

# **Cold Exposure, Breathwork and Mindset Training**

## **Guest: Dr Miles Nichols**

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#### [00:00:09] Meagen Gibson

Welcome to this interview. I'm Meagen Gibson, your conference co-host. Today I'm speaking with Dr Miles Nichols, a functional medicine doctor specializing in a mind-body approach to Lyme, mold illness, gut, thyroid, and autoimmunity. After Dr Miles personally struggled with chronic fatigue in his early 20s, he dedicated himself to figure out the root causes.

He suffered with, and recovered from thyroid dysfunction, autoimmunity, a gut infection, Lyme co-infections, and mold illness. Dr Miles is a certified Wim Hof Method instructor, has been teaching meditation for well over a decade, and has certifications in multiple systems of breathwork and somatic therapy. Dr Miles Nichols, thank you so much for being with us today.

#### **Dr Miles Nichols**

Thank you so much for having me.

#### **Meagen Gibson**

I want to start right out of the gate by talking to you about the Wim Hof Method, which I've been hoping to interview someone about for a while because it's become very popular. So for those who have never heard of it, what is the Wim Hof method?

#### **Dr Miles Nichols**

Well, Wim Hof is a person, and the method is something that that person, Wim Hof, has developed. And Wim Hof... As just a little short background, most people probably have heard of him, so I don't really need to give him much of an introduction. But he holds multiple world records. He's done very interesting things in his life, and he's worked with celebrities. He's worked with thousands, hundreds, millions, millions of people have ascribed to his method. And he's worked directly taking people with chronic illnesses up Kilimanjaro to very, very high elevations. He's gone up to beyond the death zone on Mount Everest wearing very little clothing. He does a lot of cold exposure, breathwork, and mindset. And so his methodology is three pillars, and those three pillars are breathwork, mindset, and cold exposure.

### [00:02:18] Meagen Gibson

I think so many people think of, and even me, I'm guilty of this. When we think of him, we think of just the cold exposure part. But of course, the breathwork and the mindset parts of that go hand-in-hand, because there's absolutely no way that you can do extreme cold temperatures without those two things. I would love to hear how you came upon this methodology, what inspired you about it, and why you decided to incorporate it into the way that you treat patients and also address trauma?

#### **Dr Miles Nichols**

I've been, for more than a decade, studying meditation, mindfulness techniques, practices, and different breath practices. So I already had a good foundation of those. And then I saw a study, and that study really piqued my interest. It was called an endotoxin study. What endotoxins are, they're these toxic by-products of bacteria. So in the case of this study, it was actually E. Coli bacteria, bacteria you might find in your gut normally, but what they did is they heat-killed it, so it's dead. They put it into solution and then they injected it directly into the vein.

So they did an IV and put it into the vein. Now, they've done this on over 1000 people, and they get very sick very quickly because in the cell wall of that E. Coli bacteria, is something called lipopolysaccharide, or LPS. Now, we've known a long time about LPS in medicine, and as a functional medicine provider, I knew a lot about LPS in relation to gut dysfunction, leaky gut, and other problems with neuroinflammation. And I knew brain problems and neuroinflammation went hand in hand. I had seen a lot of research on depression and anxiety with neuroinflammation, and that endotoxin may be a trigger for neuroinflammation.

So when I saw a study with endotoxin in it, I said, "Oh, what's this?" And what it was, there was this guy, Wim Hof, who was doing this breathing technique after having done some cold training, and he didn't have the same response that everyone else did. He didn't get sick, he didn't have any symptoms from this endotoxin. I thought, "Whoa, no symptoms from endotoxin." This could be important, this could be helpful for mental illness, this could be helpful for physical illness, this could be really important for a lot of my patient population, for a lot of people in the world.

When I read further, what happened was he was able to reduce his inflammatory markers, cut them essentially in half, and increase his anti-inflammatory marker and increase his adrenaline temporarily to stave off this inflammatory toxin response and to have no symptom as a result. And I thought, this is incredible, but I also thought it's strange. Increasing adrenaline, is that good? Is that not good? And reducing inflammation, that seems good, but that's in response to a toxin. What if there's no toxin? Left a lot of questions open for me.

But then there was a follow up study that took... He trained a bunch of people. So he took a dozen people, he trained them. I think ten completed the follow up study, because at first it was like, is this just him?

