Show Introduction and Guest Background

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Well, let's first off talk about what does that even mean that the blood test look fine? We have normal ranges, reference ranges things like that. Talk to us about how you feel about that?

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Then going up 26, hold on. What do you mean by functional range? I want to make sure people understand that the function. Range is going to be our optimized ranges.

All right. A lot of the standards ranges on blood work. You're already in the disease state at that point. Yeah. Welcome to Vitality Radio, the podcast that helps you make sense of natural supplements and thrive without pharma drugs.

I'm Jared St. Clair. I grew up in a health food store and spent over 40 years now figuring out what works and what doesn't so that you can make confident informed decisions about nutrition, supplements, and your health.

Hello and welcome to Vitality Radio, the podcast that helps you master natural supplements, enhance your emotional vitality and thrive without the use of pharma drugs.

I'm your host, Jared St. Clair. And today I've got a special treat for you, but also for me because first off, my guest is a local and he's a Local that I just made acquaintance with just about a month ago at the Be Healthy Utah show we met.

Maybe it's been a months and a half now, something like that. And, uh, we've already become friends. I've spent a decent amount of time in his shop here in Utah County.

For those of you who are local, Highland, I believe is the actual city. Have I got that right, Shay? Yeah. Highlands, right? It is highland. Okay. Always get confused out there.

Lehigh, highlands Alpine, you know, there's a bunch of them, tied in together. But anyway, i'll introduce Shay in just a minute, but I want to give a little backstory before I do that.

So I am a non-practitioner. As most people know that listen to this show, I'm a guy who was a kid raised in a health food store. I certainly feel like I've earned a little bit of the knowledge that I gained through doing that for sure for all of these years.

And I know supplements really well, but I don't have any classical training, if you want to say that, or schooling specific to what a lot of functional medicine practitioners would have.

But I'd never been trained how to read blood tests, for instance. I don't do blood tests. I do a lot of nutritional counseling. become at least familiar with these things.

But as I was talking to my guest, Shay, just about a month ago, and he was going over a few things that he looks for in blood tests, I became very quickly fascinated with some of what he telling me.

In fact, we've gone back and forth. I've sent him some Instagram reels from other practitioners that have big names in this space and gotten his opinion on things.

And I've learned a lot already. So I invited him to come on and talk to us about blood tests, hair analysis, a few other types of testing that he does and get a little bit more into, I'll say into the weeds.

But in a way that I think you're going to really understand and in the way if you've got a blood test sitting around your house there that you had done, you can maybe go back and look at it with a better view of what you may be actually looking at in terms of, what does this mean when I'm looking my ALT level, for instance, things like that.

So that's what we're going to dig into today. I'll tell you a little bit about Shay and then we'll bring him on the show here officially. After spending a decade as an over the road truck driver, Shay experienced firsthand how lifestyle and nutrition impact every aspect of health.

That journey sparked a deep passion for understanding the body's unique needs. And today as a functional nutritional therapy practitioner and blood chemistry specialist, He opened Shea's Health and Nutrition, a walk-in supplement store where anyone can get expert guidance.

Shee and his team help people understand the root cause of their health issues through symptom analysis and, if needed, clinical testing. Shay, I'm really excited to have you on the show today.

Thanks for coming. Hey, thanks for having me on, Jared. It was great to finally meet you. I've been told time and time again to get in touch with you, so it was really, really good seeing you at BL Utah and finally getting to know you now.

Yeah, you know, we share, for people not familiar with the area, I'm about 45 minutes-ish from your place here in Bountiful. There's basically Salt Lake City is in between us.

And, it's funny because you've got all this, and we'll talk a little bit about your experience with testing and things like that, but you're a very new to the ownership anyway of a supplement store, just having opened last October.

Of course, our store has been around for 49 years this August. There's a very big difference as far as that goes. But what I think is really cool about what you're doing and super unique is you've got a supplement-based business that is very much looking at people's actual lab results, which I don't see a whole lot, at least not in the way that you do it.

In fact, I've never seen it in a way you'd do. And so when we met and we share a lot of reps from some of the same supplement companies and things like that, and they told me the thing, hey, you got to go talk to Che, get your supplements in there.

get to know him. He's a great guy and he's doing some really good stuff. I was like, okay. So when I saw you at Be Healthy Utah, you know, we approached and it's been a cool relationship so far.

Tell me this, to give people a little bit more of the background beyond what we read in your bio, You opened up your store in October, but you have had some experience prior to that.

How did you actually decide to get into this side of world, this supplement business? Yeah, I was working one-on-one with people already. And we're doing that.

Why Normal Labs Can Miss Functional Issues

We were doing a lot of testing, but people had to pay for a package and that was pricing a lotta people out. In the three years of doing, that I came to understand people mostly want the testing and they want those supplements.

So my background is looking for nutritional deficiencies and how those manifest through symptoms in the body.

Symptoms with body's wave telling us something's wrong.

That's why it always drives me crazy when people go get normal blood work. They know something's wrong, but the blood works not showing anything. And then everybody just dismisses their symptoms.

Yeah, well, it's kind of crazy too, because you know, my wife and I went up to the Cell Core Practitioner Conference. We are actually considered Cell Corps practitioners and talk a lot about their formulas on our show and things like that.

And the cool thing about this particular conference that they do up in Boise each year is it is a bunch of like really highly experienced practitioners in the functional medicine space.

Some are very focused on hormones and others are focused very on parasites and kind across the board. But one thing that was said that I thought was really, really beautiful, and it resonated in a different way for both me and my wife, when we heard it, even though it's always been something that, I've definitely felt.

