Developing Heart Coherence to Balance Your Nervous System and Reduce Stress Transcript

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Introduction to HeartMath and Dr. Rosman

Hi everyone. I'm Doctor Sanjeev Goyal, and you're listening to the advanced Anti-Aging and Technology Summit. And today I have Doctor Deborah Rosman with me.

Doctor Rosman is the founding executive director of Heart Math Institute and a key spokesperson for Heart Math and the Heart Math system around the world.

Along with helping develop, oversee, and conduct heart math training programs since its inception in 1991. She has 30 years of experience as an entrepreneur, business executive, educator, and author.

Doctor Rosman gives media interviews and keynote addresses worldwide. She's appeared in documentary films Tell Us Summit and major magazines, and on major television networks and India and nationally syndicated radio programs.

She has trained and spoken to fortune 500 companies, government agencies and the US military, scientific, health conferences, schools, etc. besides authoring a dozen books herself, including the award winning meditating with Children.

Doctor Rosman coauthored the five book Transforming Series with Heart Math founder Doc Children. She is regular. She's regular columnist with The Huffington Post.

Doctor Rosman covers a range of topics in her speaking engagements and presentations. Key among them the heart's role in stress management, resilience, heart and performance, heart coherence, technology, and the current shift in global consciousness.

Thank you. Deborah, how are you? Oh. I'm wonderful. Good to be here with you. I'm so glad that you've, taken the time today to tell us all about this, this technology.

So maybe just I'd love to just understand a little bit how you got into, understanding the value of this. I think heart coherence, if that's the way of describing it.

So the story would be great. Well, there's lots of stories. Mine's probably starts when I was young, I was at the University of Chicago studying attitude change theory.

I'm a behavioral psychologist, and it was all rats and statistics at the time. And I knew I wasn't going to learn about how to change my own attitude or help anyone else do that.

That way. And so that started my, search for methodologies that would work and things that weren't just philosophical or religious. I got involved in meditation and yoga, but I was always looking for a way to, research how one could understand the physiology and how that enable us or facilitate us to change behavior.

And I met Hartmut, founder, before Hartmut was called Hartmut and, doc Children, who was a stress researcher. And this was in the late 80s.

Origins of Heart Coherence Research

And he said, you know, stress is going to keep getting worse and worse and worse because of all that technology that's going to be coming. And, you know, people don't know how to live from the heart or manage their emotions.

Nobody ever teaches us that. So he wanted to research how the heart and brain talk to each other and see if we could find some, some keys there. And he talked about the intelligence of the heart, which he intuitively, through his own meditation, understood.

Was something real and accessible, not just metaphorical, like the wisdom of the heart. And all cultures talked about referencing the heart as a center of intelligence or wisdom from the ancient Greeks, the ancient Egyptians, the ancient Chinese.

And it wasn't till the 15th century where it all of that compartmentalized like this was intelligent and nothing else was. And, the brain and we still are living in that paradigm, and it's really hurting us.

And the only way you can really begin to understand yourself emotionally or manage stress reactions is when you synchronize our brain nervous system and you really get alignment inside and get a perception shift is the key to powering a behavior change.

So our research, discovered at the Heart Math Institute, which we started to do this research, that when we're feeling frustrated, stressed, anxious, angry, any of the stressful emotions, the heart rate rhythm, the beat to beat, changes in heart rate that happen over time, create a pattern that's very chaotic and disordered, and it really mirrors how we feel inside.

The more angry, upset or worried we are, the more chaotic that rhythm pattern is measured by something called heart rate variability. Right? And when we're feeling love, care, kindness, compassion and joy, the more uplifting qualities of the heart that HIV pattern turns into this beautiful sine wave pattern, a coherent wave form.

And so we call it HR v coherence. And then we began to do a lot of research. A how do we shift from this stress reaction into that coherent waveform? How do we get our HIV to change, you know, biohacking the heart really.

