

# ADDICTION

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## SUMMIT



### **Functional Approach to Addiction**

Guest: Dr. John Dempster

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**Dr. Paul Thomas:** Welcome to this final edition of The Addiction Summit. I'm Dr. Paul, your host. It is a real pleasure and privilege to introduce to you Dr. John Dempster. He's a naturopathic and functional medicine physician from Toronto, Ontario. He is an expert on mental wellness. He has run two summits on that topic. He runs the Healthy Gut Institute and a number of other areas where I see you have amazing expertise that should help us wrap up this summit.

Those of you who have stuck with us for the entire 28 interviews, you're aware, we've heard from people who've gone through horrific child abuse and come out the other end beautiful and healed and helping others. We've gone through stories of parents who, themselves, have had to kind of deal with their children's addiction. One mom, as you know, lost her daughter to addiction and yet has turned this into something so positive. We've heard from addiction specialists. We've heard from doctors and authors and experts talking about all the various areas of addiction, mindfulness, other ways of healing.

And as we come to the final episode, we're really fortunate to have Dr. Dempster, because, as a functional physician, he knows about dealing with root causes. And I thought we would try to tie it all together. And I think you're going to like this final episode. Don't miss a word of this.

Dr. Dempster, what are we going to cover today? I'm going to give folks a quick overview and then we'll just dive in. This would be sort of addressing addiction

upstream of functional approach is kind of what you wanted to cover. And I think that's perfect for the talk. We're going to cover nutrition, sleep, exercise, and how these set the stage for proper addiction treatment.

But also, you have a lot of expertise in the gut axis, the HPA, adrenals, testosterone, hormones, individualizing care, and then the mental health piece, which has not been dealt with extensively during this summit. So I'd like you to touch on that as well.

So, welcome again to The Addiction Summit. And tell us, perhaps start off with a little bit of your background and what got you into medicine and functional medicine. And set the stage for you to be able to help us here.

**Dr. John Dempster:** Well, thanks. Thanks, Dr. Paul. It's great to be here. And thanks for everything you're doing with this summit. This is a very powerful and timely event. So it's great to be on this and sharing any wisdom and pearls that I've learned along the way. And that's really, where I'd like to begin is, as you say, how did I get into this?

And I was heading to the traditional medicine route for a very long time. And a number of people potentially tuning in today have heard my story already. But I'll be brief in the sense that I had an awakening. And that was going through—prior to med school and even thinking about it, I was always interested in heading into medicine according to my folks.

So anyways, I went through losing a couple of very close relatives, close family members to chronic illness. And it really started to open my eyes up to, wow, they went through the standard course of care, and they didn't come out very well at the end of it. And I don't say that to be disrespectful to any allopathic physician who's practicing at all. There's a massive time and a place for allopathic medicine. But what I witnessed was not very favorable for my two uncles. And that was the beginning, basically, of how I ended up into this.

I asked a lot of questions along my journey as I was applying to the regular medical schools about the power of nutrition and how much curriculum was involved with that.

And you're nodding your head over there, Dr. Paul, I know you've been through those questions yourself.

**Dr. Thomas:** Yeah.

**Dr. Dempster:** I didn't quite get too much on the other end of the phone when I was asking those questions. So a long story short and a number of inspirational stories along the way that I won't get into right now, but I ended

up becoming a naturopathic doctor and then did a board-certified fellowship in functional medicine. Because my real passion and the reason why my patients come to see me from around the world is that I love helping people get to the root cause.

And for, really, everyone, they have their own magical algorithm. They have their own magical pieces that need to be put together whether I'm dealing with somebody who's addicted to opiates or opioids or somebody who's dealing with, as you say, gut issues, that are chronic that they fall into the cracks in the allopathic realm or any other realm, or somebody who's dealing with any form of chronic illness. My goal and my real passion is to help them get to the root of their issues.

And so, what we do at my clinic here in Toronto is we take a functional medicine approach, as you mentioned. Meaning, that we run a number of tests to help patients get some clarity and gather some data. And then still, at the end of the day, we have to put it together in a very logical and common sense approach. And that's really I think why we're talking today is because I want to bring this together and potentially share some of the pearls that I've learned and been taught along the way, most importantly, from wonderful people that you're probably familiar with as well.

But it's all about treating the person. And Dr. Paul, that's really what I love about this type of medicine. So I'll just have to leave it at that. But let's dive into it. Which direction do you want to get into right off the hook?

**Dr. Thomas:** So I'm watching this summit, and I keep hearing about getting to the root cause. I'm liking the sound of that. Each person is definitely individual. But I think as you've approached folks who are struggling with chronic conditions, there's probably some areas you can just sort of dive in, and we got to deal with this, this, this, this, and this.

And maybe that would be a good place to start for people just to sort of, "Alright, I'm going to at least start this journey and get healthy, where do I start?"

**Dr. Dempster:** Sure. And I think we should just touch on quickly and you probably have in your other talks, but the addiction issue is massive. And I'm in Canada. You're in the States. There are no borders that separate addiction right now. This is something that is a crisis globally. And I'm sure you've been through a number of statistics and I don't need to repeat those for your listeners right now. But it is staggering. It's just something that I—

**Dr. Thomas:** I was just at a conference. And in Canada, in BC, British Columbia, there was a poster presentation. They had had a thousand opioid deaths in one month. That is nuts. Where in the US, we're having death every 7 to 8 minutes. More deaths from the entire Vietnam War. More deaths in one year. And more deaths than all the other big ones: Homicide, suicide, motor vehicle accidents combined. So absolutely, the crisis is huge.