I didn't articulate it as well as this particular speaker did. And what she said, that i thought, was so important that people need to understand, And it comes right off the heels of what you were saying about symptomology.

Is that your body is not broken. Your body, is experiencing symptoms because it is actually trying to help you figure something out essentially right it's working for you not against you even though there might be pain or inflammation or you know issues with your you with one of your glands or organs or whatever the body is always in kind of protect mode and heal mode in trying to find homeostasis.

It just needs the proper tools to get there. And so symptoms are a fantastic way to at least know there's something wrong. But what we don't want to do, Shay, and I know you and i agree on this, is just chase symptoms all the time, right?

Yeah, I'm glad you said inflammation right there because that was the first thing that came to my head. Body has to inflame. It has inflamed first to heal.

The problem is if we're not giving it the cofactors it needs to finish off the healing part, it's going to stay inflamed. And I think that's one of the places where modern medicine really gets it wrong.

A lot of times they're just going turn off that inflammation response. So we don't feel that anymore. They're actually not going heal anything. Yeah. Yeah, and that is, I mean, modern medicine, so I call it suppressive medicine.

You know, it's just pushing symptoms down. It's medical whack-a-mole to a large degree, right? We're just smacking these moles and more of them are popping up and those moles actually happen to be symptoms.

I was talking to gentlemen just the other day, we've got our new location up in South Ogden and I talking him and he came in, he didn't know me. In fact, came expecting to meet the woman who, you know previously owned the store who has a real great reputation for, you know, helping your customers.

And he started with a list and his list was three herbs and he wanted hibiscus and you wanted Hawthorne and wanted cayenne and Shay you can imagine what he's concerned about with those three.

I'm sorry, go ahead. It's going after some heart stuff. Yeah, exactly. So, he said, yeah, my, you know, I think he says it was his sister, if I remember right.

I might be wrong. Can't remember who recommended these things, but someone who was, uh, trying to help him with his health. And I said okay, so we're talking about cardiovascular health here, So what's on?

And then he talked about he wants to not be on blood pressure medication. He doesn't want to be cholesterol medication, But he struggles in both of those departments.

Then we had to have a conversation about cholesterol, which is always different for people the first time they hear it. And then we talked about blood pressure and we talk about the different avenues.

But what I thought was really interesting is here's a guy, oh and then it stumbled into him also being on a proton pump inhibitor and he didn't think he could get off of that.

I said, no, you can definitely get your gut to the point where it doesn't need that type of support. But when you think about these things, all three of the drugs that he was talking about, they are all suppressing type drugs, right?

PPIs are suppressive stomach acid production, and blood pressure medicines are are supressing blood-pressure, but not by regulating or normalizing what the cardiovascular system is doing or the heart is, doing but by basically forcing the action by either beta blocking or calcium channel blocking, or diuretic or whatever it is, depending on the pharmaceutical that you're on.

And then cholesterol drugs are pushing cholesterol down and hey, statins work great for that. The question is do they actually improve your heart health?

And based on every answer I've ever seen that is actually clinically proven, I'm not convinced. So symptom chasing gets us into a lot of trouble. But I feel like the thing you said right at the beginning is so important.

And that is that people get these blood tests, you know, what you've said, I think you had normal labs, right? Kind of standard what the doc typically recommends if you're going to a regular MD and they've got a set of symptoms and everything looks fine.

Well, let's first off talk about what does that even mean that the blood test look fine? We have normal ranges, reference ranges. Things like that. Talk to us about how you feel about that?

Yeah. I think one of the TikToks he sent me the other day brought up one the most important ones. If we look at insulin, And specifically fasting insulin, people will mess this up.

They're going for blood work and not be fasted. That bloodwork is almost useless at that point, but fasting when the standard lab range goes up to 26, the function range is actually two to six.

So think about how much lower that is. Then going up 26. Hold on. What do you mean by functional range? I want to make sure people understand that. The functional ranges is going to be our optimized ranges.

All right. A lot of the standards ranges on blood. You're already in the disease state at. Yeah. Well, let's take, I mean, you said insulin, but you know, A1C is an interesting marker too, right?

That's paid very close attention to, and I think it's something that we should pay attention too. A 1C in most cases, my experience just hearing from people who have had blood work done is that unless they're in the quote unquote borderline, 5.4, five, six, somewhere in there typically is the number that a doctor will tend to say is borderlines.

then they don't even, they're not even talking about it in most cases. And everything is again, quote unquote fine. But that insulin thing, I want to chase that one down a little bit because I think that's one that, you just gave me really big number.

I always, talk about testosterone when I'm trying to make this point. Cause you know, the range, reference range is usually like 300 to 800 and that is this huge range of 500 points, right?

300-0 is a smaller range. Talk about the insulin, cause you said two to six is functional. But we're not concerned unless it's above 26. Yeah. It's not going to be a flag in a lab unless its above the 26 and I actually have a really good example of this.

Last night, I was going over somebody's blood work. I can look at it right now. So A1C was 5.7, but fasting glucose

was down at 91. Pretty much every doctor is going just brush that off.

One of the most important things there, if we get fasting, glucose and fasting insulin, we can actually do some math.

Insulin, A1C, and Hidden Blood Sugar Resistance

What this can be called is HOMA-IR. So we're actually measuring how insulin resistant somebody is, even if they have that normal-ish glucose and A1C range.

It's actually pretty easy to do. The only problem is a lot of the times insulin doesn't get run on standard blood work. But if you have it, we can take your fasting insulin, times it by your fast glucose, and then divide that by 405. And what does that tell us?

