

Yoga therapy for long-COVID

Guest: Heather Mason

Disclaimer: The contents of this interview are for informational purposes only and are not intended to be a substitute for professional medical advice, diagnosis, or treatment. This interview does not provide medical advice, diagnosis, or treatment. Always seek the advice of your physician or other qualified health provider with any questions you may have regarding a medical condition.

Kirsty Cullen - [00:00:15]

Welcome to the Fatigue Super Conference, I'm Kirsty Cullen, CEO at the Optimum Health Clinic, and my guest today is Heather Mason.

Heather is the founder of The Minded Institute, an organization that develops, implements and researches innovative methods based on the fusion of yoga therapy, mindfulness techniques, neuroscience and psychotherapy for mental health treatment.

Heather holds an MA in both psychotherapy and Buddhist studies and an ongoing MSc in neuroscience. She is also a 500 RYT, a yoga therapist and a mindfulness based cognitive therapy facilitator.

Heather created and taught an elective at the Boston University School of Medicine. She has also lectured on Harvard's Mind-Body Medicine class and lectured on the neurobiology of PTSD and on neurological mechanisms of yoga and mindfulness for the world renowned Boston Trauma Center.

She has also developed a program for those with PTSD at the Maudsley Hospital in London and in recent years, Heather was requested to speak at the House of Commons and further to this work, established the all party parliamentary group on Yoga in Society and then additionally, the Yoga in Health Care Alliance.

Welcome, Heather,

Heather Mason

Thank you so much. That's quite an introduction, appreciate it. It's lovely to be here.

Kirsty Cullen

We are so pleased to have you, so pleased.

We are living in strange times, it's fair to say. And with the current worldwide pandemic, it felt really important to talk about how yoga might be used for long-COVID particularly, and especially when health services are stretched.

Heather Mason

You know, any kind of mind body practice, an individual has the opportunity to do on their own and to improve their immune response, potentially to improve their mental and physical well-being. And the reality is that the health services are structured in a way that they've never been, ever, ever. And the mental health services, I know that part of the health services are very much stressed as well and stretched.

And so I think it is incumbent upon us that we are engaging in mind body techniques to take care of our well-being. If we do not have an acute problem that is happening for us as well to keep ourselves well, because actually there's only so much of a net that can catch us. We as a species rely on each other and we have very clear systems on how to do that in the modern world. We have health care systems. But they are made up of humans and they can also collapse under that weight.

I work a lot with people who are psychiatrists, psychologists, and many of them say that they can't hold people anymore. There's only so much that they can do because this crisis has exacerbated a mental health pandemic. And so for me, doing breathing techniques, moving techniques and mindfulness practice are essential to keep ourselves well because we all need to band together to reduce that pressure.

There are many, many other reasons as well, not to mention the value of yoga in long-COVID, the value of yoga in COVID recovery and the unique efficacious value of yoga in mental health conditions.

So I think of these two juxtaposed. The need for self care and the value in relationship to this infectious disease and the resulting problems.

Kirsty Cullen - [00:04:02]

And when it comes to infectious disease and the immune system and inflammation and all that comes with having an acute or chronic illness or an infectious illness, what is it about yoga that might be so helpful in that particular health picture?

Heather Mason

So, OK, an infectious illness, and not specifically like COVID, because that's a broader, well, first of all, in infection in general, what we're having is this release of something we call cytokines, specifically proinflammatory cytokines, their a protein complex, and they're there to fight off invaders and to keep us well.

Unfortunately, in various different health conditions, and an infectious disease, these cytokines overproduce. And so we're not only dealing with the infection itself, but the inflammation that is resulting from us trying to resolve the infection. We see this in COVID, we see this in other infectious conditions, other, SARS like diseases or respiratory conditions. Also, we see inflammation and many long term conditions that are not infectious.

And yoga has the potential to reduce or inhibit the presence of proinflammatory cytokines. And there have been some studies looking at it.

One of the most notable is something called TNF Alpha or tumor necrosis factor-alpha. You're nodding because I feel like you're familiar with all of these things, interleukin 1, interleukin 6. And yoga has the potential through possibly different pathways to inhibit this.

I'm interested in those pathways, but I don't know if we're there in the discussion yet. I can open to it and I can bring it back specifically to COVID, because I guess right now that's my specific interest, for obvious reasons.

Kirsty Cullen

And I think it's such an interesting discussion. It's discussion that I like to have because I like to make that connection between the mind and the body, literally in terms of the power of these techniques to create an impact within the biochemistry.

