms of unwanted exposure.

And this one really shocked me. It was the case that hand sanitizers had many brands had iodine in them, and 2018 the FDA banned that because they found so many health care workers at unsafe levels of iodine exposure.

They're using these things all day long. And I always wondered, boy, what if they didn't do that until, you know, what if that wasn't identified before the pandemic, when like we're all using this stuff?

24 seven So that was good timing. But iodine, it's not a villain, it's an important nutrient and it's also a super useful compound. So we think about things that oxidize like, like bleach or peroxide.

Where Iodine Comes From

They're, they're useful. They sanitize stuff, they keep things clean. And iodine does that, too. And when you put iodine in a gel or a lotion, it makes the gel nice and smooth and it makes stuff not settle out.

It keeps things in solution and it keeps it from going bad. There's a lot of really good things to that and therefore companies have had a lot of incentive to add iodine into personal care products.

So we see that many have substantial amounts. And I thought about this in a lot of detail. There's a lot of things that we use that we don't use that much volume or we don't put them like straight away in our skin or we don't leave

them there.

We just like wash them off quickly. But there are things where we use a lot of volume, we leave them there and we can absorb them and so the things I thought about the most are skin body lotions, face creams, conditioners and shampoos.

And of those, there's many that have enough to where it can be like ten days worth of sleep exposure in one single usage. Wow. That's that's kind of not scary but interesting to think of, especially with like the hand sanitizer, the fact that that was getting absorbed at such high levels for people using them.

Like you said, if we're washing her hair every day, that's it. That's exposure in the lotion. So how would someone find out if their beauty products or their lotion has iodine in it?

Yeah. And this is something to where it's not even like natural versus commercial brands. The natural ones, you'll often see it under the label of sea vegetables, kelp, seaweed.

It was the most common names for that in the conventional products. The main compound is called PDP Polyvinyl Period on. There's actually a lot of other names to that that I've put in the book, but that's the most common name you would see.

So you have PvP, kelp, sea vegetables. Those are things to look for. Well, that's really good to know. Everyone's going to run to their bathroom and check check the labels.

Okay. So so what happens if someone actually lowers their iodine? They're, you know, taking some of these things out or maybe they're on a high dose iodine supplement.

They're like, well, maybe I shouldn't be. What happens while they're on thyroid medications? Is that going to is that going to impact their lives and how they feel?

You know, it certainly can. And this is something that's not intuitive, but nutrients in all nutrients have a window. We need a certain amount and too much is counterproductive.

But the weird thing is that too much looks a lot like too little. Specifically in the case of iodine, your body pumps it in and that's how your thyroid can use it and make hormone.

When you're on medication, you're probably making less, but you're often still making some behind the scenes. So the more iodine you adjust, when you get above that window, you stop your body's own production of thyroid hormone and you make it to where your cells don't respond the same way to the hormone you're taking from your pill.

So what we can have happen is that someone's dose can seem erratic. Their levels are always going up and down or they're not getting symptom control. You know, it looks like on paper like they're okay, but they're not okay.

They're still struggling with their hair, the weight, the fatigue. Things are right. Now that can make it very challenging for patients out there, especially if they're not feeling good.

Skin Absorption and Personal Care Products

It could be you know, they they're on too much iodine. I know I've gotten patients where they've come to me and they're on a lot of iodine and and sometimes I will run a blood test on them knowing that they're it's hard with iodine.

There isn't like a perfect test. Sometimes people do urine tests, 24 hour urine. There's urine spot tests out there. And like you said, it's just what's the perfect test?

It depends on the individual. It usually. Is that what you have found? Yeah. A little more detail on that. So there's there's urine, blood, there's skin, there's hair, there's different tissues the body can look at with this and they're all proxies.

So iodine is in the blood and it's in the tissues and it's in the thyroid. So tissues collectively that aren't the thyroid are rather similar as far as they're right on content and the blood is different.

So the blood shows what's in the blood quite accurately, but it doesn't reflect what's in the thyroid with the exception of that, the extremes. So in the body most iodine is excreted through the kidneys.