So like this, when we get an example here, if we have a glucose at 91, insulin at 10.2, and then divide that by the 405, that gives an insulin resistance score of 2.29. We want to keep that under one.

Okay. I also have another calculator that can do the math to see how hard those beta cells are working to, keep the glucose there. Oh, wow. Interesting.

So then you're looking at, again, you said on a normal lab, most times we're going to see A1C and we are going see glucose, right? And assuming that it's fasted and all that stuff, we should have a relatively accurate number there.

But we aren't typically seeing insulin because that's not usually in a standard test. Is that accurate? Yes, it is usually not run, especially on like your annual physical.

It's, not going be running there, You have to ask for it. And then of course you can go with the doctors and see if they'll actually do it or not. Yeah, talk to us about that because there's this thing in America called the standard of care.

And, you know, I've talked about it a lot specific to prescribing, so if your cholesterol is above 199, the Standard of Care is to recommend a statin or prescribe a satin, that kind of thing.

But when it comes to blood tests, there is also kind, and I don't know if it's a written or an unwritten standard, but why does a doctor run a specific test when there are these numbers like insulin or Reverse T3 is one that doesn't typically get run, you know, when we're looking at thyroid, but that a lot of functional medicine doctors look at, most regular doctors don't.

Why is that? What, what, how does that work? It's going to be all insurance stuff. It is not deemed absolutely necessary. A lot times it's not going get covered by insurance.

So doctors aren't even giving it off for it. If you ask your doctor for, it what happens? You said it was kind of a crap shoot. it is going be, and it can be that you could end up paying for just out of pocket.

The good thing is you can come to places like this. We can run pretty in-depth blood work for $220. And we're going to get all these things on there, especially when you're looking at full thyroid panels.

The liver markers, we can put GGT on that because that's actually one of the best markers for early issues going on, and especially with non-alcoholic fatty liver disease.

Hmm. Interesting. Okay. So then let's talk about that. The insurance thing is important too. I'm going a lot of different directions, Shay. But the insurance is very interesting.

We have this, I think there are a few, what's the word? A few things that we've kind of been trained on in America

when it comes to medicine. We've been trained that the guy or the gal in the white coat is the authority on our health.

We have been training that if it's not covered by insurance that maybe we shouldn't pay for it because we pay a lot of money for insurance, right? Those of us who carry health insurance.

And we're looking at these things and saying, well, my gosh, I'm already paying $700, $900, whatever is a month for the insurance the last thing I want to do is pay another $220 for a blood test, especially when I can get it for free.

The question is, what are you getting for free? Is your doctor willing to actually bend or flex for you to give you what you're actually looking for? And I would dare say that your Doctor is not different than your car mechanic.

If they're not giving you, you should be shopping for someone who's capable or willing. But it's interesting because you and so many other functional medicine practitioners are cash pay basis or sometimes they call it concierge.

You go in, your insurance ain't covering it, but you get what you want. And in many cases, much more depth than you're going to get on any kind of an insurance type clinic.

Yeah. I think that's why you were starting to see like function health pop up and companies like that. Now people are shelling out $500 for those tests and then they it's not a bad thing so that she can get really in-depth panels and then it is not too much after that when they want to keep going.

Right. Because I think they get like two draws a year with it. But then see, that's what you're going to see. You're gonna see a lot of those cash only places pop up.

A lot nurse practitioners are going be moving over towards that. It's just trying to get these markers that we need to seek to a full picture. If it's not a necessity for a disease, it can really hard to get your standard doctor to run it.

Copper is another just great example. Yeah. I mean, how many people in this audience have any idea what their copper level is, right? Yeah, and trying to, get a doctor run ceruloplasm and copper is impossible.

Yeah, yeah. All right, so then first off, I'm going to stop right now and say that if you are in Utah and if your in reach of Highland, Utah, you really should consider, and this is an interesting thing because Shay and I technically could be competitors.

I sell supplements, he sells supplements. Heck, we sell a lot of the same supplements But the reason I've got Shea on is because A, I have learned that he knows his stuff, and he certainly, when it comes to blood work, knows it a heck of a lot better than I do.

Insurance, Cash Pay Testing, and Deeper Lab Panels

And he's also very well versed in supplementation and what supplements make sense in the case of, you know, a specific blood test result, which is what we're going to get into next.

So if you're out there thinking you know what i get my labs once a year whatever i don't i still got symptoms doctor says nothing wrong. We hear this all the time of vitality i know you do to shake then she is a really great resource for you for someone who is going to do it at a reasonable price.

and then also be able to help you interpret what the heck the results actually means. And let's kind of prove that now. Let's go through some of these things.

We'll stick with blood right now, but you also do hair analysis and some things like that that we can talk about as well. So with deficiencies, there are what you referred in an email to me as kind some hidden deficiences that people maybe wouldn't notice based on blood test results.

Things like ALP and zinc, GGT and magnesium, that kind thing. Lets talk some about some those. Yeah, so I love alkaline phosphor today since ALP, people see it on their blood work.

Doctors only worry about it when it's high. If we see that go under 60 and for sure under 50, that's a zinc deficiency because that enzyme is completely zinc dependent.

So we can safely assume if it's not there, we don't have enough zinc to make it. And the same goes with GGT and magnesium. Let's go backwards real quick on that first one on ALP.

First off, what is ALPs itself? We don' t need to get super technical, but what's it considered? So that's an enzyme and it is usually a metabolic reaction.

The one we're using it for the most and when it gets high is it can show tissue destruction. And that's why it gets high. And why the doctor's concerned when it's high, but you're saying that on the other end of things, you can show a deficiency with it with zinc.

