



What Does My
Thyroid Do -
Part One

Nisha Jackson, PhD

Rusty Humphries: Thyroid. What is it and what does it do for us? How is it tested? What is the research thing? What is your thyroid? I don't know. My name is Rusty Humphries. I'm not the doctor, Nisha Jackson is, she is the doctor.

Rusty Humphries: This is *The Nisha Jackson Show*. And Nisha, thyroid, as I recall – and Nisha used to be, is still my doctor, but I don't see her all the time because I live in Arizona, she lives in Oregon – but I remember having low thyroid and I'm supposed to be taking medicine for it. And I probably haven't for a while and I don't know if that's good or bad, but what is important about the thyroid? Why do we care?

Dr. Nisha Jackson: Right. Well, okay, first of all, you're making me nervous when you say that you're not taking your thyroid anymore because it's such an important hormone to take if you're low.

Rusty Humphries: Really?

Dr. Nisha Jackson: If your levels are low. So I really wanted to talk about what is thyroid, why is it important, what are the functions of thyroid, because it has about 200 functions in the body and one of the main ones is running your metabolism.

Dr. Nisha Jackson: I don't know anyone, Rusty, well, very few people on the face of the earth are not concerned about their weight. Most people are concerned about their weight. They don't want –

Rusty Humphries: So, is this one of the reasons why I'm fat?

Dr. Nisha Jackson: Yes.

Rusty Humphries: Okay. Well, I'm listening.

Dr. Nisha Jackson: So, thyroid is intricately involved in your metabolism and your body's ability to burn calories. A lot of thyroid experts, and hormone balancing experts, and hormone optimization experts that are out there really believe that it's not a matter of *if* you're going to get low thyroid with age, it's a matter of *when*. This is going to be a two-part podcast. This one today, I want to talk about what does the thyroid do, and what are all the functions of the thyroid, and how should the thyroid be tested?

Rusty Humphries: All right. Let me ask you a question. What does the thyroid do?

Dr. Nisha Jackson: I'm going to tell you what the thyroid does. You're always jumping the gun on me. Okay, so thyroid is really important because, as I said, it has 200 functions in the body. It's just this wonderful, little part of the endocrine system, and I'm going to touch on what is the endocrine system today. But it's a little tiny butterfly-shaped gland that sits right here in your neck. And it's just a tiny little gland and you can barely feel it.

Dr. Nisha Jackson: Now, if you have enlarged thyroid or you have a goiter or you have a nodule or you have an autoimmune disorder called Hashimoto's, you might actually feel your thyroid on both sides of your ... almost just adjacent to the Adam's apple, right here. So you might feel that gland. It really shouldn't be something that you feel that's enlarged, or you shouldn't be having any trouble swallowing.

Some people that have a large thyroid actually cannot swallow very well; they feel like there's something stuck in their throat.

— Dr. Nisha Jackson, PhD

Dr. Nisha Jackson: Some people that have a large thyroid actually cannot swallow very well; they feel like there's something stuck in their throat. So, that's where the thyroid is located and it makes very important hormones, particularly T3. Your body makes one thyroid hormone called T4 and then the T4 is converted into T3, which is an active thyroid, which has the most to do with how you feel.

Dr. Nisha Jackson: Some of the functions of the thyroid that I thought would be important to talk about today are, of course, metabolism. We've touched on that, and that's really how fast you burn calories. The other thing about the thyroid that's very important, one of the functions that the thyroid does, is digestion. It actually helps you with your digestion. When your thyroid is running low, you will have more problems with things like constipation or difficulty eliminating.

Dr. Nisha Jackson: Another thing that's important for the thyroid is breathing. Some people — I know it sounds strange, like how could thyroid be related to breathing? But breathing is one of those things that when the thyroid is low, people have a hard time catching their breath. And it can happen when the thyroid is running high also. Heart rate has a lot to do with thyroid, so we find that people have a racing heart with high thyroid and often a slow heart rate with low thyroid, although it can be the other way around, too.

Dr. Nisha Jackson: Temperature control. People often experience excessive sweating when the thyroid is high or low. We see women in the office all the time with sweating and they can't figure out what's the problem with the excessive sweating, and often it is that their thyroid is too low. The irony in that is that you also often have cold hands and cold feet with low thyroid.

Rusty Humphries: Wow.