We pee a lot of it out now. The more we're exposed to the less that's true. We start to pass more of it through our bile in our stool and we sweat more out becomes less linear, but as a generalization, we pee most of it out.

So when there's too much, there's more that shows up there and our blood levels don't change. Now, when we had absorbed so much that our kidneys are not functioning properly anymore and they're damaged, that's when blood levels elevate.

So blood levels of iodine, they have a place in toxicology and they're used for people who are given very high doses of iodine in medications like amiodarone or CD contrast.

And that's a situation where someone might be maybe they took this medication eight months ago and they still have these odd symptoms that can't be explained.

Well, you can do a blood level of iodine and if it's high, yes, there's a ton in their body still and that's probably the culprit. So that's where blood aid and is helpful.

There's really no linear relationship between blood iodine and nutritional status in normal populations. Urinary levels are noninvasive. They're rather cost effective and they're very accurate for populations.

So if you're looking at a large number of people, but there's so much variability in urinary output, they've done many studies saying how many times you have to test someone to average together to weed out that variation.

And if you test someone like ten times, you can be within about 80% accuracy. If you want 95% accuracy, it takes over 300 tests. So that's that's the drawback.

Now, the one way they can be useful urinary iodine to creatinine ratio is helpful at a broad way of seeing if someone is effectively eliminating iodine or if they get a lot in their body.

So if someone's done the third research diet for three months and they're one of the few that says, Hey, nothing has changed, they can do a urinary iodine creatine ratio with their practitioner.

They can do that. And if they're above about 100 micrograms of iodine per gram of creatinine, then they're either still exposed or they've not completed their detox yet.

So let's talk about the thyroid reset diet a little bit. I would love to learn more about this. And, you know, what are the steps for that? You know, we talked the very beginning about causes.

You had some great questions about that. And I mentioned how some causes are not reversible. This is what excites the heck out of me. So one one of the first big studies on this concept was recognized, the fact that people were learning this connection between extra iodine and developing thyroid disease.

And many researchers wanted to say, hey, is the horse out of the barn or can we still help with this? And we used to think that since it was autoimmune, once it got going, you were just stuck with it.

But a study was done in which they took a group of people that had rather advanced thyroid disease from

Hashimoto's. They had average test scores of 14 and people that had been following your summit, they get that that's that's a big deal.

That's a market degree of hypothyroidism. And these are people that have been there for about four years. It wasn't like a fluke that they were in this state.

They'd been there pretty steady for some time. They weren't on medication.

Iodine Testing and Lab Limitations

The one thing they did was tried to get their iodine intake below about 100 micrograms per day by cutting out all the big sources. Two months later, 78.3% of them had perfectly normal thyroid function with no other changes.

Now that would be enough. That would be awesome, but it gets even better. So when you dig in the numbers, a lot of people weren't following recommendations and just just very blunt about that.

You know, humans that happens. Some of them weren't given through a recommendation, some just weren't following them. And they could see that by the urinary identity creatinine ratio tests.

And so you got to push those people aside. Right. And there's also other people to where their previous diet test scores were in the 50 to 200 range and some of them saw radical improvements, but they weren't yet normal.

They were a lot better, but they weren't yet in that normal range. So all those people that that didn't do it or didn't get all the way there, they were in that 78%.

But if we redefine and say, okay, of those who really did do it, how many either were totally cured or were pretty darn close and heading that way? That number was 97% from that study and there was multiple follow up studies on subclinical hypothyroidism or not.

Obviously autoimmune hypothyroidism that showed very similar results. So yeah, people have fully reversed the disease and I love the title of your summit.

This is possible. The disease can be reversed and studies have proven this. Yeah, that's amazing. And that's why researchers now are thinking because we know that Hashimoto's can be reversed and like you said, non autoimmune thyroid disease.

Now enter chronologies, a lot of them conventional and ecologists are really resistant to this notion that thyroid disease can be reversed, especially Hashimoto's.

They often are. An odd thing is, I don't know, whenever a good chance to speak with other endocrinologists about this topic and I share some of this data, I find them eager to have solutions, you know.