And what we're trying to do with this summit is empower individuals. Because, unfortunately, the system—sure, if you are a daily opioid addict and you use large amounts, you need to see an addiction specialist so they can help you wean off for sure.

But to heal, you need the kind of thing that Dr. Dempster here is about to share with you because it's so much more than just getting off your substance. We've got to start healing on all levels.

**Dr. Dempster:** And that's what we talk about. We have patients that come in, and they're receiving their care. They're getting weaned off. They're getting the support of counseling that's so, so important. And what we do is we try to establish a foundation. I try to establish a jump board for them that can allow them to spring to the next level of healing. And where is a better place to start than in the gut?

And the gut right now is such a fascinating—well, not right now at all. It's been fascinating forever. But we're even learning now more than ever how powerful your gut collectively is. And some of you may be very familiar with a book called *The Second Brain*. Well, the second brain, I always joke, is actually this one. But technically, it's still our gut. Our first brain is still here. But there is so much nervous tissue that is in our gut. It's called the enteric nervous system. And there is so much other amazing biochemistry going on in there that really influences this neurological and neuroendocrine behavior.

So when we're talking addiction, Dr. Paul, we're talking about lots of different factors. But one of the big ones has to do with neurotransmitters. And neurotransmitters, right now, we're seeing in the studies, are between 50% and 90% produced in the gut. If we're talking serotonin or dopamine, there's a variation there. And that's why the wide range. So what can we do to help some of our patients who, again, we just want to create a little bit more momentum so that they have a better result when they're going through whether it's their methadone clinics or whatever else they're dealing with, they're giving their body more of an impetus to heal.

And a lot of our patients and, actually, it's really interesting in the research right now, we're seeing that the gut is comprised, as we've seen all over the

media, of what's called the microbiome. And the microbiome is a collection of your microorganisms. And this includes our good and our bad bacteria: Yeast, parasites. But what we are seeing—and this was Nobel Prize worthy research in the last few years—is that we have collectively more genetic material that is bacterial in nature than human by a ratio of 100:1. And this is incredible. If you actually think about this for a moment, that means that we are actually more genetically bacterial than we are human.

Now, I say that just to set a foundation here is that what we do to our bacteria in our gut is going to affect and impact everything in our body. And if we are talking about neurotransmitters and we're talking about a keyword called inflammation, which is also involved with addiction, and we're talking about absorption, etcetera, these are things that I look at as real root cause resolution targets for my patients.

And so the studies right now are very clear. And we're growing still, weekly, monthly, right now, in the momentum of this data that's being collected. But the studies are very clear that when you start to create an imbalance in your microbiota or in your microbiome, we are going to see deleterious effects down the road. And that, right now—and you're nodding your head, Dr. Paul—as I know you've seen this potentially clinically, is that this can have a huge impact on the rate of recovery and even just the level of recovery of the patient.

**Dr. Thomas:** Yeah. So if you're born by C-section, you miss the vaginal flora, which is your inoculation of good bacteria from birth. If you get antibiotics, it messes up your gut. If you're drinking water with chlorine, it messes up your gut. If you're eating food with glyphosate and pesticides, herbicides, it messes up your gut. So let's say for the most of us, we've got messed up guts.

**Dr. Dempster:** Which is a fair assessment.

**Dr. Thomas:** Now what, right? Now what?

**Dr. Dempster:** Right. And that's a fair assessment. And obviously we objectify these with some of the testing we do with our patients so that we can actually see what it's going to take and how aggressive or integrated our program needs to be.

But now what? Well, we want to basically heal and seal. And I've created an online program right now basically for people around the world that I can't see in person. And our first step is literally heal and seal.

And that means that we want to take any of these microscopic holes. Now, if anyone here listening is familiar with leaky gut, bear with me. But if this is a new term, this is something that does impact anyone dealing with addiction and, virtually, any chronic condition that we know right now.

And so if we envision our gut as a very, very, I would say, almost like a piece of plumbing. And we don't want it to have any leaks in it. But if we start to form little microscopic holes, this is where the term leaky gut comes from. It's where things get into our bloodstream that should not be happening. What this does is this creates a lot of inflammation. This creates secondary nutrient deficiencies. And we'll touch on that in a moment because some of these nutrients are absolutely critical in the formation of these neurotransmitters that I've mentioned earlier.

And so how do we heal it? Well, as you said, we've got to remove. Let's watch out for things that are containing antibiotics. Let's watch out for a lot of our prescription medications. And I'm not even referring to the ones that we're talking about in terms of addiction right now. I'm talking about Lipitor and all sorts of different statin medications, NSAIDs. Go through the PPIs. These are all sorts of medications that we're seeing documented to have an impact on the gut lining. So we want to make sure that we're removing some of these assaulting agents.

And then one of my favorite ways to start to heal the gut is through something—well, we have actually a trifecta way of dealing with this. But one of them is actually using collagen, glutamine, and quercetin. And these are things that we can find in a lot of different foods.

And there's been a lot of buzz lately, Dr. Paul, about bone broth, and I'm still a big fan of it. And just something that everyone listening right now, no matter what budget you're on, you can make bone broth for pennies. And if you even suspect that you have leaky gut, then I would encourage you to start treating bone broth like it's your new tea. Sip it. Sip it out of a cup. Have two to three cups daily.

And if your budget allows and you're able to work with a functionally-minded physician, really start to explore some of the key nutrients that will start to heal the gut. But if you want to again to start off with some good general basics: L-glutamine, collagen, quercetin, these are some very commonly found nutrients at health food stores and high-end pharmacies. So that's a great place to start.