Dr. Nisha Jackson: Many men and women notice that their hands and feet are cold. One of the symptoms that I've seen often in the office when people come in that test out to have low thyroid is that they have achy muscles and joints. It's almost like muscle arthritis, like a fibromyalgia kind of syndrome where even getting out of bed in the morning, Rusty, and they put their feet on the ground, the bottoms of their feet hurt. It's like their whole body is in pain.

Dr. Nisha Jackson: So, we think that, that's related to the fact that when thyroid is running low, which is the most common cause, I mean the most common type of abnormal thyroid function —

Rusty Humphries: So, most people with low thyroid?

Dr. Nisha Jackson: Low thyroid.

Rusty Humphries: Okay.

Dr. Nisha Jackson: It's called hypo. I always try to remember it, have my patients to remember it, as hypo has an *O* in it and so does low. So low is hypo.

Rusty Humphries: Okay.

Dr. Nisha Jackson: So when it's running low, which is the most common problem with low thyroid, I mean, the most common problem with thyroid is running low or hypothyroidism, you have more body inflammation. And when you have more body inflammation, you have more body pain. So, we see more and more people today, Rusty, with body pain, and they're going in and they're getting medications, anti-inflammatories, they're getting pain medication, and they're not sleeping well at night because their body is in pain. But really, their thyroid's just low and it hasn't been tested appropriately or tested at all.

Dr. Nisha Jackson: So, growth and development, we're seeing more and more younger children with low thyroid or abnormal thyroid, and they're not growing normally.

Rusty Humphries: What would bring on low thyroid in children? And is that a new thing with all of the outside things going on?

Dr. Nisha Jackson: Yes. So, there are so many things that can cause low thyroid. There are so many causes of low thyroid, but one of the most important ones is stress, which we're going to talk about in part two. Like what's the connection between stress and low thyroid? Because there's a huge connection between the two. Because our stress glands are intricately tied into our thyroid. They're connected together via the endocrine system.

We're seeing more and more younger children with low thyroid or abnormal thyroid, and they're not growing normally.

— *Dr. Nisha Jackson, PhD*

Dr. Nisha Jackson: So those are some of the functions of thyroid. It's also very much correlated with the neuro-brain chemicals. When our thyroid is not functioning optimally, it can affect our neuro-brain chemicals and cause depression, anxiety, feeling blue, not being able to function emotionally, overreacting, irritability.

Rusty Humphries: So, when you take the thyroid medicine, the stuff that I've been prescribed before and I've forgotten about, what is that supposed to do, and is it a big deal if I stop taking it?

Dr. Nisha Jackson: Yes. So, the thyroid medication is really important because it will replace whatever your body is not producing, whatever your thyroid is not producing. So the thyroid medication, if you've been prescribed it, it's very important to take it because it gets you up to optimal levels. If you run on low levels with your thyroid, the problem is that you will have a higher risk for inflammatory disease, you'll have a higher risk for depression, a higher risk for weight gain, obesity, and all of the problems that go along with obesity. And you're also at risk for things like osteoporosis, you have issues with increased risk of dementia.

Dr. Nisha Jackson: It's really not something you want to mess around with. If you've been prescribed for a hypothyroidism or even hyperthyroidism, it's really important that you take your medication as it's directed every single day.

Rusty Humphries: Okay. And it's not one of those ones you said every single day that's a big deal too. I've heard that if you kind of miss a dose or two, it really kind of messes you up. Is that right?

Dr. Nisha Jackson: Well, you just won't feel as well. And the whole idea with your thyroid is to maintain optimal levels all the time, not up and down, up and down, up and down. You really want to maintain optimal levels. Thyroid medication can be affected by food. This is something I tell my patients a lot is that it works better on an empty stomach, but if you took it with food accidentally, it's still going to work for you. It's just a little bit less absorbed with food.

Rusty Humphries: And what does that mean when you say empty stomach? How long do I have to wait? Okay, I get up in the morning. I'm supposed to take my medicine. How long do I wait before I have the Eggo waffles with peanut butter and extra syrup?

Dr. Nisha Jackson: What? No, we don't do LEGO waffles, I mean Eggo waffles or LEGOs. Don't do LEGO waffles, either.

Rusty Humphries: I'm kidding. Don't do LEGO waffles, either. So now, how long do I wait before I eat after I've woken up and taken my medicine, and does it make that much of a difference?