So why does that matter? It's one of those normal metabolic byproducts that we're always using. It needs to be in a functional range. Just generally for optimal health.

Yes. Your tissue is constantly breaking down and repairing. All right. Okay. Let's talk about GGT. A GGT, and that's a tough one to go over. So that is a marker.

And again, we're going to use it if it gets high. That's going be one of the best markers for looking for early signs of non-alcoholic fatty liver disease or just any kind of liver.

But if it's low, especially if we get to below 10, we want to start looking at magnesium. Magnesium is a deficiency? Yes. Okay. So why would that show?

Because in a regular blood test, this is one thing I've talked about on Vitality Radio and you and I talked briefly before we started recording. A regular test is basically never going to show magnesium deficiency, right?

because the body self-regulates the amount of magnesium in the blood. Is that accurate? Well, and that's actually so I'm waiting for three labs to come back right now that I had done last week and they're all waiting.

For magnesium, but it's magnesium red blood cell. Yeah. RBC. Yep. So magnesium all the time gets run in serum. but that doesn't work because magnesium should be inside the blood cell.

Magnesium and potassium should inside this cell, calcium and sodium are outside. Okay. So then you're never really from a standard blood test, you never going to know if you have a magnesium deficiency.

But on this show, I talked about magnesium deficiencies like one of the most prevalent deficancies in America. And magnesium is like right at the top of my list of things everybody should probably consider taking, even if they don't have a blood test that shows the need.

Let me ask you this then. So again, we're looking at ranges and things like that. First off, GGT, you say on the low end would indicate a potential magnesium deficiency.

But we can then, if you see that, then is that when you order the RBC to verify that? So my standard panel is always on there. The RPC is. Yeah, the magnesium reflux.

I just want to see it. It's going to be one of the best marketers. And it's rare that I see somebody actually be good on magnesium. Yeah. Well, let me ask you this then.

Magnesium, I think now, if I understand correctly, but I might be wrong on this, it is the second or third best-selling supplement in America after multivitamins, omega-3s, and I'm thinking vitamin D, then I'll think magnesium after

that.

Not health food stores, just across the whole country, in grocery stores and everything else. You clearly have a bunch of people coming into your place that are already supplementing magnesium.

Do you see people that're still low even when they're supplemented it or not so much? Yeah, even if they supplement it, they can still be low. We need B6 to keep it bioavailable.

There can be other deficiencies that can cause that. The other things that could be causing it if we have underactive adrenal issues going on, that will lead to the storage of magnesium in soft tissues and make it on bio-available there as well.

So it is in the body, but it's not where it supposed to be. Yes. Okay. Gotcha. Calcium all the time, it also can happen with magnesium. But what you're telling us here that I think is really useful is if somebody listening to this show has a regular blood test from their regular doc that does not have the magnesium RBC on it, but it does have GGT and they see that number low, then that is at least a pretty strong indicator that magnesium deficiency is an issue.

Is that right? Yes. Okay. Excellent. All right. And so give us another example of this. Yeah, so a super easy one that people always have on that standard blood work is we can figure out how our adrenals are doing by our sodium to potassium ratio.

So we take your sodium, divide it by your potassium. That number should be between 31 and 34. After that, it's pretty self-explanatory. If it is under, its underactive.

It's over, overactive and a lot of times we will try to confirm that here with a blood pressure test.

Mineral Deficiencies: ALP, GGT, Magnesium, and Adrenals

This is another one that people can do at home, completely by themselves if they have a Blood Pressure Cust. They're going to take their blood pressures while they're lying down.

You can record that systolic number, that's the top number. Take it again immediately as you stand up. Your blood pressure should go up 10 points when you do that.

If it either stays the same or worse drops, and that's going to be your POTS types, we need some Adrien support. Okay. Excellent. So then these are some really interesting things that, again, generally speaking, people have these numbers, but they haven't been given any real education on what to do with them if they're not too high or way out of the normal range, that kind of thing, right?

And that one's always on there. We can go over another one that that is always there as well. People know how to figure out their NIN gap. So that one, you know, we're gonna take sodium, potassium, get that number, subtract your chloride and your CO2.

That's gonna tell you how acidic or alkaline your body is. So if you're, if it's high, acidic, it'll lower your alkalin, but we can use it to figure out if we have a B1 deficiency.

Again, this is a super common deficiency, We look at that. We're going to see that high anion gap and low CO two. that points to B one deficiency every time that's going have a lot of issues with glucose metabolism.

Yeah, B1. The more I learn about B-1, the more consider it just absolutely critical and exactly what you said, way more commonly deficient than I ever thought it was up until just the last few years.

I've been saying for years that B 1 is the most important B vitamin. Yeah. Well, it's interesting. I don't think I told you this, but the eco conference that I was at for cell core, not this year, But the year before they had a speaker, his

entire talk 45 minutes was all about B1 and B one deficiency and how he thinks it is like, is the, if the unspoken deficiency that everybody needs to know about.

And I was already kind of digging into B1 at the time. In fact, around that same time, I had added 50 milligrams of Benphetiamine to my multivitamin to go along with the thiamin that was in there already, specifically because I kept reading and seeing all the benefits of B 1 and how people are deficient and this kind stuff.

But he really sparked my interest. I started digging in deeper and based on his talk, I increased my own personal consumption of B1 in the form of benphotiamine and I've had good success with that.

So that's one that I think people definitely need to know about. Now you've mentioned zinc, you mentioned magnesium, and you have mentioned B-1 so far.

