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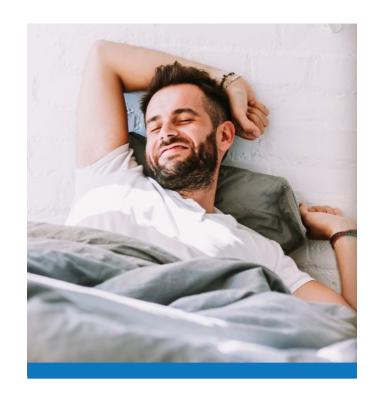
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5 Energy Types that Cause Sleep Issues

Alex Howard

Misty Williams: Hey, everybody, Misty Williams here, host for Your Best Sleep Ever, founder of Healing Rosie.

And this next conversation about sleep, and energy, and fatigue, is going to come from a different perspective than some of the other talks that we've had about sleep. Super excited to have Alex Howard on with me today. And we're going to dive into some of the, we'll call it, the emotional and psychological aspects of sleep and energy and how all of those play together to affect a great night's sleep and to affect overall well-being.

There's a lot we can do with green medicine to support us in getting to sleep if we're having a lot of challenges with monkey mind or if we're waking up a lot in the middle of the night. But, obviously, our goal is to be able to sleep well without having to use a lot of external stimuli like 5HTP or other supplements to help us sleep. So, we're going to dive into that conversation more today and it's going to be awesome. Okay.

Alex Howard is founder and CEO of The Optimum Health Clinic, one of the world's leading integrative medical clinics specialising in fatigue and related conditions. OHC's team of twenty fulltime practitioners have worked with thousands of patients in forty plus countries and a randomised control trial is currently underway on its ground breaking approach to treating fatigue.

Alex is also the host of the Fatigue Super Conference, creator of the Twelve Week Reset Program, and creator of the Therapeutic Coaching Methodology. His first book, *Why Me?* was published in 2003 and he has published theoretical papers in journals such as the British medical journal *Open* and *Psychology and Health*. Welcome, Alex.

Alex Howard: Hi, Misty. Thank you for having me.

Misty: Yes, well, this is going to be awesome. I know that you have your own background story with dealing with chronic fatigue syndrome and there's a lot of people on our space that may have a chronic fatigue diagnosis or an adrenal fatigue diagnosis, feeling really exhausted for a variety of reasons. So, I'd like to hear just a little bit more about your own experience with this?

Alex: Yes, sure. I'd like to think I was a relatively normal teenager, up until the age of sixteen. But perhaps that's not so true in hindsight. But I really lived for sport. I loved playing sport, I wasn't very good at it. I loved playing guitar in a pretty bad punk rock band but I had a very active and busy teenage life.

Until one day I woke up and it was almost like if there was a plug of energy into my body. It was like somebody had just ripped it out. And almost overnight I started having fairly debilitating fatigue. It was assumed that I had a virus, so of



course I was taken to the doctor and various experts to try and get a diagnosis. But after three months really nothing had improved, and at that point it was actually kind of quick to get a diagnosis of chronic fatigue syndrome.

And as a sixteen year old that lived a pretty active life, it almost felt like at that time, although I didn't realize how serious it was going to become, it felt like it could potentially be a death sentence because I went from being this active teenager to being certainly pretty much housebound and at times fairly bed bound. Struggling to do a few hours of schoolwork from home each day. And the thing particularly true with teenage boys is friendships are built by the activities that you do. When you can't do those things, after a while your friendships start disappearing.

So the isolation element to that also became pretty intense. After a couple of years of this, it's not like I wanted to end my life, I just couldn't see how I could continue to live a life where I was so severely debilitated, beyond just the fatigue. It's interesting in the context of this summit because sleep was also at times a significant issue.

And it may be true to people watching this, that one of the things that was so frustrating was that I was utterly exhausted, like really severe fatigue but at times I couldn't sleep. It was almost like I was too tired to sleep, is what it felt like sometimes. Or I would be exhausted all day and sometimes fall asleep in bits during the day and then I'd be wired all night and wouldn't be able to sleep at night.

But after a couple of years of this, I was really helped to realize from a conversation with my uncle, that if I wanted the circumstances of my life to be different then I was going to have to be the one to change them. And that felt like an enormous responsibility at eighteen years old at this point.

There's nothing like the naivety of being young in some ways because I realized that I was going to have to change it and I started to get the belief that perhaps I could find a way out. But it's also interesting in the context of talking about psychology because at that time, if you suggested to me that the kind of crippling fatigue or chronic fatigue syndrome that I was experiencing was psychological in nature, that was pretty much the most insulting and offensive thing that you could have said to me. I was utterly convinced that it was simply a case of finding a medical treatment to fix a very real physical illness.

And I guess I had to eat some real humble pie over time because I came to realize that it's not that the fatigue that I was experiencing was caused by my psychology, it's that my psychology had a crucial role to play in influencing the healing process and I'm sure we'll come to this in some of our conversation today. But, as a kind of headline to that, for the body to heal it needs to be in a healing state.

And if we're in a state of perpetual anxiety and stress, then it has an enormous impact on the body's ability to heal and living with a severe chronic illness and not knowing what was wrong with me, why it was wrong with me, will I ever recover, if I did this activity would I end up crashing for months afterwards, creates an enormous amount of stress in the system.

Just to finish this kind of story, I saw something like thirty, thirty-five different practitioners over a five-year period. I spent my entire student loan on supplements and seeing various, I guess, the early days of functional medicine people, traditional medical doctors, psychology based people. I practiced daily meditation and yoga. I really went into everything.

And there was no one miracle. It wasn't like there was this one thing that I did and that was the answer. Different things helped me in different



ways. And one of the things that I feel very strongly about these days is there are different sub-groups, there are different stages, there are different systems. And each person's body is its own jigsaw. You've got to find the right pieces in the right way.

But after five years of being on this journey and making progress at different points, I managed to make a full recovery. And I think, like a lot of people, and I know it's been true for you and I think a lot of people that go through these kind of intense health journeys, on the other side I felt compelled that I wanted to help other people in a similar situation and really what I wanted to do was create the organization that I'd wanted to exist in the years that I'd been ill.

And with the arrogance and naivety of someone in their early twenties, set up the Optimum Health Clinic, and we've had our adventures over the years. But it's now one of the world's leading clinics specializing in this area, as you described, thank you, in the introduction.

And we don't have any one methodology, we have a constantly evolving integration of different methodologies, but in the kind of core DNA of our approach, is everyone is different and there are patterns. And figuring out those patterns and how they apply to different people is critical and nearly always you need to address the physical side of what's happening and offer a functional medicine approach is one of the best ways to do that and you need to address the psychology of what might be happening.

And I think, often the functional medicine, nutritional side is much more popular because it's a role that people understand. You go to a doctor, you get a diagnosis, and you take a pill. You just go to a functional doctor and you get a functional diagnosis and you take a supplement and that's kind of critically important but we also have to understand what state is the nervous system in,

what's our relationship like with our body, do we listen to our body, are we putting our body under constant demand.

And figuring those pieces out has been, I guess, my passion for a couple of decades and it had enormous impact on my life and we've been able to help a lot of people with this approach.

Misty: Yes, there are so many things about what you just said that really stand out to me. One of them being you're an eighteen year old young man who is kind of confronted with this big call to adventure right? And I can tell you, as a thirty-five year old woman at the time for me in 2011, I don't know if I felt any more prepared just because I was a couple decades older.

It can definitely be overwhelming. And I remember looking at it the first time when I walked out of my Ob-Gyn's office after the follow up to the second surgery where they fixed the small intestine, took it out of the incision so that I could actually digest food again.

And she told me I had endometriosis and I asked her what caused it and she said she didn't know what caused it but I could Google it. She said we don't know, not just her. But I walked out feeling like I have to figure this out. Like I have to figure it out, there was an awareness that this was something that I couldn't count on someone else to figure out for me but there was also this awareness that I had zippo for tools.

And I relate to so much of what you said. I relate to the feeling psychologically of, "This is so stressful, now I have to take on something in this debilitated state, I've got to take on something really, really big." So I'm just thinking that there are so many people that just listened to that story that are like nodding like, "Oh my gosh, I understand what you're saying," and I'd love for you to talk to us just a little bit more about that side that is really stressed out because this



is happening. I'm sure we can all get present to that. I can say, "I see that I'm really stressed out because this is happening", but how do you even begin to mitigate that when you're in the throes of really feeling like your quality of life and your future is threatened?

Alex: Yes. Well, I think firstly, we have to define little bit and distinguish a bit what we mean when we're talking about being stressed out.

Because in a healthy functioning body, stress still happens. It's like you're walking down the street and you don't see the enormous bus that's coming along and you're stepping out into the road and you get a hit of adrenaline and that's a survival response. That means you respond fast enough to get out of the way of the bus. That's the same thing as thousands of years ago where cavemen and cavewomen are walking along and suddenly there's a sabre-toothed tiger and we hadn't seen it and we see it and we get a hit of adrenaline and cortisol and we respond.

And really we're going to do one of three things. We're going to fight the sabre-tooth tiger, which may depend on how good we are at fighting sabre-tooth tigers and how many weapons we have at hand. We're going to flight, we're going to run away as fast as we can. Or we're going to freeze, we're going to hope the sabre-tooth tiger hasn't seen us.

But whatever happens, if we get killed by the sabre-tooth tiger, it becomes a bit irrelevant, but assuming we survive, at some point we know we've survived. So then, our nervous system can self-regulate and our system calms back down again, the body comes into a healing state again and we carry on about our day.

If we don't know if we survive, this is particularly interesting in the context of sleep, if we don't know we've survived and we still think that there's a threat of the sabre-tooth tiger, which is kind of

hunting around looking for us, when we're going to sleep that night, how deeply are we going to sleep? Because our physiological survival is under threat, so we're probably going to sleep with kind of one eye kind of half open, and kind of listening out. And every time we hear a kind of crunching of leaves or of twigs kind of breaking, we're going to think, "Is that the sabre-tooth tiger?" So the nervous system is not going to self-regulate. In fact, to protect us, it's going to stay activated.

This is the difference between an acute stress, like a sudden stress that comes in, we have a response, we know we're safe, and we calm down, and we're fine again. And a chronic stress, an ongoing stress, we get normalized to, we get used to being under threat.

So if someone had a stressful life, let's say prior to having a chronic condition, and chronic sleep issue is obviously its own chronic condition, then there might have had lots of acute stresses, like lots of single events or things that were happening. Or there might have been a build-up of chronic stress. But when we have sleep issues, for example, we tend to become less resourceful, like we have less energy available.

So if the demand of our life stays the same, so the external events and circumstances that we need to deal with stay the same but we gradually get more depleted because we're not getting good quality sleep and we're getting more and more tired, then the demand is here but the capacity gradually goes down and the difference between the capacity and the demand is stress. Because we're having to pump our system, having to push our self to close that gap.

And so when we have either the chronic stress of living with a chronic illness where our resources have been depleted, or we're in this constant state of "Will I sleep tonight, how will I feel tomorrow, what if I don't sleep tonight, I've got all these things that I've got to deal with." It's like



that sabre-tooth tiger, constantly hunting and constantly chasing for us.

And the analogy that I use, and this is not an experiment that I've done, and it is not one that I'm recommending, but if you take a frog, so I'm told, and you drop it in a glass of boiling water, the frog will jump straight out. If you put it in a glass of cold water, and you gradually boil the water, the frog won't notice the change in temperature. So it will stay in there and get boiled.

