Paleo Solution - 388

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Robb: Hey, folks, welcome back to another edition of Paleo Solution Podcast. I am Robb Wolf and very excited to share today's show with you. You're going to see two, three, maybe four episodes over the next couple of months probably that deal in various ways with the topic of traumatic brain injury or TBI.

This is clearly just a huge issue in everything ranging from American league style football to folks in the military, huge variety of other sports, UFC, any type of head trauma inducing event which there's a lot more things out there that produce traumatic brain injury than what people are generally aware of. I think that our altered sleep and also pro-inflammatory diet is making this whole situation worse but I'm getting far off field on that.

Today's guest is Cavin Balaster. He is the author of the book How to Feed a Brain. Cavin is a pretty amazing guy. He survived a two-story fall and was comatose for 12 days. He was diagnosed with a diffused axonal injury, a DAI, and was given less than 10% change of recovery. Most people, about 95% of people with this injury die and/or never wake up. They're in a vegetative state for the rest of their life.

He actually came back from that and upon awakening, he experienced severe brain fog, memory loss, breathing problems, double vision, was horribly prone to infections and a host of gastrointestinal related issues. We've learned more and more about the effects of the gut on the brain. It's interesting. It's a two-way street. Damage to the brain ends up damaging all of the other systems on our body via both immunological and also endocrine function.

I talked extensively with Cavin about his whole experience, his recovery. Diet and lifestyle ended up playing a critical role for him in addition to a host of other therapeutics. Given the statistics, it's almost certainty that you know someone directly who has suffered a traumatic brain injury and likely suffers impairment to this day from traumatic brain injury.

Again, I encourage you to give this show a listen. Share it around to friends and family, those folks that you know who are likely affected by this condition. I think you will be incredibly inspired by what Cavin has been able to do. Again, most people who suffer an injury like this never really get back on their feet but Cavin has generated multiple successful websites, has written and published his own book and is really on a mission to not only continue his own healing journey but

to get this information out to as many people as he can. So incredibly inspiring. Hope you enjoy the show.

Hey, folks. Robb Wolf here. Another edition of the Paleo Solution Podcast. The cool thing, the really amazing thing about some of the work that I do is I'd been able to meet just thousands and thousands of amazing people. Occasionally I hear that I've played somewhat of a role in helping them in some way which I can't think of a way of earning one's way through the world.

Just being able to earn one's way through the world is a huge blessing. But then the fact that one's work might have some influence on other folks occasionally is great. But then there's this reciprocity piece to it where I learn so much from many of the people that I meet and interact with.

Today's guest, Cavin Balaster, is one of the people that has just really been amazing for me because I've had an interest in traumatic brain injury and all kinds of metabolism issues related to the brain for a long, long time. I've talked about things like ketogenic diets, fasting, hyperbaric oxygen. Ages ago, 20 years ago, I was nosing around this stuff and there just wasn't the ubiquity of information at that time that there is now.

Cavin has a very interesting story. Cavin, hey, man, welcome to the show first. Congratulations on wrapping up your very first book, How to Feed a Brain. How are you doing?

Cavin: Dude, I'm doing good. It is so good to be here. Yeah, you said it, Robb. You've definitely played a huge part in a lot of things, a lot of understanding from me and your presentation on ketogenic metabolism and brain injury really, really helped outline and directed me towards all sorts of research on that subject. And so I can't thank you enough.

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Robb: Let's do a little trip through memory lane. We met at Paleo f(x) for the first time, is that correct? And I forget which one it was. Was it the one where I presented the ketogenic diet for traumatic brain injury?

Cavin: I think that's the one where I got the nerve to go up and talk to you.

Robb: Okay.

Cavin: You're intimidating, Robb.

Robb: Oh, man, I know. I'm 5'9" and not particularly attractive. I have hair growing out of weird places. I am very intimidating, yes. Cavin, give folks a little bit of your background. You wrote a book, How to Feed a Brain, and you've got a really compelling reason that that became a thing for you. Talk to folks a little bit about that.

Cavin: Yeah. In 2011, I sustained a severe traumatic brain injury, was diagnosed with a diffused axonal injury, which is a type of brain injury that statically 90% never wake from a coma and the 10% that do, most are in a vegetative state. First off, I'm extremely fortunate for being here and then extremely fortunate for not being in a vegetative state.