So a reduction in inflammatory markers through mind body practice is fascinating because it's something that we can really harness on a day-to-day basis and is within our control.

Heather Mason - [00:06:31]

So one of the things that's really interesting in relationship to COVID is something called nitric oxide. So nitric oxide is a chemical that we naturally produce within the body and it has various different roles. It exists within the upper respiratory tract, specifically within the para-sinuses. And thereby when we inhale air, the role that it plays here is neutralizing any pathogens. So it helps us to warn off potential infections at the very beginning of inhalation.

I'll get back to this in a second, but I just want to talk about the different things that nitric oxide does that are relevant to COVID. Another thing that nitric oxide does in the lower respiratory tract, is it increases the ability of oxygen to move across the lung wall. Obviously, if some of our air sacs, or our alveoli, to use the technical term, are damaged or inflamed or they have fluid in it, edema, we're going to need to use the alveoli for oxygen exchange really effectively, so that's helpful.

Another thing that nitric oxide does is it enhances the availability of oxygen to the cells. Now why is that important? There is a lot of research, and I know within the entire fatigue community, as to what happens to the mitochondria that is leading to fatigue. Now, I've been doing a lot of research in the last couple of weeks. It does seem that rather than the mitochondria themselves being problematic, that it is the precursors to the mitochondria getting access to oxygen, which is the issue. And, N.O., which is the abbreviation for nitric oxide, can actually increase the availability of oxygen to the individual cells. So important to mitochondrial functioning, which allows us to create energy.

So the mitochondria, which I just mentioned, is an organ within the cell. We call that an organelle, right. And it's the powerhouse of the cell. And I know you know this, Kristy, but I just want to get into this a little bit. And if it cannot effectively catalyze its reactions, we don't have access to energy. And when we have less availability to oxygen, this happens.

Now, the coronavirus, this novel coronavirus, it links up to this specific receptor, right, the ACE2 receptor. And it partially is inhibiting proper oxygen flow. And nitric oxide helps oxygen to move into the cell membrane. So this is really important.

OK, but how is yoga going to do that? Well, two things that I'd like to suggest. The first is that states of deep relaxation are actually associated with increased levels of nitric oxide. This was actually hypothesized by the Benson-Henry lab in Harvard in the early 2000s. They have been doing a lot of work on something that they call the relaxation response. And Kirsty, stop me at any time if I'm getting too technical.

Kirsty Cullen

No, this is wonderful.

Heather Mason

OK, so they've been doing a lot of work on the relaxation response and N.O. is related to that. But I need to, therefore, dial it back to, what's the relaxation response? So it's not just being relaxed.

In the late 60s, early 70s, Herbert Benson, a famous cardiologist, who was then not famous, at Harvard started doing research on transcendental meditators. He says, in his talks, because I had the benefit of being able to listen to him directly, that he did not want to do research on this population. But they kept showing up in his lab and saying, listen, we really believe that there is a measurable physiological change that is associated with the state of meditation we're entering and we want you to measure it. And he was like, all right, fine, fine, l'll do it.

So in measuring this altered physiological state, he found something remarkable. That these individuals that he was looking at were able to enter some kind of actual shift where they were using up levels of oxygen much less quickly, where their oxygen consumption, oxygen metabolism was much slower than the average person. In fact, 13 percent less. Now, 13 percent out of 100 might not sound grand, but it's huge when we're talking about cellular processes.

[00:11:16]

So, he discovered this and over the last 50 years, an entire institution at Harvard has built around this work. And what they've discovered is that when you enter this deep relaxation response, you have changes in how the heart is working. But in the last 20 years, you also have shifts in genetic manifestation.

So this is where I'm getting back to the N.O. And what can actually occur, and they did a very interesting study in 2008. Is that by entering this relaxation response, which we now understand, as we fast forward to the present day, can be entered through many different means, not just transcendental meditation, yoga nidra, deep other meditation states, prayer, etc, that the genetic expression that occurs can actually change over an 8 week period.

So let me speak about this a little more. So they did this really, really cool study that I love in 2008, where they took long term practices of a technique to enter the relaxation response. Remember, it's a physiological state. And then they took subjects naïve to the relaxation response.

Now, those who, and then, there's so many different pieces to this really cool equation. And they looked at the genetic profiles of both those people who were regularly practicing and those who never had. And what they did is they went to like the gene bank, since we uncovered all of the human genome in 2003, right, Cambridge did that, yay for Cambridge!

And they said, OK, we want to look at genes specifically related to stress within the body and inflammation within the body.