So I think it's a matter of just I think that it's more matter of them really wanting patients not to have false hope and maybe they've been exposed to things that said that, but didn't have much to really base it on.

And they didn't want to pay people chase things that weren't going to be effective. But yeah, once they're exposed to solid evidence that this is possible, they find that they really are on board now. That's exciting.

I'm hoping more and more conventional doctors will give patients hope when they come in and they get this thyroid diagnosis because a lot of times they feel hopeless.

They feel like they are their disease. They become this disease and they feel like there's no way out. So with the thyroid reset diet, you're really working on getting those iodine levels to that lower threshold to heal the thyroid.

Yeah, and it's not the only thing that matters. It's d'arn. It's way up there. But there's data too, saying that our

macronutrient balance is relevant to thyroid health.

So yes, we cover a nice spectrum of reasonable amounts of carbs, fats, proteins. There's also data saying that other phytonutrients can be supportive of good thyroid function.

There's a lot of data saying that certain other micronutrients are important for the thyroid as well, like selenium or vitamin A or adequate iron or zinc.

So I try to cover all these bases. And I guess one other distinction is that the low iodine diets first came out for doing before some kind of a procedure like a iodine uptake scan or radio ablation.

And they weren't really made to be done longer term. So they could tell people just cut out all these food categories for a couple of weeks and call it good. And it was fine.

But my my understanding was that many would do this for months and some would do maintenance versions of it for long term. So I wanted to set up in a way to where it was really covering the bases nutritionally to where it was cutting out the crazy excess sources of iodine, but not going to none and not cutting out the important nutrients along the way.

So it was done in a way that was really sustainable and just healthy overall. And that's the hardest part is is diet. I think that's what people struggle with the most.

They need to have a guide. They need to know exactly what to eat, what not to eat. It can be very confusing, especially in the in the thyroid space. So gluten is another thing that have you.

Are you a big fan of gluten free? Is that part of your the thyroid reset diet. For people that have celiac disease? It's totally important and there's a market overlap between celiac and thyroid disease.

The Thyroid Reset Diet and Reversal Research

We know that of those who have thyroid disease, probably 3 to 5% have celiac versus like 1% of the general population. So yeah, super important there because of that overlap.

Back in the late nineties, early 2000s, some researchers speculated that maybe apart from celiac, that in some way gluten was causal for thyroid disease and they did some good studies to test this.

You know, one study took people who are newly diagnosed excuse me, newly diagnosed with with celiac disease, and it tracked them for a year and wanted to see how the results were of those who were complying to their diet and those who weren't. And the beginning it found that some of them already knew they had thyroid disease.

So these are those are taken out. So the thought was if gluten somehow caused thyroid disease, I mean, if it caused it versus just happened to show up with it, then those with celiac who didn't follow their diet used to like gluten.

They should be more apt to get thyroid disease than the compliant people with celiac. So that was kind of the thought process and the study went on for a year and when it was done, the rate of developing thyroid disease was actually a little higher in those who went gluten free with celiac than those who didn't.

So it it refuted it refuted the hypothesis. And yeah, there's a lot of reason people go gluten free and they feel better, and that's totally fine. But someone will ask me, they'll say, hey, look, what what do we know is going to work?

What do we know is clearly causal, was clearly connected and yeah, the data suggest that gluten is a big factor for those are celiac. There was one study which showed that a group of women who had mild elevations of third antibodies did go gluten free for a few weeks and had a small reduction in antibodies.

Now, there was no change in thyroid output, there was no change in progression of thyroid disease, but the antibodies were a little lower. So we do have that.

And, you know, we could it could have been a coincidence. It was a small group, but but that's that was there. So yeah, I have nothing against anyone going gluten free, but there's so many options that are available that I wanted to have someone look what's the most important and that's that's I'm going to talk about the things that we know.

Have you good evidence for. Yes, absolutely. So with regards to the iodine and the thyroid reset diet, is this something that someone will be on forever or can they go out and maybe have some seaweed and some sushi?

How do you deal with those circumstances with or if they got like a CT with contrast, how do you deal with those circumstances for the thyroid patients?