The same thing is true with stress. I'm sometimes working with patients in the clinic and they'll be so wired in their system that I'm having to moderate my own stress level because they're almost bouncing off the chairs and they're talking a million miles an hour and you can feel the stress coming out of their system.

And then I'll start talking about the difference between being in a stressed state and being in a healing state and they will tell me they're not in a stressed state, because they're so normalized to being in that state. And it takes a while to realize, "Oh my gosh, actually this is not normal. This is just something that I've been doing for maybe six months, a year, maybe it's been ten, twenty years, but their system gradually got normalized to that.

So when we're in a state of chronic stress, we can get into this perhaps more in a bit, but there is an enormous impact that starts to happen on our physiological body.

So, going back to what you were asking about in terms of my story and this kind of realization of the impact of stress and having to take responsibility and the kind of stress of being ill. This was something that on one hand was really hard to hear because what it started to feel like is this thing that I know is a physical illness, I now having to look at my mind, my emotions, my behaviors, my belief patterns, and all of these things.

When I started to really get my head around it, it made so much sense that it was also in some ways a relief that I started to understand that for the body to heal, it has to be in a healing state. When the body is in a state of stress, it prioritises physiological survival over digesting food over healing.

There's fascinating research that shows that a study that was done on people that were carers. So carers for elderly people or for spouses or family members, and that's known to be something which is highly psychologically stressful over a long period of time, and they did biopsies on this group and a control group.

Those that were in an on-going role of being a carer in a stressful way, that biopsy took twenty-five percent longer to heal than it did in the control group. Being stressed impacts upon our body's ability to heal. So, on one hand it can feel like a responsibility, "Oh my gosh, I've got to start dealing with all of this stuff." But it can also be incredibly empowering because we're actually dealing with the core of what's happening.

Misty: Yes, so, several things are coming up for me as I'm listening to you talk about this in my own journey. One of the things that has been confronting for me is that I've chosen a life path that is naturally stressful, being an entrepreneur.

Alex: Congratulations.

Misty: Yes, thank you. I think. So, my personal journey has included evaluating how I'm living my life professionally. I actually had an experience five years ago where everything related to my agency just basically incinerated because of the way in which I was building my business. It was unbelievably stressful. I went into a place of deep, deep surrender, just letting go. I have no idea what's going to happen from here. And I let go.

And wouldn't you know it, everything just kind of



lined up amazingly on the side of that. But I don't think you can tell me, "Misty, the answer and solution is just that you really got to just let go", and just let everything fall apart and let me go to the other side because there is something visceral inside of us that kind of clamps down and drives hard and we have all these beliefs around how we need to show up to control what's happening in our life.

And I would imagine that in your experience with patients, certainly my story is not a unique one. Not only was I, and am I still, an entrepreneur to this day, I was running half marathons, which is fairly stressful thing to do. I basically just pick everything to illustrate your point with my entire lifestyle. Certainly, there are some things that I've experienced in my own life that have been very therapeutic and have probably done more to change the quality of my life than anything I've done with a protocol, right?

So, I'd love for you to talk a little bit about how you deal with this with your patients. How are you supporting people beyond just these healing protocols that I deeply believe in and have been profoundly useful to my life? But as you just said, I don't think that I could have even gotten the results from these protocols if I wasn't also doing a lot on the emotional and spiritual side of how I'm showing up in the world.

Alex: Yes. Yes. Well, thank you for sharing that. And I think maybe we'll talk in a little bit about some of the tactics we might use to actually calm the nervous system. There are certain tools or strategies for that, but actually even before we come to that, we need to look at the underlying psychological patterns of how someone approaches their life.

Because we categorize five, what we call energy depleting psychologies, right? Ways of approaching oneself and approaching one's life, which are inherently stress-inducing. They're also inherently depleting and draining. So these are: first thing, that we call the achiever pattern. And you just described that.

Misty: You're welcome.

Alex: "I'm feeling stressed. I know, I'll go and run a half marathon. That will be a really good way to calm down my system." So, the achiever pattern is where we are effectively defining our self-worth by what we do and what we achieve in the world. And there's achievers in the sense where it's the kind of typical achiever where they've got the big job and they've got the all the responsibilities and all that.

But there's also atypical achievers where they're not motivated by those things. They're just really driven to constantly be busy and do whatever they do to the best level. And that could be someone that their achiever pattern is playing out on fixing climate change. And it's like someone's like, "Well they're not achieving it, because they're not driving around in the Porsche and living in the fancy house and the kind of holiday home in the Hamptons. It's like they're just trying to fix climate change."

But the way that they're doing it is so driven and you can see that if they're not achieving and they're not pushing forwards, they don't feel enough. And so self-worth is not a luxury. Like self-worth is something that if we don't have it, we feel that we don't matter. And so we drive ourselves because we think if I can achieve this, then I'll be enough.

The second is the helper pattern, where it's similar to the achiever pattern, but we're defining our self-worth by what we do for others. And so an example of a helper pattern might be we get home after that long day at the office and we're kind of tired and we're thinking, "Oh, I can't wait to just have a hot bath and lie on the sofa and watch Netflix." And then we get the WhatsApp message



from the friend of ours who's just broken up from their partner and they're like, "I need to talk, can you come out?" So we completely ignore what our body is saying. Our body is saying, "I need you to rest, I need you to take care of me." And we go and we're there for someone else. And of course, one example of that is not an issue. I don't want to live in a world where people just selfishly only care about themselves. But it's when that helper pattern becomes disproportionate, that we consistently are placing other people and their needs as being more important than our own.

The third is the anxiety pattern where we have a kind of underlying sense that the world is not a safe place and so we deal with that in a few ways. We might deal with that in a counter-phobic way where we're constantly proving to ourselves we're not afraid.

So we keep putting ourselves in challenging and difficult situations because really we're trying to deal with this underlying sense that the world's not safe and I've got to prove I can handle that. Or more of a phobic response where we're just constantly worrying and we're ruminating and one of the ways that we often try to solve that is we try to think our way to a feeling of safety.

Like we go round and round in our mind thinking, "What if that happens? I'll do that and if that happens I'll do that. And then that." So we're constantly thinking to try to get a feeling of safety. The problem is you can't think your way to a feeling of safety. In fact, the more you try and think your way to it, the more you go into your mind, the more you lose contact with the actual connections we're feeling of safety.

The fourth is the perfectionist pattern where we feel like we have to get everything right and if we don't get things right, we feel like that's kind of a blot on our character that somehow we failed as a person. It's obviously closely related to the achiever pattern. The difference being achievers

are less worried about getting it right. They just have to succeed. Whereas the perfectionist pattern, it's not the achievement that matters. It's the doing it the right way that matters.

And then the final one is the controller. We feel that, again, it's a bit like the anxiety pattern or strategies that deal with that, that the world is not a safe place, so I have to be in control. So we're endlessly taking responsibility for everyone else and all different situations. We felt like we have to be in control of ourselves the whole time. We can't show vulnerabilities. So there's that.

There's more patterns. But these are five particularly predominant patterns that we see in people that end up with sleep issues, with fatigue issues. And I know the question some people are thinking. They're going, "But I have all five of them."

Misty: I was totally thinking that!

Alex: And the answer is yes, it's possible to have all five of them. It's almost like what these become is they become. It's like if our body is a boat and our boat is floating and boats are not designed to have no lows. They're designed to be able to hold certain loads, but these patterns after a while become heavier and we start to gather more and more loads and more and more burdens for that bow and it's no one pattern and it's no one event of one pattern. It's the cumulative effect of this sometimes over decades, which has an endlessly depleting impact on the system.

There are also physical loads of course on this boat. If someone's got SIBO, someone's got adrenal issues, someone's got blockages of mitochondria function, someone's got Lyme or some kind of co-infection. There's all kinds of other loads. Some people it's just too many loads over too long a period of time and it's a gradual onset and sleep issues just get worse and worse over the years.



For other people, there's a trigger, like they're kind of, the boat's just about surviving and there's that one extra load and the whole thing starts to crash. And we think it's often a red herring, that we think, "What was the thing that caused the boat to sink?" And we get fixated on that final thing that happened. But actually it's that cumulative effect of all of those loads over a period of time that often we have to deal with to really be able to shift the overall issue of what's going on.

Misty: I think what you just said is really profound because I know that I had looked for a causative event, "What was the thing that happened?" I can point to this surgery. And then in recent years I've realized actually the surgery wasn't that big of a deal. It was when they improperly drilled mercury for my teeth. I think you're exactly right. I think that probably any one of these stressors, everything else was great in the body, the body could handle and you could move through them. But when you're compiling these stressors, one on top of another for an extended period of time, our bodies just can't handle it. And at some point the straw breaks the camel's back.

Alex: Yes, that's right. And I think it's also why I was saying earlier, there's not a miracle answer. We often have to deal with these different loads. If someone's had chronic sleep issues, for example, and some of what I've been saying has been resonating, taking melatonin or 5HTP or doing something to kind of work with hormones or whatever. That's great.

And that really may have a place and what you're actually doing is you're fixing, you're addressing the consequence of these patterns. But if you don't deal with these patterns in the first place, you're just going to have to keep patching up all of the consequences of that.

Misty: That's right. All right. So let's talk a little bit more about maybe some of the patterns of stress and you've got some really great protocols for

helping people deal with this. And I want to make sure that we get into some of those.

Alex: Yes. So the first thing that I always say, and I'm aware this can sound over-simplistic, but I think it is super important, is if you can see it, you don't have to be it. Having awareness of these things in the first place is often critical because otherwise what happens is that we can have all kinds of amazing tools and strategies.

We can learn tools for mindfulness or meditation. We can learn tools from NLP to help calm the system. We can work with emotions, with things like EMDR, with emotional freedom technique. But if we aren't aware of the patterns in the first place, then we've got a great tool, but we're not using it in the right place.

So one of the things that I heavily emphasize is the importance of understanding. For example, if that was part of the map we talked about in terms of the five different types, so having awareness of things like that. I encourage people to track their nervous system at different points during the day over a period of time.

So you start to see how different things impact you in different ways because if you can see that, "Hang on a second, my system always seems to get wired when I walk into the office" for example, or "My system, I always seem to have a kind of spike in the kind of stress levels in my system when I'm around this particular person."

We can start to get some awareness of how different things are impacting us and rarely when I worked with someone specifically, for example, for sleep issues, rarely do I start by teaching strategies to help fall asleep. I see what happens at night is a reflection of what's happening in the system during the day. And one of the ways that I met this is there are four different brainwave patterns that we can have.



There's beta and put this in very simplistic terms. We're having all of these brainwave patterns all of the time. We have different patterns predominant at different points in the day. So beta is a busy mind. So in beta it's like we're concentrating, our mind's kind of focused on different things that are happening.

We then have alpha and alpha is a kind of relaxed state of awareness. And when people practice things like prayer or meditation, part of what they're doing is they're cultivating more alpha.

We then have theta and theta is if we're awake, it's daydreaming. So it's that kind of thing where you're in a meeting and then suddenly you have no idea what anyone said for the last few minutes because you' ve been daydreaming about something else.

Misty: I have no idea what you're talking about.

Alex: I'm sure there'll be a few people here that might recognize this. So then there's delta and delta is deep sleep. So in delta we are, for example, releasing growth hormone and there's a lot of healing processes that happen in the body when we're in delta sleep.