If you had to put a number on it, 100% of the time, 50% percent of time or 20% whatever of clients that you see, how often do you them with three or four or five or six different pretty obvious deficiencies when it comes to vitamins and minerals?

They're getting the obvious ones. Sometimes it's hard. We do see a ton of B1 deficiency. It's a tone of zinc deficiencies. Those are the two we see. A lot of.

I mentioned copper before and copper and zinc kind of play together. Do you see lot copper deficiency as well? You know, that's the interesting one because we also do hair analysis here.

Okay. And that most people are doing hair. Analysis are always worried about copper toxicity. we. See a lot more copper. Deficiency. and that is going to be a of people taking 50 milligrams of Zinc a day.

That's going to deplete copper. Right. We need good stomach acid for both of those. They're metals. Yeah. So if you're on a PPI or you do a lot of antacids and things like that, you can have a heck of a time absorbing it even if are taking them, right?

Yep. And so copper and vitamin A deficiencies will absolutely wreak havoc with your iron stores. Yeah, that actually I'm glad you said that because I wanted to get into iron as well.

So, but first really quickly on this, so the copper and zinc thing, I was surprised that you see so many zinc deficiencies. And the only reason I wasn't surprised by that is six years ago, you might not remember this but we had this thing called COVID, right?

And zinc became like the supplement along with quercetin during that time, right? Everybody wanted zinc and quersetin because the big influencers online were pushing zinc in querketin.

And what was not ever happening was they were never pushing Zinc and Quercetin and copper. It's copper to help balance the zinc, Right? So at that point, you know, I actually developed a formula specifically of vitamin C formula with copper and zinc in it, because I had so many people asking me for zinc, not asking for copper.

And I knew I wanted them to have copper as well. But I think it's interesting that you still see as a lot of zinc deficiencies because Anybody taking a multivitamin is getting zinc.

And oftentimes, I would say more often than not, not copper or not enough copper, depending on the quality of the multavitamins. Then lots of people are supplementing zinc just on its own.

I've noticed in my shop that we see a lot of that just come in and buy zinc that I don't think bought zinc prior to COVID, but that became part of their regimen.

We get to talk to them about, okay, so if you're going to take zinc, that's fine. But let's make sure we're also balancing it with copper. But do you see more zinc or more copper, or is it pretty equal as far as deficiencies?

It's gonna be pretty even. Zinc is fighting on. I don't know what percent of the population is on PPIs, but I'm guessing it's a pretty large. Way too many.

Because they just sell Ozempic at Costco, like candy. Or Meprazole. Yeah. If they sold Ozmpic in Costco it would be the number one selling product. Any of those metals we have to have good stomach acid to get.

We have oxidize them for our body to be able to absorb them. Right. Well, in my take, there's three problems with that. One is PPIs. The other one is Tums and Rolaids and all that kind of stuff, right?

The things that people take when they get the heartburn. And then the other is most of us are walking around with too low a stomach acid anyway, once we hit 40, 50 years old, Right?

Yep. Yeah, so there's a lot of issues with mineral absorption. And then from a food standpoint, we aren't getting what we used to get because the soil is so depleted as well.

So there is a wide range of reasons why minerals are a problem in terms of deficiency in this country. One of our favorite tests to do is people that are already taking zinc would do what's called the zinc tally test.

We do that completely for free here. So we do a really low dose of zinc in liquid form and have people hold that in their mouth, hold it in the mouth for 10 seconds and then swish around for another five.

If you're good on zinc, you should get a very bitter metallic taste. And a lot of people taking zinc still don't taste anything because they're not actually absorbing it.

Well, there you go, I'm officially doing okay on zinc then because every zinc lozenge I've ever had leaves me tasting metal for 30 minutes. I didn't know that though, that's very interesting.

Okay, let's jump into iron because I don't if there's a mineral that we talk about in nutrition that is more maybe confusing and also pretty heavily debated in terms of iron.

There's lot of people out there You know, pushing iron supplements, there's a lot of people saying, Whoa, wait a minute. There's bunch of co-factors we need to be concerned about before worried about iron.

Where do you come out on this? Iron drives me absolutely nuts. And yes, sometimes it has to supplemented, but two of the things we're going to watch out for immediately is gallbladder types.

Cause I want to see what vitamin A is doing. And then people will have any kind of digestive issues going on. If we have bacterial overgrowth and we're getting bloated with all of these meals, iron is going to pour gasoline on the fire for that.

Sure. The first thing you said, though, I didn't quite understand it before the stomach issues. Yeah. So that's where we see a lot of people that have no gallbladder, they're anemic a little bit of the time.

Okay. Because they don't have a gall bladder in the first place or under functioning maybe in some cases as well. Cause it's going to be super easy for them to get a vitamin A deficiency.

If we don't have enough vitamin A in the blood, there's a thing called hepcidin that's going to be in blood and it's gonna get elevated to inappropriate levels.

Iron is gonna stay in this spleen and the liver. And that's where we run into issues.

Zinc, Copper, and Iron Balance

If we don't have that free flowing iron around the body, then we're never going to get ferritin to come up because how are we going store more iron if it's not floating around in the bottom?

Okay. So then the gallbladder issue is a problem because vitamin A is fat soluble vitamin. We're not breaking it down and absorbing it like we normally would So let's first before we get into the rest of that because I still want to dive into vitamin A a little bit But I think there's gonna be a lot of questions about the iron levels that are looked at or the way iron Levels are look at I guess in blood because you mentioned ferritin, but there is also serum iron, right?

What are the things that you're looking at in the blood to determine if there was an iron issue? I yes So if we have low ferretin low iron saturation, then we might have actually true iron deficiencies.

