

Understanding Cannabis & the Cannabinoid Systems in the Body | Dr. Eric Goodman

[00:00:00] Guest Intro - Dr. Eric Goodman

Darin: Hey, everybody, welcome to the show. This is Darin Olien. This is The Darin Olien Podcast. I'm sitting next to my boy, Chaga, who is supporting me on this podcast right now. He gives a big paw to you, a big high five paw. I just want to say this next guest is a great friend of mine, Dr. Eric Goodman, who's a Doctor of Chiropractic and many other things. He's set his path off professionally, thinking outside of the box. He was in his own set of pain. He figured out through his own specific movement patterns. He created this infamous and famous Foundation Training. He created that in 2007. Celebrities all over the world are using it. I've been using it. Since then, it's been a powerful, innovative way to turn on this posterior chain, this chain that kind of gets lumped over as we're sitting around in our modern-day conveniences of chairs and things like that. So Eric came up with all of these incredible things and the foundation of Foundation Training was his brilliance and his knowledge and his own need, and it always comes by way of that when you're really discovering and creating things new. In addition to that, we now talked about this amazing new book, Foundations of Health, that he dug into. Then we talked about the cannabinoid systems and the fascination that goes into all of that stuff. These foundations and the Foundations of Health book that we talked about here, and that he got into in his book, he realized that these are primal, these are deep within the body, and we're just now starting to understand them. So he's starting to crack that open and really start to understand the foundation of this ancient mechanism of our body. Also, his wife's new book, Jen Goodman, Shaping Your Baby's Foundation. I have to get her on the podcast, but it doesn't stop you in checking out her book. Incredible, this dynamic duo. But please kick back, relax and enjoy this incredible conversation with my good friend, Dr. Eric Goodman.

[00:02:21] Podcast Intro

Darin: You are listening to The Darin Olien Show. I am Darin, and it is my life's mission to find and share healthy and sustainable ways of living. In this podcast, I talk to inspiring people and professionals from around the world to uncover ways that we as humans can improve our lifestyles, strengthen our mindsets, and take better care of this beautiful planet we call home. If you're looking for motivation to take the next steps towards a happier, healthier life, then you're in the right place, and I'm stoked that you're here. So let's do this. This is my show, The Darin Olien Show.

[00:03:05] First Part of the Interview

Darin: I'm stoked to connect with you. Just so everyone knows, I've known you now for over a decade, and way back in the day doing Foundation Training with you as you're developing it. Your first book came out, Foundation Training is shaping your unique way of engaging the post chain, getting out of back pain, and all of this stuff. That's your bread and butter, that's your "foundation." People have been using it like crazy. Why don't you just describe that a

little bit so people have a context of you because I know you so well, I don't want to overjump that because I do want to get to your cool last book that you just came out with.

[00:03:46] What is Foundation Training?

Dr. Eric: Thanks, man. So Foundation Training is the only thing I'm legitimately good at. I want to be very clear on that, very, very clear. That's my addition to the collective knowledge of movement is this protocol. What the protocol does is it integrate the posterior chain, the muscles along the backside of the body. It teaches them to kind of lift the ribcage higher than its adapted, internal falling and convergence. It allowed us the shoulders to have the strength to open up but not retract behind you. Instead, it holds this expansive place. Then the most important part is this hip range of motion. So, there's a big emphasis on hip hinging to the point of like obsessive-compulsive disorder. It's OCD as it gets and I know that. A lot of people appreciate that at this point. But what you're learning is how to support your own body weight in space, so that it's dispersed evenly throughout the muscle chains instead of resting focally in the joint tissue, in the joint itself, the structure. It's a very metabolically active muscularly demanding process. Guys like you love it because you're a gorilla. You like to feel strong and there's nothing like very active posture and very aware movement to make you feel strong, and that's what we teach. So that's foundation training in a nutshell. It helps the symptoms of chronic back pain, hip pain, neck pain, shoulders, ankles. People come to it for all the common arthritic breakdowns and nerve breakdowns.

Darin: Well, that's the thing, in my experience with it is that the biomechanic way of turning on which turns off with our poor posture, our movements, just getting beaten down by gravity, obviously, gravity isn't letting go. When we're not in that alignment, when the bones aren't stacked where they need to be, and our shoulders aren't back where they need to be, then all of this other strain and muscle strain, then we're like, "why does my neck hurt," while you're staring at your computer, your neck is down, your shoulders are forward. There's going to be something that adds up and not in your favor. It's almost like the antidote for the fatal convenience of our modern-day life. We're sitting in these stupid ass chairs, we're staring at our computers, we're looking at our phones, all this dysfunctional shit that we know is hurting us in some way or at least we will soon enough.