## Meagen Gibson

Is he some sort of anomaly?

## [00:05:56] Dr Miles Nichols

So he took people, he took them for a little over a week and trained them with cold exposure and trained them in this breathing technique. And then they went and did the study. Same thing. They were pretty much symptom-free. Significantly reduced inflammatory, significantly increased anti-inflammatory, significantly increased adrenaline. And this was strange, because who can raise their adrenaline at will and lower their inflammation at will? This isn't normally thought to be the case. So the researchers were saying, "This is a lot of control over the autonomic nervous system. We don't really understand this, but it's noteworthy, and it's worth publishing about."

When I saw that study, I thought, "Wow, I need to understand more about what's going on here. How does cold play into this? How does breathwork play into this? What is this Wim Hof Method?" As I looked a little deeper, there were more studies on other things too, that were quite interesting about Wim's body and about his temperature response. And then I started looking into generally cold exposure research and found some incredible findings with mitochondrial function, with trauma, with brain dysregulation, and inflammatory markers, which we know are underpinning a lot of brain issues and mental emotional issues.

## Meagen Gibson

It's fascinating too, because as you're talking, I'm thinking about all of the different systems in our bodies and our brains that are responsible for so many different things. And all of them have a piece to play and a piece of the responsibility of our overall wellness. Whether that be your endocrine system with your hormones, or your adrenal system with hormones as well, but more different hormones. You talked about adrenaline and there's cortisol and all of these things.

When we're first starting a healing journey, it can be incredibly overwhelming, as I'm sure that you've experienced with every one of your patients. They come in with this glassy eyed, deer in the headlights, and they're like, "I don't know where to start. I don't know where to begin. I don't understand how my body works." There's not usually one thing that you can point to and say, "If you start doing this one thing immediately today, you don't have to change the way you eat, you don't have to change the way you sleep."

I get why it's so fascinating to people, and so intriguing, and so enticing to people, because it's one thing that you can immediately do that will very drastically and quickly start lowering your inflammation and increasing your anti-inflammatory markers and all of the things that you just said, and so what exactly does it entail? How long would it take somebody to benefit from practicing it? What is the scale of experience that you can have and how you can engage it and still reap some benefit?

#### **Dr Miles Nichols**

For me, I had a problem, which was that I didn't like the cold at all. I grew up in Arizona. I grew up in Tucson. It's hot there. I was the kid who was... It was summer, it was hot out. Kids were in the swimming pool. My lips were blue in the swimming pool, and it's really hot out. I heard about this. I was like, "I need to do this." But then I was like, "Wow, I don't want to do this. I really don't want to do this."

## [00:09:28]

For me, I had to really read enough research to convince myself that this was going to be something phenomenal, or else I don't really think I would have gotten started because I hate the cold. But the fact that I hate the cold too, for me, is like, "Huh, what is that?" That's something to work with for me, because I see life a lot as a metaphor. There's a metaphor. And for me, I have the research. I have the data. I know this is good for me, but then I have this sense of, what is cold, metaphorically? And I get this feeling of, "Oh, this is really a strong physiological stressor."

When I started to learn about cold exposure, and I started to... When I first, before I had gotten enough training, I just turned to cold in the shower, and I just went... Tight. But then when I started listening to the training, it's slow, deep, long breaths. You breathe in and then out slowly, and you relax your body. Everything in your body wants to tense. Everything in your breath wants to just contract and go fast. This is a mind game. It is really convincing your body that you're okay. Even though everything in you is screaming stress, you know you're safe.

So can you override that physiologic response mentally? That became quite interesting to me. And it took me back, actually, because getting in the cold, just this intense response in my body, immediately I was back to 15 years old. I was babysitting for a friend of my sister's, and the phone rang. It was a big old style phone. I picked it up, and it was Claudia from my family's church. She said "Something's happened. Your father's in the hospital. You're going to have to go right away" and I froze in that moment. I froze in that moment in a way, I don't know what to say. I don't know what to ask, what's going on?

Unfortunately, my father had passed-on suddenly and unexpectedly. And it took me a long time to realize what that freeze response was. And when I got into cold, I was right back there. I was right back in that. And what I recognized is that for me, it's very quick. It doesn't take a long time to get there and to feel this intense everything-screaming stress to me is: I'm training.