Dr. Nisha Jackson: Yes. You asked such good questions. Okay. First of all, an empty stomach is defined as 30 minutes before you eat or an hour and a half after you've eaten. Now, the problem is, Rusty, I'm really careful about telling people about their thyroid and I know pharmacists are also, is that the trouble that people get into is that if they've eaten then they don't take their thyroid because they're like, "Oh, I can't take it if I've eaten food." And then they don't take their thyroid at all.

Rusty Humphries: Yes, I'm totally guilty of that because I worried about that all the time.

Dr. Nisha Jackson: Yes. So, I would rather my patients — this may not be true for every physician or practitioner out there — but I would rather my patients just take their thyroid every day and try to take it on an empty stomach. But if they can't swing it, they still need to take it because it still works. It still works.

Rusty Humphries: Okay. So, by taking it with food, it doesn't just completely wipe out the effects or make it dangerous or something. Nothing.

Dr. Nisha Jackson: No, no. It's definitely not dangerous. It is a little bit less absorbed, but that's not true for everybody, either. So, let's talk about what thyroid does. We've talked about the functions of thyroid in the body, but let's talk about what happens. I really want to focus on low thyroid because that is by far the most common problem with thyroid. And this is getting worse, Rusty. Our diet is worse, our sleep patterns are worse today. It's happening in our children; it's transcending every segment of the population.

Dr. Nisha Jackson: We're having issues with of high stress, which is directly related to low thyroid and it can cause low thyroid. So, I want to talk about hypothyroidism today and what the symptoms are because a lot of people don't realize ... because they just think about thyroid and they just think about metabolism, or they think about weight. But there are so many other side effects of low thyroid that I think we should brush over. All right.

Rusty Humphries: Do it.

Dr. Nisha Jackson: Number one.

Rusty Humphries: Number one.

Dr. Nisha Jackson: Number one, fatigue. By far the most common problem with low thyroid is fatigue or exhaustion. And one of the –

Rusty Humphries: Okay. I don't want to interrupt, but I have to ask you this. Okay?

Dr. Nisha Jackson: Okay.

Rusty Humphries: I hate to admit this stuff on the air – and by the way, I want to thank everybody for listening or watching and subscribing to *The Nisha Jackson Show*. Or if you're listening to us on the radio, go to nishajackson.com and tell your friends. We have a lot of cool things, and we're going to have transcripts to the show and all kinds of stuff – but here's the problem I've been having lately. I've been having a heck of a time waking up. And I've been having a heck of a time in the middle of the day staying awake.

Rusty Humphries: And this is new. I don't know if it's because I'm getting old; I turned 54 on Thursday, or –

Dr. Nisha Jackson: Hey, by the way, I love the mustache. The mustache is ...

Rusty Humphries: Thank you.

Dr. Nisha Jackson: ... good.

Rusty Humphries: If you're watching, this here is 54 years of growth, right here. It's 54 years. I'm hoping to be, I may use a razor this year. I'm kidding.

Dr. Nisha Jackson: Looking good.

Rusty Humphries: Thank you. I mean, I'm starting to get worried, to be honest. My sleep has just been messed up.

Dr. Nisha Jackson: Right. So, this is a great topic and I'm glad you brought this up because this is such a huge problem today with people. They don't feel well. They have exactly what you said. They wake up in the morning, they've slept eight hours or however many hours – enough, and they don't feel rested. They don't feel like they got enough sleep.

Dr. Nisha Jackson: And they're dragging; they're hitting the wall in the afternoon. Whenever somebody comes into my office and they say, "I actually feel decent during the day, but by 2 o'clock I'm hitting the wall. Like I can't even function. I got to go get something to drink to wake me up or something to eat to wake me up." That's a very telltale sign. That can be a very telltale sign of low thyroid.

Dr. Nisha Jackson: So, remember thyroid is kind of the hormone that keeps you awake and keeps you going. It's like a gas pedal. So, we want it to be optimal. We don't want you to be scraping the bottom of the barrel. It's very likely, Rusty, that your thyroid is low because you're not taking your thyroid regularly. And you cannot function at a high level with your thyroid being low. It's just not possible.

Rusty Humphries: Okay. Is there something that you can take other than the prescription medicine? Is there any natural thyroid kind of boosters or is that —

Dr. Nisha Jackson: Yes.