**Dr. Thomas:** That's a great tip. I'll sometimes show people my two fists as cells lining the intestinal wall. And if they're inflamed, there's a gap. And that's

that leak. And so toxins are entering your—your immune system is going nuts and there's your inflammation. And so, that's a great tip for healing. The bone broth would have the collagen in it and then you're just going to pick up some glutamine and some quercetin.

**Dr. Dempster:** Yeah. And if you're really interested in getting the objective data, if you're somebody potentially like myself, I love to see the proof. We hear a lot about, "Oh, I have leaky gut," or "I have intestinal permeability." I say, prove it. I'm a natural skeptic.

So if you are wanting to work with somebody, there are two very powerful tests that you can utilize. One is called the zonulin test, and this can be done via blood or fecal matter. You can also use what's called a lactulose mannitol challenge. And again, ask your functional medicine physician for those tests, and they'll be able to help really truly identify if you're dealing with leaky gut.

**Dr. Thomas:** Yeah. Super. So you're watching this. You've got a clue as to a way to start healing your gut. Dr. Dempster, you mentioned neurotransmitters. So I know my neurotransmitters are not working well. I've got mood disorders. I'm often anxious or depressed. I'm speaking for our audience here. I'm personally blessed with crazy amounts of dopamine or something because I'm always happy. But for a lot of people, they struggle with anxiety, depression, mood stuff. And I think there's a neurotransmitter issue right. And there's the gut-brain axis. There's the dopamine-serotonin in the gut. It's also in the brain. How do they get a handle on healing that part of their endocrine hormone system?

**Dr. Dempster:** Sure. Well, as we know there's the HPA axis, as you mentioned, but there's the gut-brain axis. And not to beleaguer the point, but this is why it's so imperative to get that gut working better. Your gut is where you absorb key co-factors to produce these neurotransmitters. And there's something that is found commonly in high-protein rich foods called amino acids. And these amino acids are the building blocks for a lot of these neurotransmitters. And just to name a few: Serotonin, GABA, dopamine. These are some of the real powerful ones that are connected to addiction. We've also got norepinephrine and epinephrine as well. We'll get into some of the other hormones per se.

But these are all essential molecules that send all sorts of signals throughout our body that control cravings, impulses, and mood swings. And as I said earlier, a large significant part of these neurotransmitters are produced in the gut.

Going back a moment, if we have intestinal permeability, we are already at—we're not anywhere close to at par for the way that we should be absorbing these nutrients from our foods or supplements. And so that's why it's so imperative to get that going. Because if we're behind the eight ball—and now, again, as I run some tests to measure these neurotransmitters and even some of the nutrients that are responsible for these neurotransmitters, we see a huge correlation between people with these gut issues. And we have to make sure that that's fixed before we start to implement that.

So back up to where we are now, is I want to make sure that my patients have the right amount of nutrients in their body. And again, if you don't have the ability to work with a functional medicine doctor, that's okay. There's so much that you can do starting today.

I don't know about you, Dr. Paul. But most of the patients that I work with who are dealing with addictions of any nature are not eating very well. They're waking up in the morning, they're having that donut and that double double. And that is a huge—that's a drug. We can talk about sugar all day long in a whole other conversation. But that is already starting to influence their neurotransmitters and their neuroendocrine pathways.

And so one of the first things that anyone listening right now can do is, please, make sure that we start to take the time and the care into planning your meals. If you don't plan, you're planning to fail. And that's something that we've got to set out for. And one of the ways to plan for this, everyone, is to make sure that you've got some very high-quality proteins and fats at the ready.

And we are in a wonderful age right now where we have what I call the information generation. I can't take credit for that, sorry. But that is something that we can quickly get online and there's Google what recipes are healthy and high in protein and healthy fats. And then you can have all sorts of foods to choose from.

But these proteins are going to slow down some of these inflammatory responses that happen when you have that donut and that double double coffee. And I'm not against coffee per se, but it's what we put in the coffee that can often be very, very inflammatory. So literally, eating breakfast, getting a nice quality meal into your system to start your day, sets your whole day up ahead.

And of course, there are some very specific nutrients we can talk about to bring in to assist somebody dealing with different addictions. But that is so simple. And that is something that a lot of people don't do.

**Dr. Thomas:** Yeah. So, folks, the precursors, the building blocks of your serotonin, your dopamine, and your epinephrine, norepinephrine, these important neurotransmitters, are the amino acids that Dr. Dempster was talking about. When I get patients who come to me from a treatment center—and I'm not trying to knock treatment centers here because they're lifesaving for other people.

**Dr. Dempster:** Absolutely.

**Dr. Thomas:** But I'll get patients come to me for outpatient work and they're on six or seven pharmaceutical medications. Two or three of them are reuptake inhibitors of serotonin, for example. So these folks have these guts that you're talking about, right, that aren't working well. They're not making enough serotonin in this example. And they're given a medication just to sort of hammering away at their serotonin, but they can't make enough.

So you need tryptophan as an amino acid example. You need tyrosine to make more dopamine. And you want to get as much of this from real food. This is the healthy protein you were talking about, right?

**Dr. Dempster:** Correct. And that's so, so important. I love that you said tryptophan. Another one of my favorites is serine and tyrosine. And these are huge to help people just get some critical co-factors. We tend to see a lot of tyrosine deficiencies in those who are addicted especially to opioids and helping people just fill that void very quickly.

There are some other very key nutrients that you probably discussed, Dr. Paul. But the B spectrum is so important: B6, B1, of course, B12. But not every B12 is the same, really focus on your methylating nutrients and Methylcobalamin would be one of my favorites out of that. And then of course, you've got to talk about magnesium. Magnesium is such a critical thing.