So when we're in a state of high anxiety during the day when our system, and remember what I said, people may not be aware of that. They might be the frog that's been boiled in the glass of water and they've just normalized it being in a state of chronic stress. But when we're in a state of high beta during the day, firstly that's draining. The brain's having to and the nervous system's having to use fuel to support being in that state of beta.

The second thing is then we're having less alpha during the day. There's less of that kind of cruising mode. It's a little bit like being at the traffic lights and revving the engine like the car is working when it doesn't need to be working. We're also then when it comes to sleeping at night, one of

the purposes of dreaming is to process all of the things that had been happening during the day.

That's why if we're feeling emotionally triggered by a lot of stuff, we tend to find that we have more vivid dreams at night. The body doesn't distinguish between something that's real and something that's vividly imagined. That's why sexual fantasy works because you can visualize something, you can focus on something and you can have a real bodily response to that experience.

So if we have lots of vivid dreams that's really tiring, like we wake up, it's like you can be asleep for seven, eight hours or wake up and feel totally exhausted because your nervous system has been working more than it needed to. Also, when we're in theta sleep, we can be more easily woken. So people that have a lot of light sleep, that there'd be people watching this, they're like, my problem is not getting to sleep.

My problem is staying asleep, that I kind of get to sleep but I'm so easily to start and woken up. But also if we've had a lot of beta during the day, the brain's been working really hard during the day. We're having a lot more theta at night because we're having to process that. We're getting less delta, we're getting less deep sleep and it's in delta sleep that we feel restored and refreshed.

Also, if we're going back to what I was saying a little bit earlier, if we're cavewomen and cavemen and we know there's a sabre-tooth tiger and they're out hunting for us. As I said earlier, it's not safe for sleep, so the nervous system is kind of on edge and we suddenly get hyper attuned to hearing a sound in the distance. Then we kind of get really distracted by that. That is more often than not, that is a nervous system issue. It's an over activated, ramped up, nervous system.

The resolution is often to understand what are all those stress triggers during the day? What are



all those things that are causing our system to get over-activated and overstimulated? If we can calm the system during the day, we'll find that at night naturally we sleep more easily. It's kind of one of the fascinating things, apart from obviously certain drugs, there's nothing you can really do to make someone sleep.

Sleep is a natural process. It's almost like you get a bar of soap and you pull it under the water. If you let go of that bar of soap, it just naturally floats. So when we're not sleeping, there's something that we're holding on. Like we're on some level, we're resisting something happening. It's not that we need to make something happen is that we need to find what's in the way of that thing happening and relax that and then that natural process can happen.

Misty: That was beautiful. That was like, "Put that on a meme and share, share it on social" because I think that probably a lot of us can see where we are creating the resistance in our lives that is kind of getting in our own way, so to speak. So very profound. So let's talk a little bit more about some things that we can do if we find ourselves in that really wound up state. And we're in a lot of resistance in our life or we identify with one of those five types that you described. Take us through some pathways or solutions that might be really effective for creating some shifts.

Alex: Yes, so I guess the long answer to the first one, which is awareness. The second thing that we need is we need strategies. So we need something to do with that awareness - meditation, mindfulness, prayer, guided relaxation. There's nuance differences between these different things, but they all have some similar shared benefit, which is they can help train the system to calm.

And one of the ways we need to think about it is just like we have a homeostatic balance in our blood pressure, in our blood sugar, all kinds of balances in the body. That when these things go out of balance, the body will work to bring them back into balance because these homeostasis are necessary for our survival.

Our nervous system also has a homeostatic balance. So that's where we go back to this example of chronic stress that we get ramps up or we get used to being in a certain state. One of the challenges that people often have when they use things like mindfulness and meditation to deal with stress is they'll say, "I feel so much calmer when I do my meditation, but then when I stop, I end up back in that state again."

So it's almost like if up here is, kind of the normal state of stress, they calm down and they stop and then it just gradually works back up again and then people feel like it's not working or I can't do it. There's a couple of things I'd say about that. One of which is we need to retrain the habit. It's like the nervous system. It's like the dog that keeps jumping on the sofa. Maybe the dog's been allowed on the sofa for years and we get a new sofa and we're like, "I don't want dog hairs on my new sofa."

So each time the dog's on the sofa or I have to push the dog off and tell it to get off the sofa, and then we go out the room. You come back and where's the dog? It's on the sofa, so you have to go through a process of training the dog that it's not meant to be on the sofa.

Same is true with the nervous system. We have to habitually retrain the system. Any kind of guided relaxation, meditation, mindfulness, and there's different things that people will find helpful. That's a great start because that will gradually help to recondition and train the system. The next bet that we then add into that when we're working with people is what are the triggers? So when the system's being calmed down and it starts to go back up again, what are the things that trigger our system?



We call it a maladaptive stress response. So it's a stress response. There's a healthy stress response as we talked about. There's that, a maladaptive stress response where it's responding in an unhealthy or a kind of dysfunctional way. What are the triggers? That could be things like the helper patterns, achiever patterns and things that we talked about earlier. It could also be certain ways that, for example, we're thinking about sleep, I think people that have chronic sleep issues, one of the things that you find is that a lot of times in the day you'll be having thoughts about, will I sleep tonight. If I don't sleep tonight, how am I going to feel tomorrow? How many did I get enough hours sleep last night that we start to get this fixation and constantly thinking about sleep. The more we think about sleep, what happens? The more the nervous system starts to get irritated and starts to get stressed out.

So learning to stop those patterns and we have certain techniques that will teach people to actually learn to stop and to think about it like neuroplasticity, to rewire the pathways in the brain to learn to not get pulled into and not get caught in in those patterns.

So just to summarize, there's awareness. Then there are strategies and tools that could be mindfulness meditation. It could be techniques to kind of stop and rewind the system. The third thing is that we then also need to work with emotions and one of the ways I think about it is as I was saying that sleep is a natural state, but it's for sleep to work.

We need to be relaxed like we need to be in our body. When we go into a state of stress, we disconnect. We go into our minds and people often experience that like a racing mind or almost at the extreme. It can be like a state of depersonalization that we feel emotionally numb and it's like our brains running so fast that it's almost not functioning.

So learning often. Part of the reason why we've learned to go into our mind is there are feelings, there are emotions, then maybe adverse childhood events. There are different things that are happen to us that we've just learned to not feel and effective we're running away from our self. We're escaping our emotional life by going into our mind. And so it's not just the case of calming the mind and working on certain thought patterns.

As much as that is important, it's also working through what's happening in our body. Like what are the emotions that either we're not feeling or, there are different emotional styles that we use. It might be avoidance and distraction. It might be state changing through drugs or alcohol or sex or work, whatever it might be.

But we need to find, figure out how to start to feel our emotions, to digest them so we can relax deeply enough into our body and into our self that that natural state of sleep can then happen. It's almost like with chronic fatigue, often the way that I invite people to look at it is it's not what's caused you to get sick. It's what's stopping you from healing. And I think it's the same thing often with sleep. It's not, why can't you sleep? It's not like what's in the way. It's like what's stopping this natural process from happening?

Misty: I'm just thinking that there's going to be people that watch this interview that find themselves just like me the entire time. I am picking up these pebbles that you're dropping, as we go along. Are there some resources that would really support people in going deeper into this if they feel like, "Oh my God, this is where my work is."

Alex: Yes. I mean, I have to be mindful of self-promotion, but yes, I can recommend some place. So I have a daily vlog five days a week that I put out on YouTube, podcasts, Instagram video, Facebook, or the usual places. So I talk a lot about



this. Every Monday I do a guided meditation that's free for all the platforms. Every Tuesday I do a mini session, where I actually work with someone, live with these kinds of issues and people then can see that. I interview our nutrition team about functional medicine on a Wednesday. I offer various thoughts and ideas on a Thursday and then we have a patient story. I've a recovery story or lessons they've learned on a Friday.

So that's a great way to just kind of go deeper into some of these ideas. I also have an in-depth coaching program called The Reset Program and everything that I'd been talking about, we go into much, much more detail and there's much more support about actual strategies and there's actual help in terms of implementation. It's not just shelf help, it's not like lots of ideas on the shelf, but actually putting that into practice.

Misty: Yes, that's awesome. Well, I know that it can feel daunting when you have the awareness, especially if it's for the first time that you're not only sick because of an event that happened in your life. You're not only not sleeping because you have monkey mind before bed, but there's actually a way in which you're showing up in the world that's creating this state that you find yourself in and, what do I, what do I do with that? I remember confronting, I saw myself in all five of your examples.

Of course I was nodding my head as you were listing for us the five different ways that people tend to approach life. That creates a lot of stress for them. I remember having this awareness that, "Oh my God, I am the helper. I'm the person that does for everyone else and I'm also the person that has an almost impossible time letting people do anything for me."

After my second surgery, I'm at the hospital. This is before Uber. I couldn't just call an Uber to take me home. I'm finished with that second surgery. I spent three days in the hospital. I need to go

home. I had not told a single friend that I was even going in for surgery. The only person that knew was my roommate at the time and that was it. Nobody else in my life even knew that anything was up. And I remember feeling so vulnerable and awkward, even asking one of my good friends who any of them would've been happy to like, come pick me up from the hospital.

But I was so stuck in a pattern in my life where I was the one that helped everyone else and I didn't need anything from anyone. And unravelling that has been really probably an eight and nine year journey. The same length of time that I've been on my health journey.

But it's the most deeply transformative work that I've done in my life today. And the way I live my life today has shifted so much because I started facing some of the things you were describing. So I'm so grateful that you were able to connect these dots for us and really frame a beautiful conversation to help us understand what we might need to look at if you really want to shift these things beyond just a really good set of supplements or trying CBD or doing the sleep hygiene things. There's a lot more to this conversation and you so beautifully illuminated it. So tell us, where can we find you online?

Alex: Thanks, Misty. So the simplest place is AlexHoward.tv. That's T for Tango, V for Victor. So AlexHoward.tv and on that you'll find the daily vlog that I mentioned. You'll also find details of The Reset Program, which is a twelve-week program. You'll also find links to The Optimum Health Clinic, and there's also an introductory to various kind of courses and free bits you can sign up for there, as well. So AlexHoward.tv.

Misty: Thank you so much, Alex. This was amazing. I appreciate it.

Alex: Thank you, Misty. Really appreciate you having me. Thank you.



How Probiotics May Impact Your Sleep

Michael Ruscio, DC

Misty Williams: Hey, everybody, Misty Williams here, your host for Your Best Sleep Ever, and founder of Healing Rosie. And I am so excited about this conversation we're about to have with Dr. Michael Ruscio. If you guys have been part of the Healing Rosie community over the last year, you know that I love Dr. Ruscio's book *Healthy Gut, Healthy You*.

I refer to it at least once a week in our community. I have encouraged everyone who's come in looking to heal from any flabby, foggy, and fatigue symptom to get his book because it's probably the most comprehensive resource I've found on aggregating all of the research that we have on gut health together and distilling it in a way that's super easy to digest. I think it's just masterful.

And if you've been in this space for a while listening to lots of summits, you probably know that there's a correlation between our gut health and sleep. And that's not something that people typically think about if they're having sleep trouble, that, "I need to look at my gut health and see what's going on in my gut." But there is a correlation and we're going to talk about that a little bit more today.

So, Dr. Michael Ruscio is a doctor, clinical researcher, and best-selling author whose practical ideas on healing chronic illness have made him an influential voice in functional and alternative medicine. His work has been published

in peer-reviewed medical journals and he speaks at integrative medical conferences across the globe.