So they chose to look at 2000 specific genes, and genes can be turned off or on. It's not like you change your DNA, but you can change what manifests or what doesn't manifest.

So there was a really significant difference between those who are engaging in the relaxation response and those who weren't. There was a difference of expression of genes of about three quarters. Those who practice the relaxation response had expression of genes that were anti inflammatory and pro all kinds of things like even neurogenesis in the brain.

After 8 weeks, they took the novices and they put them through this program and they had to enter the relaxation response. I believe it was two thirds of their genes expression changed in a positive way after just 8 weeks.

OK, so that's like phenomenal. And the question is, how does this happen? So this is obviously a very intricate process and we will be unpicking the biochemical mechanisms for years to come. But the Benson-Henry Institute has hypothesized that nitric oxide is essential in this process.

OK, great. So what's yoga got to do with it? Well, there are two ways that we can increase it. One is just through entering the relaxation response, it increases. So it both mediates and increases. It's doing a lot of work. The other, nitric oxide actually increases when you have a slight occlusion within blood vessels and then you release that occlusion and then blood flow increases.

So let's say, for example, you take a yoga posture where, you know for a second the shoulder's up like this. So there's not as good blood flow between the arm and the torso region. Right. And then you release. When the arms come down, the blood flow is going to increase. When that blood flow increases, it actually increases the level of nitric oxide, allowing more oxygen to move into the cells.

When you do posture by posture, by posture, by posture, including different parts of the body, by bending the knees, flexing the feet, drawing the arms back, you have this process of slight occlusion followed by increased blood flow, again, increasing nitric oxide, thereby increasing the availability of oxygen to the cells vital for those who are not getting it effectively because of some damage that has been done by COVID. And when you have a deep relaxation state, you're also increasing nitric oxide.

And the very last thing, and I know that I've been going on and on, sorry. Research has also found that

when we hum, we increase the amount of nitric oxide within the para-sinuses by sevenfold. That's pretty significant.

And in yoga, we do things like humming breath. And that's not going to have an effect at the cellular level, but it will again enhance the ability of us to warn off some of these pathogens.

So this is just some of what yoga can offer. There's a lot more in my toolkit that I can talk about, but I think I just spoke for 10 minutes.

Kirsty Cullen - [00:16:44]

And it's wonderful Heather. Anyone who knows me well knows I am a nerd for mechanisms. And I think we talk a lot about the mechanisms of diets and supplements. And it's so wonderful to match that with the mechanisms of mind body practice. And of course, it then lends itself to why it's so important to prioritize these practices as part of the daily toolkit, the health toolkit that we're always talking about. So along with dietary recommendations, supplement recommendations, these practices genuinely need to be prioritized as part of that daily routine. So it's a fabulous explanation of why that is and the impact that it has on the body in real terms, in terms of the biochemistry itself.

Going back to long-COVID then, and with all that being said, what are some of the guidance points that you would suggest for using yoga, specifically with those long-COVID patients? So what kind of yoga practices might you recommend?

Heather Mason

OK, so the two other related things that yoga can specifically offer is it can release a chemical through the vagus nerve, I'm going to talk about how we work with that practically, called acetylcholine, where we activate the vagus nerve through relaxation practices, that inhibit proinflammatory cytokines, which we're seeing heightened levels of in long-COVID. So we need to engage in practices that potentially are going to activate the vagus.

And the other thing is we need to move the lungs and such in certain ways to help recruit the maximum amount of alveoli, because we do find some damage within these air sacs. And if you apply pressure to the body in different ways or you move in different ways, you're kind of stretching into the alveoli, more in particular areas, allowing for oxygen consumption to increase in places where we don't have damage.

OK, so if that's the case, what I recommend first and foremost in my work, because I have been working with long-COVID, is trying to get people into deep states of relaxation first. I'm thinking about the nitric oxide changes. I'm thinking about the potential of being in that state, which yoga would describe in a non physiological way of entering like a bliss state within self where healing can happen, and then to move forward.

So I'm generally doing about 20 to 30 minutes of a guided relaxation practice that I'm hoping is going to take somebody really, really deep. That will also activate the vagus nerve because you're going to be in a parasympathetic state. Now, I'm guessing that it would be useful for me to describe the vagus and not take for granted.

OK, so we have many nerves in the body. The one that excites me the most is the vagus. It comes out of the medulla oblongata, that's the base of the brainstem, and it moves all throughout the thorax. The reason it is called the vagus is vagus comes from Latin meaning to wonder. And it articulates or connects to the cardiovascular track, the respiratory track, the pancreas even, in fact affecting insulin production, to the digestive track, etc.