Essentially, I didn't eat, walk or talk for months. My left hand was totally flexed inward. I was breathing through a tube in my neck. I was receiving nutrition through a tube in my belly. It was a long road of -- I mean, you can imagine the despair at that point as well, just like, "Holy shit, my life is over."

At one point, I'm looking at my wrist and I'm like, "Move your hand," and it wouldn't move. I'm like, "This sucks." I realized at that point, I was like I'm on this ride either way. I can go on kicking and screaming the whole way or I can recognize this is an adventure. Adventure sucks sometimes but they get better.

Robb: Sometimes you get dysentery on an adventure and you're laid out for a while. I've had a few adventures like that where purging out of both ends. Cavin, tell folks how old you are.

Cavin: When this happened, I was 27.

Robb: Okay, so young guy. Young guy, prime of life, yeah.

Cavin: The reason I said this is an adventure, and that was where the name of my first blog was born which is adventuresinbraininjury.com, because I'm treating this like an adventure. But, yeah, I'm 27 years old when this happened and I began regaining my abilities, relearning how to walk and talk again, just basic functions of life. At one point I was steered to a nutritional protocol and I began to regain some clarity and I was like, "Whoa, there's something to nutrition. What do you know?"

Robb: Right, shocker.

Cavin: Shocker. So, I began researching why. I used that regained clarity and began to delve into study, studying metabolism, neurometabolism, mechanisms of neuroplasticity. All these things began to be uncovered for me as I went on and learned so much about nutrition. What this book is that I've written is the

nutritional tools, the culmination of some of the nutritional tools that I've used to recover my brain function. And really the same interventions that we use to rehabilitate the brain are the same interventions that are used to optimize the brain in different ways. This is for nutrition, for optimal brain function and repair.

Robb: That's fantastic. I'm thinking here a question that I have. It's interesting to me. Are you familiar with the book Flowers for Algernon? Do you remember that? Did you ever hear of it? Old books.

Cavin: A long time ago, right.

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Robb: It's a little bit kind of near future sci-fi where these folks are doing some experiments and they're doing experiments to enhance one's cognition like they're basically trying to create super geniuses. They used this formula on a guy who is basically cognitively impaired to some degree, very, very low IQ. They do this treatment on him and he ends up with a highest IQ that anybody has ever seen.

He's doing all this amazing work but then they discovered that the treatment doesn't last forever and it starts degrading over time. Then this guy is in a race against time to figure out, the smartest man in the world, is he going to save his own life, the life that he now has and the thing goes on and I won't give away the ending. It's a very interesting deal.

I've got to wonder. For you, and I'm sure this has changed over time, but what have been and what are the great challenges you have faced along the way here? You've mentioned that you had some movement issues but you learned somewhere along the line that, hey, this nutrition and different interventions may have incredible bearing on your brain health. But how impacted was your memory and cognition and connecting the dots?

You're in a state potentially in which you are compromised relative to what you were before but yet you are on a track where you can reverse that process. What was your state cognitively? What was your state physically and emotionally? What were the boundaries of where you were and what you could do and how has that changed over time?

Cavin: Yeah. I mean, I definitely had some memory issues, for sure, a lot of emotional dysregulation. I really appreciate that you brought up how is my state emotionally? Because that was a huge aspect. Getting through the emotional piece of it -- I actually was speaking with a psychologist friend just yesterday

about this. The greatest thing that I needed to overcome was fear and despair and fear of not being able to do what it is I need to do.

There was some cognitive place, there was some physical -- My brain wasn't communicating very well. It's still not perfect at all by any stretch. I've gone leaps and bounds but I'm still not perfect. Then again, who is? Yeah. But getting over the emotional piece, that has to do with getting the drive to actually implement these changes.

Basically, many connections in my brain have been damaged. I think of rebuilding those connections like building a bridge. What do you need to build a bridge? You need supplies and you need skilled workers. Supplies would be the nutrition, the brain building the nutrition, the right kind of nutrition. And then the skilled workers would be the therapy, the targeted therapy, the right kind of therapy, the skilled workers.

And with that also is the motivation, the willingness, the attitude. That goes along with skilled workers, the motivation for them to do something. The skilled workers don't do anything if they don't do anything, if they're not motivated to. That's to do with the mindset. You figure out the nutrition piece to a great extent. I'm always kind of honing that piece for myself and my specific biochemistry at that point.