And how do we do it? And then if we do do that, what happens in the pathways between the heart and the brain? So this care that you're talking about let me know because I've been reading about that.

Obviously more variability is good. Like that's what they're saying is that yeah, there's of pain. Good question. There's two different ways of measuring HIV right.

One is the amount, you know, how much your heart rate can vary from peak to peak, like 90 minutes beats a minute down to 60. And how flexible we are to go from one to the other, like if you're sitting down and you need to run up a hill, you want to get to that higher heart rate very quickly.

And then, just like an athletic performance, you want to be able to bring it down very quickly. That's called amount of HIV. What we discovered at Heart Institute was the pattern of HIV over time, meaning whether you have a little bit of HIV amount or a lot, what does it look like over a minute of time or three minutes?

What's the pattern? What's the waveform? That's where you see emotional state. And that was profound. That was published in the American Journal of Cardiology in 1995, is the first time that there had been any link between emotional state and the rhythms of the heart.

So this heart rate, there's a normal sinusoidal, variation that happens with breathing, right? That's right. Well, is that what you're saying, that. Yes, that counts as if one is more in a relaxed state.

Actually, and you're asking the right questions that can respond to coherence. Is not relaxation okay? When you are in a relaxed state and you're breathing in a relaxed way, you'll see a little more of that sinusoidal waveform.

But really it's more parasympathetic activation. Relaxation is parasympathetic. And what you're seeing in the whole HIV is the interaction between the sympathetic nervous system, which speeds up heart rate, and the parasympathetic, which slows it down.

So in relaxation you're going to see more going down more of this slow down. And in coherence there even.

Heart Rate Variability and Coherence Explained

And what that does in the power spectrum, if you're a scientist looking at this, is that the two branches in train, they synchronize coherence as synchronization between the two branches of the autonomic nervous system.

And that increases the amount it powers it up. And it actually enables the entrainment of the brain waves because it's such a strong signal. So as you practice coherence, which is not just a sleepy, relaxed state, it's a high performing state because you don't want to.

You're not going to when you want to perform, you don't want to just be relaxed. You want to be relaxed but present, ready in the ready state but relaxed.

So that combo is what happens and how you feel when you get coherent. And so practicing heart rhythm coherence, you can breathe yourself into that, but that doesn't feel good very long.

It's really the emotional shift that enables you to sustain that without having to focus on the breath so hard. Math techniques are starting with heart focused breathing, right, and then adding a positive or renewing emotion to that, like appreciation and gratitude or love for your pet or what you feel, you know, warm hearted feeling and putting your heart into it.

As the saying goes, that's what really creates that coherent rhythm. And that's when we know just doing that for a few minutes synchronizes the brain waves all the way to the frontal lobe.

So your executive, decision making is sharper, you have clearer thinking and enhances your ability to make effective decisions and your connection with intuition and flow.

So it's really a ready state for the flow state. And, and it has a lot of other health benefits because the autonomic nervous system is controlling 90% of your body's involuntary functions.

So coherent is an optimal state for health and performance. Just so I understand I'm to apologize for that. So okay. That is a tough, tough, part. So you think ego and coherence at the autonomic system is in coherence with the parasympathetic, is in coherence with the sympathetic?

Is that what's happening? Yeah, they're in train. So imagine these two branches one speeding heart rate up, one slowing it down. And imagine those peaks in the frequency spectrum in training okay.

Synchronizing as they synchronize at 0.1Hz to become one peak instead of the parasympathetic here. And the, you know, high low frequency here, they become one frequency to become stronger and lower, like the higher the dips or lower.

Right? Okay. They're both acting and in unison they're both. Yes. And then you're saying that, then the brain is also frequencies. The brain. The right alpha rhythm synchronizes to that frequency.

There's two pathways by which the heart communicates to the brain. And there's actually more neural traffic going from heart to brain, telling the brain how the body feels than there is from the brain to the heart.