Dr. Eric: I love that you're correlating an innate thing that we sort of adapt in to, which is our movement patterns. Whatever we frequently do, we move towards, and the reality of that being a very fatal convenience and time because of the metabolic impact it has to the organs, the nervous system, and all of that. On November 11, 2011, I gave a TED talk called The Unexpected Consequences of Modern Technology, in which I go through the breakdowns of the human frame, and the build up of the human train. I bring one of my guys up there to help me kind of show it and we really tried to go through it. We met Brian back in the day. He was up on the stage showing it. We really got to explain to some people what you do is both good and bad for you, and you have this very mechanistic control over that that's very easy to learn from breathing to horizon line gaze, where you learn the horizon line is in front of you to the weight of your head being felt in the back of the neck versus the front of the neck. These small shifts that over a week or two, that's all it takes to really learn to make them and start to feel them and then practice them in a modest but steady way. You can undo almost anything you get yourself into unless you don't try it, unless you take a pill, "this hurts, stop," "here, take this, it won't hurt anymore." That's a real fatal convenience.

Darin: What I love about your work is that it engages that which back in the physiology days, a body is so amazing. If you keep doing the same weird shit, there's also a point where the body won't even tell you anymore that it's not so functional. Then all of a sudden, you wake up one day and you blow your knee out, your back goes out because the body did everything it could. It doesn't know what you're doing, it just knows that you're doing an action and maybe it thinks you're hunting a freaking tuber, or something like that so that you have to keep bending over to look for it so you can survive.

Dr. Eric: And you have to have the force to pull.

Darin: Anyway, we can talk a ton about Foundation Training, but we'll put it in the show notes because I know you have online classes, you have certifications, you have all of this stuff. And you also have free things that people can just go to and learn some basic moves. A lot of people, and they've told me magically within one to two times their pain starts going away.

Dr. Eric: It's not magic, it's movement. In most people's cases, movement in the right direction off of the wrong places is medicine. For some people, they're beyond that I have some patients that I send to hip surgery, especially hip replacement surgery. I have never sent a person for back surgery, but I have sent people for hip replacement surgeries over the years. If the hips don't work well, the back doesn't work well. It tends to work and correlate. If it's a highly vascular area, meaning like there's a lot of blood flow, there's a lot of cellular replenishment, then there's a much higher likelihood if you're going into an area with very little blood flow, very little hydration, it's going to be really hard for things to happen because it's an un-nourished area. Real quick if you don't mind, I want to go back. You had a state where the body doesn't know what it's doing, it just knows forces and different things like that. Even back up a little bit. The body only really knows molecular and chemical reactions. That's it. Some of those reactions are like calcium and different things that make muscles contract and potassium and sodium pump that makes the heartbeat up and slow down and change concentrations. But ultimately, everything your body feels, senses does create is a molecular reaction. Our capacity is to alter those reactions throughout our lives and to clean them up and to actually guide them. That's what adaptation is. The reaction is steadily changing shape until it's providing a different outcome even though it's still pulling from the same pool, it's just changing the ratios a little bit. That's what strength is. That's what tension is. That's what a rupture is, it's a change in pressure rapidly. That's all the body knows, and I want to be really clear on that is that it only has this homeostasis, that it's always trying to return to chemically, physically, mentally, all these things, but homeostasis is only what it's practiced. So that can be a pretty low baseline for a lot of people.

Darin: I remember one of my friends saying, are we really ever 100%? I'm like, I don't know if I've ever been 100%. Are we ever really balanced? But to your point in the journey of life, the body is built to heal itself. It's built to chemically and biologically, and we're built, I think, to also mentally, emotionally to find that balance. What happens when we're so freaked out and stressed out? Something's going to crack, and it's going to push us so much where we have to let go and look at something different, or we just stay in the pain. Same with the body. Something's gonna break, someone's gonna snap. It's always seeking balance. Are we ever really balanced? Yes, we get closer, closer, and closer but at any point, I could step my toe that loves to heal itself. That's my point.

Dr. Eric: That's the basis of the body is it innately wants to feel well and heal. That's what's cool once it's self-protective. My favorite quote in the world on what you just spoke of was given to me by Dr. Tim Brown, who's my favorite mentor. He's been very, very dear and important in my whole career and life. Tim says to me, "The body is not meant to be symmetrical, man. It's meant to react to asymmetry, as well as possible, and as often as possible" And that's the goal is to be reflexive, reactive, and to have efficient pathways that can always find as close as they can to balance knowing they're off balance and will remain.