Dr. Ruscio also runs an influential website and podcast at drruscio.com. In addition to his clinical practice located in Northern California. Welcome, welcome.

Dr. Michael Ruscio: Hi, thank you for having me.

Misty Williams: Well, I'm so excited to have you, and one of the things that I always say every time I have you either on a summit or coming and speaking to our group is just how wonderful your work and resources are.

Dr. Michael Ruscio: Thank you.

Misty Williams: And so, I'm thrilled that we're going to dive into this, because you have such a great way of connecting the dots between the research and the actual process of healing.

The one of things that really struck me about the Great Nate Protocol that you've put together is how important the sequencing of healing is, and really healing and restoring the gut. And I've seen a lot of women come through our community who've feel like in healing their gut they're playing Whack-A-Mole, right? And I know that a lot of it comes from not properly sequencing this whole healing process.



So, this is going to be a powerful conversation today, and I want to just open this up with maybe a little teaser question here, because one of things that your team sent over to me was some research about probiotics, gut health, and sleep. And in talking about gut health I wouldn't, as a lay person, I would not have extracted like, "Let's do the probiotic angle to really frame out this conversation." So, I'd love for you to just kind of give us an overview of how gut health and sleep are tied together, and how do probiotics kind of affect the whole equation?

Dr. Michael Ruscio: Sure, it's a great question. And I should start by saying that my initial foray into my own health issues did involve insomnia. That was my first most debilitating symptom. I was in college and for the life of me I could not sleep, and I could not figure out why. And this wasn't just a bad night's sleep. This was a hellacious night's sleep. Almost every night.

And for anyone who has had this it can be quite crippling. And it turned out in my case I had an intestinal parasite that was not manifesting as diarrhea, as it typically does. Or abdominal pain of any sort. It solely manifesting as insomnia, fatigue, and brain fog. Which taught me a lesson that the research is now catching up to, which is it is possible to have a problem in the gut that's solely manifesting what's known as extra intestinally. Or outside of the intestines.

And so, the way that I resolved my sleep issues was by improving the health of my gut. Not melatonin, not relaxing before bed, not blue light blocking glasses, which are all fine and good. But what I'm hoping in part to help people with today is not overlook what could be one of the most fundamental causes of their poor sleep. A problem in the gut.

And we do see in the research literature that those who have – that's just one example, IBS, are more likely to have insomnia. And as IBS

improves, we also see the insomnia improve. And I'll just do a quick screen share here to show you a few of the studies.

Okay, so what you're seeing here, a placebocontrolled trial. Essentially, looking at fourth year medical students and finding that those who are receiving the probiotics seem to have less stressinduced perturbations or interruptions of their sleep.

And another study here, essentially a review looking at probiotics effect a number of things, including sleep quality, also showing improvement in sleep quality. Another study, looking at as we alluded to a moment ago, those with IBS and finding as IBS improved their digestive symptoms improved, so did sleep quality.

And another randomized placebo-controlled trial, this time in depression, and there's a nice actually, preliminary cropping of studies showing that probiotics can improve depression, and at the same time led to an improvement in sleep quality.

And here's kind of the summary of those studies if people want them, we'll send over this text to you, and if we can get that wherever this going to live will have the text along with it.

But that's kind of the short synopsis on yes, there is some evidence that suggests that gut health and sleep go together. It's not the only cause of problems with sleep, but it's certainly a foundational one. And that simple interventions, like, but not limited to probiotics can actually have, and have been documented to improve sleep as well as other symptoms that may go along with this underlying problem in the gut.

Misty Williams: Yeah. So, I did a GI map test earlier this year and I've been playing my own version of Whack-A-Mole. Since 2011, if anybody has been following us in the Healing Rosie group, you guys know a lot of my story.



But I've tried a lot of different healing protocols for the gut over the years. And I was really inspired, Dr. Ruscio by *Healthy Gut, Healthy You* to take a closer look at my gut. And I actually did a GI map, and one of things that I found on my GI map was that I'm really low good bacteria in the gut. I did show some parasites, and a few other things. And I was a little surprised that I had Whack-A-Mole'd my way not really improving gut health like I thought I was.

And I'm sure there's a lot of other people who are in the same boat. So, why don't kind of start helping us understand a little bit about the importance of probiotics and the good bacteria in our gut in helping to stabilize or improve our overall gut health.

Dr. Michael Ruscio: Sure. And it's a great lead in question to tie these to results from the lab test, in this case a GI map. Which is a test that I like. The reason why this is important is because patients often times think they need lab testing in order to use a given treatment to improve their gut health.

And for the majority of natural treatments out there you really don't need a lab test to guide you. And one of the most powerful examples there is probiotics. Probiotics have been shown in five clinical trials now to be able to decontaminate SIBO, or small intestinal bacterial overgrowth out of the small intestine.

They've been shown to be antiparasitic. And in fact, in one head to head trial they actually were more effective, a probiotic than a prescription antiparasitic agent. They've been shown to be antifungal.

So, probiotics are actually fairly powerful antimicrobials. And they can help to clean out bacteria overgrowths, fungal overgrowths, parasites. Now we also want to be careful that if you have this really acute severe symptoms it

doesn't mean, if you're in the emergency room they tell you to do the stool test – you shouldn't do and just say, "Oh, well, I'll just take my probiotics." No. Not going to be the other end of the spectrum here.

But with a well execute probiotic protocol you can really improve many of the findings on a test. And this is something that I've been seeing in the clinic for a while. And now it's so clear that we've draw up now I think three, maybe even four case studies in which we had a pre/posttest. In this case it could be a GI map. And we didn't do anything differently in light of the results, we just executed a good probiotic protocol, and either the patient got healthier or the labs improved. One of them – without getting too into the weeds here. The functional lab tests are so sensitive, sometimes they suffer from false positives.

So, what you see sometimes is a patient from month one to month three is vastly healthier, yet their labs actually look worse. And I think this is because some of the labs, and this has been shown in the research do suffer from false positives. Meaning they're so sensitive they pick up things that aren't really there.

And so, for a number of reasons I would say don't do your own testing and rather find a good protocol to help guide you through how to improve your gut health. And one of the things that will happen when you do that is you will improve the bacteria in your gut, which is one of the things probiotics have been shown to do.

And tying back to the fact that probiotics are antimicrobial. Part of how I think this works is probiotics help to push out unsavory players, and they're also anti-inflammatory. Pushing out the unsavory players and creating an anti-inflammatory environment allows the good players to grow.

So, it's not so much about here's the one



bad guy and if we just get rid of that one bad guy everything's going to be fine. But rather it's cultivating a healthy ecosystem and that ecosystem will then in the long term either encourage healthy things to grow if it's a healthy ecosystem. Or allow unhealthy things to grow if it's an unhealthy ecosystem.

And one of the main ways we can put to that healthy direction, probiotics because they are anti-inflammatory, anti-leaky gut, and also help, again, push out some of those unsavory players.

Misty Williams: I actually did a candida antibodies test. I think it was at the end of last year I started working on all of this gut health. I never addressed the candida, and my recent test came back zero antibodies, and that was just from doing the probiotic stuff.

So, I really love that you have such a balanced approach to healing the gut. There's a lot of talk in our space, especially with parasites. Seem to get really excited about the parasite conversation and want to go after them like napalm, blow up everything up in gut related to parasites.

But in truth it is an ecosystem in there and it's really important healing the gut holistically. And there's others in the Healing Rosie community who've had a similar experience where they've just by focusing on growing and cultivating more good bacteria in the gut they too have eliminated other serious they've had without having to necessary do a protocol for those issues. Which is really fascinating.

So, why don't you talk to us a little bit about how do we choose a probiotic? And I know in your book you talk about probiotics and prebiotics. And you definitely have a philosophy on how you approach integrating those into a protocol. I'd love to just hear a little bit more about that.

Dr. Michael Ruscio: Yeah. Well, thank you. And

it's another really important question because one of the things I see patients flounder with is how do I use probiotics effectively? And it's not really the patient's fault, because even gastroenterologists are confused on this and scratching their heads.

So, it's not like in the doctor community there's a bunch of clinician educators teaching the doctors and the doctors sending that down the line. Confusion here permeates, and I would argue that dogma also permeates, because unfortunately there are some fairly well-credentialed gastroenterologists and despite the fact that we have a very impressive amount of data showing most specifically probiotics can improve digestive health. These conventional gastroenterologists have this opinion that we're not quite ready yet to be recommending probiotics or there's confusion in the research studies.

And to be honest with you those are kind of dodges, because we can also something to nitpick. But if there's a totality of evidence clearly suggesting benefit, if you're going to nitpick the little things that are wrong there and withhold that therapy that could help a patient – I would argue you're actually doing more of a disservice than you are doing a service. And I think that's the state of affairs with probiotics.

Now, at the same time I always try to be careful not to over reach or over represent the case. And probiotics are not a cure-all. But they certainly can help a number of things.

Now one of the reasons people are confused, in my opinion is because most of the education about probiotics seems to be vectored by those who are trying to market you a probiotic. And that's not necessarily a bad thing. You can have a good company with good people trying to help you and sell you a good product.

But you don't get this kind of clinical perspective.



You get here's our probiotic, it has a couple of studies showing this, so we're really going to proclaim this as the best probiotic for whatever the X symptom or condition is. And not give you kind of this broader context of if we looked at all of the research and we weren't really trying to favor one probiotic then what would be the narrative be? What would the clinical recommendations be?

And it's exactly quite simple. When we look at almost any probiotic on the market it can be organized into one of three categories. And let me, I guess, use another visual aid here. Pardon my nerdiness.

Misty Williams: It's great. I love it.

Dr. Michael Ruscio: Okay, so what you're seeing here is a schematic of the three different categories of probiotics. And any probiotic on the market can be organized into one of these categories.

Category one, the most well-researched. Over 500 clinical trials studying category one probiotics. Which will have a predominance of various Lactobacillus and Bifidobacterium species. So, it's a blend. There might be seven strains, there might be 15 strains, most of them will be some type of Lactobacillus or some type of Bifidobacterium. How do you know? Take the label look on the back, look at the strains, if you see mostly Lactobacillus X, Bifidobacterium Y, then that is a category one.

Now category two, slightly different. This is actually healthy fungus. This Saccharomyces Boulardii. And almost everyone of these will have just Saccharomyces Boulardii in it. Some also include this other strain Saccharomyces cerevisiae, but for all intents and purposes you're looking at the back of the label and seeing Saccharomyces Boulardii.

And then category three are soil-based or spore forming, I'm sorry, with the category two there are just over 100 clinical trials looking at this category. And then in category three your soil-based or spore forming, and there are about 20 to 40 studies depending on the exact strain. So, I guess we could say about 40 total clinical studies looking at the soil-based probiotics. And these contain various bacillus types of probiotics, with bacillus subtilis, bacillus coagulans, bacillus licheniformis. And those are the three categories.

And what's helpful to understand is that some patients will use one category one formula, and maybe see not see significant improvement. And then, they say, "Well, that probiotic didn't fully do it, so let me try this different probiotic." They don't realize they're taking the same exact category, different label, slightly different marketed, maybe one or two strains are different. For all intents and purposes, it's Coke and it's Pepsi. Where there almost the same exact thing.

And they go, "Oh, well, I felt a little flicker, but nothing there." And then, eventually maybe the go onto a Paleo community blog and soil-based probiotics are really popular there. So, they go on a soil-based formula. And similar kind of thing, they see some benefit, but they may not see the full benefit that they're looking for.