Those are awesome questions. And I broke this down into a maintenance phase and a reset phase. So a big part of the book was developing a list of iodine content in foods, and that was a big process.

You don't really find exhaustive lists readily available, but I got good data on about 600 foods and also how much iron was in them from about 60 different assays from different parts of the country, different times of year.

And I average those things out and I found that some foods always have whopping amounts. So I called those the red light foods and I found that some foods pretty much always have a very safe amount.

I call those green lights. And there was other foods that were pretty consistently in the moderate range. So I called those yellow light. And when someone is at a stage of wanting to improve their third health, they want to really make it better.

My plan is for them to use the reset phase and just stick to those green light foods. Once they've gotten the change they want. That's awesome. They have the option of broadening their diet a bit and they can add in up to two servings of those yellow light foods per day.

So yeah, not never. And once it stabilized, you do get more latitude on that. Sorry, I had a dentist one time that made me think about the idea he was talking about, like flossing arabesque came out.

I think I asked him this, but the story was, you have to floss all your teeth like not just the ones you want to keep. And so that sort of thought was, do you have to cut it out forever?

Not forever, but you got it. You know, long as you want to improve your thyroid and keep it stable, you want to stay away from the crazy high sources.

That's hilarious. I love that. Just. Just lost the ones you want to keep. This the front then. Right, right in the back. In the back. So this is this is so awesome talking about Aida because people get really passionate about this and there's practitioners out there, they're on different sides of this.

What, what have you found since writing this protocol with with colleagues are most for it or some against it because I feel like there's it's really it's really hard out there.

There's some people that think iodine is the best thing and everyone should be on high dose iodine. Now you're saying low. So but I love that you're into the evidence so.

Well so here's here's the story on that a dear man, he's passed away. He was a gynecologist. And he saw some studies showing that high dose iodine lowered the symptoms of fiber, cystic breast disease, and he wanted to help his patients.

It was something that caused a lot of women a lot of pain. And he found another avenue to possibly help them. So the paper showed that doses of like 5000 micrograms a day could lower symptoms for about two thirds of women.

Now.

And I've talked to this guy personally for quite some time, and I read all of his work that he put out. He didn't really get nutrients working as drugs.

You know, nutrients can work like drugs or like nutrients. You know, iodine can kill bacteria in your skin. It doesn't mean that those bacteria came back because you're 18 deficient niacin can lower cholesterol.

Does it mean high cholesterol is a nice and deficiency? Right. So he thought that these women must have been iodine deficient and that's why it helped.

We've since learned that the breast tissue has a lot of the same chemistry of the thyroid it also pumps in iodine. So here's the big paradox a megadoses of iodine is kind of like a low amount of iodine for a while because that mega dose shuts off the pump.

So with fiber assisted breast disease, there's a process by which the breast cells concentrate too much iodide and that causes fluid to build up. The same thing is a little bit worse in many kinds of breast cancer.

Those are also cases where 18 is excessively concentrated and normal breast tissue doesn't really do that. Lactating breast tissue concentrates a little bit, so there's enough the right amount for the baby's milk.

Gluten, Celiac, and Thyroid Health

So what was happening was that it helped those women not because they needed it, but because it shut off that pump. But he took this idea that they needed this massive amount and really ran with it and wrote lots of papers and wrote lots of books.

And they all kind of made sense. They all seemed intuitively correct. And I came across this because I was already a thyroid focused doctor when he started his work in the end of the nineties, and it was plausible to me, so I exposed myself to all of it.

But I also looked at the literature outside of his work and I saw that although this stuff seemed to make sense, it didn't align with this massive body of knowledge we had.

And so his little stuff has taken the now grown and other doctors who are still alive, still write about it, still talk about it, but it just doesn't align with what we know in the fact based world.

And especially when testing becomes such a challenge because it's so difficult. It is. I mean, there's no really perfect test. It seems out there they're difficult or you have to repeat them a lot.

It becomes even more of a challenging situation when we talk to patients about iodine and I'll have a lot of patients come with me in there on high dose iodine or they're rubbing it in their skin daily.

And, you know, I try to make sure they're not at those high levels and we try to take it back a little bit because just, you know, someone 810 Brazil nuts a day and took selenium in a in a supplement you know that could get toxic too.