Rusty Humphries: Okay.

Dr. Nisha Jackson: I want to go through some different thyroid options and treatments and testing. But first, I want to hit some of the symptoms of low thyroid because most people don't know what the symptoms are.

Dr. Nisha Jackson: Fatigue and exhaustion. Hitting the wall in the afternoon. Weight gain, especially weight gain around the middle part of your body. Water retention, like you can't get your rings on. Splitting nails, like your nails are thinning out and they're splitting. That can also be a B deficiency. Constipation. Dry skin. Skin problems. Cracking heels or elbows, like really dry, like your elbows are cracking. Cold intolerance, like you cannot tolerate cold but you're still sweating.

Dr. Nisha Jackson: Weakness. Brain fog. Forgetfulness. A lack of concentration. Inability to focus. Muscle cramps, like I said, almost like muscle arthritis. With women, women often have heavy periods, irregular periods. They can have problems with missed periods. Frequent infections. Lowered immune system. Back pain. Chronic back pain. Insomnia. Their body temperature is lower. If you took your body temperature every day for a week, you might find that it's lower than normal or optimal.

Dr. Nisha Jackson: Pain and numbness, a lot of people have pain and numbness in their extremities. Depression. Irritability. Feeling blue. More serious seasonal affective disorder in the winter if you're in an area where you have a winter. And then, of course, decreased sex drive and decreased sexual functioning. So obviously, this is not a very pretty picture, right? These are a lot of symptoms that you can have. Not everybody has all of them, but people who have advanced, low thyroid may have most of those symptoms.

Rusty Humphries: Yeah. I mean, I don't have all of those, but it sounds, I mean, it's pretty wide ranging this low thyroid, though.

Dr. Nisha Jackson: Yeah.

Rusty Humphries: Right?

Dr. Nisha Jackson: Yes. And this is the thing — and I always kind of start sounding like I've broken record at this point — but this is the thing: I really can't stand that people are not appropriately tested for low thyroid. They go in with these symptoms and they get a bunch of prescriptions to treat these problems, these symptoms, but they're not treating the underlying cause, which is low thyroid, or something called a subclinical low thyroid. And that's like the beginning of low thyroid.

Dr. Nisha Jackson: People can have real dramatic symptoms with the beginning of low thyroid. So, I strongly believe that it should be treated. Here's the testing options for low thyroid and then I'm going to get into the treatment before we end the show and then move on to the next show to talk about, next week, the connection between stress and low thyroid.

Rusty Humphries: Okay.

Dr. Nisha Jackson: In our office, I can only speak to what we do in our office, when you come in and we want to look at your whole profile, we're going to test the whole thyroid, all the thyroid functions. We're going to look at the thyroid hormone that comes from the brain; it comes from the pituitary gland where all the endocrine system hormones originate from, it's from the brain. And then they go down and they signal the thyroid in the neck and then the thyroid sends out thyroid hormones, then the feedback goes back to the brain. So, it's like a continuous cycle.

Dr. Nisha Jackson: It's almost like a thermostat. One of the thyroid hormones is called TSH. It stands for thyroid stimulating hormone, and that is just a signaling hormone. It's not your actual thyroid hormone; it's just a signal. And that goes to your thyroid gland and then the thyroid gland produces a thyroid hormone called T4. The four, I want to just stop for a second because this is kind of cool. The number four actually stands for how many iodine atoms are on that particular molecule of thyroid.

Dr. Nisha Jackson: Iodine is really important in the diet, and most people actually don't get enough iodine in their diet because nobody's OD'ing on sea kelp and sea vegetables, right? Most people aren't. And we took the iodine out of the salt years ago because we had some bad batch of it. Now, nobody's getting enough iodine in their diet, and it affects the functioning of the thyroid in a negative way.

Dr. Nisha Jackson: And you can't make enough thyroid hormone without enough iodine. So many times, when we test thyroid, Rusty, we also test iodine levels to see if this person is deficient in iodine, and is that the reason why they're not making enough thyroid hormone? So, sometimes just replacing the mineral iodine actually fixes low thyroid.

Rusty Humphries: Well, I guess I missed that. Sorry, when did they take iodine out of salt? I remember salt with iodine. That was kind of the thing in all the salt, wasn't it?