I'm training for that call. I'm training to receive that call and to not freeze. I'm training to receive that call and to relax instead of, "I can't." Instead of that slow, deep breath, maybe even a little enjoyment. That might take a little while. But that, to me, is now I can get there. And 30 seconds is plenty. There's not a lot of... I've gone longer. I've gone minutes. I've gone 15 minutes in straight up ice water. I don't recommend that, you can give yourself hypothermia unless you're very trained.

## Meagen Gibson

Don't start with that there.

#### **Dr Miles Nichols**

You must be very trained to do this. But 30 seconds cold in the shower, that's a perfect place for most people to start. There was a study that looked at cold water swimming that found that 24 seconds of cold water swimming was enough to increase norepinephrine levels by 200-500%, doubling to quintupling the levels in the body and we know norepinephrine plays a role in... Precursor to dopamine, which is about motivation and drive and focus, and may relate to issues

with focus and concentration. But we also know that depression, and we know that some trauma, especially on the depressive side of trauma, also may relate.

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One of the first antidepressant drugs was a norepinephrine reuptake inhibitor, meaning it would keep that norepinephrine around longer. So if you can double, triple, quadruple your norepinephrine in 24 seconds with cold water, that's very much a strong finding. And they didn't find it to habituate, day after day after day after day after day after day. It still did that. So it isn't like you have to keep going up and up and up and up in time to get the effect either. It found that the effect comes quickly every time.

Now, there are some things the shock effect goes down and the cortisol effect goes down, some other things go down, but that norepinephrine effect, just 30 seconds is plenty for that. So how do we start? Cold shower is the easiest for most people. It's the easiest. You don't have to jump right into the cold immediately, although you can. But that can be more of a shock. You can take a warm shower and then at the end, cold for 30 seconds. That's a great place to start for most people.

#### Meagen Gibson

That's how I've started. Is the warm shower, cold at the end. It's actually become a family joke because everybody can tell when it's the end of everybody else's shower because I've started getting everybody else to do it as well. And we can all hear, "Oh, they're getting it. They're about to get out." You know, I'm in Florida, and so we get a little bit of a break in the summer because the water isn't actually that cold. We could run it for an hour, and it never really gets that cold. So it's harder to do in the summer for us.

24 seconds. So much of our lives, so many of the people watching this conference and watching this interview have comfortable lives, even if they have extreme difficulty, even if they're facing stressors. Most of us, I'm not going to speak for everybody, have shelter, have running water, things like that. So much of our lives are so centered around our comfort these days. And I know that my father grew up in a house where they had a pump. They had to go pump water, and that water was cold.

I say that because it was only a generation and a half ago that people had much more frequent access to cold water on a daily basis, that they were literally exposed to colder water, whether it was because they were washing their face with well water in a pail... We're not that far removed from this kind of discomfort, I guess, is what I'm trying to say. And we've forgotten what it feels to experience any discomfort at all.

#### **Dr Miles Nichols**

I would take that a little further. Not only have we forgotten, but if we look at both chronic disease and mental illness, it's oversimplifying, but I would say that one of the... If I had to pick what's one of the biggest things that have been contributing to that? There's lots of things. There's toxins, there's dietary changes that have occurred in processing, and the world has changed, and there are lights that are indoors. So many things. But one of the big things that I don't think gets enough attention is that people are addicted to comfort, what's comfortable.

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I do believe that becoming too comfortable is actually a way to not get over health issues. Because the body has... We have this homeostatic mechanism, we maintain the status quo. It's a strong drive, and that's great if you're healthy, but if you've become unhealthy, your body wants to maintain your mind, your brain wants to maintain that status quo. It doesn't want to, but it does. There are mechanisms by which the mind and the body maintain a status quo and repeat and recycle. To break free of that is uncomfortable.

When uncomfortable has become so foreign, because we can control the weather inside, we can control our food and when we get it now. You don't have to go hungry. You don't have to go cold. You don't have to go excessively hot. You can turn things up or down or change things. You can eat more, you can eat less. You can modify and have instant access to many things that you want.

While that serves a great purpose, what it does is, the reward centers in the brain are evolutionarily evolved to seek this dopamine-seeking behavior and then the body habituates to a level of dopamine. We get into this place of dysregulated neurochemistry, a place of dysregulated brain chemistry, a place of dysregulated physiological chemistry. And then we're fed enough stuff to keep us there. To keep us there, to keep us there.