You want a couple key takeaways here. Anyone listening right now should safely be able to take magnesium. And again, always consult with your practitioner before you start taking any of these things. But magnesium is the most commonly deficient nutrient in mankind. It is responsible for 300 biochemical reactions every single second in every cell of your body. And we deplete it very quickly with chronic stress, with the way we eat, and the medications that we're taking. So these are things that go a long way when it comes to really starting to reroute a lot of these neurotransmitters in our body.

**Dr. Thomas:** Yeah, that's a really good point. It has not been stressed much in this summit. So thank you for reminding us about magnesium. Do you happen to have a preferred—magnesium comes in different ways, right?

**Dr. Dempster:** Yeah, absolutely.

**Dr. Thomas:** Do you have any recommendations for what type of magnesium?

**Dr. Dempster:** Well, the first and the best is to get any. Now, when I say, if we have a choice then we look for a glycinate. And glycinate is something that is going to be the highest rate of absorbability. And there are other forms. There are citrates. And if you take too much citrate, you'll notice that—probably the worst thing that'll happen to you is that you'll get a lot of diarrhea.

And so don't be scared of this. Again, do make sure if you are on any medications to run this past your primary caregiver. But magnesium is very safe. And again, take it responsibly, and you will start to see a difference.

**Dr. Thomas:** Yeah. Dose ranges that you've used comfortably?

**Dr. Dempster:** Sure. So for magnesium, especially, this is something that is a bit of a range here. I would always start off with 200 mg, and you could do that a couple of times a day. And I'm talking for people who are already dealing with addiction and have a history of pharmaceuticals whether they're prescription or a non-prescription based. That's a great place to start. You can go as high as 1,200. But again, I would start to titer it up and make sure that you're not just going to suddenly overwhelm your system and create an osmotic effect that can be a bit uncomfortable.

**Dr. Thomas:** Yeah, diarrhea, folks. So magnesium is calming. And you brought up an excellent point that we're depleting it because of the stressed out lives we live among other things. In addiction—I have an opiate clinic where I'm treating folks who have an opiate problem, almost, to a person, universally, they struggle with restless legs. And I found that just addressing the magnesium issue often will resolve that problem.

**Dr. Dempster:** Again, it's about putting the connections together, right, Dr. Paul?

**Dr. Thomas:** Yeah, absolutely.

**Dr. Dempster:** We have to make sure that we get away from the myopic vision of just treating what we may think as the addiction up here. We have to look at the whole person.

And when you get clues like restless legs and anxiety and other clues that we pick up when we do a thorough intake, you can really start to put the puzzle together and look upstream.

**Dr. Thomas:** Yeah. Perhaps, you could segue into the mental health realm just for a little bit because I know you did a couple summits on this. So you are certainly an expert. As it relates to addiction or just in general, what kind of functional medicine approaches and tips would you have for our viewers?

**Dr. Dempster:** So thank you. Yeah, I've co-hosted two summits called the Mental Wellness Summit and then Mental Wellness Summit 2.0. And we'll have the links available to everyone listening if they want to go and learn more about some of the world-class speakers we interviewed. And my partners and I, we've been very fortunate to interview, much like yourself, some amazing experts.

This is a journey. And at the end of the day, a lot of what we can do starts with very simple changes. And as you said at the very beginning, it's all about eating right. It's about sleeping right. It's about de-stressing. Those are some of the very key things. And it's about moving.

And we've got to make sure, if we don't look at those four, I call them those four legs on your table. If you start chopping off a leg on your table, well slowly and surely, that table is going to fall over. And it doesn't matter how much of that fancy supplement you're buying or how good you are with the latest diet trend that's out there right now or the medication you're taking. You still have to have four legs on the floor to support a properly functioning table.

So, you know what, it may not sound profound. But after interviewing over 60 experts that are world leaders in anxiety, depression, bipolar, schizophrenia, and addiction, it all comes back to those four key things. And we're talking about a couple of them already.

And I say, one of the best therapies for everyone—and I learned this, I was very fortunate to learn this at Harvard—is that you can literally start to reduce the impact of stress in somebody by doing 10 deep breaths every hour. This is—thank you—and that's as easy as it gets, guys. Everyone says, oh, should I like put one finger in my ear and plug a nose? No. It literally is 10 deep breaths every hour reduces the impact of stress on your body by up to 40%.

Now, there's not a drug or a nutrient or a diet that does that. And that's something that does not cost a penny. You can take it with you anywhere. And one of my personal favorites is it doesn't cost me any time. And so my busiest

executives—and I love this because they can sit in their board meetings or on their conference calls and work on their personal self-care. And if you, literally, if everyone who's listening right now, would start to do this, after the third breath, you're going to feel a sense of warmth start to come down and into your abdomen area. And that's going to start to signal a lesser secretion of cortisol, which is something that we're going to segue into here, is the HPA axis. This is something that is massive for addiction. And we are seeing this in the papers right now.

So, maybe we should dive into that right now, huh?

**Dr. Thomas:** Let's do that. Because I am finding in my patients—I'm also a busy pediatrician—and I'm seeing teenagers coming in every day depressed, anxious, stressed out. And a lot of times it's screens. They're spending so much time just on screens that I'm sure they're just messing up their HPA axis and their cortisol. So I think it's a huge factor. But do take us there. Let's talk about cortisol and stress and the HPA axis.

**Dr. Dempster:** Well, first thing I always state is that we actually need some cortisol, and we need some stress to survive. Our objective is not a zero-sum game here right now. But it is about looking at what your personal boundaries are and understanding what we can do to get—what we can get away with and what we can't.