And that's just turning physiology upside down. And both are important. But the heart's input to the brain is really telling the brain how the body feels.

And from blood pressure waves to electromagnetic waves and to the vagus nerve, the vehicle traffic from heart to brain, there's more wires going from the heart to the brain through the vagal nerve than the other way, and it passes through the medulla and the back of the head right to the amygdala, the emotional memory center.

So when you're frayed or panicky and your heart rhythm is all chaotic, like it triggers in the amygdala memories of when you have that before, it reinforces, what is the trauma or the emotional memories stored there when you switch into coherence, it starts to bypass that, or it starts to do that and it starts to give you new perceptions and feelings, and then and also another pathway goes straight to the thalamus, which is responsible for synchronizing cortical information.

And when you're frustrated or angry or stressed, that signal is sent from a heart rhythm pattern to the brain saying chaos, incoherence. And the thalamus then triggers the fight.

Fight right? Reaction a stress response to protect you, a survival mechanism. When you're in that coherent waveform, the thalamus synchronizes cortical functions.

So now you're operating in alignment. And it's beautiful that with just a little intervention you can take charge of a lot of that neural traffic. So let's do that.

So flow states you're saying that this happens. This is kind of what happens in flow states. And when people are, I don't know, performing in sports or whatever, are they more likely to be in this type of coherence or let's say, meditating?

Is this depends on the state of the emotion. You can be meditating and sitting there and fuming inside at your boss the whole time, and you are not going to be in coherence, or you can be in a state of joy and feel connected to life in nature.

And yes, you know, 0.1Hz. That frequency is nature's resonance frequency too. So if you get into the coherence, you feel more connected with others in nature and your own larger cell.

So if you're in sports, it depends. If you're in a sort of flow state and you're breathing and you're feeling or connected and you're just in that intuitive flow, you're likely to be in coherence.

How the Inner Balance Device Works

You know, when I first heard about it, I thought, oh, maybe this is related to energy systems and, you know, like, other, medical systems like chakras and things like that, where we, you know, we have a heart center.

Yeah. How do you how do you how do you then tie these? Are these things tied at all, like, with technology? They sure are. I mean, the energy, we call it the energetic heart.

That's where the spiritual heart, so to speak, the heart center, where you know, connects with the physical heart. And you see the evidence in the heart rhythm pattern.

So when we feel we're in these intuitive flow states, we're getting a download of information. We're connected to something our higher self or whatever we call something larger than our day to day consciousness.

We're usually in more heart coherence because everything's synced up, and you want to know that the chakras are receiving this information from somewhere outside of time and space.

So you're getting these downloads from some other dimension, and that's certainly coming through all the centers. But the heart centers, the main trunk line, love, and the qualities of the heart of the main activators of that universal connection.

Perfect. So just one quick, so I want to maybe just tell the viewers a little bit about what does this actually look like? How does one actually use the device?

I don't know if you want to talk about it. Like. Sure. Well, the device looks like this is a lightning sensor and it plugs into your iPhone. We also have one that's a USB C wired sensor.

It plugs into your Android phone or tablet, and we have a Bluetooth sensor, which I didn't bring with me, which plugs into, you know, either one can be used with Android or iOS.

Yeah, I can connect to the ear and it's just like, yeah, it clips on your ear. Yeah, all of them do the same functionality, whereas the ear is one of the best places to get accurate heart rate.

And then the algorithm and the firmware in here convert it to heart rate variability. And then from there they look at how much coherence or synchronization is in the air V pattern.

And it all works with an app called the Inner Balance app, which you can download from the Apple Store. It's free. Or Google Play Store. This you have to purchase, but the app is a trainer.

We call it the Inner Balance Trainer because it trains you of how to with guides and how to actually get into that heart rhythm coherent state and gives you feedback when you lose it and you become more conscious of what takes you in and out.