And this nerve is super important and my favorite, because it's the major nerve that activates the part of our nervous system that evokes rest and digest. Or technically we say the parasympathetic nervous system. So this is important. And there are a host of yoga practices that should be increasing the stimulation of the vagus. And when doing that, remember what I said a moment ago, you're going

to release this chemical, acetylcholine, and acetylcholine can inhibit proinflammatory cytokines.

Now, the easiest one that exists within the yoga tradition is simply inhaling and exhaling longer. It's beyond yoga really? Why? Because actually, the vagus sends inputs on the exhalation to the heart every time you exhale. And when you have an elongated exhalation, it sends more inputs. And the input it sends softens the intensity of contraction and also reduces the speed of heart rate.

So as you do that, right, as you inhale, exhale long, you're going to reduce your heart rate, but also you're constantly triggering the vagus and you're releasing acetylcholine.

So I've had people in practice is really, really gentle movements where they're inhaling naturally and exhaling long through the whole practice. And in fact, the breathing is more important in some ways than the moving. And for those of you that might practice yoga, you can inhale. And even use the ujjayi exhalation. Would people know what ujjayi is?

Kirsty Cullen - [00:22:07]

Could you explain that for us?

Heather Mason

OK, so ujjayi probably the most common yoga breathing technique where we say pranayama, it means victorious in Sanskrit, but generally be translated into English as ocean because it sounds like the ocean. And although we don't focus on this at all, it is made by a tightening of the laryngeal muscles in the throat and it creates a noise that sounds like this and getting a little closer. I'm just going to do it on the exhale.

Like that. Now when people are learning ujjayi for the first time, I ask them to just inhale naturally. And an exhale long. Like that.

Now, it's not a reverse sniff. A lot of people do that, and one of the easiest ways to learn to do it is to imagine fogging up a mirror because we all do that with our mouth. And rather than... Because we sometimes do that too, slow controlled. And then with a familiarity around breathing in that manner, you can place your fingertips at your throat and imagine your nostrils here and you can actually breathe out of the nostrils and throat. I find that it makes it much easier than trying to think of how to make that noise through the nose.

So this is something that people can do with long-COVID, post the deep relaxation.

And then there are the different kinds of postures that we take to maximally recruit the air sacs or alveoli. So just to make everybody aware, OK, when you're lying flat a lot, either because you've had COVID or because you have long-COVID. Right. And if you have long-COVID, you've had COVID, you're not really getting the proper amount of oxygen to the lungs anyway, forgetting what's happening as a result of any damage to the alveoli.

And that's because blood moves in relationship to gravity and gases move kind of upwards, they float up. So if you think about it, like if you stand up, blood will kind of pull a little bit towards the feet if you sit upright, blood's going to pull a little bit into the lower lungs. If you lay back, blood's going to pull a little bit more towards the back of the body. Oxygen is going to flow more to the front.

And so since you need oxygen to be up taken by blood, this isn't a great scenario. We call this a mismatch of ventilation and perfusion. Ventilation is when you actually take air in and perfusion is the process of these lovely oxygen molecules moving across the pulmonary membrane.

OK, so if you're on your back for long periods of time, you're not getting great oxygenation. And so you need to move in general. But if you have long-COVID, you don't want to overexert. And so you can do really simple things that will help.

The first is you can come onto your belly. We call that a prone position. And when used in respiratory distress in hospitals, they literally call that proning. But what you can do is like come into a cobra, right, most of us know that posture. You can come on to your belly, put your hands underneath your shoulders, and you can push yourself up just a little bit. This will apply pressure into the alveoli at the front, thereby pushing the air actually towards the back and into, the actually flesh here, the lungs and everything. And then you will have more diffusion in that area. And also you have a lot of alveoli in the back of your lungs you get access to that.

You can also just simply lay on your belly or you can have your hands to the side and just lift up the heart center a little bit like that.

You can then take other positions that will help, like you can take a side stretch. Now, what this does, this will stretch more into the right lung and specifically into the lateral section of the right lung, recruiting alveoli here. And you can do that here.

You can also literally lay on your right hand side and your left hand side. And then to really open and expand the chest, you can come onto your back, roll your shoulders underneath you, placing your hands underneath your sacrum, and that's going to really expand out the chest. So you're stretching all these different parts of your lungs.