Now, there are different types of stress and this is something that, again, I'm not sure if you've touched on this in the other lectures, I'll keep it brief. But we have something called eustress, which is spelled E-U-stress. And then something called distress. And I always think of eustress as where you are right now, in Hawaii, and potentially in a hammock.

**Dr. Thomas:** Good stress.

**Dr. Dempster:** And then of course we have the distress, which I equate to you're out in the ocean in Hawaii. And suddenly there's a shark right beside you. So there are two different types of stress, and we actually need both to survive. The problem with the distress is that it far outweighs, in terms of a ratio, how much that versus the eustress we're getting for most of us. And we are all meant to, as I said, get some form of this danger stress as we'll call it, at some points in our life. But we are meant to have a huge recovery period right after.

And so there's a great book out there called, *Why Zebras Don't Get Ulcers*. And everyone should pick that up if they get a chance. But spoiler alert, what happens is that zebras, when they're out and they're grazing and a lion or

whatever the predator of the day is comes after them, there's a serious foot race. And that foot race is usually done in about a minute we see. And literally, anywhere between 60 and 90 seconds after this foot race, if the zebra survived, it is lucky to survive. It's kind of rattled for that first minute and a half, and then literally starts to go back to eating grass and chilling out again.

But what do we do as humans? All day long, we're sitting in traffic. We're worried about our job. We have a boss that we don't like. We have, potentially, issues at home or financial stressors. These lions and these predators are after us all day long. We get that massive hit of cortisol that is literally your fight-or-flight hormone and helps us stay alive for the moment. But we don't have a recovery period like the zebra gets. We go right into the next one. We've got deadlines. We are standing up at our desk eating our lunch. We don't sit down. We don't take the time to go and have a workout. We don't meditate. We don't do yoga.

And then of course we look at that thing at the end of the day that we take for granted called sleep. And we say, "Oh, you know what? I don't need an extra two hours of sleep tonight, I'll push through."

These are all some of the collective distressors that hit us on a daily level. And if we want to talk about addiction, we've got to come all the way back to, how did we end up potentially even becoming addicted?

Now, some people, this is obviously a much bigger story, but helping your body from a real root level is really how we handle stress. And that 10 deep breaths is something that I find very profound and there's obviously many—I would say, more sophisticated techniques that we can discuss potentially. But that's something everyone listening here right now can take away.

**Dr. Thomas:** Yeah. Dr. Dempster, thank you for that. You're listening. If you were like me, alcohol was my issue until I kicked that 15 years ago. But I remember being a year sober, I've said this before, wondering why did I become alcoholic. And it's been clear listening to all the experts on this summit that it was the stress issue, this dis-stress. I was in so much stress that I reached for it for relief. And it worked at first. And you'll hear this. If you're addicted to anything, it worked at first, right.

**Dr. Dempster:** Absolutely.

**Dr. Thomas:** It provided you some relief. But then it's not the appropriate response to the stress that you're under. The appropriate response is, as you're starting to talk about, sleep, rest, deep breaths, other more healthy ways of dealing with that stress or dis-stress.

**Dr. Dempster:** Absolutely. And the other big one is exercise. And there's circling all the way back to our neurotransmitters. You want to increase your dopamine and your serotonin and create a balanced state of GABA in your body? You've got to get off your butt. And I don't say this lightly, I say this to help save lives. This is something that if you're going to take control of your health right now, you've got to get moving.

And that doesn't mean a fancy gym membership. That can literally mean just going for a walk. And we didn't have gyms at the ready as we do now. A hundred years ago, they didn't exist. But we had, as we're seeing in the studies right now, a lot less obesity and a lot less fitness-related health issues.

And even comes to our mental health and any form of addiction, you've got to use that as your medicine. And that's got to be one of the first things that if you aren't moving every single day, getting a sweat on at least four days a week over 30 minutes, that's something that you need to work up to. And if you're not physically capable of doing that, again, make sure you work with some professionals to help you do what's within your limits. But even going out today and going for a walk, 100 feet down the block and back, is going to be an improvement if you're not doing that.

And this is going to start to send all sorts of downstream signals to every organ in your body and really start to create a balanced, much more healable state.

**Dr. Thomas:** Yeah. No, that's so important. Folks, just a year ago, I couldn't jog. I was that out of shape. And I've just been doing what you're talking about, Dr. Dempster, getting out there, doing it. I actually joined a CrossFit gym. That has just helped me because it was the camaraderie of doing all that stuff.

And then this just improves, feel better, and that's that eustress I think you're talking about. If you take muscle groups, you take your body and you do nothing, it gets no stress, no healthy stress, so it just sort of—I mean, you put a limb in a cast, and it will just shrivel up because we need to be moving. We need to be using our muscles and our body. So, yes, get moving. Thank you for that important tip.

**Dr. Dempster:** And on that note, this is something that is also huge tying back into our HPA axis is the whole idea, you just reminded me when you were talking about muscles and a lot of issues that happen with muscles is hormonal imbalances, too. And what we're seeing in the studies is men, traditionally, have lower—people who are addicted, males rather who are addicted have much lower levels of testosterone and other androgens. And this

is something, again, that we measure in our clinic to make sure that we're helping optimize these with somebody.

And if there's a way to improve their endocrine pathways and their endocrine levels, that's something that we also strive to do. But it begins at the gut. And we have to get those, again, baseline levels set so that we can move to that next level.