And it's very sensitive. So you can be in the heart map techniques are what make it work. You're practicing this shift of the heart and heart focused breathing, and then activating a genuine, warm hearted feeling, such as gratitude for someone or something in your life.

It doesn't matter what. It's the feeling that counts and you see your heavy changes. You do this and it's very empowering to see, wow, I did that. And then you keep doing that for a little bit to sustain it.

And then a few minutes, it's synchronizing your brainwaves and you can actually feel like you have more ease, more clarity, more clearer thinking. And the app has different guides that take you into different ready states, like Before Sleep or how to connect with more intuitive decision making about a choice you need to make, or anything that you prep you for more ease and flow.

Like flow states like there's probably seven Major League Baseball teams that are using this in the dugout, you know, free or pre and post and golfers use it pre and post sports and TV, which is just launching, is featuring it for all sports from soccer to basketball.

Because again, you want to get in sync before you perform or whatever you want to do creative projects, all of you are stressed out. You're that meeting or something triggered you.

That email that you just got. You want to be able to quickly get back in sync so that you're responding from more of who you really are, instead of your reactive self, and it helps you regain emotional poise and recenter really quickly.

And the whole idea is, yeah, there's coherent scoring in there to improve your score and baseline, but the whole idea is to have the carryover effect.

When you get your autonomic nervous system in coherence, it carries over into your next activity, you know, so you're more harmony in your interactions, more creativity in your work, more ease and flow in your day to day.

And that's what you want. How to live life more effectively. And this is the ready state for that, because it's the body's and nature's natural frequency you want to be able to return to.

And then after a while you develop the reference, what it feels like and what the technique you use just to get back there. And you don't need to use it all the time or as much, but as in training as like training wheels on a bike, you do want to use it to know when you're actually in your vehicle happens instead of assuming you are.

Yeah, it's not obvious to me. Like, I mean, I can tell you that when I started it, I was like, it has a color coded wheel. Right away at red, I'm unfortunately I do a whole rounds.

That's all green but it's okay. And it does once you get in it it happens. But I wouldn't have when I first start think

that I feel any and I'm worse or anything.

It's. That's right.

Applications for Sleep, Performance, and Flow

Like it's not something that most of us, you know, are trained to live from here up or when we think, think happy thoughts worth thinking, the feeling shift and the emotional shift which is required for real behavior.

Change your real attitude shift opens up new perceptions. It's quite astounding how you can be perceiving this reality. You know, he did that to me and projecting what that means.

And you get coherent and you go, wait a minute, that wasn't even real, and you know it in your heart, and then you perceive a different possibility. Now it seems like like, like 95% of our time is probably not in coherence.

Okay. Oh, no, you're right. And most of our time is not in coherence. You know, with deep sleep, deep peaceful sleep, we go into coherence. And when you're really loving, you're in coherence.

You know, when your heart is open and connected and you feel that when you're playing with your puppy, you're probably in coherence more than in most times.

So the idea is, how do you get back to that whenever you want to? And then as you create more of that in your baseline, you have more natural coherence in your system, even when you're not using a technique.

Right. What is the, science on, is there, stage of looking at sleep improvement, like before you say? Yes, we have a book called the, Heart Mass Solution to Better Sleep.

And again, so much of our sleep disturbances and there's so many people nowadays who have a hard time sleeping or staying asleep is due to the unresolved stress of the day.

It disrupts our circadian rhythm, it disrupts our metabolic rhythms and is very much involved in weight issues. And it's hard to turn the mind off, you know?

Or we wake up with the same problems and we go, oh, no. In the anxiety creates a pattern of incoherent and and it doesn't just shut off when you're trying to go to sleep, it can sustain making it harder.

So what we want to do is learn emotional self-regulation skills. That's not suppression. It's not venting. It's learning how to come back to inner poise and balance as needed, and that powering up through heavy coherence feedback is a accelerator for that.