But then the mindset. I love your book, Wired to Eat, because that's what we're talking. We're talking about the wiring of our brains, how it's set up naturally to be in this place of like give me reward, give me the feel good brain chemicals, whatever. And then being able to choose differently nutritionally and then choose differently therapeutically and all of these tactics that you can do, that I can do to affect my recovery myself and that's self-empowerment right there.

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Robb: Absolutely. So, what are you doing nutritionally? What does that look like and how has that maybe changed over time? What was maybe version one and then are you on version six, version seven? How has that evolved over time?

Cavin: It has definitely evolved over time. Definitely. I mean, there are so many nutritional guidelines out there. I've definitely slugged through lots of different ones where I'm like, "Oh, that doesn't work for me. No way. Done with that." But really a huge aspect is Paleo, for sure, and then real food. Those are the mainstays, just like bringing in lots of produce, bringing in high quality protein and bringing in lots and lots of veggies and lots and lots of high quality fat. That's really, really short version.

Robb: Got you. Are you shooting for specifically ketogenic ratios with your eating? There does appear to be some suggested benefit for ketone bodies being an alternate fuel source for the brain, enhancing brain drive, neurotrophic factor and some other nifty elements that could be beneficial for cognition? What do the exact numbers look like if you don't mind sharing that?

Cavin: Actually, the numbers, Robb, I've never done blood test or seen my actual numbers. I do use Ketonix which is a breath analyzer. I stay pretty much in the high yellows, low reds usually. Honestly, I don't count my macros. I feel it. I use the Ketonix a lot to guide where I'm at, like tell me where I'm at and then correlating that with how I'm feeling and where I am and I can pretty much tell you where I am as far as ketone metabolism or if I'm burning sugar at that point based on how I'm feeling.

Ketone metabolism is fantastic. I like how you brought up BDNF because that was another cool little chemical I learned of, cool little compound that could really help me out, self-actionable things that I could do to upregulate BDNF. For example, every morning, I hop in the sauna. I have a near infrared sauna. I have sauna spaces, near infrared sauna, and I hang out in that for about 20 minutes. I meditate and I journal.

Those are all great aspects of building connectivity the way I want. And then after that, I hop in a freezing cold shower which also upregulates BDNF, increases nitric oxide, more oxygenation to the brain, just like cool little tricks. I call them rock star rituals that we can do to improve our brain function.

Robb: That's awesome. A very good friend of mine and one of the smartest people I've ever met, Ken Ford, who's the director and founder of the Institute for Human and Machine Cognition put onto my radar -- I had known about BDNF and some of the benefits that we could potentially garner from increasing BDNF levels via exercise, meditation, some of these other outside the box methodologies like the infrared sauna and the cold exposure and whatnot.

He shot me a paper and it suggested that for BDNF to really do anything we have to have some degree of ketone body signaling. For people who are metabolically healthy that may be just simply not over eating before bed and then doing an overnight fast and we get an appreciate-able of ketone bodies. But there is an argument for things like complex exercise, intense exercise, new physical activities, all within the context of that ketogenic environment, even a mildly ketogenic environment to help augment that BDNF production.

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That's fantastic. I'm curious. On the journaling, do you do pen and paper with that or do you type that on a computer?

Cavin: I'm sorry. You said did I do pen and paper with it?

Robb: Yeah. Do you do your journaling, is it pen and paper or computer? I'm just curious about that as far as the journaling?

Cavin: It is absolutely pen and paper.

Robb: Okay. That's interesting. Because I've read some stuff on that too, that the pen and paper process does something that the computer typing does not do as far as brain connectivity and whatnot. That's cool.

Cavin: Yeah. I absolutely feel like with the pen in your hand, I almost feel like it just channels through. The connection between the brain and your hand, just like scribing, it just goes and flows. It's like your brain is talking. It's funny. I mean, I used to journal because it was what I was supposed to do and I was like, "I'm going to do this because I'm told to."

But if I had nothing to say I realize I can just write, "I don't have anything to say," over and over again. This is what I teach clients. I'm like, "Journal." If you've got nothing to say write "I have nothing to say" over and over and over again for ten minutes. After a while, your brain is going to be like, "I got stuff to say. This is boring."

Robb: Right. Right. Anything besides this.

Cavin: Yeah.