Darin: I love that. So your next book that I'm absolutely freaking fascinated by, The Foundations of Health. Everyone, we'll put it in the show notes. I love because you're going into an area, the cannabinoid system, the receptors and also bridging into the different types of nervous system, how that relates. It's also not just, so as soon as we say that people go, it's THC. It's all about that, but that's not true but yet that exists within it, and CBD and all of that stuff. Yes, but there are also all these other mechanisms that the body uses. We just haven't known much about the system. So break this down for me because you started off with the body knows how to heal, it knows what to do, we don't need to reach for the pills, but we need to understand the systems of our body. So educate us on the cannabinoid systems.

[00:13:00] Cannabinoid systems in the body

Dr. Eric: I want to be very clear first. I have learned this along the way, and I'm really interested in it. I'm continuing to understand it, I'm continuing to try to recognize this incredible system that is within every vertebrate on Earth, every mammal on Earth. It is in no way shape or form unique to us. We are very fortunately beneficiaries. The endogenous cannabinoid system was found and named by a group of Israeli scientists that were studying the effects of THC on the human body in the '90s. It's very young. The initial experiments I think were in the '70s, but the process that led to the naming and understanding of the endogeneity and the understanding of CBD's influence and THC's influence and other endogenous inside of us, the cannabinoids that we make ourselves, that happened in the '90s. It's very new. The only reason it's called the endogenous cannabinoid system is because they found the system in studying marijuana, cannabis. So they named it after the stimulant, but the stimulant is outside of us.

Darin: The stimulant that we really love to use, this inherent endogenous system that existed already.

Dr. Eric: I recommend anybody to go, you can find this stuff on YouTube at this stage. It's very clear to everybody in the science community that is willing to look at peer-reviewed data, a lot of very interesting emerging science are homeostasis system. It's called the endogenous cannabinoid system. To a lot of people that's exciting, I'm one of those people, to a lot of people that's a little bit scary because there's a stigma behind the term "cannabis." Take that out of it. That is one of the many stimulants to the system. Exogenous means outside the body. Endogenous, inside the body. They're manufactured within made by us. So, let's talk only of the made by us. If you have the right amounts of arachidonic acid which is an omega-6 fatty acid, you get an omega-9 fatty acids in there and omega-3 fatty acids in there, and you have the presence of glycerol. You make something called anandamide and you make something called, hang on, this one's long, the shortened version is 2-AG. So just

look up 2 hyphen A-G, 2-Arachidonoylglycerol. It is an arachidonic acid molecularly bonded to glycerol, a sugar alcohol. It's very, very simple metabolism from things that we eat in nature all the time, red meats, different oils. In the vegetarian and vegan world, you would find this in different sunflowers, you would find this in coconuts, you would find this in all sorts of myriad fats, avocados. Fat is so important to the mechanisms of health in the body. I'm not keto, I eat whatever. Follow whatever diet you want, just feel well, but there are certain chemical requirements for the bliss molecule of anandamide to be created in the body. You have to have enough fat. There are certain chemicals that allow you to purge things that are bad for you a little bit more easily. A really interesting thing about the endogenous cannabinoid system is, it is composed of anandamide and 2-AG, which are neurotransmitters. People know neurotransmitters as serotonin, dopamine, different things. There are tons of neurotransmitters in the body, and they all move from the start to finish of a neuro synaptic cleft. It plays in which neural communication occurs from point A to point B, it's called a synaptic cleft. Most neurotransmitters fly right across that thing, point one to point two, except for two. There are two neurotransmitters, anandamide and arachidonoylglycerol, the two endogenous cannabinoids that go from point two to point one in the synaptic cleft, like a cleanup crew. It's crazy. This is the most interesting thing in neural science in a really long time and I recommend anybody go and look up. The reverse engineering that occurs in anandamide and 2-AG across backwards traveling the synaptic cleft, like a cleanup crew taking record of what just occurred so that the next time those serotonin, dopamine, acetylcholine, all these different other endorphins and different neurotransmitters are secreted, it's a little bit smoother across that synaptic cleft. Then again, a cleanup crew comes and what just happened? This is adaptation in real-time. And the mechanism of adaptation is that backwards communication and kind of recording of what just occurred so that the next iteration the body creates of that exact form going through it, the digestive tissue is regenerated every 7 to 10 days or so. The body is an alive, adapted, constantly changing series of tissues and synapses. Every time that gets cleaner, the endogenous cannabinoid system is bringing the body closer to homeostasis that is healthier for it or more efficient for it, I would say, not necessarily healthier, unless you're practicing healthy things, and feeding healthy things, but it is going to be more efficient towards the actions, stimulants, and different things the body is undergoing on a very frequent basis. This is that adaptive process in real time for us. That's the emerging science of the endogenous cannabinoid system. Again, it's very widely available, and it's very easy to learn this at this point. That was some of the most surprising stuff to me over the past. I've been researching this now, probably 8 years. Now, I've personally used pot many, many, many, many, many times and there's clearly an effect, but to see that homeostatic-like effective system that it stimulates is very interesting. It helps you understand why a lot of people that use cannabis can eat a lot of crummy foods and stay lean and not have blood sugar issues and not have diabetes a lot of people have. If you go deeper and deeper into these subjects, you'll learn some very cool stuff about neuroendocrine health, which is nerve and hormone health and the driving force of that being this endogenous cannabinoid system.