And this is where I found using three probiotics at once to pull out the next visual aid here. In these cases, be the difference between having that one probiotic formula supporting balance, that's the one-legged stool. And that it does help to support balance, but it's wobbly. And what I've observed is that when we use all three together, we present a much more robust support to the gut, akin to having three legs supporting the stool. And that can be the difference between success and failure for some patients, or a minimal result and a much more remarkable result.

And so, what I recommend people do is find



a quality formula from each one of the three categories, and try them all at once. Or if you're sensitive and you're really reactive try them one at a time.

And part of the reason why we break them out into three different formulas, rather than all in one is in case you are someone – let's say just as an arbitrary example, Saccharomyces Boulardii doesn't sit well with your ecosystem and you have a negative reaction you leave that one to the side, and use a peg two probiotic approach instead. And that can be quite effective. And that can be the difference between success and failure for some people.

Now you want to look for a GMP or good manufacturing practices manufacturer. This will ensure that they follow high-quality assurance standards. And also, a company that tests for quality. There has been a few analyses done that have essentially found that about half of the probiotics on the market don't meet their label claim. They tell you it's 100 billion, and it's actually only got 20 billion. Or in some cases, even worse, the strain that is listed on the label isn't actually what's in the probiotic. When independently tested by a third party.

So, it's not to say the most expensive probiotic is the best, we don't want to fall into that canard either, but you do want to look for those quality assurance practices being in place. And once you've found a good company or companies then use one of each of these three different categories together, and give that a couple of weeks and you should really start noticing some movement of the needle.

Misty Williams: So, what's the difference between a prebiotic and a probiotic?

Dr. Michael Ruscio: Great question. A probiotic is actually the bacteria. A prebiotic are substrates that feed the bacteria.

Misty Williams: So, how do you typically recommend people incorporate pre and/or probiotics? Are prebiotics a part of the equation, typically?

Dr. Michael Ruscio: They are. Now, prebiotics can also help, and they can also lead many of the same benefits that that probiotics can. However, it does seem, and there is a fair amount of evidence to support this – that there's a decent distribution of adverse events in those who are using prebiotics. But it seems to be – this is my interpretation partially guided by what we see in the research literature. The more symptomatic someone is the more inflammation and imbalance they have in their gut, the more likely, not guaranteed, but the more likely they may be to have a negative reaction to a prebiotic.

So, what I recommend in *Healthy Gut, Healthy You* is to – well, there's kind of two general paths in *Healthy Gut, Healthy You* because the book protocol is personalized. So, if someone's really healthy they can try prebiotics early and they'll probably be okay. And that's a nice little support for them.

But if someone has quite a number of symptoms, we want to build up the health of their system and put off the prebiotic trial until later, because that increases the probability of benefit and decreases the probability of an adverse event.

Misty Williams: Right. Okay, makes perfect sense. So, can we get probiotics from food or do we have to supplement?

Dr. Michael Ruscio: And this is actually a really helpful table that our team and I put together recently to break this down. So, yes. The answer is yes, but the amount you get from foods doesn't really compare to the amount used in the clinical trials.

So, good practice to eat fermented foods, yes. Are



you likely to see the same benefit from a clinical trial using probiotics? Probably not. And if you look here, sauerkraut contains these following species at about three billion CFU per cup. Now, that is how much in one of our probiotics, the Lacto-Bifido blend. That's one-eighth of a capsule. So, a service a food equals one-eighth of a capsule.

Yogurt, you see about one-tenth of a capsule. Lacto-fermented pickles, .05 of a capsule, kefir one-tenth of a capsule, kimchi a half of a capsule. So, kimchi is probably the most dense.

So, yes you can get these things from food, and I think that's a good practice to adhere to dietarily. However, you may not be able to get over that initial balancing hump that you need to try to fight leaky gut, push out the unsavory players and get your gut back to balance. So, it's definitely a foundational piece, but you may need a little more oomph if you have some stubborn imbalances that need to be rectified.

Misty Williams: Yeah. So, I'm thinking about the people that are watching who've been dealing all sorts of sleep issues. Whether they're waking up in the night multiple times. Having trouble getting to sleep. Having trouble staying asleep. Some people will just spend the night awake, barely dozing off at all. Some people are waking up feeling like they'd been hit by a Mack truck.

When we talk about probiotics and improving our gut health who specifically could benefit from taking this approach?

Dr. Michael Ruscio: Yeah. So, this is another great question. And I'll do another screen share, because there's a summary from the research literature I want to present. So, this section here we see high level of scientific support for it, so this means there's a number of clinical trials and often times those clinical trials are summarize in a metanalysis.

So, we have high levels of support for those with IBS, gas, bloating diarrhea, constipation, abdominal pain, IBD, Crohn's, ulcerative colitis, mood imbalances, depression and anxiety, and gut microbiota imbalances, SIBO, H. pylori, candida, fungus, and pathogens. And also, leaky gut.

Now, there's limited but encouraging evidence for cognition, sleep, we cover those four sleep studies earlier, thyroid health. One exciting study actually found that a probiotic could reduce or stabilize the dose of levothyroxine that was needed. And this likely because most or the entirety of a thyroid medication is absorbed in the small intestine.

So, if we know that – it's kind of side note – those that have hypothyroid have a higher prevalence of SIBO. So, if know SIBO and hypothyroid kind of go together, and we know that SIBO affects the small intestine. And SIBO can cause metal absorption, and probiotics can combat SIBO, then follow this all of the way back if you combat SIBO, improve absorption, and then you may actually need less of a dose of your thyroid medication and/or have more consistent absorption on more consistent levels.

Female hormones, autoimmunity, metabolism, I should say with metabolism the impact is not statistical chance. So, it is significant, but it doesn't seem to be clinically meaningful. A couple points up blood pressure, a couple points low blood sugar, maybe one pound of weight loss. So, there is benefit, but it's so small that it's not really clinically meaningful in my opinion.

Brain fog, sleep is listed there twice. So, anyone with these conditions can use a probiotic. They've even been shown to be safe for infant, even preterm infants. A few studies have shown a reduction of necrotizing enterocolitis, so essentially bad inflammation that can lead to lack of circulation and death of intestinal tissue



in premature infants. So, there's definitely a body of evidence showing that almost anyone can benefit from a probiotic. Save one exception and that's those who are critical ill or severely amino compromised. Most likely, not going to be anyone reading this or hopefully not. And if they are, they'll be over that hump and at least somewhat amino stable, and then that will be a good point in time to consider using a probiotic.

But really, anyone can use a probiotic. And it's not to depict this as a panacea, but because probiotics improve one's gut health, and because that's such a central component of general health – it seems reasonable to recommend that people use a probiotic almost irrespective of their ailment objectively.

Don't placebo yourself into thinking it's going to help and then stay on a probiotic forever needlessly. You should be looking to do this a somewhat scientific way. Here are my symptoms, I'm going to start day one. A week later I'm going to reassess, a week later I'm going to reassess. Am I seeing consistent benefit from the probiotic? If so, keep going. But I would recommend using a probiotic until you kind of see a plateau. And then try to find the minimal effective dose over time.

But they're not going to help everyone, so also just because there's also all of this good evidence doesn't mean that you should just blindly go on a probiotic forever in spite of there being any evidence of support that they're actually helping.

Misty Williams: So, that was actually going to be my next question is how long should someone be on a probiotic? I was having a conversation with Dr. Michelle Sands privately, not related to this summit, where we were talking about gut health. And she works a lot with gut health in her practice as well. And she told that it's not uncommon for someone to do a gut healing protocol and over time, once they've kind of finished the protocol, over time their gut health tends to revert back

to what it was previously. So, my question as someone coming kind of from the patient perspective is should we completely stop doing probiotics?

Dr. Michael Ruscio: That's a great question. That's a very important question. And this is something that I really try to pay attention to in *Healthy Gut, Healthy You*, because it's one thing to get someone devoid of symptoms, it's another thing to keep them there in the long term.

And so, the general approach -- to kind give a 30,000-foot view – we use whatever supports are needed to get someone to a point where they have no symptoms.

And the first thing we try to do in this kind of weaning off and kind of get back to kind of a more normal life phase is expanding the diet. Because in my opinion I would rather have someone expand their diet first, even if that is fueled by probiotics allowing them to expand their diet. I'd rather get them to that normalcy first. It seems to be more important. Then try to find the minimal affective dose of the things in your plan.

But part of how you identify the minimal effective dose, is let's say you're not taking probiotics for a couple of weeks and whoa, I'm a little bit bloated, I'm a little bit constipated. And it may not go all the back to how bad it was before but you may see a drop. This is why I personally, I use all three of our probiotics every morning along with something called Gut Rebuild Nutrient, which is a glutamine, zinc, aloe, slippery elm kind of cocktail of gut support.

And I played with it and I noticed that I'm more impervious to eating out, bad food, if I didn't sleep well. So, I can get by just fine without them. But I notice I function better with them.

So, someone who is on the more severe end of the scale may notice they just maintain that



normalcy with these things rather than coming off of them. Everyone's going to be a little bit different in terms of how robust of a plan they need to support them in the long term. So, it's important that we try to do this objectively, aim for the minimal effective dose, but be okay with whatever your minimal effective dose is.

I don't beat myself up because I feel better on a probiotic. I feel fine about it. But it's important to identify that if one or two FODMAPs bother you, or you feel better on a probiotic in longer term, that's okay. We all have our differences. And usually if the whole approach is executed correctly, the maintenance plan is pretty darn doable. And as long as we're just objective and conservative, then we can get all of the gains without any of the fear or the dogma.

And I should also mention flare-ups and setbacks happen. And this has a tendency to really freak people out. In fact, we just released case study video with one of our patients in the clinic. Her name is Valarie. And she read *Healthy Gut, Healthy You*, and really saw some nice healing by going through it.

One of the things she said that was the most helpful for her was a narrative that explained that a) all of this in a non-fear-based way, but also b) that flare-ups and setbacks happen and that's okay. And in most of those cases we just return to what got us to our peak to begin with. And that usually gets us back to normal. And then, we go again into broadening the diet and reducing the supplements in our plan.

And the analogy I often use is if you either – let's say your sprained your ankle really bad, or let's say you sprained your knee really bad in college. You had to do some rest, some stretches, some stability exercises, and now no knee pain, great. But if you slack off for too long, if you're not moving, if you're sitting too much, you may get some knee pain back. And you go, "Oh, okay,

yeah, I got to do my stretches and exercises again." But you don't go, "Oh, my God, SIBO is back. The world's on fire."

So, we wouldn't do with a knee injury, we shouldn't do it with a gut flare. Because that fear doesn't help you, and most of the time you don't have to go back to a doctor, you don't have to do another test. I mean, again, be careful to follow your doctor's recommendations.

But you can return to the plan that got your health in the first place. Often times a shorter amount of time. And you'll get right back to square one and then again broaden your diet, try to find the minimal effective dose. And that's how you navigate the experience of being human and having some ups and downs. But it's really important to get that fear out of there, because that will make things far worse than they actually are.

Misty Williams: Yeah. That's really great. So, one of the things that's coming up for me – this is a little off script of what we talked about covering, but I feel like I have Dr. Michael Ruscio right here. We've been having lots of these conversations about parasites, and how to address parasites.

And you know there are people in our space who have beat their head against the door with their healing and when they finally went after parasites it was almost miraculous what happened for them.