So I think we have to look at things as, you know, we can't do too much. You know, you have to have a good balance. And with iodine, it can definitely be overdone.

So I would love for you to share a little bit more about how patients are people listening at the summit, they could get a hold of the thyroid reset diet and learn more because I know you said you share a lot in there about what products this is and and maybe sneaky sources.

I know with COVID, you know, everyone's using the iodine nasal sprays, so then they're getting a lot of iodine. If

they're using that daily, which I don't recommend people use that daily.

So how could people find out more about you if they haven't heard of you yet, which I'm sure they have, as they're here in your book? And I don't know, I love it the most when practical ways mean like food and recipes, like here's how you do it with stuff in your kitchen.

So that's what it comes down to. I got meal plans and shopping lists, and here's how you make it work. Yes, food is medicine. And if your diet is not on board with you, with health, if it's if you're eating out of whack, if your diet is just not ideal, if you're at Burger King, especially because they use the iodized salt, and then you're going to be in trouble.

So I love that the focus with the thyroid is is through the diet, because food truly is medicine. One thing I'd love to briefly open up, if you don't mind.

Another big finding in the Third World these last many years is that for the majority of patients, medications don't work. A lot of folks have been struggling to get on the right amount, the right dose, and there's different levels of hypothyroidism if you want.

We can talk more through those. But most people that get on medication are at what I would call stage one or stage two. And there's clear data saying that at stage three, the medications can sometimes help.

They can be important in life saving. They don't always help symptoms. They sometimes can. But stage one, stage two, there's now a massive data set showing that as a group response, medications don't help weight loss.

They don't improve energy. They don't lower the risk of progressing to stage three. They don't cut the risk of associated problems like heart disease.

They just don't do any of the things that we thought. So those two things that came together at similar times were that the medications didn't work like we thought they would, and the disease is more reversible than we thought.

So it was like totally happy that we saw one door closed, but another door opened about the same time. Yes, you could definitely go over the stages. I think this is very important with patients to understand because sometimes there will be patients and we're just adjusting their medications.

But I'm telling them this is adrenals, this is blood sugar imbalance, this is other things. It's not always your thyroid. And I think some people are so focused on their thyroid that they're missing.

They're missing the whole picture of really why they're fatigued and tired and then their thyroid is just it's trying to regulate things and trying to tell them to fix the other things first.

Yeah, a little more depth on that. So the thyroid, even even when it can cause a symptom, that doesn't mean the medication will take that symptom away.

Maintenance vs Reset Phases

So what your body does by itself, even a natural compound, even natural thyroid in a pill, it's not the same as your body making thyroid hormone. So even if you were low in that level, you were low was causing you to feel badly correcting that with a pill wouldn't necessarily change that in the way that correcting that naturally would do so.

So to answer about the levels, I just put those numbers in there, but more formal definitions. We have what's called overt hypothyroidism and that's where the TSA is up usually by a lot, you know, 20, 50 or a couple hundred.

And the T4 levels are way below range. So that's what we call overt disease. That's someone who's had their gland removed or it's dramatically shut down.

And most Hashimoto's never goes there. There's some that think about Hashimoto's as eventually shutting the thyroid down, making it shrink up. No 80 plus percent of Hashimoto's slows it, but then it stays steady.

It doesn't slow it that much. So yeah, rarer subsets do. So that's the minority of people. And those people medications, they're not the only option for them, but they're at least justified.

Now, if we back down and go to the next milder version of what I'd call stage two, this is called subclinical hypothyroidism. And here the brain is yelling at the thyroid to work and it can make more or less a bunch of hormone.

It may not be perfect, but it's still making a lot. So at this stage the test is elevated, might be by a lot, but the T4 has not dropped off. Now in the conventional world, this is where most patients get put on their medication and here's where we know they just don't make them healthier.

They don't cut their risk of further thyroid disease and it doesn't lower their symptoms. So the next milder step, I call this sub optimal and this could be where their labs are normal but not optimal.