Darin: So you talked about anandamide. I mean, that was discovered in chocolate..

Dr. Eric: It comes anandamide in the body.

Darin: Yes, that was technically the loose term called the bliss molecule, kind of in that same '90s era when this was starting to pop up. Did they know at that time that it was this

neurotransmitter, it's doing all these things, it's the bliss molecule, but did they know that it was this endogenous cannabinoid system?

Dr. Eric: Yes, they knew that anandamide made us feel well around the same time that they knew that THC was stimulating the same system. The two were found by the same group in a similar setting. I would like to double-check that, but I'm almost positive it was Raphael Mechoulam and his lab of Israeli doctors and scientists that sort of uncovered the majority of this, which makes sense. I mean, I'm an Eastern European Jewish guy, and I know the brain that a lot of us come with and that guilt and the self-loathing and the frustration that can sometimes just being this set of serotonin and dopamine makeup, and it's not surprising to me at all, but that's the group that correlated THC, anandamide, and all of these feel-good things into kind of, not into existence but into their collective knowledge.

[00:20:36] Caldera Lab Ad

Darin: I never used to give much thought to my skincare routine. There weren't enough brands making products that I would actually feel safe to apply to my skin and that is the truth. And on top of that, the idea of finding a routine that would suit my skin and my schedule was just too much effort. I just blew it off. Nobody has the time or money to try a bunch of different products, look into them, and of course, I'm looking into every single ingredient and most of them are junk until you find one that actually improves your skin. That's why finding Caldera Labs was a blessing for me. They made it easy for me to take care of my skin in a way that fits my routine and my lifestyle. I cleanse my face in the morning and at night using the Clean Slate cleanser. Then in the morning, I use their base layer moisturizer to keep my skin nourished throughout the day. And at night, I use my favorite product from them, The Good, which is a serum that just leaves my skin feeling incredible. It's that easy. Their products are made from completely clean, nontoxic ingredients. And my favorite part about it is their sustainably harvested botanicals, and they're going above and beyond organic and their incredible extraction processes to create the best skincare that actually works. My skin has never felt or looked healthier. If you're ready to take your skincare to the next level, Caldera is offering my listeners 20% off when you head to calderalab.com/darin and use the code DARIN. That's C-A-L-D-E-R-A-L-A-B dot com forward-slash Darin, D-A-R-I-N. You will not regret it.

[00:22:44] Second Part of the Interview

Darin: As people are hearing this aside from-- Listen, a lot of people go ahead and do whatever you want. Sometimes THC works for people, sometimes it doesn't. Sometimes CBD works for some people, sometimes it doesn't. Then just kind of staying on this point of endogenous support. Let's just pause for a second because that is amazing. The fact that we think we're so bloody superior, and look at our freaking healthcare system, they're not acknowledging squat for the systems in our body. They're not acknowledging the science behind the body's desire to heal itself. They just divorced that entirely and blasting us with drugs. So without opening up that can of worms too far, of course, everyone here, it has its freaking place. It can do something for someone and it is whatever. If I break my leg and flip my motorcycle, and I break my arm, I'm going there. But in terms of the body healing itself, we just discovered a new freaking system.