I would love to get your take and perspective on how to approach going after parasites. Because in this summit, in particular, there's a lot of talk about how nocturnal parasites are, and how much they can contribute to keeping people up at night and that sort of thing. So, I'd love for you just to give kind of like the Ruscio perspective on parasites.

Dr. Michael Ruscio: Sure. All of the same rules



apply, really. Parasites and SIBO in my opinion are not vastly different. Or parasites and candida. To see long term resolution, it's very helpful to start with that foundation of up-building of the healthy gut ecosystem approach. And in *Healthy Gut*, *Healthy You*, I lay out those foundational aspects. Diet and lifestyle, then probiotics, and by the way the probiotic protocol is sometimes much more robust than what most people have done. So, that second step often times gets people to resolution.

But then we can actually go even further to antimicrobials, which work synergistically with the probiotic. So, if someone does have a parasite we know again, that probiotics are antiparasitic, so are the obviously herbal antiparasitic agents. So, if you're building on top of that foundation, this can make the execution of antimicrobials more effective.

And that is something legitimate. And there are some people that do have frank parasites and you do eradicate them, but the travesty of a mistake is when people fixate on, "It's H. pylori," or, "It's blasto." "It's yersinia." And they lose site of the more comprehensive approach to improve their gut health.

So, both, they are all important, but if you're just trying to kill stuff without trying to figure out what's the best diet for me or the best gut supports, then that tends to really lead to lack luster results.

Also, I think it's very important to mention that some people are chasing parasites because that's the only thing they find to blame. And my sneaky suspicion growing stronger every day is that in many of these patients, it's not actually a parasite. It's an [inaudible] in their immune system where they're immune system is too overzealous.

And so, they tend to react to everything in their gut, even their healthy commensal normal bacteria. And so, that's where immune therapies

like immunoglobulins can be helpful, because the person may have the microbiota okay, but the immune system that houses it is hyper-responsive and overzealous. And this can then lead this kind of crusade where we're always trying to kill the parasite. But again, the microbiota may be about as good as it's going to get.

The immune system is too overzealous and this is where changing our tact from all microbiota directed interventions instead to something that helps to quiet down the immune system can be the difference between success and failure.

So, parasites have a time and place, but also be careful not to make it this crusade against this one pathogen, because that can make one's vision too narrow and they can actually end up missing other therapies that could really help them.

Misty Williams: Yeah. One of the things I really appreciate about what you're saying here, that I hope resonates with a lot of people too in that they're also connecting the dots on this – is what you're saying about diet diversity.

Because what inevitably happens when we find ourselves getting sick is that we start with elimination diets, and we might do food sensitivity testing, and autoimmune testing and find out that we need to take all of these things out of our diet. And for a lot of people it can start to feel really overwhelming. You can almost just shut down just because your diet is so restrictive, like how am I going to live like this for the rest of my life?

And recently in our community Dr. Lauren Lax actually posted about this and she talked about how important it was to get to the point, do what you need to do to heal your gut and increase the good bacteria so that you can actually tolerate more foods.

And I really appreciate that this is something that you're saying too for those people who are



maybe overwhelmed by the restrictiveness of the diet because of the health situation they found themselves in – really taking some time to focus on improving the good bacteria in your gut. And improving your gut health is going to help you that much more quickly get to the point where you can tolerate more foods. Which is actually the best thing that you can do for your gut is to eat a really diverse diet. So, I really appreciate you bringing that point out as well.

Dr. Michael Ruscio: It's an incredibly important point. I just want to echo, that yes, the long-term objective is to broaden your diet. Now, people differ in how broad they can go, and that's okay. And we also don't want people to think because they don't ever tolerate certain carbs that there's something wrong or broke or they're doing irrevocable harm. But we do want to have that goal of eventually going as broad as given individual can.

Misty Williams: Yeah. That's awesome. All right, Dr. Ruscio if people want more information about you where can they find you online?

Dr. Michael Ruscio: drruscio.com, you can plug into pretty much everything I do there, including the book, which is called *Healthy Gut, Healthy You*. It's available on our website and also through Amazon.

Misty Williams: Yeah. So, I encourage everyone to get the book. It's a standard, I refer to it all of the time. We talk about it in the community all of the time, because it is you are unbelievably empowered as a patient with that book. I love it.

The gut health conversation especially is one,

from a patient perspective, and in this moment speaking as a patient is really overwhelming and intimidating. And lots of people go to practitioners hoping that someone's going to help with their gut health, and sometimes it's one step forward, two steps back. Sometimes the practitioner doesn't move the needle at all.

And there's really no reason for us, as patients, to spin our wheels like that not knowing if the person we're working with is really going to help. Is this how it should go, when we have such an amazing resource available to us.

So, I encourage all of you guys to get Dr. Ruscio's book. And if you love this interview and if you have questions for Dr. Ruscio, please on Instagram go find Rosie.Radio and look for his graphic and drop in your questions.

Next week, I'm going to be bringing many of our speakers back to have ask me anything's with those have participated in the summit. So, if you've got a question for him and you'd like to pick his brain a little more, go find his graphic over on my Instagram page. You can also go to the Healing Rosie Facebook group, look for Dr. Ruscio's graphic there and drop in your question, and I will do my best to get him back next week and answer all you all's questions.

So, thank you so much, Dr. Ruscio. This was brilliant. I appreciate it.

Dr. Michael Ruscio: Thank you, it's been a pleasure, thank you.

Misty Williams: All right. We'll see you guys.



GABA and Tryptophan for Anxiety and Insomnia

Trudy Scott, CN

Misty: Hey, everybody. Misty Williams here, your host for Your Best Sleep Ever and founder of Healing Rosie. And this next interview, I'm predicting it, it's going to blow your mind. Every single time I have a conversation with Trudy Scott, everything goes abuzz in the Healing Rosie community because she comes at the whole health conversation from a really different perspective that I think lots of us are going to be able to relate to.

And one of the things I often say when I'm interviewing Trudy is she really helped clue me in to how a lot of the ways I'm experiencing the world from an entrepreneurial perspective, as stress is really anxiety, and some of these other things that other people might use to describe their experiences of the world.

And I think it's a really important topic when we're talking about sleep, to talk about the emotional and mental side of the human experience and how that affects our sleep. And I know probably most of us have experiences sitting up at night with our minds racing or just ruminating because something has happened that day or there's a stressful event that's coming, or something has happened to us that's really rocked our world. And you know, sometimes maybe it's not even that big of a deal but we just can't shut our brain off. There's so much going on in our life that we find ourself in overdrive and we're so afraid of dropping the ball.

So I want to tell you a little bit about Trudy and then we're going to jump right in here. So, she is a food mood expert and nutritionist. Trudy educates anxious individuals about nutritional solutions for anxiety. She's known for her expertise in the use of targeted individual amino acids, offering hope and immediate relief from anxiety, so other underlying root causes and dietary changes can be addressed with ease. She also is known for her expertise around the social anxiety condition, pyroluria and the harmful effects of benzodi... I can't say it; you can tell us, Trudy.

She's the author of *The Antianxiety Food Solu*tion, how the foods you eat can help you calm your anxious mind, improve your mood, and end cravings, and the host of The Anti-Anxiety Summit and online educational platform for both consumers and health professionals, and dubbed a bouquet of hope. She educates health professionals via the Anxiety Nutrition Institute, sharing current research and practical how to steps. Welcome, Trudy.

Trudy: Thank you very much. And those are benzodiazepines, which are frequently prescribed for both anxiety and sleep issues, and we'll touch on that a little bit later. But really important to be talking about these other areas, so we don't have to use benzodiazepines, which have a whole host of issues. So thank you for that introduction and thank you for having me here today.



Misty: Yeah, well, I'm excited that you're here. And you always use a lot of big words that I can't pronounce. So this is probably going to be a common refrain of, "I can't quite say that." But this is such an important conversation because I'm sure there's lots of people who are watching us who are actually using pharmaceuticals to help them with their sleep. And I have friends who just swear that if it weren't for some pharmaceutical that they're taking, that they wouldn't be able to sleep at all.

And it seems like this is kind of this epidemic that we're experiencing now, right? With people feeling like they need some kind of prescription in order to sleep at night. And when you think about what sleep is, like, it's the most human part of our entire experience like all of life rests, and we have so much trouble sleeping. So why don't you just kind of like, introduce us. I know you have your own backstory with this whole topic. Why don't you introduce us into this whole dilemma that we're experiencing with our biochemistry and sleep?

Trudy: Yes, and so whatever the condition is, whether it's sleep or anxiety, or depression or low mood, or just feeling this overwhelm that you described, we always want to get to the root cause. And what I want to focus on today is talking about some of the neurotransmitter imbalances that can affect your sleep. Now, I work primarily with women with anxiety and sleep is a huge issue. And it's because some of the similar underlying causes like low GABA, low serotonin, or high cortisol can actually make you more anxious and can actually affect your sleep.

And you described it beautifully at the beginning there where you talked about ruminating thoughts, sort of reprocessing, rethinking, not being able to switch off that busy mind; that is a really common thing that we see going on. We also can be lying in bed stiff and tense, and just feeling like we've just got this physical tension in

our body, like our body is really, really stiff. That could be related to low GABA. That can cause anxiety, it can cause sleep issues. I want to just touch on the benzodiazepines here because I think this is a perfect lead into it. A lot of people are using benzodiazepines. And if anyone doesn't know what that is, it's Ativan, its Valium; Xanax, those are commonly prescribed for anxiety and for sleep.

And the problem with them is that they tolerance develop, so you need more and more, so you go higher and higher. Then you get to the point where they're just not working. And then if you want to try and stop, you can have really, really difficult withdrawal symptoms. So they are a class of medications that are supposed to be prescribed for two weeks maximum, in an acute situation, and people are prescribed them and just stay on them indefinitely. So it's a big issue. The other thing is that it may be prescribed for a dental procedure for pain, and then it starts to cause anxiety and it starts to cause insomnia. So it can actually start to make the symptoms even worse.

So, the reason I am just so excited about sharing the work that I do is because there's a better way and that's using targeted individual amino acids. And you know, this is part of my story, I got into this because of my own anxiety. I had anxiety, panic attacks, insomnia was part of my picture. So I've lived it. And I know there's a better way to do it. And these amino acids that we're going to talk about today and balancing our neurotransmitters are amazing because it's getting to the root cause and it's addressing that root cause. And it makes it simple and it makes it very effective.

Misty: So one of the things that I really love about your work is that you approach, I think, the whole idea of healing in a similar way that I do because I've been a patient and had a really big struggle with my own health. There's two aspects to healing, in my mind. The first is, how do we get



stabilized enough in our like broken, not perfect condition that we have the resources and the fortitude to be able to go after the root cause? And then of course, the other side of that coin is not being content just with temporary stabilizing, but really going deep after the root cause.

And I've heard people talk about how they want to deal with their anxiety issues or mood disorders, or depression, without anything. Like, "I want to figure out how to do this without anything." And women do the same thing when they're dealing with energy issues and weight issues. It's like, "I want to figure it out without taking any hormones." "You know, I just want to do it the natural way."

And the hard part about that for all of us really, is that once your body hits a point of degeneration, it's like this super slippery slope. When you're dealing with a lot of anxiety, perhaps or one of these other conditions and you're not getting the sleep at night, like your body's healing potential is severely compromised.

So, one of the things that is so intriguing to me about amino acid therapy is that there's a dimension of it that's intended to stabilize us right now. And I'd love for you just to talk a little bit more about that because part of your work is let's get stable and then the other part is going after the deeper stuff. Could you differentiate those two areas for us?