Robb: Cavin, what are you doing supplement wise? Because I know that there are quite a number of supplements that are claimed to have some neuroprotective maybe neuro enhancing effects. What have you discovered in that realm that seems to work for you?

Cavin: I love that you brought this up. I actually have a handout on my website of my top five favorite ones. What those are, we got fish oil for stuff like high DHA and EPA, high quality fish oils. I mean, you know the research is just fantastic about what that does for the brain. And then we have desiccated organ meats. I love what organ meats do.

I'm not necessarily a huge fan of eating organ meats all the time although my taste had definitely evolved. But back in the day, there was no way I was going to eat a bunch of beef liver. Now, I love that stuff though especially beef heart. Beef

heart is great. You slice it thin and you sear it like for just a tiny bit and keep it pretty raw. It's pretty awesome.

Robb: We've been doing a beef heart chili. We get our grass fed meat shipments and we'll save up two, three hears which end up being pretty good size but then we will actually throw that in the food processor, season it up and then just do a chili which is inspired by Charles and Julie Mayfield's work in Paleo Comfort Foods. It's pretty darn good and the girls smash that stuff. Yeah, nice.

Cavin: Nice. The others, CoQ10. I'm a fan of that stuff.

Robb: What form do you use with that? Qunol or do you have a particular name brand? Because I know the absorption on the CoQ10 can really vary.

Cavin: I go for a liquid CoQ10.

Robb: Okay.

Cavin: It doesn't seem to me like the difference between ubiquinone and ubiquinol is that great and especially when it comes to price. As far as absorption goes, there are studies that show the benefit of either is pretty substantial. When I choose my therapies or my supplements or whatever, my nutritional practices, I weigh risks and unknowns versus its possible benefits, right?

With that risk and unknowns, cost is definitely a factor as well. When I look and I'm like, "Well, that's safe--" For example, sauna. "Well, that's safe and it's one purchase and it's good forever." That's pretty cool.

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If that's the deal, all right, with my supplements, I can get something that's affordable and it looks like the research shows it's not that big of a deal between the two. All right, I'll go with the form. But, yeah, I always get the liquid because that's apparently much better absorption.

Robb: Okay. And then clearly eating that with a fatty meal to further enhance the absorption?

Cavin: Yes. Well, I mean, yeah. Lipids are great transporters, right? So, let's keep plenty of those in our diets so that we're actually getting the nutrition we're ingesting.

Robb: Nice. Do you do any amount of intermittent fasting or extended fasting to augment some of that ketogenic state, the neuroplasticity and whatnot? I could see an argument for and against. I could argue for because there is the potential

of getting some of these cellular reset mechanisms engaged which clearly could be beneficial. I could see some arguments against because oftentimes some of the problems with traumatic brain injury include this broad reaching HPTA axis dysregulation which we oftentimes label as adrenal fatigue.

I could see the dose response curve on that being dodgy, like a little bit might be good, too much might be bad. But then again, I don't know. I suspect it could be an individual situation there too. Have you played with that or do you have any thoughts around that?

Cavin: I definitely played with that. Essentially, I don't intermittent fast but I don't feel like it. It's like, "I'm not really hungry. I don't think I want to eat." Great. But I think absolutely with the adrenal fatigue or adrenal dysregulation or whatever that is -- I think, Nora Gedgaudas wrote an excellent book about adrenal health. What's it called? I forgot. Something about fixing your adrenals. Let's see if we could find that.

But, yeah. I love how -- She says your adrenals are just hormone factors. They do what they're supposed, what they're told to do by your brain. So, your brain is what's telling them what to do. That's what you want to get in touch with, how your brain is feeling about things. If you don't feel like intermittent fasting, don't.

But interestingly, a couple of weeks ago, we launched the Feed a Brain interview series, which was fantastic. I got to interview some of the top brain and nutrition experts of our time right now. We had Dr. David Perlmutter. We had Dr. Kharrazian. We had Terry Wahls. I wish we had you, Robb.

Robb: We'll make it happen although with that lineup I don't know that I would have all of my stat. I'll bring down property values when you're ready to shut the show down, when you're ready to pull the bullet on its head then I'll be your last guest on it.

Cavin: Yes. While we were doing that, it was actually after Thanksgiving, my family got a really nice bird, pasture raised beautiful bird and they gave me the carcass. So, I froze the bones and I ate the leftovers. And then I had this carcass. I made bone broth with it for a while. At that point, I did a 50-hour bone broth fast which probably the longest fast I ever did. It was pretty cool. I think I want to start making that a tradition. Get the Thanksgiving carcass and just bone broth fast for a while.