[00:23:58] How cannabinoids help you heal

Dr. Eric: Just discovered like 30 years ago, not that long ago. It's three decades. That's a very short amount of time, but it's enough time to get some knowledge. It's enough time for tests to be occurring and for governments around the world to start recognizing that perhaps it was misappropriated into a schedule one classification as a drug, and perhaps it should be more along the lines of like supplementation, different things like that where it's more caveat emptor, buyer beware, but do your research. This really might help people. So, I want to go real quick. The whole basis of that discussion on endogenous cannabinoid relationship in the body and health in the body and function in the body came through a process that I was going through and I'm still going through, but I'm not a smart guy, and I tell this to everybody, but I'm very, very observant. But what I found was those who can translate symptoms typically remain healthier than those who cannot. The people that can translate what they're feeling had in common a couple of things. One was a movement or postural practice, and I obviously selfishly put foundation training into that, but it ain't always foundation training. It can be Pilates, it can be Feldenkrais, it can be a method, it can be the Egoscue method if I didn't already say that. There are many, many very valuable systems out there. There are simple rules though. Movement done well with awareness is good for you and helps you really notice when movement is not being done well. That is one element of somatosensation, body awareness, body sensation, translating what you feel into a kind of a good for me or bad for me bucket. The other is organ systems and literally the ability to feel pressures in the body as good or bad pressures from hydration to strength to posture. That comes very largely through two things, the lymphatic system steadily draining itself, sauna usage. Sometimes I get in a little trouble for this because I see no infrared. I think just as you guys know, half my initial sauna usage was between your group and getting to come and play with you guys and learn from you guys in 2011, 2012, 2013. Then my time training in the US water polo team in 2007 and 2008, we went to Margarita Island in Hungary in Budapest. It was incredible because I was undergoing a back spasm at that time. I had been traveling. My back was really bad. I didn't know what I know. I had just started this journey in the foundation training but certainly didn't trust it yet, and was very much exploring. I did sauna ice bath two or three times, and my back pain went away for four days. I can distinctly remember that. Then fast forward a few years and I'm with you and your crew and these are the healthiest people I've ever seen. This was what's going through my head. I'm very intimidated right now but I'm also noticing these guys aren't trying to throw weight around but you guys are strong, but you aren't like look at what I can do. You are helping each other and you were listening to your bodies very clearly. I remember a stretching protocol that you were doing, 10 nasal breaths throughout each pose way before anybody else was doing nasal breaths, mind you, way before, and me going in there sweating uncontrollably as I'm sure you guys probably noticed at times because I'm learning, performing, trying to help you guys understand something I do, trying to learn from you guys at the same time but I'm watching you. I'm like, every one of these guys can hold their breath longer than me. They're all older than me. They're all fitter than me. They're all stronger than me. What's the common theme here? It was sauna usage really. It was this intense transformation internally of feeling and purging that let you have the energy to do a lot of those other things and recover from those things very smoothly because you're literally purging these interrupters of recovery out of your system. You're creating this cardiothoracic pump, and you're hydrating and purging all the bad stuff out. I noticed that the people I knew and eventually I became one of those people that chronically use saunas every day, you get healthier than everybody else. It's that simple. You literally get healthier than the people around you that don't do that. In that, coupled with certain and remember my angle is chronic pain and autoimmune disorder

management. That's my angle of teaching and advising. There is a huge performance component to my work, but my love and my dharma, my work is pain management that people can do on their own for a lifetime. What I was seeing was that my patients that had major chronic ailments that chose cannabis over painkillers had such better quality of life. I had to say something about it. I'm lucky I got to write some books, I got to create a course, I got these people that are helping me but ultimately, I'm a doctor that treats patients and I love to be hands-on or teaching with a patient. So, I graduated in 2008. April 2008, I got out into the wild and I was teaching, teaching, teaching, teaching, teaching, teaching, and developing foundation training and then I started practicing in 2013, where I would bring in more heavy pain patients and be hands-on with them. In that time, multiple thousands of people have come through with different symptoms and different ailments and different stories and different outcomes. Movement and breathwork, stimulation of the endogenous cannabinoid systems through one of three things: cannabis, sauna, and ice therapy, or hypoxia, hypoxic training. Those three things create a hormesis effect, which any anti-aging person hears about because of very intelligent people out there. But hormesis is a fancy word for your body gets better at handling stress if it has a little bit of stress to handle. But if it doesn't have very much stress to handle and it's too protected, it doesn't know how to handle stress and it overreacts and the overreaction could be detrimental to your health and well-being and adaptation in general. So, hormesis or the process of minor stressors that is the stimulator of the endogenous cannabinoid system as long as you have enough omega-6 fatty acid, glycerol, to create the molecular requirements for anandamide in 2-AG. So if that's confusing for people, you can take your time and learn it anywhere. It is very easy to understand once you dive in, but the key is a little bit of stress, sauna, training, running, meditation, all sorts of things that are minor stressors that are enough to frustrate you and make you want to get out of it to kind of hang on to it a little bit, and then you get out of it. That's a very strong adaptive process that is fed by the endogenous cannabinoid system and keeps us adapting towards efficiency and health instead of kind of towards efficiency in passiveness.

Darin: So break down for me, I mean, there are a few things there. Let's step into our conscious stress. So we become more adaptive and more resilient in life because we're actually actively stressing ourselves and adapting and changing, so going into the sauna, going into the ice. There's a point in the sauna where I'm uncomfortable, stay a little longer, don't do this shit and pass out, that's not what I'm saying, and then the ice. No one likes to go on that ice. That first 10 seconds suck. But once you've done that, something's turned on. Is it suffice to say there's a lot going on in the body when you've transcended? Because the biggest thing of all of that is nose breathe calm the system, you're not stuck in here and you're not going to die. You just sit in, calm down, let yourself, and then it transcends into this thing. So when you have that experience, your highs are freakin tight. It's unbelievable.