And then finally, and this is the last part, because we're talking about all different aspects of the lungs and allowing that perfusion to happen, you can lay on your back again, supine, and you can cross your right leg over your left and then take a little bit of a spinal twist going to the side that's going to really push the air into the diaphragm region and into the lower lungs, also which is not working effectively often in long-COVID and during COVID.

So you're going to be recruiting the diaphragm and also getting more of the alveoli down there, and then you switch to the other side. So I do that. I match it with breathing techniques. And I also ask everybody to do a little bit of humming or oming in each particular posture that I take them into.

Kirsty Cullen - [00:27:59]

Thank you, Heather, and what is wonderful about that plethora of tools is that they're completely achievable with minimal energy, aren't they? And I think that's really important to say as well.

Heather Mason

Yeah.

Kirsty Cullen

You mentioned there the vagal nerve and I share your passion for it and also the parasympathetic nervous system, I think it's really important to say, isn't it, that with anybody with a chronic illness or an acute illness, there is a change, isn't there, in terms of sympathetic nervous system response, stress, trauma, anxiety, vagal tone and it's really important to address those. And obviously, your history has seen teaching, lecturing within the neurobiology of PTSD and the mechanisms of mindfulness and yoga.

And it's just not unusual at all to see within the fatigue community a level of trauma, stress and anxiety as it is now in the long-COVID community as well.

Can you share with us why those mind body techniques support people so effectively with trauma and PTSD?

Heather Mason

Yeah, I mean, that's really pervasive question because like long-COVID's newer, you know, and my work with it is newer. PTSD I've been working with for a long time. There's a litany of reasons for its

value. I mean, one of the things that happens when we have experienced trauma and we are then presenting with PTSD is that we feel a disconnect between mind and body. So at the barest level, yoga offers a reconnection between mind and body, which is important. I mean, yoga means union.

Additionally, often trauma arises within the body, in some way it's been compromised. And so there can be fear around body sensation and body movement of particular ways that will trigger somatosensory inputs that might feel familiar even though they're different.

And so, what you do in yoga is you have this, I like the word plethora you just used, cornucopia of postures. And you understand that the sensations that are rising are coming specifically from the posture in that way. And you can start to decouple your relationship for those kinds of sensations, from past associations and start to bring them to the present.

There are other values. Yoga does have an impact on brain function, and it does seem that the particular impacts that yoga has on brain functioning are specifically suited and useful for working with neuroplastic changes needed for somebody to heal from PTSD.

I mean, I could quite go on and on. There's so many different things. I feel like yoga as an 8 limb system. Offers so much from how to reappraise how we think, behave, breathe, move and focus. And so that regardless of how your PTSD is presenting, there's something there for you.

And actually, it clarifies also the difference between yoga's value for PTSD and yoga therapy, which is actually my wheelhouse. Right. In yoga therapy, you're working with an individual person usually, not always, and you're getting a sense for where they're coming from as a whole person, not just with PTSD or long-COVID, including other aspects of their history, their strengths, the areas that they want to work on. And then you can devise a plan calling on these 8 limbs that is going to help that person uniquely.

And I've seen magic happen. You know, I was the first person to train with the Boston Trauma Center I think it was in 2008 or 2009 from the U.K. And I immediately started working with that population. And it's also because I have lived experience of trauma. So it was very dear to my heart and it was amazing to just see the transformation that can happen.

It doesn't mean that we don't wear our scars, but, yeah, it's quite phenomenal. It's the kind of thing that I could continue to talk about uninterrupted for the next four hours, so I'm going to stop right now and let you ask me another question.

Kirsty Cullen - [00:32:48]

Wonderful. And how amazing to see those real, huge, very present changes within the context of that work.

I'm interested from a practical perspective, people will always ask this, it's something that we come up against clinically all the time, what are some of the challenges for people when they're starting or learning to incorporate these practices into their daily health toolkit? And how do you overcome some of those challenges and really encourage people to use this as a day-to-day tool?

Heather Mason

I mean, it's the same with any kind of discipline, you know? I mean, it's even hard sometimes for doctors to get people to take their medication, to just swallow a pill. So I think the biggest challenge is the discipline. Some people may not have full belief, right. If they've been helpless for a long period of time, whether it's because of chronic fatigue or trauma or an overlap of the two. It's like, well, is this really going to benefit me? What's the point? Maybe some perceptions that they have of yoga, all of that, but I think discipline is the biggest one.

And also managing expectations that magic doesn't happen. It's not like you're going to go and do it and tomorrow everything's going to be resolved.