Robb: We always make soups out of our carcasses and whatnot and this year we had a ridiculous amount of turkey left and so we made a keto oriented recipe that ended up being part of the Keto Gains Holiday gift guide. It was a chayote squash turkchilada. It was, basically, enchilada minus the tortillas. We used the chayote

squash to fill that in and we did turkey and goat cheese and enchilada sauce and everything.

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I got to say I possibly ate a bit too much of that first time I dug into it. That's awesome. On the Nora book, Rethinking Fatigue: What Your Adrenals Are Telling You and What You Can Do about It. I have heard good things about that.

Cavin: Yeah, it's fantastic. She talks a lot about how adrenal fatigue is kind of -- It's misunderstood and it's based on old science in a lot of ways.

Robb: Something popped up in my newsfeed today that is interesting to me because it relates to brain health pretty significantly. It's from Wall Street Journal. The headline is Pfizer Ends Hunt for Drugs that Treat Alzheimer's and Parkinson's, about 300 layoffs to take place once promising compounds failed during testing.

I find this fascinating that one of the largest pharmaceutical entities on the planet after a whole lot of time and a whole lot of money is just completely throwing in the towel on what could arguably be a trillion dollar a year pharmaceutical, potentially one of the first ones too to hit that trillion dollar sales market. They're just wrapping it up and throwing in the towel.

What I find fascinating about this is that when you talk to folks like yourself, David Perlmutter, if we just sniff around at some of the anecdotal stories that we're seeing and also the emerging amount of randomized controlled trials in things like ketogenic diets and enriched environments for various neurodegenerative diseases which traumatic brain injury shares a lot of these features, but it's fascinating to me that these guys have thrown in the towel on approaching any type of a pharmaceutical intervention for this. What do you think about that? What's your gut level response to that?

Cavin: What I first thought is you can't patent a ketogenic diet, can you?

Robb: That's kind of what I was just thinking. I'm wondering if the rise of keto has not kind of put a kibosh on this because we have a really effective non-patentable intervention at best. Maybe there's some ketone esters and ketone salts out there but we're on the same page there. I'm sorry to interrupt you.

Cavin: Yes. My pops plays for the holidays and we were -- They always have the TV on and you had drug commercials. This drug commercial, it's gotten really popular, to optimize brain function. It's in the news. And there are drugs and it's so funny, he's like, "What do you think about this drug?" And I'm like, "It has this exotic ingredient from jelly fish." And I'm like, "Well, that's patentable, right?" I'm like,

if you've looked at the research there is so many effective tools out there that are not patentable and are, therefore, not advertised and there aren't huge budgets and big pharmaceutical companies pushing them. But we can find so much right now that's out there. I think it's interesting. I didn't know that they threw in the towel on this.

Robb: Literally, this is today. This thing broke today.

Cavin: Okay.

Robb: It's in the Wall Street Journal business thing. I don't get surprised by a whole lot but my jaw, I had to pick it back up. No, no, I'm sorry. It came out January 6th but I just saw it today. I find that just fascinating. I mean, these guys have -- There is that saying don't throw good money after bad money but these are the folks that have gone down the statin route pretty aggressively. It's so back and forth whether there's any benefit to those. There's likely more risks than benefit. If there is benefit, it's in this really small cross section.

But you could make an argument that they should, if they're quite far down the road with anything that, well, we're just going to keep slugging away at this, and when you look at the projections on Alzheimer's and Parkinson's, these things are just going to the moon. They're increasing at exponential rates. They are shockingly expensive to deal with because of the managed care element and the fact that these guys are pulling the plug on that is just fascinating to me.

One of the first indications that the reductionist pharmaceutical intervention approach, their understanding that the risk-reward element to that is just not worth it.

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Particularly, again, I'm really curious if someone in that chain of command hasn't been following the effects of ketogenic diets on neurodegenerative diseases. I know that they were looking at traumatic brain injury as some of the places that they might rollout some of these drugs. Because again, so many of the mechanisms are similar, reactive oxygen species, neuronal cell death, support cell, cell death, lack of substrate availability mainly glucose, and this is why ketones are such a huge benefit there. It was pretty interesting.