There's some valid arguments to where you could have normal labs, but your thyroid could still be causing symptoms. That's true. I'm not discounting that.

There's also many ways in which others might say, Oh, your labs, we can ignore them, but you've got these symptoms, so be it. So whatever you want to call all these things that are not yet subclinical or overt, I call that suboptimal.

And this is where most patients come in to third medication in the functional medicine world, they're often still not still not even yet subclinical, but suboptimal.

And this is this is the distinction there thyroid may be causing them symptoms. That's totally true. But the medication wouldn't make those symptoms go away.

And not only that, we've got more data saying that third medications, even when used where they should be, are not safe. They raise the risk for cancers.

They raise the risk of early mortality. So I think they're being very overused. I'm not alone in saying that and we've got better options. Yes, absolutely.

And better options are lifestyle changes, diet, all of those things. And there's the things, though, it's hard to do those. And I think for patients, they need to hear this loud and clear from their providers, from their doctors, that your symptoms are not necessarily going to feel better unless you do those things also.

And most people don't want to be on a thyroid medication. So removing the things causing the thyroid to to be struggling and show those the labs that we see are going to be the most helpful from a longer standpoint, even though this is thing.

And this is the other really exciting inquiry is this is the concept of RD prescribing. So once the studies came out saying that like well and thyroid meds are typically the top one or top two medications globally.

So this is this is a lot of people were talking about. And so once the studies came out saying how these things aren't working, they're not safe or counterproductive, then the question was, what can people stop taking them?

Can they safely come off? And we've had many studies on Deprescribing now and they've shown that that about a third of people can just radically, randomly quit and do fine.

But a large subset of people, like 85% of people, if one study looked at most basic iodine reducing strategies and had them do that and they found that 85% of those in thyroid meds living in people from all those categories, even

the worst categories, they could radically lower their dose and have no negative symptoms and no negative change in their labs.

And about half those people could come completely off with no negative changes to symptoms or labs. And this has them staying on a low diet.

Debate Over High-Dose Iodine

Iodine diet would say it is. And they were very rudimentary instructions. They weren't very through instructions. Well, that's that's reassuring. So basically anyone could do this then.

So when they come back on iodine, have they done studies following these this group of people that came off their meds on low iodine, if they started having more iodine in their diet, would they need to go back on medications?

Have they research that at all. In smaller cohorts? They have. And the thing about iodine that, you know, I often will talk about in terms of like being on it or being offered, but everything has some, you know, we can't really be off of it.

There's there's a continuum and all foods have substantial amounts. So it's getting below a certain threshold. And yes, most people, if they can get to where they get below that threshold and then they're consuming the good micronutrients that make their body more resilient so people can develop this iodine intolerance.

And part of that is genetic. Part of that is not having nutrients that support the body's enzymes that regulate iodine. So that part they can correct and they can get to where now they're thyroid normal now they've got healthy Ioannis enzymes working well again.

And yes they can tolerate occasional amounts that are above their window. Yeah, that's amazing. Now with goiter with regards to goiter and hypothyroidism, you know, the, the worldwide most common causes iron deficiency, where, where does that fit in with the research regarding iodine and kind of the new research of low iodine, what about this population worldwide with goiter?

Yeah. So the role of the organization is tracked the global iodine status for quite some time. And back back in 1994, we had 112 nations categorized as severely iodine deficient and was a huge problem, you know, especially among pediatric exposures.

You know, there's a lot of kids that had poor cognitive development. They never went on to develop full mental capacity. There's windows of time for brain development that are irreplaceable.

There's a real tragedy. So that was 9412 nations severely deficient. Now, if we go to 24 I'm sorry, 92 is the number I should have said 2014 that 112 that severe deficiency, that number is now brought down to zero.

So we now have no nations on earth categorizes severely iodine deficient we have there's severe deficiency moderate and mild insufficiency. We have seven remaining nations that mild insufficiency and they can see slight increased rates of pediatric goiter.

However, from 92 to 2014, we went from zero nations at mild to moderate excess to 52 nations at 18 excess, and that's where the United States, among others, are.

So it has been a big problem historically that's greatly improved, not totally gone, but pretty close to it. And it's mostly an issue for children in developing countries.