I always equate it to building a house. When you're staring at that hole in the ground, you can't put a roof on it yet. You've got to lay the cement. You've got to let it dry. You've got to put the first floor on, second floor, and then third floor if you're lucky. And then put the roof on top of that. We don't just go straight for the top. You've got to get some of these key concepts in place so that we can start to get that momentum and get that downstream effect.

And that's why, again coming back to our hormones, it is important that we balance them. But if you can get everything else working leading up to that, it becomes much more efficient.

**Dr. Thomas:** Yeah. That was a very good point. In my addiction clinic, I have usually anywhere from 60 to 100 opioid addicts whom I'm treating. And the guys, the men, their testosterone, it's a rare patient who has a low normal testosterone. The rest of them are so low, they're in the female range or lower. I mean, some of these poor guys, they've lost all desire for sex. In some cases, they can't even function. It's that low. And that's that huge stress, I think, that helps do that.

I'd be interested in, since you practiced functional medicine—I write prescriptions for testosterone because I can get them feeling well right away. But some of our viewers may not have access to that right away. Are there any natural things that people can do to help boost their testosterone in the case of a guy? But even ladies, if you're doing it naturally I'm sure it's fine.

**Dr. Dempster:** And there are. And again, as I said, we run some pretty in-depth labs. In fact, our hormonal panel that we run is an eight-page report. And it's a urine test. And it's something that's going to give us not only the information on the hormones themselves but also all the co-factors. And this is how we really start to create a complete program for somebody. But yeah, to your point, Dr. Paul, there are a number of things that you can do. And I always, again, preface this. Make sure that you are working with somebody who's measuring these levels so that you know what to take and what not to take safely.

But when it comes to some of the other natural ways to boost testosterone, one of my favorites, if we ever need to start somewhere is Tribulus. And there are all sorts of different products that contain this extract, this botanical extract called Tribulus.

One of the things that we will do on top of that is we'll look at bio-identicals and these are other ways, and I don't know if you prescribe those in your practice or if you do the HRT version, Dr. Paul, but these are another—they're deemed natural approach to help somebody boost their natural testosterone levels. But it's so important to remember that what is the backbone of our androgens? And that is something called our adrenal gland. And we have two of them. And our adrenal glands are the stress glands.

So again, coming full circle here, we have to make sure that we're supporting them and supporting their function. And so there's urine test that we run among some others will help really let us understand not only about testosterone and androgens but about the adrenal hormones that are really going to give us that backbone, something called DHEA. It's so important and so critical.

And there's a number of different herbs and botanicals you can look at. Ashwagandha. There are different ginsengs. These are a number of different nutrients including the B12 and Methylcobalamin that I mentioned earlier. Zinc is critical for testosterone production as well as a number of the B vitamins. And these are some things, again, that are very commonly depleted in those dealing with addiction who have abused their bodies and their nutrient pool, so to speak.

**Dr. Thomas:** Yeah. Viewers, you're getting an idea of the importance of seeing a functional medicine physician. You really need to deal with all those root causes and treat those nutrient deficiencies. And so, you have a very comprehensive approach. I do prefer that approach as opposed to just giving pharmaceuticals. Absolutely, you want to heal the body as naturally as possible.

**Dr. Dempster:** But it's so important to integrate both, Dr. Paul. And we're in a time right now in medicine that we're finally bringing the teams together. And we have a long way to go yet. And I am so passionate about this integrative approach. I don't think it's going to be an either/or camp going for it as it has been traditionally. Oh, I can't see my medical doctor. I'm seeing my naturopathic doctor or my functional medicine doctor. They don't get along. Now that's changing.

And in my fellowship right now, 80% of my fellows are medical doctors. And we have great camaraderie. We have great discussions. In my opinion, that integrated approach is the medicine of the future. We do have to bring it together. We all have things that we're good at. And we all have things that we need to do better and if we come together, the patients will benefit in the best way possible.

**Dr. Thomas:** Yeah, absolutely. Where would you say a person should go to—this might be a hard question to answer because it's so regional or town specific, but how does one go about finding the type of doctor who we're sort of talking about?

**Dr. Dempster:** Well, that's a great question. And I can give you some resources just right now. There are two accredited board certifications for functional medicine globally right now. One is called A4M, and I believe the website is a4m.com. It might be .org, forgive me. But I think it's a4m.com. What you can do is you get on there, and you can type in your city that you're looking for and they will give you a list of the accredited physicians that have gone through a proper board certification.

The other one is called IFM which stands for Institute of Functional Medicine. And so these are two of the best. And in my opinion, the only board certifications that I want you to be looking at when it comes to functional medicine. So any docs who have got their accreditation there will be listed on either of those websites.

Another simple way is Google "functional medicine" and then your city. But at that point, you don't know who's board certified. And it's not that you need to work with somebody who's board certified. But that is how you will be able to work with somebody who's very experienced when you find that.

**Dr. Thomas:** Yup, super. That's very helpful. I happen to not be board certified in either of those two. I did get an integrative medicine certification.

**Dr. Dempster:** Awesome.

**Dr. Thomas:** And I've been doing this sort of work for about 10, 15 years. But it's a learning curve when you come from my background, which was just the traditional Dartmouth Medical School and you come to realize that you're trained by the pharmaceutical companies. I used to deny it. But, man, it's true. Your standard MD these days, for the most part, learns how to diagnose and treat. And it's so weird because the first two years of medical school, it's all basic science, and you're learning how diseases develop. And then you just sort of toss that out the window and start learning what to prescribe.