Dr. Eric: It is important to recognize your personality type in this too because it's not extremes that are only good for you. There's a gentleman, Andrew Huberman, that I think at this point, pretty much everybody has heard of him, and he's a very intelligent guy.

[00:32:01] Saunas and Ice Baths

Dr. Eric: But Andrew does an incredible job of dispelling the information about cold versus freezing. In my book, I write the perfect temperature for a cold, not an ice bath but a cold dip

is Santa Barbara winter ocean, 55 to 58 degrees. You don't want to be hypothermic. You don't want to even approach the possibility. What you're doing with this ultimately is you're tricking the body. Many, many scientists are going into heat shock proteins and the natural rhythm of regeneration that the body goes into from that. Ice is a little different. If you go too hot and heavy in the ice, it does delay recovery because you need that blood flow. What ice does is it shuts everything to the center of you blood-wise, and you need that peripheral immune system blood flow in life in general. So cool can, for a lot of people, be a lot better in the long term than ice cool. I'm really adamant on that, especially sensitive people, especially pain, chronic pain people, you want to cool the nervous system. Exactly. That hyperstimulation can set you back a week or two usually. When I recommend sauna or any of that, I just say use the sauna, get to that point where you're feeling it, take a few deep breaths, and then get out. With cold, just like Andrew Huberman and I love that he's kind of leaning in this, go to where you feel a little uncomfortable and then take a deep breath and get out. I'm not gonna lie, you guys are legit super athletes. You have an intensity that I think is not only admirable, but if I could get there, I would be training there. Do you know what I mean? I love training intense and the things I can train intense for. I just noticed that for my nervous system, it was literally too intense to go freezing. When I go cool or cold, I get the benefits that everybody else talks about.

Darin: I think I've gotten better with that too. I'd rather get in my pool that's about the Santa Barbara ocean temperature right now and then just get that stimulant that is there and it's not such a punch in the face.

Dr. Eric: I feel like hot is amazing for us. Sauna is amazing for people. It's one of those things, it's like a miracle. This exists for us, we got to use that all the time. Cold is like pretty good for people. It's a feel-good but it's kind of like seals that deal for sauna. It doesn't quite in my opinion have the same extraordinary benefits as sauna does.

[00:34:27] Beekeepers Naturals Ad

Darin: Bees harness some incredible benefits to the environment and to our health. Bees are truly a fascinating and incredible little insects. Beekeepers Naturals are a proud advocate for these bees in so many ways, and their sustainable source products offer real safe health solutions derived straight from the hive. Through the power of natural ingredients like bee propolis extract, royal jelly, raw bee pollen, Beekeepers products provide similar results to what you'd find in your local pharmacy, that's right, but don't force you to compromise your values. Their products undergo third-party testing to make sure that they're free of these modern-day additives, artificial colors preservatives, fillers, gluten, GMOs and the dangerous pesticides that are everywhere as well as refined sugars. I use their bee propolis throat spray every morning to set me up throughout my day. I love it because it supports my overall health as well as soothing my throat because I am definitely talking a lot when I'm recording podcasts like this. I am completely plant-based and I support insects and animals and everything else, and so I really spent time understanding their harvest methods and how they're actually allowing the bees to thrive better as a result of their caretaking. Beekeepers' main mission is to save the bees. They even donate 10% of their profits to honey bee research, and that is awesome. To improve your health today, Beekeepers Naturals is offering my listeners 25% off by going to beekeepersnaturals.com/darin or enter code, D-A-R-I-N at the checkout.

[00:36:42] Third Part of the Interview

Darin: Then the other thing you mentioned was hypoxic training, and we definitely have pushed our limits in that to the point where I've caught friends passing out. So this was early days, we're just getting our head around this and we definitely eliminated it in the pool essentially because we had to watch each other, we had people flopping in the water, thank God, no one got hurt. But then just small breath holds and doing a walk and trying to walk up a hill and hold your breath for a count of 10 and then just get to that point where it's uncomfortable and then recover through the nose. Is that the kind of thing and many more examples that you're talking about?