So with us being in iodine access, are you on a campaign to take iodine out of salt to get rid of iodized salt because now we're in excess or we're all you know.

It's a fascinating thing. So I don't insult iodine for for prenatal purposes. This has been looked at a lot. And the

American Heart Association, the American Academy of Clinical Endocrinology, the American College of Gynecology, they're all not in support of iodine in prenatal care.

They're saying that our exposures are now adequate and we've got more risk from excess. Salt is something curious because there's no mandate for it in salt.

There never was electively. Some companies fortified in some states, but not all states and not all companies. Also, kind of an odd thing. Iodine can be added to solids or it can be naturally occurring and some types of salt have amounts naturally occurring that are much higher than what's in fortified salt.

Thyroid Medication, Deprescribing, and Goiter

You know, pink Himalayan salt is an example about one assay showed that it had over twice the amount of fortified iodine and salt. Wow, that's interesting.

I didn't know that about pink Himalayan salt. I use like a real salt or Celtic salt is is what I prefer. If you really precise Celtic brand salt has a subcategory called light gray and they make that both in coarse and fine ground, their light gray is pretty negligible in the ashes of iodine, meaning their other products have quite a bit.

You know, I thought a lot about salt over the years and I guess one one push for sea salt is that you've got these other nutrients that sounds kind of cool, like getting more stuff in there.

But you come down to the numbers on that, like what are how much is there, you know? And so you look at like for example, is tap was being a source of magnesium or calcium or potassium.

It's got potassium. And if you consume a thousand day's quantity, a thousand servings of salt, then you'll get about 100 milligrams of potassium, you know, which is like nothing.

So yeah, it's got a lot of nutrients, but not really significant amounts of any. And if you're talking about that much, it also has arsenic and lead and mercury and cadmium and gold.

Those are all things naturally occurring in sea salt as well. So I don't think about salt as a multivitamin. I think about is a thing in cooking. And I love I love my very favorite is diamond brand kosher salt.

And thankfully, like all the top chefs, that's their favorite as well. It's one ingredient is salt and it's physical shape is such to where you don't need as much of it.

It penetrates better and also has a better effects upon cooking. So yeah, that that's an awesome one. And actually most chefs argue that salt that contains iodine taste bitter as well.

It disrupts the flavors of things. So yeah, I quit thinking about salt as a multivitamin. Right. Just just cooking. It's very good for cooking. It's so funny. You you are like a salt, man.

You know so much about all different brands. And and I you're probably when you go to a dinner party, I mean, you could probably just be like the salt good, the salt bad.

And you're probably a salt snob, huh? I keep my mouth shut about things merciless. I'm asked. I try really hard not to otherwise. Yeah. Oh, that's. That's so interesting.

I just love that you back everything up with studies and information from the World Health Organization. I think that's really important when we're trying to talk about these difficult topics with thyroid health.

And I would say this is a difficult topic to talk about. You know, it is and it is a point of controversy among natural medicine. It's really not outside of natural medicine.

There's really no controversy about these things. But there is this kind of this fad view about it. And it's a thing to where it seems intuitive and it also it's appealing.

I mean, how cool would that be if this major problem was just one simple nutrient that we were missing out on? I get how that's appealing, but but yeah, it just doesn't align with what we know.

And it doesn't align with the data either. Mm hmm. Well, thank you so much, Dr. Christianson. It's been so delightful. I'm going to have dreams about salt tonight.

And I. In a good way, though. So do I know you have a great YouTube channel. Do you hang out anywhere else on social media? For sure, yeah. At drchristianson.com.

That's my main hub, I mean website. And from there I link out to the social media channels and elsewhere. That's great. Well, thank you so much for spending your time sharing your expertize today.

We really appreciate it. You know, Dr. Jen, again, thank you for doing this summit. This is such an important topic and I'm glad that you're pulling people together and getting more information for everyone.

So those who are listening, please know that the things are learning can make a huge difference. So listen, you know, get a hold of the program so you can check it afterwards if that's an option.

But listen, do these things and know that you can do better. Awesome. Thank you so much.