Still want to see what vitamin A is doing there. But some other patterns we can look at, let's say somebody has good ferritin levels, but low serum iron, low ion saturation.

That's a copper issue. That iron is stored in ferritin, but we need ceruloplasm, which is copper dependent, to move it around and get it into the cells, get into hemoglobin.

So is your take that most people are probably not deficient but they're not optimizing how their body is utilizing iron? Is that a good way to put it?

Iron's got to be one of the most abundant minerals on the planet, right? It's in everything. It should be easy to get. I think it's the third most abundance mineral, like literally, in the makeup of planet itself.

Yeah. So we have to make sure our body is transporting it. All right. So the big issues would be digestive issues that would prevent the body from absorbing iron.

The same as what we said about zinc and copper, that'd be a factor, right? Yeah. We look at iron in nature as in ferric form. That's where we need that stomach acid to oxidize it, so it goes to ferrous.

And that's why supplements are usually in the ferroshell, which is a ferris form, because it's not getting into that ferrus form we're never going to absorb it through food.

Okay. All right. And so then what do you recommend? Well, let's talk about kind of, I know there isn't such a thing as typical, but maybe the most common thing you see with these three numbers that we're talking about with iron in the blood, what is pretty typical out there?

We end up seeing a lot more low iron levels with good ferritin levels. So that's going to be our copper sign every time. We also want to see what the red blood cells are doing.

We can use the number MCV on there, which is kind of telling us the size of our red blood cells. If they're getting too big, that's going to be a B9, B12 problem.

Okay. All right. Very interesting. Okay, so then, but your take generally is that you're far more likely to have one of these other issues that's leading to an iron.

I'm going to call it an Iron imbalance, I guess, instead of an Iran deficiency, then you are to actually be low on iron is. Yeah. We see that every time too.

These people sit there and take iron supplements over and over again and nothing happens. Right. That's kind of the definition of insanity. Why are we doing that?

All right, so have you ever written a book on this? Cause I think people would love that. This is really interesting stuff for sure. That's right. I'd have to have somebody else write it for me.

Well, you clearly have learned a lot about this stuff. On my notes in terms of other things I wanted to talk about, one thing that we haven't, I barely touched on it a little bit is thyroid, but thyroid is another one that is super confusing to people.

So let's talk Yeah, thyroid hats time. We'll see a lot of people come to us with only TSH or Tsh and T4. Only TSh tells us nothing. That's just, that's coming from the pituitary as a signal down to the thyroid.

So that can be out of whack, but it doesn't tell us anything of T-4 and t-3 are in range. You know, they're going to use that as the early sign of hypokalorism.

Could be an iodine deficiency. If we're having High TSH, the pituitary is having to send that signal to make T4, but we don't have the building blocks, which is just tyrosine and iodine.

That's what T-4 is. It's tyroxine with four iodide molecules attached to it. Iron does play a role there too, because the TPO comes before that. And that's actually the catalyst to get those iodides molecules.

Attached. All right. So then this is another one that I think there's actually it's interesting. There's a lot of literature out there on this that there may be, you know, 20 million Americans.

I mean, it was the last number I read that are walking around with low thyroid that don't realize it because their basic blood tests aren't necessarily showing it or they're just not getting blood test at all.

But this TSH thing frustrates the heck out of me because it's a pituitary hormone, not a thyroid hormone. It's the pitutary going downstream to the thyroid and saying, hey man, kick out some more stuff for us here, basically.

But my understanding is, and correct me if I'm wrong, if a doctor sees high TSH, which is thyroid stimulating hormone, then based on that alone, they can prescribe centroid, levothyroxine, something like that.

Is that right? Yeah. They'll just go immediately to that without actually testing iodine. You know, what's the T3 doing? The body might not, her thyroid might make that much T4 if we have enough T 3. Yeah, well, T3 is the active form.

That's the one that we want circulating around, right? T4 converts to T 3. Another one, that drives me crazy is people will blame the thyroid for low T-3 when the thyroid barely makes any T three.

that is a liver issue. And this is that whole, the shin bones connected to the knee bone kind of thing, right? So the pituitary is doing its thing. The thyroid's doing it's thing the adrenals are involved as well.

And then the liver of course is involved. Anything that you can think about that has to do with hormones on some level the livers involved And so you're saying that in this, I've been telling people this for a long time that my take on thyroid is that the thyroid has kind of caught in the middle.

And to a large degree, that's literally what's happening. We have the HPA axis where we have, the hypothalamus and pituitary above the thyroids. we had the adrenals below the Thyroid.

You got the liver involved there as well. and oftentimes the, thyroid, is not the problem, but it's blamed for the. Right. There's all these other factors that we're not paying attention to.

It's almost always a victim. Yeah, yeah. And then yet it's medicated like crazy and then exactly what you said about people taking iron on a regular basis and not feeling any better, their blood tests not improving, people take levothyroxine and they don't feel any you know, warmer in the cold months or all the other things that we talk about with thyroid.

And yet if you take, it's not the same as what I was saying about statins, but it is kind of the. You're taking Leva, which is Synthroid and your TSH number comes down.

because we're bumping up the T4, and so the body's like, well, plenty of T-4. I'm going to bring my TSH down now, all is well. But you're not feeling any better, but your labs look better.

And so, the symptom is high T SH, at least the way that they're looking at it in the blood, But there's all these symptoms that are related that aren't improving, even though that number goes down.