Dr. Eric: Yes. I'll talk about Jessie Salas, who's my partner in crime with Foundation Training. He is the best instructor that I've ever seen. He's an incredible, incredible coach, but he's also an ex-firefighter and heavy rescue guy of 17 years. He's had this really interesting, extremely stressful life. What he used to use before meeting-- not before me, I've known him for 20 years. Before joining Foundation Training, he always used this free diving, these apnea tables. Apnea, meaning just no oxygen for a very specific amount of time and then breathing it. So he would always do these apnea tables just to calm down to keep his nervous system down, to combat the really heavy stuff. He was at downtown Orlando, Station 1 heavy rescue guys, so he was seeing the worst of the worst for 17 years, a long time. But he introduced me to apnea in the way that I can kind of understand it. When I'm around people that can hold their breath for four minutes, five minutes, I'm nothing but impressed. I'm just like, it's incredible. It's a lifetime of practice. It's incredible. What I'm talking about with apnea is like what you're talking about, and I'm not an expert in this. I have learned this along the way, and I have seen that the people that practice this are healthier than the people that don't. That's all I'm correlating here. But those who practice apnea tables, meaning I'm gonna breathe, I'm not gonna breathe, you're gonna breathe, not going to breathe. There are lots of different timings, lots of different reasons. The people that practice that has better health or has more awareness, have a better understanding of their bodies, have more mental control it seems, and can understand their symptoms as something that is happening with them, not to them. That's all I can say is I can correlate my experience with many patients, many of whom are much older than me, and sometimes two and a half times as old as me. A whole lifetime of experience and they're still doing these things, and they're still going and they're pretty damn healthy.

Darin: I've meditated over the years for sure and then fallen in and out of it. Once we got into breathing stuff a decade ago, and then started doing apnea stuff, and it literally takes a five-count of a breath in hold for a certain period of time, let go in a slow amount of time, hold, and then exhale, all of these things. It's funny because it naturally calms the brain, it puts you in parasympathetic, it increases oxygenation, destresses, all of these infinite benefits and also, I love doing it right after a workout. How quickly can I downshift and recover from these workouts? Plus, if you ever have done breath holds trying to work out, I know back in the day, we did Wim Hof before it was out there and we would just do these huge long exhale, hold, and we just do 50 push-ups. It was unbelievable on no breaths. It's just extraordinary what it does. So from cannabinoid system, what's going on exactly within the hypoxic, within the cold? How is it stimulating and just unpack that a little for us?

[00:40:32] Breath control and the cannabinoid systems

Dr. Eric: This is what I think is happening and I think it actually has a lot more to do with the structure of the body and the way that breathing can adapt to the body and through strength. Breathing well, especially nasal breathing, these are smaller passages in the mouth. It's much harder to pull air through the nostrils, especially for certain people. It's a more muscular endeavor, the serratus muscles that surround the ribcage, the intercostals, the lats, transversus abdominus, and the diaphragm, all have to participate in a nasal breath, even a gentle one. Try to breathe, and in fact, everybody listening to this, just while you're sitting or standing, breathe as low into your ribcage as slowly as you possibly can through your nose just for like 5-10 seconds, as slow as you can. You'll feel that the slower you go, the more muscles you feel trying to move your ribcage. Well, it turns out that mental stability and physical stability kind of seem to go hand in hand in a lot of people. Breathing well as I've learned through experience, through the process of developing decompression breathing, practicing it myself now for over 10 years and teaching it to everybody I can possibly teach it to, I have seen that if you breathe really well and practice breathing in through the nose, holding your breath for a moment to feel the structural expansion that occurs and then mechanistically slowly breathing out, and then holding the breath to feel the restriction that occurs when you don't have any air and then you feel the abdomen, you feel the obliques and the diaphragm contract. You do that one year, three years, five years, seven years, your ribcage has changed position in your body. Your lung volume has radically improved through a series of everyday adaptive mechanistic processes that are governed by a healthy endogenous cannabinoid system, not because you're smoking, but because you're feeding it and stressing it and training it to adapt towards healthier things. One of the really cool things is that two things that you had no idea you were doing will have been done over the course of those years. Your grip strength will improve, no question about it because of lat recruitment, transversus abdominus recruitment, serratus recruitment, makes your hand stronger. Grip strength is one of the indicators of mortality in life. It's one of the huge ones, and we have proof of this with Los Angeles County Fire Department. We did a study with LA County Fire over several years ago, and we found that the biggest improvements of 10 minutes of foundation training a day for eight weeks were lung volume, grip strength, reported mental wellbeing and injury reports, everything was improved upon. The things that happen through lung volume increases that are slow steady adaptations, and grip strength improvements that are slow steady adaptation, that's aging healthy versus not eating healthy. That's it. We have something right here. I love telling this to people. We have something here called our solar plexus. Do you want to know why it kind of aims at the sun? In modern-day, it aims at the ground. We want to take this space, this bundle of nerves that separates the digestive tissue from the breathing tissue, we want to give it room, we want to aim the solar plexus towards the sun the best we can without hyperextending the spine, obviously. But it's that breath in that uses the neck muscles, uses the diaphragm, uses the abdomen, uses the lats that keeps us healthy. Go watch Top Gun and look at Tom Cruise and Goose playing volleyball and you'll see exactly what I'm talking about. You'll see the difference in their stance in the '80s versus the stance of people in 2020. It's very deliberate. And there are lots of other examples, I just like that example.