So what I suggest to people is that they try to start first thing in the morning because actually it sets up the whole day. And that can be hard. You know, if you're feeling weak or overwhelmed, you think tomorrow, not today. I don't have the resources today. And actually in many of our modern cultures we use this byline that I don't think helps us, I'm going to take care of myself really well and not push, which is great. But if their not pushing means I'm not going to actually take care of myself and I'm going to eat ice cream because I prefer to do that, that's kind of like a misuse of what we're talking about here. So I think there does need to be a little push, like I am going to control my breathing for 5 minutes in order to take good care of myself. But that's challenging.

So what I actually do, since you asked, is I try to work from a neuroscientific perspective, considering what is the minimum amount of movement that has the maximum effect on the motor cortex in the brain.

So here's an interesting fact. Your fingers and your lips take up more cortical real estate on your motor cortex than anything else. So if you can't do anything in the morning, and I've had those days, whether it's because of weakness or it's because of psychological overwhelm, you can start in bed doing this.

This is actually a yoga mudra called Kirtan Kriya, and it comes with a chant associated with it. But you can just do this. You can start moving your fingers, you can rub your fingers together. You can just play with your fingers. And I mean this literally, because you're providing a lot of input to your brain when you do these things. If you want to specifically do Kirtan Kriya, you can look it up rather than me teaching it here because that will take quite a while.

And then you can do stuff with your lips, so you can do humming like I was talking about, just that, hmmmmmm.

Or you can be silly. And I suggest people make like horse lip sounds.

The next part of your body that surprisingly sends a lot of information up to the brain are the toes and the feet and the soles of the feet, so you can start wiggling them, you can massage your feet. Once you get there, to these very basic places, you probably have a shift in state.

Oh, and there's one other thing I actually want to add. Eye movements, eye movements have a very significant impact on brain function. Your eyes are part of your brain. They're not separate. They don't just send information to your brain. They are the brain. And you can simply engage in gentle bilateral movements of the eyes back and forth with the eyes opened or closed and the impact on how the brain is functioning is again pronounced.

So fingers, toes, lips and eyes. And then from there you can start doing other things like just lifting your arms up, overhead, down. But those four, that quadrant. I'll say it one more time so that the listeners can write it down. Fingers, toes, lips and eyes.

Kirsty Cullen - [00:37:38]

Heather, that is so practically useful. I can think of quite a few people that will find that so useful who I'm speaking to recently.

I'm sure people will want to find out more about your work, so where can I direct people if they would like to read more about you?

Heather Mason

OK, so The Minded Institute is my primary company and that's www.themindedinstitute.com. We have a full diploma in yoga therapy and we are the only U.K. yoga therapy organization to be accredited by the International Association of Yoga Therapists, which is exciting and a new advancement. We have short courses, long courses, some on demand courses and I offer also a lot of free breathing sessions to the public.

Additionally, people that are having COVID related anxiety, you might want to come to the free class that I have been working on with the College of Medicine. You need to go to the College of Medicine website. There are 6 more sessions, Wednesday nights from 6:30 to 8, U.K. time.

And I do work trying to bring yoga into the health services. If you're interested in that, you can look at the YogainHealthCareAlliance.com

And is it OK if I mention my conference as well?

Kirsty Cullen

Certainly can.

Heather Mason

OK, so I'm really thrilled that the Yoga and Health Care Alliance has linked up with another charity in the United States, which also has a U.K. branch called the Give Back Yoga Foundation. And we are offering a high level conference May 28th to 30th on wellness after COVID: A Yoga and Healthcare Symposium. And we're bringing in experts from public health, from yoga therapy, from policy, from just medicine and talking about how yoga practices can be used to deal with the aftermath of this pandemic, whether it is long-COVID, the huge mental health pandemic which is going to be worse, in terms of its pervasiveness in society and social isolation.

And we have amazing speakers that are coming, everyone from Stephen Porges, Dr. Patricia Gerbarg and Richard Brown. Some people I can't name just yet, physicians from Imperial University that have been working in the COVID wards. It's just like so, so many people. Dr. Sat Bir Khalsa, one of the most prolific yoga researchers in the world. And other people I'd love to announce, but I'm not allowed to just yet, but some really big names.

So do come. You can go to the give back yoga university <u>website</u>. They have it on their platform. You can pre-register for the conference and if you do you'll get a little discount that you will not receive if you register when we're completely live.

Kirsty Cullen

Sounds very exciting. Very exciting indeed. Heather we're so grateful for you joining us today and it's been lovely to chat with you.

Heather Mason

Thank you so much.