Yeah, and that's actually where hair comes in really handy when we do a hair analysis. So if we're getting normal labs for thyroid, but we are still having all those thyroid symptoms, you know, that fatigue, the brain fog, especially in the afternoon, constipation, we want to see what calcium is doing in hair.

And this can be a lot of people over-supplementing vitamin D or in a stress response. We start sequestering that calcium where it shouldn't be. If it gets too elevated, specially compared to potassium, Because potassium is needed to sensitize those cells to thyroid hormone.

What we get is called a calcium shell kind of forming around the cells. You would think about that thyroid hormones kind is bouncing off of it. Yeah. Yeah, so and calcium is another one of these things.

It's very heavily supplemented in this country for a very specific reason, and that's bone density. But then in many cases, doctors aren't paying attention to all the cofactors that are required for bone to actually become more dense.

And you mentioned vitamin D3. That's become a bit of a problem in his country, much like what we talked about with zinc. because there's not necessarily an issue with supplementing vitamin D3 if things are in balance.

But if you're not taking K2, if your not take magnesium, you are not absorbing the minerals that are needed to build a stronger bone, then you've got an issues and we still to this day and it just takes time for things to catch up.

We still have people come in far more often, the Vitality Nutrition, asking for vitamin D3 than for Vitamin D 3 with Vitamin K 2. We have more people coming in looking for zinc than zinc with copper.

I think it goes back to the training.

Thyroid, Liver Conversion, and Hair Analysis

Like I was saying, we have this training where we are looking at very specific things and we're not necessarily looking to keep balance across the whole of the body.

kind of target things. Oh, I'm low in vitamin D. I'll take vitamin d. oh, i'm worried about my immune system. i'll Take zinc. My TSH is high. I'll, take levothyroxine, but we're not paying attention to all of these co-factors that are critical to optimizing help.

And you've shed a light on several of, these right now. Now, what I don't want to do to my listeners is leave them like, oh my gosh, so I've got all these things now that I'm trying to figure out.

How do I find balance? And I was leading to a question that we got off track a little bit that. Then I want ask you, you're generally seeing, I think a lot of people with multiple deficiencies.

Is that safe to say? Yeah. I don't think I've ever done blood work with somebody being in optimal range on everything. Okay. And typically deficient in three or four or five or six things, is that accurate as well or not necessarily?

Okay, all right. A lot of deficiencies. So if you see someone like that and they've got a copper thing and magnesium thing, whatever it is that you're seeing the deficiency in.

Are you typically recommending individual ingredients or are you recommending like a multivitamin to get sort of the core of those things handled? How do you do that?

What's your take on that. So it's funny when we look at certain minerals, we don't bring in that specific mineral a lot of times. We're going to give adrenal support.

Potassium is a great example of that, You can bring in a ton of potassium. A lot of times it's still not going to bring those levels up unless we take care of the adrenals first.

Okay. So then how are you supporting the Adrenales? If you're not just, if you, cause, because essentially what you were saying is I'm not necessarily going dump the mineral in there because there's an underlying reason as to why the person's not doing well in that area.

Well, that's the big thing we're always, always watching. Um, so go for that. The root cause is what we are, what are we speaking for. Well, let's just, take magnesium and zinc.

So these are two really common ones you see. Are you doing things besides supplementing magnesium in zinc to support the body in those areas? Let me look at zinc, I do that in a multi-mineral.

Let's get zinc. Let us get copper. Lets get molybdenum if we can do them all at the same time. Those are really, really important ones. Magnesium. Yeah, we're doing magnesium by itself.

One, We're going to make sure we are not taking too much vitamin D there because that will give you a magnesium deficiency as well because we use a ton of it to get bioavailable.

So that's one thing we want to watch there. We also want watch B6 levels with magnesium. Make sure those are good and then of course have to be careful with B 6. That's what a unique B vitamins that we get too Yeah.

And I'm assuming you probably are using P5P when you're using B6? Yes. Yeah, which is the active form essentially. So then if someone comes in to see you, I am curious how you do it versus, you know, and I m sure it's different for all kinds of different practitioners out there, but they come to you.

They get the blood test. Let's say you put them on a multi-mineral and a magnesium supplement, maybe there's one other thing that you've got them for adrenal support or something along those lines.

Are you recommending three months, six months a year? When are they coming back to see if what your recommendations are? The recommendations you made are making an impact when it comes to the blood.

We like people to come back in a month to just see how symptoms are doing. So we're going to use symptoms before anything else. Okay. If we need blood work, let's go at least three month before we run some more blood, you know, one of the crazy things that we do here, which is getting referred to as witchcraft by some people, I think.

on our table and for, especially for adrenal issues, we'll actually hit certain points on the body, see how tender they are, and then set adrenal formulas next to them and see which ones their bodies are reacting to the best.

It's pretty much everybody. We need to fix digestion or blood sugar regulation. I'm yet to find somebody that doesn't need one of those two things fixed.

Yeah. Digestion, if digestion's off, there's not really a point in supplementing because you're not going to get most of it. Yeah, you're going to lose out on a ton of it, especially the minerals, right?

And so then, so we're talking about kinesiology or muscle testing. Essentially, there's different ways to do it. Of course. Yes. But, but you find that the reason I asked that question is that we talked way back to the beginning about cash pay, concierge, all this kind of stuff.

It could get expensive, Right? Supplements can get, expensive testing can People want to get as much as they can with as little outlay as the need. But the thing that you're essentially recommending here is you are saying, okay, let's get a baseline with the blood test.

And correct me if I'm wrong on any of this, but I think I understand. Let's go to baseline of the test, see where we're at. We're going to make some recommendations based on A, what the tests result, that also B, What your body

seems to want when it comes to muscle testing and how the body is responding to specific supplements.