Cavin: I spoke at KetoCon recently. We talked about -- Well, I brought up this study that shows that when glucose and ketones are present your brain prefers the ketones. Pretty fantastic. I have to read this article you're talking about. What would I Google, Wall Street Journal?

Robb: Pfizer. I'll email it to you and we will definitely make sure this ends up in the show notes.

Cavin: Perfect.

Robb: If somebody wanted to do a search on this, Pfizer, Alzheimer, Parkinson's. You will guaranteed get this piece. It's super interesting.

Cavin: I think that's really interesting because Alzheimer's and Parkinson are increasing. There's such a huge prevalence of that and it is projected to reach 5.6 billion by 2020, or sorry, million, by 2020 in the US alone. Don't quote me on those numbers. I'm pretty sure though. You said that it's really expensive with all this. But what I was thinking is expensive also means profitable.

Robb: Potentially.

Cavin: Potentially, right.

Robb: That's where the Statin shtick has been effective on that profit seeking realm. Some of the diabetes drugs had been incredibly profitable although they do nothing to improve long term survivability or anything like that. If somebody has a heart condition, they can get sick enough or they can't care for themselves. But in general, if it's managed somewhat well, you can still drive, you can still work, you can pee, you can poo, you can wipe your bottom, all that type of stuff.

Same deal with diabetes. You can have really horrible complications with diabetes like losing limbs and ending up on dialysis and whatnot but that cognitive impairment part, like you described, 90% of the people that had your type of brain injury never come out of coma. Most of them who do are in a vegetative state.

The progression with Alzheimer's and Parkinson's and some of these related dementia conditions, you have an individual that is technically alive but they are largely incapable of care taking themselves, are highly likely to be dangerous to themselves and others from driving, to wandering out into traffic, setting their house on fire.

So then you're in a full time caregiver scenario. This stuff can drag on for a decade or more. I mean, it's a no joke problem that westernized societies are facing. The monolithic entity that's looking for a one magic bullet solution pulled up stakes and left town. That is wow. Wow.

Cavin: No magic bullet.

Robb: Not for that. I mean, the antibiotics and stuff but--

Cavin: ***[0:39:15] [Crosstalk]*** working. People likely have to do something. They have to change their behavior and eat differently and do different cognitive tasks and rebuild those connections, keep themselves sharp. We can't throw that in the bottle and sell it. That's super interesting.

Robb: Yeah. Cavin, if you had a couple of things for a family, let's say someone in their family just suffered a traumatic brain injury or maybe even -- I know several people now who are retired from professional athletics, the NFL, or even special operations, military service, and these folks have sustained a lot of traumatic brain injury over the course of time.

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Not as acutely significant as your event but the numbers and the statistics do not bode well for many of these people. What are three to five things that they clearly need to do? Obviously, buy your damn book and start following your stuff. I mean, what are some other things, just so we sound like we're somewhat credible and we know what we're talking about and have something good here? What are some things that folks need to do to address these issues?

Cavin: I am going to bring it like, yes, the nutrition piece, the quick things that you can do like, first of all, exercise. Get exercise and eat real food. There's your base. Let's start with that. But again, if we're building these bridges in the brain, we need supplies, we need skilled workers and we need the skilled workers to be willing to do this.

That's where a lot of the mindset goes in and the psychology of what we're dealing with. There's analogy I use for this as well. Neuroplasticity. This is what I use to describe neuroplasticity. I say your brain is your garden and you have 86 billion plants in your garden, 86 billion neurons in your brain. Your thoughts are the seed and your attention is the sunlight and water.

You're going to ask anybody who understands neuroplasticity, what we give our attention to, those pathways grow. Those neurons grow. Those plants grow and they connect with other plants. And we all have weeds in our garden. We all have thoughts we'd rather not think. We all have habits we'd rather not have. Unfortunately, we can't really reach in and pull the weeds.

Without brain injury or brain surgery, we're not just selectively destroying neurons and choosing different pathways. But what we can do is we can give our attention to the pathways we want to grow, give sunlight and water to those plants and after a while those plants, the roots take over the roots of those

weeds. That's how we grow a beautiful garden. I'm not saying just ignore the weeds, like lock them away. Sometimes the most beautiful flowers are found amongst those weeds. But we don't need to have that right in our face. We don't need all of our attention to be given to the painful aspects of our life. How do we say this?