It takes real inertia, real effort to get out of that. And that's why I really appreciate things that are, what we call, hormetic stressors. Because the hormetic stressors that were naturally a part of our environment for many, many thousands of years are so little a part of our environment today. Things that are cold or a difficult, challenging push your physical body because you're escaping from something...

#### Meagen Gibson

Just like stacking wood. Chopping and stacking wood for your wood fire or your oven or whatever it is that you needed to keep warm, that would have been a stressor.

#### **Dr Miles Nichols**

It's cold. You're running out of fire for the wood burning stove, it's actively snowing out. Who goes out and chops the wood to bring it back to survive and keep the family warm? That kind of stuff doesn't happen today, which is good, I'm glad that kind of stuff doesn't happen. And I think there is something missing in those kinds of things that we can reproduce and that has good research behind it, and cold is one way to do that.

#### Meagen Gibson

So much of what you said about the mindset, too, I can reflect on my own life. In the last three years, I had been doing a bunch of changes through the help of a nutritionist and a functional medicine doctor to try to curb some inflammation because I have a couple of autoimmune disorders. Nothing that I was trying was working, and I was waiting to physically start training with a trainer until I got my inflammation under control. After about three years, I was like, "Well, let's try

something new." And so I started going to the gym and lifting heavy weights, as heavy as I could with guidance, and my inflammation dropped, and I was like, "Well, isn't that strange?"

## [00:21:28]

And of course it's not strange, but this whole time, I was going through all these motions to try to lower an inflammation so that I felt physically better when the result was actually a little bit of both. So I'm very empathetic to people with chronic illness or chronic disease or chronic fatigue, things that they're waiting to feel better, to start making positive changes in their life. And that's why I kind of love this, is because this is something simple that doesn't take a ton of effort or a ton of time, that can make really drastic improvements in your quality of life and your well being.

#### **Dr Miles Nichols**

You're pointing to one of the core pieces of part of a complex, which is that, fortunately, a lot of people have gone down roads that have led them to feel so dysregulated that it becomes scary to go down roads again and to go down certain kinds of roads, especially that push. It's a crazy culture. It's a crazy time we're living in, where it's so easy to push so hard to burnout and be rewarded societally for the badge of honor of being so busy, and that sitting, just sitting, you're lazy.

That gets so ingrained at such a young age. Have you finished your homework? Have you done this? Have you done this? Well, we have this chore, we have that. Don't just sit there. We have all this stuff to do. We're never done doing. We're never done doing. We're just doing, doing. This capacity for people to sit back and relax is so pushed so deep that people do get to a point where they have exceeded the allostatic load. And that allostatic load, that could be from emotional stress, from burnout, from overwork, from never resting enough, from under-sleeping, maybe it's from toxins and from exposures to infections or diet and all these things.

They come and they pressure the body, and the body is able to deal, able to deal, able to deal until this load, we call it allostatic load, is exceeded. And then everything becomes chronically inflamed, and we get this chronic inflammatory response. And when that is chronically inflamed in the brain, we experience mental health struggles. When there's chronic inflammation in the body, we experience pain and fatigue and other symptoms, neurologic symptoms sometimes.

That process then makes it very scary to get back out to doing, because then that forces the person, many people... And I hear the story. I hear this story so much, and I experienced some of this story myself in my own chronic fatigue struggle where I want to exercise. But I'm afraid that if I do, it's going to put me deeper into this hole. And then it becomes so extreme in some cases where even eating certain foods, I'm afraid to eat these foods because they're going to make me worse.

And then I'm afraid to even take these supplements, that even a well guided practitioner has told me are going to help, because I might react to those. And I'm afraid to even live in my home because it's moldy or water damaged. And I treat a lot of mold illness. It becomes very deep. It becomes very deep, very quickly, of feeling unsafe in the world. Unsafe to eat, unsafe to exercise, unsafe to do anything other than to retreat inside. But inside doesn't feel safe either. It feels off, and it feels like something's wrong. And then it's really hard to get through a day. And then how do we unravel that?

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It's very complex. We have this complex trauma, and then there's this... Medical professionals are saying, "Everything looks okay, you should be okay." But I don't feel okay. Maybe go see a mental health professional. And the mental health professional, "Well, let's talk about what might be going on." But I still don't feel okay after talking about that. So what are we doing here? It's a deep challenge. It's a deep struggle.