**Dr. Dempster:** That's what I have heard, Dr. Paul. And again, you know what, as you know, some of these are very lifesaving therapies in a very—

**Dr. Thomas:** Yeah. Absolutely.

**Dr. Dempster:** Acute crisis.

**Dr. Thomas:** Acute care, yeah.

**Dr. Dempster:** Awesome. But what we're seeing is problems with a lot of the chronicities right now and a lot of the chronic issues, whether it's addiction, autoimmune disease, and a lot of the other degenerative conditions.

**Dr. Thomas:** Yeah. So we've been summing up for our viewers the sort of physical aspects that are so important. Do you have any thoughts or wisdom you'd like to impart on sort of the emotional, spiritual side, because addiction oftentimes takes its toll on that level?

**Dr. Dempster:** I think that is really the basis of so much of health in general, health and illness in general, is if we—I think the research is quite clear on this here. If we have negative outset, if we don't have faith, we are already at—we're behind the eight ball. And so it doesn't matter what denomination of religion you are or faith, but we are seeing very clearly in the research that those who believe in a higher power per se and pray regularly, these are people that are going to have a better outcome. And again, it doesn't matter to me which religion my patient has.

Now religion and spirituality are two very different things. But when we're talking religion right now, that's obviously one aspect of it, but spirituality, getting out there and connecting with—I would say most important suggestion is connect with nature. Again, that may sound very basic right now.

But that, to me, is a core of my spirituality. And if I'm not getting out and getting connected and getting connected with my like-minded folks, that kills me. And I can really feel it. And I really feel it when I re-immense myself and reconnect with my spiritual side.

And that's, again, a very personal thing for people. I can't sit here and preach what exactly that is. That's something that if you're questioning it, it's something that's part of your discovery and part of your journey ahead of you. But we are seeing very clearly that those who are connected spiritually and have faith do much better.

**Dr. Thomas:** Yeah. We've had a couple sessions in this summit on mindfulness and meditation. So those sessions would be helpful in this area. I like the suggestion to get out in nature.

**Dr. Dempster:** It's so important.

**Dr. Thomas:** If you live in a city and it's just really difficult, look for a park at least where there are some trees, something to get out of the concrete jungle for a moment. And it does wonders for the soul. It really does.

**Dr. Dempster:** And it does wonders for the soul, and it does wonders for your physiology that we are seeing as well. There is something that if we can immerse ourselves near what I call negative ions (and these are things that are found on the dew of wet grass, out in the rainforest, pounding surf) these are molecules that literally start to recharge and revive us.

And again, there are ways to do that when you live in an urban setting. I live in an urban setting with my family. We make a point to get out into the local parks if we are here during the weekends. We try to get out of the city on the weekends as much as we can.

But there are ways to do this. If you still feel like you're trapped in the concrete jungle, there are things that you can do to get out into a green space. One of my favorites, for those who live in urban environments, is to get up early and to go and hit your local park and make sure it's safe but walk barefoot on the dew on the grass. And that is a form of grounding and that is something that does start to reconnect us electrically and biochemically back to nature.

And we are electrical beings. We are energetic beings. We have to make sure that all this electrical smog that we're surrounding ourselves in that we neutralize that as best as we can while still experiencing the wonders of technology, which would not allow us to have the summit if we didn't have it.

**Dr. Thomas:** That's right. Now, when I get out in the ocean frequently I just feel better. I know it has to do with some of that healing energy for sure. This is important, folks. And we're covering a lot of little things. But they're huge. This is sort of the essence of healing. And when you're in the midst of a huge addiction—if it's opiates, alcohol, meth, something that just has your body wrecked, you've got to deal with that first. But, as fast as you can, start implementing all the things that Dr. Dempster here is talking about because you're not going to have lasting wellness and vibrant health without it.

**Dr. Dempster:** Absolutely.

**Dr. Thomas:** Yeah.

**Dr. Dempster:** And you're right, Dr. Paul, this was a bit of a rapid fire session, I would say, skimming along the surface on a number of topics right now, which is, I think the purpose of this interview, I think, which will be helpful is just to allow people to become aware that there are options out there, and there are some other avenues to support your care no matter what you're currently doing.

And for those in my clinic and I've been doing this for over 12 years now, the ones that embrace the holistic approach tend to do the best. And that's with anything from addiction that we're talking about today all the way down to a lot of the chronic degenerative conditions that are plaguing us right now as well.

And so do what you can. It's not about being perfect but it's about making progress. And that's something that's—don't put that pressure on yourself to do absolutely everything. Do what you can and just keep putting that foot forward. And I really think that that is something that's served a lot of people well for all walks of life.

**Dr. Thomas:** Yeah, absolutely. It's a journey, folks. We're all on this journey of life where we've fallen off the right course perhaps, either in our nutrition, in our thinking. We're overexposed to toxins or we've just plain old fallen into an addiction, whether it's food or other substance or behavioral addiction. The road back is right here before us, right? This summit is outlining all the various things that you can and should start doing. And just chip away at it, right, chip away at it.

What other suggestions might you have for our viewers? I know, like you said, we're sort of big overview. This is our final interview. And so we get to kind of do the overview/wrap-up and throw in pearls. Do you have any other thoughts or wisdom you'd like to impart?

**Dr. Dempster:** Well, I think we've touched on a lot of the key points. And we can obviously go in much more depth in these in potentially some other interviews, Dr. Paul. And I think the best thing right now is to start to explore what resonates with you. If you do have a history of being quite toxic, get those out of your system. Make sure that your body is being fed clean, real, whole food. Again, that does not include a donut or a double double. Again, no strikes against coffee. But these are things that if we can just start to eat right, think right, sleep right—and something else that we didn't touch on too much, but poop right is the other thing.