Darin: Where your solar plexus, where is your chest pointing? Is it pointing down? Then pointed up. What I love about the breathing inherently not to mention the cannabinoid system and the activation but the postural integration that happens. I remember that study so long ago that grip strength was the best measure of overall strength. The fact that you can do breathing stuff and foundation training and get a stronger, essentially, overall body

and body position. I love that you really merged all of that together from foundation training to breathing, obviously, it's so important, and you've created that on-ramp to understand this ancient system that we just now are starting to realize and then once we realize that we can actually do something with it. Do you have a bunch of the exercises in the book and stuff?

Dr. Eric: I have three books on foundation training that have come out. The most recent one is this Foundations of Health in which we provide sort of a gallery of poses. I put all 25 of my poses in this book, but they're not explained because over the past 10 years I've learned that people learn poses one of two ways, from videos or in person. That's how you really get it. I have two books. These two are 100% movement and philosophy. This is the first foundation training book called Foundation. This is the second book called True to Form. This is like the development of the physical process of my work and you'll learn it very well. From those of you who choose to learn from a book, this one is a philosophy. This one is my philosophy on how pain happens in the body and the mechanistic simple protocols we can follow to eliminate its capacity to infiltrate us too often and too heavily. To understand where it comes from, I go through the 10 most common symptoms people come to me for from scoliosis to degenerative spine disease to plantar fasciitis, frozen shoulders, carpal tunnel syndromes, neck pains, and symptoms, all sorts of things like that, I go through exactly what those breakdowns occur biomechanically, so you can understand your injury, you can see where it all comes from. Then I provide sort of a 10-patient case study. So you're listening to 10 people that have worked with me for a lot of years now and what they do for those symptoms, including sauna, including cold, including THC for some, including CBD for some, including staying away from that for some. I've got some firefighters that cannot have it but they're tested. I've got some different people that you have to be careful, they could lose their jobs. We have a really good spread of information, but this Foundations of Health book, and I'm still going but here's what I'm learning and what I've sort of backward stepped my way into over what's now as a 14-year career. I hope I get the chance to do a lot more and to share as much as I learned in the future. I hope that just like I kind of proved a few things that I thought wrong, I hope that happens again. I hope I keep getting closer and closer to the truth and what feels right, but this is the closest I've come yet. I hope people that are thinking of surgeries that are potentially major or on the drug they don't want to be on or on a prescription they don't want to be on, I hope they'll take this seriously and listen to me a little bit and just give it a try.

Darin: Well, I love that because we do have to be our best advocates. If we give that power away, then we are opening ourselves to a journey of never getting to the source. I love the descriptions and the examples that you're going to layout. I'm sure everyone who are listening are going, I have that pain and to be able to unpack that as to see because we want to get into this going my body's fucked up. That is a horrible statement to say, it is fucked up. But understanding of what you're saying, understanding how these things developed, what's going on, and then I can unravel that mechanism and change it in this way, that is powerful because that puts the power back into the person and allows the body to have the mechanisms, the biology, the chemistry to then start healing itself again.

Dr. Eric: I hope people take it seriously because they have a lot more power than they believe they do. It's not because they're eating the right superfoods necessarily, it's because they're eating the right superfoods and they're eating the right diet, and they're also getting the stuff out, they're also training the mind in an easy, adaptable way, not overthinking it

literally as they're trying to train themselves. I've seen a lot of people get better. They all sort of have a disciplined approach to getting better. It's not so hard that their superpower is discipline, it's just that they start feeling better and that breeds discipline.

Darin: Dude, you're the best. Thank you for this amazing conversation. It's so good to see you again. Hey, give my best to your family. Stay in touch dude, for sure.

Dr. Eric: I can't thank you enough. Thank you so much for just the help and the support, always being just an awesome, kind, intelligent human being.

[00:49:25] Podcast Outro

Darin: Thanks for tuning in to this episode of The Darin Olien Show. I hope you took something valuable away from this conversation that will help improve your life in some way. If you'd like to learn more about my incredible guests, you can find all of their information in the show notes on my website. If you enjoyed this episode, or even you didn't like it, please rate this podcast. The team and I value your feedback so we can continue to give you the most value possible. We want you to get the most out of every podcast. So please rate, subscribe, share anything you feel called to do. I truly appreciate it, and I love and value your support. So, thank you, and I'll meet you in the next episode.