The diagnostic criteria for trauma, unfortunately, don't include the spectrum that we would like it to for complex trauma. And if complex trauma were included, we would see a vast majority of adults in the United States affected by complex trauma. This is not a minority or a small percentage issue. This is an issue that is epidemic in our culture and that is produced by cultural conditioning, behaviors that are encouraged, educational systems and institutions. People are pushed to do things that create complex trauma. And we have such a burden of complex trauma today, in today's world, that it's astronomical.

#### Meagen Gibson

Absolutely, I completely agree. So if somebody's hearing what we're talking about and they're like, "Okay, I'm ready. I can incorporate 24 seconds of cold exposure therapy and mindset and breathwork?" How do they begin? How can they find somebody to help them guide this process and help them along the way as they're learning? Because, like you said, things might come up. You might have some stuff that you're like, "Well, I was in the shower for 24 seconds in cold water, and now I've got all these feelings and thoughts that I didn't expect and don't know what to do with."

#### **Dr Miles Nichols**

There are several resources available. There are DIY resources at home. Very important, though, to take safety precautions seriously. Do not do the kind of breathing that Wim Hof teaches if you're driving a vehicle. If you're in water, do not do it in water. Please. This is a big safety issue that some people confuse because he teaches breathing and he teaches cold exposure. They are separate pillars. And you do not do the breathing in the cold. Please don't do that. Especially if it's cold water. If there's a risk, if you can't fall asleep suddenly and be safe, do not do it. So that's just one.

If you access any of these DIY materials, the safety information will be there and it'll tell you who not to, for example the breathing, it'll say, if you're epileptic, don't do it. So just pay attention. If you're first trimester pregnant, also, please don't do this. Pay attention to these safety precautions. The DIY tools, the <u>WimHofMethod.com</u> website has some good courses available and free information. There's a mini-course, there's a foundations course. That can be a great way to start. Please don't just start on a YouTube video or something that is not intended to train you how to do it. It can be great to watch YouTube videos to be inspired by this, but there aren't usually good trainings there.

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So please go to the official source for training is my strong recommendation. And then even better, if you can go to a workshop. And there are one-day foundations workshops all over the world, so they're pretty accessible. There are quite a number of certified teachers can find those classes at the Wim Hof website as well, and get classes from certified instructors, who know what they're doing and understand the safety precautions and can train in cold exposure as well as the basic breathing technique as well as the basics of the mindset part of the three pillars.

Those three together can prepare you very well for cold exposure. And in those workshops, you'll also be guided through a two minute ice bath. Now, a two minute ice bath is pretty intense for a lot of people and you don't have to stay for two minutes. Two minutes is the maximum. But the person, who's an instructor, is well trained on how to do that safely, how to help people through that, and how to get that first exposure into an ice bath so that then someone can understand enough to be able to potentially be doing more cold exposure on their own than the cold showers.

But the cold showers are safe, easy to start with, and some people can do cold sitz baths in their bathtub as well as an easy way to start. And then some people go the route of getting a cold plunge or making themselves a cold plunge. And that gets a lot pricier, and I definitely recommend that you get a little more training before even considering something like that.

#### Meagen Gibson

Absolutely. There's kind of two schools of thought, aren't there? You buy the thing, so you'll do the thing or you start doing the thing and then you buy the thing as the reward. We can do it without all the fancy stuff. That's great. And then for people who are interested in working with you and exploring not only your certification in Wim Hof, but also your knowledge and expertise in functional medicine and all the ways that you can help people with that and how that's integrated into trauma, how can they find out more about you?

#### **Dr Miles Nichols**

My clinic is Medicine With Heart, and the website is <u>MedicineWithHeart.com</u>. There are lots of blog articles on the website that are freely available about a variety of different mental and physical health topics. That's a great resource, the best place to get free information. Also, if you want to work or learn more about working with the clinic, you can book a discovery call with staff in the clinic to talk with them. That's complimentary. A quick conversation with staff to see more about what it looks like to work together and what opportunities there are for working and if it's a good fit.

#### Meagen Gibson

Fantastic. Dr Miles, thank you so much for being with us today.

#### **Dr Miles Nichols**

Thank you so much for having me. Been a pleasure.