We're going to come back a month from now and see how things are, you know, are we making improvement in these areas as far as your symptomology? And then, maybe three months later or longer, we may do more blood if there's still some symptoms that we're trying to figure out why we haven't seen improvement.

basically in a nutshell, how you're doing it. Yeah. And it brings up a good point too. I know we're talking at the beginning of which tests we recommend for different things too, we'll work off the symptoms first and foremost every time, especially if people don't want to pay for the functional testing.

A lot of people like people to try things first, and then move on. Then blood is not always the best. For minerals we do like hair better. Okay. All right.

If it's mood issues, we're going to do urine based testing. We're looking for metabolic byproducts are put off. And if you really want to lock in to supplement specifically for you, then we are going do DNA testing and look at your SNPs.

Okay. All right. So you've got all those things available. Now you're in Utah, as we've discussed, do you do anything remotely with people that are not in your area?

I do. And we can send a lot of these tests through Fullscript and we could send all of this through, through full script. Okay, all right, and do ship products from your location as well or no?

Not yet. I've been using Fullstrip for that. It takes care of the sales tax for me and there's 20,000 items on there. Right. All right. So then if someone's listening to this and they're feeling like, okay, where do I start?

What, what's your recommendation? If, if they wanting to work with us, we love them to set up an appointment, come in, let's just have a conversation first and then give them our ideas of what we could try or which testing we can do.

We really like people that set the appointment up. It's only Silke and I here. There's like two of us so it gets really hard when it's me and somebody comes in for an.

Yeah, for sure. Okay. How do people get in touch with you? So they want to call us at this door here. It's 801-492-2723. Or if they just want check us out on the website, it's shayshealth.com and that's ShaysHealth.

Alright, and we'll put both of those in the show description as well, so people can look on the on-the-show description.

Testing Strategy, Remote Consults, and Closing Remarks

To remind everybody, we are on YouTube now, So if you're not watching us, you can. I don't know that that's necessarily a win, but if your YouTube person, there you go, And otherwise, of course, your favorite podcast apps are a good place to go.

Shea is now carrying a pretty good chunk of Vitality Nutrition products out at his shop as well. So if you're in Utah County and it's more convenient for you to pick things up out there, you certainly can do that.

He's got a great shop. There's just two of them as he mentioned out, but She and Silke are both great. Really, really good on the knowledge and certainly people that I trust sending you too get answers to some of your questions.

In fact, She's going to be running some blood tests on me soon and we're going be digging into that as Anyway, I think that's all I've got today, Shay.

Is there anything you want to leave my listeners with? No, no. Thanks for having me on. And like I said, yeah, we just started carrying your stuff, even though people would probably consider us competitors, but I were far enough away and I love your products.

Well, and let's talk about competition for a minute. My take on it is really, really simple. Good people doing good things in this industry are needed and they're needed in every little corner, whether it's Highland, Utah or Bountiful or South Ogden where I'm at, or on the web where you can find our stuff as well.

I don't have my products in a thousand places. They are in very strategically planned clinics and supplement stores in people where, I know the owner, I know what type of individual they are, what their knowledge base is.

Those are the only kind of people that I like to sell my products to. It's why they're not on Amazon and they not all the, you know, a million other places on the web.

Vitality nutrition is and always has been about taking care of you, the client at the personal level. And I'm always happy to share in that with someone who's doing great work like you are Shea.

So that's, why we are close enough that we could be considered competitors, but I not ever going to look at it. that way. So I, and, frankly, I think people, there's a good reason for people to visit you.

There's good reasons for me, depending on what they're looking for anyway. No problem as far as that goes. I really appreciate your time. And I'd love to have you back on and maybe dig in deeper on a couple of very specific issues down the road if you're up for that.

Until next time, because I am going to invite you on, thank you so much for joining me on Vitality Radio. And for everybody listening to the show, thank you for joining us as well.

This show I hope was more about kind of dialing in on education. If you've got a set of blood tests that you're curious about some of these numbers, pull it out when you can, when not driving down the road and listen to this again with your blood test in front of you.

and take a look at your GGT and your ALP and some of these other things that Shay mentioned and see where things are at. If it's been a while and you feel like you need an update and if you're open to working with Shay based on his education here, I highly recommend him as a great resource for this type of testing and would love to see you get that information for yourself, especially if your dealing with some symptoms and you're trying to figure out where they're coming from.

And the last thing I'll say is I agree with Jay completely that you can absolutely start at symptoms. Heck, that's what I've always done because we don't do blood tests here at Vitality.

We've had a lot of success based on a ton of what is actually clinical research that we've studied on here, but also anecdotal evidence. of just what works for people to help with these things.

It's always how I've done it. There's a combination of education and experience that have helped us be very useful in those areas for you as well. So don't feel like you've always got to have lab, but if you're chasing something that you have been trying to figure out based on symptoms and supplements and diet changes and things like that and you are hitting brick walls, those labs can be extremely beneficial and this different type of testing can also be beneficial as All right, I probably talked too much, but thank you so much for joining me.

If you have any questions, call us 801-292-6662 is the number. You can visit us in Bountiful, you can us now in South Ogden, or of course you visit online at vitalitynutrition.com.

Thank you for listening to me, my name is Jared St. Clair and this has been Vitality Radio. If this episode helped you, follow the show, share it with someone, and explore trusted education and resources at vitalitynutrition.com.

See you next time. Hello, everyone. I hope you enjoyed this week's episode of Vitality Radio. Just a reminder that this podcast is for educational purposes only.

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