Dr. Nisha Jackson: It's been years. It's been years. And if I would have done my preparation appropriately for this show, I would have told you the exact time that, that happened. But they took it out and you know, now it's back again. But it was out and then there was this big scare, like no one should use iodized salt.

Dr. Nisha Jackson: And that's actually bad advice because you need iodine in your diet. That's one of the more common causes of low thyroid, not having enough iodine in the diet to make thyroid hormones. So anyway, we do a test in the office; it's a blood test. It looks at the thyroid stimulating hormone that comes from the brain. And then we also order a test called T3, which is your active thyroid, and T4, which is your storage thyroid hormone.

Dr. Nisha Jackson: There are other tests that we can order. We can order another test called reverse T3, which is kind of like the nasty little villain to T3, which you want good T3 because it's active and it helps you feel good. But there's another thyroid hormone called reverse T3, and it reverses out the benefits of T3 in your body. It's just, it's a villain.

Dr. Nisha Jackson: So, these are some of the things, the investigative tools, that we can use to really look at somebody's thyroid. We can also do an ultrasound of the thyroid gland if it's enlarged to see if there's nodules or if it's boggy or if it's enlarged. And then, of course, we can run the autoimmune profile panel on the thyroid.

Dr. Nisha Jackson: Sometimes people who have kind of a wonky looking thyroid profile, and they have unusual symptoms and they're really, they're very symptomatic, they actually have something called Hashimoto's thyroid syndrome, which is when your body is actually attacking your thyroid. It's an autoimmune syndrome. And more and more people today, Rusty, are getting this. We think it's related to stress. We think it's related to our environment and our toxic environment that's not getting better.

Rusty Humphries: So, stress can actually cause your body to attack itself?

Dr. Nisha Jackson: Yes.

Rusty Humphries: Wow.

Dr. Nisha Jackson: Yes. Yeah, that's really the crux of autoimmune disorders. And there are getting to be more and more autoimmune disorders that we continue to discover, which is terrible because it's when you get one autoimmune disorder and you do not arrest the problems in your lifestyle and the problems with your hormones, the imbalances, you are much more likely to get more autoimmune disorders. It is a very disabling thing for people to have just one autoimmune disorder, let alone two or three.

Rusty Humphries: I had one, Nisha, and it was eating at my jugular vein and I had to have surgery. I couldn't talk for like three or four months. I mean, it wiped me out for almost a whole year. So, I know exactly what you're talking about. It's scary.

When you're diagnosed with an autoimmune disorder or even hypothyroidism or some of the other hormone imbalances, we take it very seriously.

— *Dr. Nisha Jackson, PhD*

Dr. Nisha Jackson: It is scary. I take this very seriously with my patients, and our practitioners that work in our office take it very seriously. When you're diagnosed with an autoimmune disorder or even hypothyroidism or some of the other hormone imbalances, we take it very seriously. Like you got to get things in order. Your diet needs to change, your sleep patterns need to change. You have to take this seriously because if you start down the autoimmune path, it's going to get worse. And it could take your life, so it's really important that you get this under control.

Dr. Nisha Jackson: So, those are the tests that we run in the office. And then there's multiple different types of thyroid medication. We can talk about that on another show, but there's medication that's been around for many, many years. There's what we would call natural thyroid medication, but it's pig-derived thyroid. And then there's more synthetic thyroid, but it is the same as what your body produces, but it can be customized to exactly what your body needs.

Rusty Humphries: Was that Levothyroxine and Liothyronine, something like that?

Dr. Nisha Jackson: Yeah. Liothyronine and Levothyroxine are the two most common, commercial-grade thyroid replacements. One's T3 and one's T4. And then Armour Thyroid, NP Thyroid are types of thyroid that are pig-derived that have T3 and T4 in it along with other thyroid hormones.

Rusty Humphries: Now the pig-derived one, could I just eat bacon?

Dr. Nisha Jackson: No.

Rusty Humphries: Okay. I'm just trying to come up with alternatives.

Dr. Nisha Jackson: No, and you can't take the thyroid out of a pig and eat that either, okay? That doesn't work.

Rusty Humphries: Oh, man.

Dr. Nisha Jackson: There's no correlation there, sorry Rusty. So anyway, that's kind of like a snapshot of the thyroid. I thought it was important that we talk about it because it has so many functions. There's so much more I could say about thyroid, but I think this is good enough to at least show everybody and tell everybody what thyroid does.