You can use it with other techniques that you find valuable to meditation techniques, but you want to get in the heart rhythm coherence first and then do whatever other techniques you find helpful.

One of the things I came upon on your site was this idea where, above group coherence. Yes. I would love to hear and learn more about that. What's happening here?

Well, one of the biggest problems we have in society is getting along with each other right? You know, there's so much bias political, religious and people just are so sure that their way is the right way.

And everybody else is wrong. And unfortunately, that just creates tremendous separation. And all the problems we see in politics and often wars and that's gone on for eons.

And so one of the things we're designing is an app where you can get in sync with your loved one or family or group of people and look at your average coherence score, and together go deeper in the heart, put out more love or care, compassion or the qualities of the heart and increase your score and their collective score.

So it's a fun way of getting more resonant with others. And as you do that, you understand each other more, you're more forgiving and you're more intuitive.

So it's wonderful for relationship, but it's also wonderful for business, being in the boardroom and creativity or for team sports of getting more resonant and in sync with each other so that the collective or the group effort can be more efficient.

It's more fun that way too. So we have a new app that we've launched from the heart Methods to the global coherence app. And there you can create social groups.

You can use it with the same sensors, and you also can see on a global map where you are practicing in the world, where everybody else is. So part of the research Dartmouth Institute's doing now is research on global coherence with magnetic field detectors in different parts of the world.

Seeing what the Earth's heart rhythm is are with the Earth's pulsating rhythms are from the Schumann resonance, which are on the same frequencies as our brainwaves to the electromagnetic field emanating from the center of the Earth's magnetic field, which is overlaps the same frequencies as the human heart, including the heart rhythm at point one hertz.

So we can see how we can synchronize with nature and with Earth, and how Earth's changes affect our heart rhythms. And we can begin to do some experiments.

Group Coherence and Global Resonance

But the main experiment is what happens. You get a collective of thousands of people getting into heart coherence and putting, radiating love or compassion into the planetary energetic field.

At the same time. Yeah, it's uplifting to all who do that. And we're researching to see what benefits that has in for the field, for the planet, for humanity.

Wow. And, you were saying that this could be used with other, other, technologies as well. And or, techniques to techniques. Well, it's own technology.

I mean, you can combine it with other things just to see how it relates. But really there's people, for example, who've told me they, they're Orthodox Christians.

They use it with the Jesus Prayer because that's at the same mantra, the same rhythm as your coherent heart rhythm. I thought that was really interesting.

And, so people use different types of meditative technique to see which get them in more coherence. There's different meditation techniques. Some are intended to have you dissociate and then you're not going to be in coherence, but a lot of them are intended to open the heart and have you experience more loving kindness, which will put you in coherence.

I'm curious. And what about, psychedelic experiences? And has there have been any studies? We can't we haven't done any research directly with people in different states of psychedelic experience, although I'm sure individuals have it.

Really, if you look at this way, whatever your methodology, if you're feeling uplifted in the heart, it's like you're going to be in more coherence. And if you're not and you use the inner balance technology, use the techniques, it's likely going to lift you into coherence and you'll feel more uplifted in the heart without having to take the second out.

That's that's awesome. Working, working people learn more about what kind of years. Go to learn more about. Sure, there's three different things you can do.

One is you can go to Match.com. T.com/experience, and you can download the free 90 minute interactive video that has heart attack techniques. And we're giving that away for free.

We started as soon as Covid hit the planet when we first brought it out a year ago March, and it's been wonderful. People have had so much help with it.

That was our gift to say, here's some of the science, here's what we're doing. It's a beautifully professionally developed film or interactive learning experience in ten minute sections where you actually practice some of the techniques, and it talks about the inner balance at.

So you have that. There's something called the At and heart facilitator, which, you know, you can get the technology the inner balance with instruct action.

And that's at heart Mccolm. And then you know, that's how I would suggest people start with that. You can buy the sensor just by going to heart met.com/tech deck.