Trudy: Well, using the amino acids gives us that sense of ease, so then it's much easier to make the changes. And sometimes we've got to make bigger changes, like get off gluten or get an autoimmune paleo diet and those are big changes to make. Getting off coffee, I mean, we haven't even talked about coffee and that's a big, big factor with sleep. And for some people, just the thought of having to give up coffee is just too much. You know, "I can get off the sugar. I can get off the gluten but don't tell me I need to get off

the coffee." "My cold dead hand," yeah.

If you are feeling overwhelmed and stressed, and sometimes you feel like you're a perfectionist, you're not going to get anywhere. You're just going to be stuck. You're not going to be able to make any of those changes. So that's why I like using the amino acids. And when I keep talking about these amino acids, I'm talking about GABA for low GABA symptoms, I'm talking about tryptophan for low serotonin symptoms. And when they these are both low, it affects your sleep and it affects your mood, and it affects how overwhelmed you feel. So if we can get to the root cause, I think that is what we absolutely want to do.

But going back to your point about wanting to do it on your own, think about the glass being half full and having holes in the bottom. So whatever you're putting in there is just sort of dripping out the bottom. If you've got low GABA levels, you want to top up your GABA levels, so you want your level to be going up. But you also want to be plugging up those holes.

So using an amino acid supplement like GABA will top up those levels. And then in order to plug those holes at the bottom, so you're not leaking it out, so to speak, is addressing the gluten, addressing the stress levels, making sure you're getting out in nature, and all of these other things.

And addressing gut health and everything else that you're going to hear about on this summit, because there are many root causes for insomnia. But what the amino acids do is they give you quick relief. So now it's easier to make all those other changes. And they also give you hope because if you haven't slept for a long time, if you've been feeling this sort of overwhelm and anxiety for a long time, it's exhausting. It really is. But if you can get some immediate results, and it'll give you hope, and then it makes it easier to make all the other changes.



Misty: So, why don't you talk to us a little bit about GABA and tryptophan in particular? Because you just said that both of those things have a set of symptoms that go along with them that kind of indicate that those are the paths you might want to explore. Why don't you take us down those two roads?

Trudy: Okay, so if you have low GABA, you're going to have a set of symptoms. It will be the physical tension. So I described someone lying in bed, feeling very tight. So you may just feel like your shoulders are tight when you're lying in bed or when you're sitting during the day, and you've just got this physical tension.

And you can really feel it in your shoulders, you might feel it in your gut, you may feel like you've got this sort of feeling in the pit of your belly. The sleep problems are very commonly related to low GABA levels. The other thing that we see with low GABA is there's unwanted thoughts. And we always have associated the sort of ruminating thoughts with low serotonin but a recent study actually showed that low GABA can cause unwanted thoughts.

So if you've got these unwanted thoughts and you're just lying there, and you can't sleep, you want to be thinking about GABA levels. The other thing that we see with low GABA is this need to self-medicate in order to feel calm, and a lot of people will use alcohol. So they'll use wine at the end of the day. Come home, end of the day, totally stiff and tense, totally overwhelmed, and they've got to have a glass of wine. And then they have another glass of wine and then another glass, and that may lead to a whole bottle of wine in order to relax, and may lead to self-medicating with alcohol when they're out socializing.

And a lot of people will use alcohol or wine in order to sleep. They think, "Well, it's going to knock me out and then I'm going to sleep really well." There's a number of issues with using it for

this way. Firstly, we self-medicate, so we're using it like a drug. And it's helping us to sleep or feel better and we don't want to be doing that. We want to get to the root cause and GABA in this instance is one of the possible root causes.

But we do know that alcohol can actually make sleep worse and alcohol damages the gut lining. It has a huge impact on the gut lining. So it's actually causing leaky gut. It's causing nutritional deficiencies of some of the same nutrients, like zinc and vitamin B6, and magnesium; that we may need in order to make our neurotransmitters. So we don't want to be going that route.

So now, what do we do? We look at the symptoms, the low GABA symptoms, the physical anxiety, the insomnia, they're feeling really, really stiff, and the self-medicating. And we say, "Well, how do we score on a scale of 1 to 10?" 5 out of 10, 10 out of 10? And then use a trial of a GABA supplement, and see how it improves. And I do a trial and when I say a trial, we start on the lowest possible dose. We try it and we see how we feel. So, if someone is saying, "Well, I'm feeling very physically tense, and it's a 9 out of 10," use the GABA and we should see it go to maybe a 5 out of 10. That's a good sign. That means that we need the GABA to help raise our GABA levels.

And there's so much research on GABA that's coming out now, Misty, it's pretty amazing. Research on using GABA alone, GABA and theanine. Theanine is another amino acid that helps to raise GABA levels; so, using those in conjunction. Using GABA and 5-HTP, and we'll talk about 5-HTP and tryptophan in a bit when we talk about low serotonin. But this combination of using these amino acids or using them individually is amazing for getting results. And the important thing is to use them in a targeted, individual way.

So I see a lot of people in your community saying, "Oh, GABA was amazing for me, it really helped me sleep," and everyone thinks, "Oh, it's going



to work for me." You need to figure out if your issue is a low GABA issue. And if it is, then do the trial. And then figure out the amount that's going to work for you because what might work for somebody else may not be the right amount for you. You may need a very small amount, you may need a higher amount; you may need just GABA on its own. Or you may need the combination of maybe GABA and theanine in order to sleep. So I'm going to pause there for a second and see if you've got any questions and then I'll go on to the low serotonin type of sleep issues that we see.

Misty: Yeah, keep going because I'm going to have questions at the end but we're going to compare these a little bit to each other.

Trudy: Okay. So the low GABA is the physical tension. With the low serotonin, it's the busy mind. You mentioned that earlier; that you just lie there and you can't switch your mind off. You can't stop thinking about things. You're reprocessing, you're ruminating. So, together with those type of symptoms, with low serotonin, we have the insomnia. So that's a classic with low serotonin and the reason being is that serotonin is converted to melatonin, which then helps us sleep. So you've got to have enough serotonin in order to produce enough melatonin.

The other symptoms that we see with low serotonin are the afternoon and the evening cravings. So you may use sugar or carbs later on in the afternoon or the evening in order to self-medicate, in order to feel happier. And some people feel like it helps them sleep as well. We also see PMS, any kind of hormonal imbalances, perimenopausal symptoms, irritability, anger issues, the low mood, the winter blues, the perfectionism, the negative self-talk, the imposter syndrome, "Who am I to be doing this?" These are all classic signs of low serotonin. So if you have all of those signs and you also have insomnia that could be a clue that you need to look at your serotonin levels.

And again, I'll have my clients look at the questionnaire, rate their symptoms on a scale of 1 to 10, and then we'll do a trial. And the amino acids that we use for low serotonin are tryptophan, it's one of them, and then the other one is 5-HTP. I mentioned there's some studies showing that GABA in conjunction with 5-HTP has been shown to help with insomnia. And by the same token, GABA with tryptophan could help. And it's very common to have both low GABA and low serotonin. So, using both GABA and tryptophan or GABA and 5-HTP makes total sense.

What I do say is when I'm doing a trial with one of my clients, and if you're going to do this on your own, make sure that you do one at a time because then you're going to know, "When I take the GABA, this is how it makes me feel. When I take the tryptophan," or the 5-HTP, "this is how it makes me feel," because if you do them both at once, you're not going to know which is working.

The other reason why we want to do them one at a time is we start at the lowest dose and then we increase. So maybe we start at 500 milligrams of tryptophan at night. And wow, it's helping us sleep but it's not quite enough. So then a week later, we might go to 1,000 milligrams and yes, we're sleeping a little bit better but it's not quite enough. Then we might increase to 1,500 milligrams. So we slowly but surely go up and up, and up until we find what's going to work for us. And this is where this term, targeted individual amino acids come in.

And then what's going to happen is that boosting our serotonin is not going to provide enough for making melatonin. And if we're not quite getting the results that we would expect by boosting serotonin in this way, then we may add in melatonin. And I can talk about melatonin in a second and how we would do that, but that's where I start with my clients.

And I'm primarily working with people with



anxiety but keep in mind, they've also got insomnia as well. If you don't resonate with the term anxiety, as you said, Misty, when we first connected, you just didn't resonate with the term anxiety, that's fine. But if you have got insomnia, it's really worth investigating whether low GABA could be one of the root causes or low serotonin, or a combination of both.

Misty: So if someone is experiencing a lot of external stress in their life, and or there's a lot of hidden internal stressors in their life. How is that going to affect their need for GABA or tryptophan? Is there a connection there?

Trudy: There absolutely is because stress depletes us of nutrients. And in the introduction, you actually mentioned pyroluria, which is one of the conditions that I work with, which is a social anxiety condition. And with pyroluria and the social anxiety condition, you prefer interactions with one to one conversations, rather than being in big groups. You may resonate with being an introvert, you have this morning nausea and you get like joint pains and aches. Not wanting breakfast first thing in the morning, [inaudible].

Now with this condition, if you are under a lot of stress, you actually dump really high levels of zinc and B6. So the two nutrients that really help with the social anxiety condition, together with a number of others, are zinc and vitamin B6. Now these two nutrients are needed to make GABA and are needed to make serotonin. So if you happen to also have pyroluria, and in my community of anxious women, I would say 80% possibly have pyroluria or have a high need for zinc and vitamin B6.

And both these nutrients are commonly deficient, certainly zinc is depleted by sugar, depleted by caffeine, depleted by stress, depleted by exercise as well. And often low in our diet. So, yes, outside stressors, internal stressors, can definitely have an impact on lowering some of those raw

materials that we need in order to make GABA and serotonin.

Misty: So what you're saying right now is I'm connecting to the interview that we're doing at this event, with Dr. Dan Pompa, where he often talks about upstream stressors. But in my own experience, I've had a few of those upstream stressors in my own life.

Number one, I remember in, I think, 2013 or so, I had mercury fillings improperly drilled from my mouth. So I have like this heavy metal toxicity. I did not connect the dots on that until 2018. So I knew that something happened because I gained 45 pounds in like four months. This was after I had just radically cleaned up my lifestyle. So this was out of the blue and totally unexpected.

And I found out last year that I had an infected root canal in my mouth. And there's a whole lot of other things that can be stressors that we don't even know we're dealing with. And I'm just connecting the dots here a little bit in my own mind, on this connection that these stressors could have to our need or our opportunity to benefit from amino acids.

I'm thinking of some phases that I went through in my own healing journey where sleep was really elusive. I could go to sleep but I couldn't stay asleep, for example. I would constantly wake up in the night and not be able to get back to sleep. Or I've gone through phases where I couldn't get to sleep and I wish I would have known.

But there's a few things, if you find yourself experiencing that, I just want to invite you to consider the fact that there could be some upstream stressors that you can deal with that can be helpful. And in the meantime, oh, my gosh, Trudy, what you're sharing here is like a lifeline for so many people who are really depleted and don't have the tools to do something about it today, so that they could start getting their sleep back.



Trudy: Yeah, it really is amazing. And that's why I call them the amazing amino acids because they're giving you that relief. They're giving you that respite. They're giving you hope. And now you can think, "Ah, okay, now I can deal with all the other things." And we don't want to just do this, we've got to look at the diet, we've got to look at the upstream things. Like if you've got a root canal or you've got some kind of infection or you've been on a benzodiazepine, that's going to have impacts but it's going to give you that respite. So now you've got the wherewithal to say, "Okay, phew, now I can start to deal with it," and then you're sleeping better. Which is great. It really is.