Dr. Nisha Jackson: I have this graph here that I thought I'd just, I'd like just to put up here, because this is a picture of the human body here, and it shows all the different areas that the thyroid can affect. And it's pretty significant. You can see it really affects every area of the body for men and women.

Dr. Nisha Jackson: This is not just women. So when your thyroid is low, it can affect every single area of your body. So take it seriously. Demand the testing. It's really common for medical offices today to just order one test, which is the TSH that comes from the brain. It's not enough. You need the whole panel, and you need to be in the mid to upper end of normal limits. I don't like people sitting all the way down on the very low end of normal because that means that sometimes it's probably going below normal because a blood test is just one second of one day, right?

Dr. Nisha Jackson: So, you don't want to be hanging out clear on the low end of normal. And if you're not getting your answers, go to somebody who will give you answers. That's really important. I think the testing and the interpretation of the test is very important.

Rusty Humphries: All right. Speaking of important, this show was very important, and I think we're going to have to do an e-book on this show. We're going to do a transcript of that, that little thing you held up there. We'll put that in the e-book and give people opportunities. We'll tell you in the next couple of shows how to get that. But this is the kind of information that you need to read and take to your doctor, right? And say, "Hey, maybe you're not doing it the right way." Do all doctors, they're not testing the same ways, are they?

Dr. Nisha Jackson: No.

Rusty Humphries: No.

Dr. Nisha Jackson: They're not, and it's okay to ask for what you want. I mean, it's okay to say, "I would actually like to have more than just my TSH tested. I'd like to actually see what is my thyroid hormones that are circulating in my body. What are my levels? I want to see the test results." I think it's okay for patients to ask for what they want. And I'm a big proponent of people being autonomous about their own healthcare. People do the research. There's a lot of information out there. You can get my book, *Brilliant Burnout*.

Dr. Nisha Jackson: I did a whole chapter on low thyroid, and it's a darn good one. It starts on page 109.

Rusty Humphries: Okay, 109, *Brilliant Burnout*. And where can we get that book?

Dr. Nisha Jackson: You can get it on any online bookstore. It is available in bookstores, but online is real easy. Amazon has it. It's a best-seller on Amazon, and I'd suggest that you just get the book.

Rusty Humphries: All right. And it's a great book and you really should get it. Also, I suggest you do a couple of things. First of all, thanks for watching or listening. If you get a chance, would you subscribe to this on Apple podcasts? Go to your iPhone and just click subscribe. Look for *The Nisha Jackson Show* and you'll be able to find it there or on any other apps. It's also on YouTube and www.nishajackson.com, www.nishajackson.com.

Rusty Humphries: The book is out there too,

Brilliant Burnout: How Successful, driven Women Can Stay in the Game by Rewiring Their Bodies, Brains and Hormones.

Nisha, as always, it's a pleasure. We do these shows every Tuesday. We get them out there and I always appreciate you being here. Thank you. Anything else you want to say as we wrap 'er up?

Dr. Nisha Jackson: Get your thyroid test and if you have symptoms, think about what you can do that might improve it. Changing your lifestyle, looking at your iodine in your diet. Maybe mix in some kelp every once in a while. That might help, actually.

Rusty Humphries: Yeah. I'm a big kelp guy. All right, we'll check in next time. I'm Rusty Humphries, she's Dr. Nisha Jackson, this is *The Nisha Jackson Show*.



Nisha Jackson, PhD MS NP HHP

NISHA JACKSON, PhD, is a nationally known hormone expert and functional medicine specialist. Nisha founded and is the director of Peak Medical Clinics, which specialize in functional medicine, hormone balance, age management, and disease prevention. For 28 years, Nisha has subspecialized in hormone balancing for men and women. With in-depth testing and balancing of the adrenals, thyroid, brain chemistry, gut, and sex hormones, she has successfully helped thousands of men and women reverse chronic problems such as fatigue, brain fog, weight gain, and depression and regain focus, stamina, drive, and optimal mood and energy. Nisha is a renowned lecturer, motivational speaker, radio host, columnist, and author. She is the founder of Peak Medical Clinics in Oregon, Texas and California, and the founder/owner of Balance Docs Inc., a nutritional supplement company, and Peak Laboratories, a full-service laboratory for in-depth specialized testing and research.