And it explains the different sensors. We have the professional version for health professionals call the mmWave Pro. We have the inner balance which is what we've been talking about.

We have a handheld mmWave, stress reliever. So that's all explained there. And you can actually do some of these exercises even without the sensor, like a little piece, of course, that you can't get the feedback from the device, which I think seems to be very helpful.

Yeah. I mean, that's why we can develop the device because we have the techniques. They work and in the heart with experience. You don't have the device.

You're going to learn the techniques without the device. They work. And we had that for years. We developed the technology rather than have people sit in our lab with this big lab equipment to see what was happening when you use the techniques.

Right. And so that gives you a chance to refine very quickly your practice of the techniques. But it's the techniques that work. The technology is just the feedback tool that helps train you into more accurate and refined use of the techniques.

Has there been any studies looking at, you know, blood tests or biomarkers and see how people are aging? Well, here's a very interesting study we did in the early years of heart.

Math has since been replicated. We were teaching, one of our techniques in this, a woman's health clinic. There was an experimental group and a control group and they practiced the heart math techniques.

And we took salivary examples before they learned anything. And then about five weeks after, and they agreed to practice a few minutes a day, every day, or at least I think it was five days a week.

And you may have given them two days off in the protocol. What happened was we sent, IGA samples to the lab at the end of the study.

Research, Aging, and Getting Started

The lab called us and said, well, what DHEA supplement are you giving these people? And we said, there isn't any supplement because they all agreed not to take anything extra.

It was a real control study, and the only variable was practicing these RF techniques. You said, well, the group had an average 100% increase in DHEA and an average 23% decrease in free fraction of cortisol.

You know, pregnant alone is the precursor hormone, the both DHEA and cortisol. And he couldn't believe that it

was just a self-management technique, that they were just getting into heart rhythm coherence.

And it had that impact. But once you studied our research, we understood the autonomic nervous system controls 90% of our body's involuntary functions, including our hormonal balance, our immune system, our digestion, our sleep rhythms.

I mean, so much. That's what yoga teaches. And here you're really going right to the heart of the matter, pun intended. And seeing what's going on and feeling it.

So you develop that relationship and you learn how to regulate your own all around nurses. Wow. Okay. That makes a lot of sense to me. I think this is great.

I'm really excited, and I hope the listeners, got the gist of what what is going on with heart math. I think this is such an important topic. I wanted them to do really well.

Thank you. I mean, DHEA people may not realize this called the anti-aging hormone. Cortisol is called the stress hormone. Yes. And the more stress you have, the more it shrinks your telomeres, which are the aging markers on your cells. And that is the fastest way to age.

It's not deal with your stress. And everybody has challenges with stress waves these days. And the global situations to the acceleration of change to whatever their own personal issues are.

And again, if you can get into coherence, you can ride these waves of change with more balance and poise and produce more DHEA, which helps aging worse.

It lets the next year look like for hard pass and what's what's happening. This last year with Covid is this expansion for us because more people are waking up to the heart and more people are feeling the nudge that it's about the heart, that we're not going to solve our global problems just with the brain, mind.

And they're, you know, they're finding out about heart math. So we didn't intend giving away the heart math experience to be in order to increase our list size and sell more product.

But that's what happened. And so this year, we're offering this again for free for people and our health professional certification program. We have 20 30,000 health professionals who work with patients and and have them use the, the sensor, the heart mass sensor and their balance app or the Amway.

And we're developing more games to we have games right now in our Amway Pro and Amway at hand. Now make it fun to practice because it's all about practice and increasing your baseline.

So we're growing in the corporate market, the hospital and health professional market, the sports market and the general public. So and spiritual market people use it to enhance their meditation for sure. Yes.

Thank you so much. I really appreciate your time, doctor. Awesome. So very welcome. Please come to Rev.com for Slash Experience and get your free program.

Okay. Thank you. Take care.