Robb: The challenging element?

Cavin: I mean, we need to know the challenging elements. We need to recognize them but we don't need to be like, "My life sucks." Instead, we can have that instead of it directly in front of our face, we can have it in our peripheral vision. It's right there. I know it's there. But that's not the focus of my attention. My attention is towards improving my circumstances, accomplishing my goals and living out my purpose.

Robb: It's funny, your traumatic brain injury may have made you telepathic or able to read the future because you basically just answered the last question that I had for you which was if someone was listening to this program and they've suffered a traumatic brain injury or they know somebody who suffered from traumatic brain injury, what on kind of an emotional level would you convey to that person to give them the hope to stay in the fight?

You already did that. With prescience, you managed to answer my final question. That's just powerful stuff. Cavin, I'm so honored to have gotten to know you a little bit. It's two ships not passing in the night but during the day at these events. It's really a testimony to your will to thrive and go forward.

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Many, many people think about writing a book. Very, very few people do it. Almost none of them do it on the heels of suffering a potentially, clearly life altering -- Your life's been altered but it didn't end. There's an argument that your new vector here may be one of the most profound experience of thriving and contributing. That is really something. That is something to be so incredibly proud of.

I am honored to call you my friend and very, very stoked that you've been on this show. Can you let folks know where they can track you down on the interwebs and all the important show notes that we need to take care of on that bookkeeping side?

Cavin: Well, it goes both ways, Robb. I am honored to be here. I have always looked up to you despite that you're short and--

Robb: And not particularly good looking, yeah.

Cavin: All of that stuff. Absolutely, I feel the same way. Yeah, you can find me at feedabrain.com or my original blog was adventuresinbraininjury.com. We have the Adventures in Brain Injury Podcast. My story began with brain injury or at least my blogs and my internet crusade, if you will, began with my brain injury. So, Adventures in Brain Injury.

The Adventures in Brain Injury Podcast is not just for brain injury. We go far beyond brain injury. I get to interview the smartest and most inspirational people I've ever even heard of which is pretty cool. Isn't that cool, Robb? We get to--

Robb: It's not a bad gig.

Cavin: It's a pretty good gig.

Robb: Having a good story and a decent podcast gives you access to a surprising cross section of people that would otherwise basically have their bodyguards beat the shit out of you and toss you on the curb, so -- It's a pretty good deal.

Cavin: Not bad. All access pass. And speaking of all access pass, we did the interview series recently and I, again, interviewed some of the top brain and nutrition experts of our time. It was fantastic. You can go to feedabrain.com/preview and you can watch the -- You're going to watch ten minutes of each of those interviews for free. Let's see. What else? What else do I got for you?

Robb: That's a lot. We could wrap there. Are you going to be at Paleo f(x) this year?

Cavin: I am, yeah. I don't miss Paleo f(x). I love Paleo f(x).

Robb: Cool. Bring your gi. We'll get you some jujitsu--

Cavin: Dude, that’s a great call.

Robb: I suspect that may be the ultimate and enhancing BDNF. We'll get your first jujitsu session with me.

Cavin: Yeah. Speaking of jujitsu, jujitsu was a huge part of my recovery as well.

Robb: Nice.

Cavin: Yeah. Yoga first was a huge aspect. My functional neurologist was like, "What do you think about jujitsu?" I'm like, "Yeah." Because I was actually talking to him I

used to do martial arts before my injury and then I lost my balance from my injury. I used to throw spin kicks and stuff and that's not happening anymore. I got terrible balance. Why don't we take this to the ground? I'll try to break your arm or choke you out. Jujitsu is just fantastic. You're right, BDNF. Feeling that cerebellar resistance and building those connections is fantastic. Yeah, I will take you up on that.

Robb: Awesome, man. I look forward to seeing you. Again, congratulations on all the great work that you've done and looking forward to seeing what else you have cooking. Again, whenever you want me to bring property values down, I'm more than happy to do it on your show.

Cavin: Nice. Well, let's make that happen. One more thing I forgot about. Go get my book on Amazon. It will be up there when this airs.

Robb: That is How to Feed a Brain. We will definitely have links to that in the show notes as well.

Cavin: Perfect.

Robb: Awesome, man. Well, take care and have a great rest of your day.

Cavin: Thanks so much, Robb.

Robb: Okay. Bye.

[0:50:02] End of Audio