I wanted to touch on something where you said you would maybe fall asleep and then you'd wake up in the night. Now that can happen with both low GABA and with low serotonin. And I mentioned how we want to go up and up, and up until we find the ideal amount. What you can do until you're finding that right amount, is if you wake in the night you could take a little bit of GABA, if low GABA is your issue. You can also take a little bit of tryptophan in the middle of the night if low serotonin is the issue. Now, if those aren't the root causes, they're not going to help, but it's a way to try to see if they are going to help.

What we really want to do is get to the point where we're not waking in the night. And the way to do that is to find the ideal amount to take before bed and then that should take you through the night. Now there's many reasons why we might wake in the night, parasites can definitely cause us to wake in the night, so we do have to deal with that. But getting that right amount of the GABA or the tryptophan is going to start to fix that as well. Then the other thing I mentioned when I was talking about low serotonin is this fact that it converts to melatonin and helps us sleep.

So I'll always start... you know, I'll have someone do the questionnaire. We'll see that they've got

these low serotonin symptoms, the ruminating thoughts, the worry, the sleep problems, the sugar and the carb cravings, the PMS, irritability, and we'll say, "Okay, let's have you start with tryptophan." We'll do a trial.

And keep in mind when I'm doing the trial, I'm having my clients open up the capsule, and putting it on their tongue because that is the most effective way to determine very quickly if it's going to work. So I'll always start with tryptophan. If that doesn't work will then switch to 5-HTP. And keep in mind 5-HTP can raise cortisol and high cortisol can be a trigger for insomnia.

So if you do know you have high cortisol, I would definitely start with tryptophan. But if we're not getting the results with maybe the tryptophan or the 5-HTP, or we're getting some results but not quite enough to help us stay asleep, that's when I would add in melatonin because maybe the body's not converting serotonin into melatonin in the most effective way.

So we'll start with a sublingual melatonin at bedtime to help you fall asleep. So if falling asleep is a problem then the sublingual melatonin is the way to do it. If you are still waking in the night, then I'd use a time release melatonin because what that's going to do, it's going to release the melatonin slowly over the next few hours and that can help people stay asleep.

And melatonin is amazing. I know it's had a little bit of a bad rap. I'm sure you've got other speakers talking about this on the summit. But a lot of people are a little bit concerned about taking melatonin long term and that's gone out the window. We know now that melatonin acts like an antioxidant, it's used very effectively in cancer treatment.

And if you have low levels of melatonin, why not use melatonin to up those levels so you are going to sleep? And interestingly enough I love to



always share the research. But there was a really interesting study that talked about melatonin for sleep disturbance, after a traumatic brain injury.

So if you've had a concussion or you've banged your head, maybe snowboarding, adding in the melatonin can help with that sleep, and it can help to start to heal some of that traumatic brain injury. And in the same study, they found that it actually eased anxiety as well. So it's helping to raise the melatonin levels. It's helping to sleep. It's starting to heal from a TBI and it's also helping to ease some of their anxiety. So I'm a big fan of melatonin.

Misty: Yeah. So, talk to us about any dangers that might be associated with taking 5-HTP or tryptophan or GABA, or even melatonin. Is there anything people should be aware of? Is there dangers to taking these things long term? Can some people have a certain kind of reaction that they should be aware of, just in case?

Trudy: I'm not concerned about melatonin, as I just said; so I'm fine with melatonin. With tryptophan or 5-HTP, there we do need to be aware that there is this contraindication if you are taking an SSRI, so a selective serotonin reuptake inhibitor, which is one of the classic antidepressants. There is a potential for serotonin syndrome.

So if I'm working with someone who's currently on an antidepressant, I will have them talk to their doctor about adding in tryptophan or 5-HTP. So the doctor can monitor. And I'll only work with someone in adding in tryptophan or 5-HTP if they're on one SSRI. If they're on multiple issues SSRIs, then we don't even add in tryptophan or 5-HTP. There's just too much of a potential issue with serotonin syndrome.

And then if they are using their SSRI at night, we'll get permission from the doctor to switch it to the morning because we want to use tryptophan or

5-HTP mid afternoon and evening because that's when serotonin starts to take a dip. So, getting permission from the doctor, moving the SSRI to the morning, and then doing it six hours away from the SSRI.

So if they're doing the SSRI in the morning, they could potentially use their first dose of tryptophan at 3:00pm, which is perfect. But as far as the benzodiazepines and using GABA or the SSRIs, I have not seen any research to say that benzodiazepines and GABA are a problem. And I have not seen any issues with any clients as well. So GABA can be used safely with a benzodiazepine and tryptophan can also safely be used with benzodiazepines.

Misty: So if you're going to use any of those, GABA, tryptophan, 5-HTP, or melatonin, are you...? My assumption... we've started talking about this; because we're talking about doing this for bed and sleep, my assumption was you would take these things at night. But then you just kind of threw in that afternoon thing. So I want to get clarity from you. Is there a timing recommendation of when we take these supplements?

Trudy: Yes, and it depends on when you have symptoms. So let's go to the low GABA. So if you wake in the morning and you've got physical tension and you have tension throughout the day, and then you also have tension at night, you could take GABA throughout the day. So the dosing is between meals, away from protein, GABA first thing in the morning, mid-morning, mid-afternoon, and then at bedtime. Maybe you need just a small amount throughout the day, of the GABA, and then you need a higher amount at night to help you sleep. So this is where the trials come in.

So you start at the lowest dose and with GABA, we want to start low, 125 milligrams. A lot of people will run out and buy 500 milligrams or 750 milligrams of GABA and that's way too high for the



average person. You may build up to that amount, certainly at night, but to start off in the day, 125 milligrams. And for GABA, sublingual is the best to take across the board, always. Not just during the trial but just always take GABA sublingually, it gives you the best results. So, GABA throughout the day. If you're finding its making you too sleepy in the day or too relaxed, a lot of people don't need to... you know, they don't worry about feeling too relaxed. "Yay, I feel relaxed," it's not often an issue I see.

But if you take too much it can make you feel too sleepy and too high a GABA amount can actually give you a niacin type flush. So if that's happened to you and it's put you off, definitely consider starting again with a very low amount. As far as supporting serotonin, the ideal timing is mid afternoon and evening.

And why we do mid-afternoon is because as I said, serotonin starts to take a dip at that time, and we want to start getting the body to start making enough. So we would do mid-afternoon dose, 500 milligrams is a typical starting dose for tryptophan. 50 milligrams as the starting dose for 5-HTP. And then also at night.

And you may end up with 50 milligrams of 5-HTP in the afternoon and 100 or 150 milligrams at night but start low, and then build up. And you may find that you need to increase it in the afternoon as well or you may just need to increase it in the evening, if sleep is an issue.

Now, some people need serotonin support earlier in the day, it's not very common but it does happen. And if that's the case, we may add in 5-HTP earlier in the day and then have tryptophan in the afternoon and the evening. So there's no sort of strict protocol. There's these guidelines that we follow, but it's a matter of trial and error to figure out what's going to work for you. But that's a really great point.

And all of them are taken away from a protein containing meal because otherwise, it's going to compete for absorption with the other amino acids in that meal. Now, 5-HTP is a little bit different. 5-HTP can actually be taken with protein but it just gets confusing, so I usually just say take it in between meals and that's the easiest way for folks to remember.

And it may sound complex and it may sound like, "Oh my gosh, I'm going to be taking supplements four or five times a day," but I found that my clients are so willing to do this because they feel so good. You know, they just feel so great and it's not a chore because you're getting this immediate feedback. You're getting these immediate results.

You know, if you stop you're going to feel the anxiety come back, you're going to feel the tension come back, those ruminating thoughts are going to come back, the sleep is going to get bad, and then you just add it back in again. With the amino acids, there's no taper protocol to get off of them. Now, some of my clients will just say, "You know, I went on holiday and I forgot to take my aminos and I did great." Okay, great.

Now it looks like you've repleted your levels. Or maybe they say, "I am going on holiday. Do I need to use these four or five times a day?" and we decide, "Okay, maybe try two a day and twice a day, and see how you feel." So that's a great thing. There's no taper protocol and there's no side effects while you are tapering.

Misty: So you said something that was pretty intriguing, actually, in another interview I did with you, and then you mentioned it again. And I just want to draw a little bit of attention to it because my partner has that restless body. He really can't get comfortable at night, some nights. And I've actually heard other friends talk about that. And I wouldn't think of that as being connected to anxiety or connected to a mood anything, an emotional anything.



But the way that you talk about them and link them together, I'm seeing that there's something going on physically that maybe looks a little different than something that we're feeling, but it can be treated similarly. So I'd love for you just to take a minute to unpack that a little bit more for those people who find that they just are really restless at night when they sleep. It's not necessarily their mind ruminating but their bodies just can't get comfortable or settle down.

Trudy: When I hear that it's not the mind but it's the body, I straightaway go to GABA. I would just tease that out. And you're right, some people may not say that, "I've got this. I'm not anxious. It's not anxiety. It's just this restlessness." So I would definitely look at that.

But then if it is, there's other causes of that. Certainly low magnesium can cause that. Low iron can cause that, like restless legs; so, if you actually have that restless kind of feeling. Food sensitivities could cause that. High cortisol, we've talked about high cortisol a little bit here, but if you've got high cortisol that can make you feel a little bit edgy and restless.

So I would start with GABA. And the reason I start with GABA and tryptophan is because you're getting quick results. So it's easy to say, "Yes, it is that, let's deal with it," or, "No, rule it out, it's not that. Now we can go and dig a little bit deeper." So I start with those initially when I'm working with someone. And the other thing that can cause that sort of restlessness is low blood sugar and there's an amino acid that helps with low blood sugar.

And if you've got low blood sugar, that can cause insomnia. It can cause you to not be able to sleep or it can cause you to wake in the night. Glutamine is amazing for both healing the gut and also stabilizing that blood sugar, while you're addressing everything else. So that restlessness, it's not clear what it could be but those are the sorts of things that I'd start looking at.

Misty: Awesome. So you've given me a total brain gasm again. Every conversation, this is so good, I'm just envisioning people listening to this and feeling like, "Oh my gosh, there's something I can do right now, immediately, to help with this situation. To help with what I'm experiencing." And your work is so important. It's so unique. I don't know of anyone else in our space that was having this conversation on an ongoing basis like you are and I love it, and I appreciate you for it. So why don't you tell people where they could find you online, if they want to learn more?

Trudy: Well, thank you for that lovely ending. And it's an absolute pleasure to always talk with you. And I love that you're sharing this with so many people and I look forward to the rest of the summit. I know you're just going to bring together so many amazing resources. If folks want to learn more about me, my book, *The Antianxiety Food Solution* is a great resource. There's a whole chapter in there on the amino acids, together with all the other things like gluten issues, making dietary changes, getting off caffeine. We didn't talk about that one enough but it's a big one when it comes to insomnia.

I've got a home study program for people who reading a book isn't enough and they want that guidance to walk them through how to make these things changes. And then I also teach practitioners through the Anxiety Nutrition Institute. And I'm really wanting to teach more and more practitioners how to use the amino acids because they are so powerful in helping your clients and helping your patients.

Misty: Thank you so much, Trudy. I appreciate it.

Trudy: Thanks. Thanks, Misty.

Misty: We'll see you guys.