We want to make sure we're eliminating. And maybe we'll end it on that note, no pun intended. But we want to make sure that we are not holding onto toxic material that creates and really exacerbates an already inflamed environment. And so make sure that you are eliminating well. And just for the record, anything less than two bowel movements a day is technically constipation. A lot of my patients think, "Oh, I'm regular."

In fact, one of my favorites was my first patient in my career 12 years ago came to me and said—and I asked him and I was being a very diligent, just fresh grad, going through my questionnaire. And I was like, "Okay, Mr. Jones, tell me about your bowel movements." He's like, Oh, they're normal, regular." I'm like, "Great." So I check off regular, and I moved on down. And something just kind of twanged. And I came back. And I said, "What do you mean regular? What is that to you?" "Oh, once every two weeks. What do you mean?" And I was like, "Okay, let's talk about this for a moment."

But if we're not evacuating regular bowel movements then we are going to be holding on to toxic and inflammatory-based waste in our body that's only going to perpetuate addiction and, again, a lot of other chronic issues right now. So that's the one area we didn't really touch on too much in detail. But make sure you are eating and cleaning your bowels accordingly.

**Dr. Thomas:** So I have to ask you since you brought it up. Let's say I am constipated. My bowel movements are infrequent, every few days, and they're often hard. What natural things can I do to turn that around?

**Dr. Dempster:** Well, there are a couple of things. And one of the best things that anyone can do is to make sure that they're putting in the good probiotics, the good flora into their body. And interesting you bring that up, Dr. Paul, and I know we're almost winding down there, but I'm going to dive into another area here very quickly. We're seeing right now, especially those who are addicted to alcohol, that there are certain types of bacteria that are commonly found in people who are addicted to alcohol. We'll just use that as an example. And there are certain types of bacteria that people are very low-end who are addicted to other medications.

So if we can start to bring in some of the beneficial flora and stop feeding the negative flora, that's going to do, not only amazing things from an inflammatory perspective and a bowel clearance perspective, but it actually starts to create this environment, coming all the way back to our neurotransmitters, that is going to be more optimal for those with addiction. And the one bacteria that is really, really powerful that is a beneficial flora that's found in people or actually rather helps people improve when they're dealing with addiction is something called *Faecalibacterium prausnitzii*.

And I had to read that because I always mispronounce that. But that is such an important bacterial strain that we're seeing in the literature right now that we want to make sure that we're building up. But a lot of the different probiotics that are available right now you want to be really careful with. There was a recent study that showed about 80% of them actually don't have what they say on the label because they're not produced right or not packaged right, or they're actually being destroyed by our stomach acids on their way through before they actually hit our bowel.

So we really do want to make sure that we're getting high quality supplements. And that goes across the board. Make sure that you do invest in good quality things. The bottom line is you pay for what you get.

**Dr. Thomas:** Yeah. And fermented foods, I think, can help.

**Dr. Dempster:** Wonderful. Fermented foods, back to the constipation concept, that's a wonderful way. It's usually very fiber-rich when we're dealing with sauerkrauts and kimchis. But hydration is so critical. If you're not drinking at least two and a half to three liters of water a day, you're going to upset a lot of the basic and very important systems in your body that will help you heal faster.

So stay away from the refined carbs that are going to gum up and jam up your bowels. Make sure that you're being very careful with gluten. Gluten is something that's a much bigger topic but something that really does act as a neuroendocrine disruptor, which again comes all the way back to everything we're talking about today. But especially the really refined flours that we're seeing in Wonder Bread for example, that forms a gum and a paste that really slows down transit time in your bowels. And those little things can be very powerful when you take them out.

**Dr. Thomas:** Yeah. I found in my patients, dairy is very constipating as well, especially cheese.

**Dr. Dempster:** Pasteurized dairy, especially. That's something—it's critical. If you are noticing that, then remove that. Anything that your body doesn't like in terms of how you respond, that's your first clue. There are wonderful tools and tests that can get much more specific information on the hidden sensitivities that can cause constipation. But if you know and a lot of us do see this, like yourself, Dr. Paul, dairy and gluten, those are big no-nos when it comes to getting your bowels going.

**Dr. Thomas:** Yeah. And it really messes up your gut-brain axis for many people.

**Dr. Dempster:** That's right.

**Dr. Thomas:** So that's often a first step when you go to real food, just cut out the dairy, gluten, and highly processed foods. You're eating real, free-range meat, if you can, fish, fruits, vegetables, organic if at all possible because you just don't want the glyphosate and several other speakers have spoken to that topic.

Well, I think we should probably let our viewers off the hook. You guys, this has been the most amazing summit. If you've missed some of the sessions, please get a hold of the whole summit if you can because a lot of them you're going to want to watch over and over again.

Dr. Dempster, I can't thank you enough for being gracious to sort of wrap it up with me. And you did a really fine job of covering all those basic essentials. I know you do a lot of very detailed, individual work with patients. How do patients get a hold of you? I think you alluded to an online option for people?

**Dr. Dempster:** There's a couple ways. If you're looking to get some more information, you can jump on my clinic website, which is [thedempsterclinic.com](http://thedempsterclinic.com), [www.thedempsterclinic.com](http://www.thedempsterclinic.com). You can also check out something called The Healthy Gut Institute, which is something that we are going to be launching our program in the coming months.

And as I mentioned earlier, our Mental Wellness Summits, if you're interested in exploring more experts in that area that are going to give you a plethora of information, you can check that out.

**Dr. Thomas:** Fantastic. Well, I want to thank you for sharing your wisdom and amazing knowledge with our viewers. And to all our viewers, thanks for participating in The Addiction Summit. I've been your host, Dr. Paul.