Transcript – Hacking A Concussion - #333

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Dave: You're listening to Bulletproof Radio with Dave Asprey. Today's cool fact of the day is that the sport that causes the most concussions is, believe it or not, high school football, which means, well, that explains Al Bundy, right? Second up, though, is, for my Canadian friends, ice hockey, and number third, for the rest of the world, would be soccer, or football as they call it in the rest of the world.

The reason I'm talking about that, and the cool fact of the day, is that today is going to be a different kind of podcast. I've been getting all kinds of requests on Facebook where people are saying, "Dave, we want to know more about what you're doing and not always hear just from the guests." As an interviewer, I kind of feel like you guys hear, you hear what I have to say quite a lot, just between the questions and all, but the feedback is a little bit different, saying that you want some direct one-on-one time with me, so I'm going to try it on this, and I would ask that if you like this, or if you don't like this, head on over to Facebook and just leave a comment and just say, "This is totally working. I want more of these," or "I want less of these."

This show is actually your time. It takes me a few hours to prep for a show, and then we film it, and we edit this and all that for you, but each one of these is oftentimes seen by a million people, and that means that if you look at how long a human lives, like a million hours, that's a lot, so basically, I'm using up human lifetimes right now, which is fine as long as I'm doing something good. Tell me what you want, tell me what's helpful, and I'll do more of that, because we've got this time. We might as well use it. You're probably driving or working or doing something else. Anyway, I do feel a sense of responsibility there, so tell me what works for you. Go to Facebook and I will listen.

Before we get going on today's show, if you are looking for a career in tech, maybe business data design or marketing, or trying to get a promotion or raise, you need 21st century training and skills. General Assembly is the largest and most respected school worldwide for people seeking to grow their talents and master the marketplace. Whether it's learning remotely online or in person at one of their beautiful campuses, you can join the 350,000 who've already gotten the training needed to propel careers in tech and business. More than 2500 companies worldwide hire GA's graduates with 99% of grads who participate in GA's career services landing a new role in the field within six months of starting their jobs search. Take control of your talent and career now. Find out more at ga.co/bullet. That's ga.co/bullet. Enter in the promo code "bullet" to save on your first class, workshop or event. That's ga.co/bullet, code word "bullet."

What we're going to talk about today is we're going to talk about what to do if you get a concussion. There's all kinds of stuff written about this. You could Google it as well as anyone else. I have a different perspective on this, number one, because I used to have chemically induced traumatic brain injury. It actually wasn't traumatic. It was just chemically induced brain injury, but it represented like TBI. This was about 15 years ago, when I went to a neuropsychologist or neuropsychiatrist, because I was going to Wharton, getting my MBA, and I was having cognitive deficits. I'm working at a startup, end up selling the startup for $600 million, and I was in maybe one of the top three business schools out there. I thought I was doing really, really well, but I was close to failing out, to be honest. I would sit down for a test, I would score really well on the first question. I'd score kind of okay on the second one. The third

one, I had no cognitive abilities, and I was just sort of embarrassed by this. I thought I was prepared, but maybe I'm just not as smart as all of my friends here.

That didn't make sense, so I started digging and digging, and eventually, when they injected me with radioactive dye and they looked at my brain, they're like, "You have brain injury." It actually says it on the paperwork. I still have it scanned somewhere. The psychiatrist said, "Dave, you have"... Let's see, he said, "Inside your brain is total chaos, and you have the best camouflage of anyone I've ever seen," camouflage being the ability to walk around and act normal with the brain that was completely jacked. Years later I showed that same SPECT scan to Daniel Amen, who's been a guest on Bulletproof Radio, who wrote Change Your Brain, Change Your Life, and I think 11 other New York Times bestsellers, who's become a friend, and he looked at that. He said, "Dave, this is the brain scan of someone who's on street drugs living under a bridge. This is a very toxic brain scan. It's amazing that you held it together."

I know how that felt, but about four months ago, I had another traumatic brain injury, and you're saying, "What? Four months ago, how come we didn't know?" Well, because I was saving it for this podcast, that's why, but I'll tell you what happened. You know if you follow Facebook and Twitter and Instagram and all that, I kind of do a little bit of biohacking, and recently I did stem cells in Utah and also in Florida, and when I say did stem cells, I'm not talking about anything having to do with fetal stem cells or anything like that. This is actually my own stem cells taken out of my bone marrow, out of my fat. It's a pretty interesting procedure. By the way, I did Facebook Live the last time I did it, so you can actually see them pulling the fat cells out in order to spin them and reinject them.

What happened in Utah is I did this, and I felt pretty wrecked for three days. It's kind of rough when they go into your bone and pull stuff out, but it wasn't that bad. What happened a week later is I got food poisoning, and I got it probably in an airport. I usually don't eat airport food. I'm guessing it was airport guacamole, which is one of the few things that you might be able to eat at an airport. I get home after being gone for eight or nine days, and I'm not feeling so good after dinner, go to sleep, and I wake up, and I'm like, "Alright. I've got food poisoning. I'm going to go to the bathroom." Well, I'm in there puking my guts out, this is one of those great stories you've just got to tell people, and I'm throwing up so hard that I passed out, which is not that hard to do, especially if you have high vagal nerve tone, which I do also have.

I just kind of felt a wave of passing out coming. I'm already praying to the porcelain god, right? Not that far from the floor, but the floor's tile, and I collapse. My legs went out from underneath me, bam, hit my left temple on the tile. At least, I think I did, I don't know, because when I woke up, I was grateful that I'm married to an emergency room doctor because I had passed out in a pile of my own vomit, and I probably would have died if there hadn't been someone there, because all of my breathing passages were entirely full, so the Heimlich maneuver actually worked, but man, my recommendation for you, if you're not already in a relationship is seek out an emergency room doctor. They're so useful to have around. Anyway, she gave me the Heimlich, and was like, "That was not good." I'm totally fine from that now.

I took some activated charcoal the next morning, which is what you do whenever you have food poisoning because it helps to bind toxins, and I felt fine. In fact, the next morning, I sat right

where I'm sitting now, and I ripped out five podcasts in a row, which is a record for me. When I record for you on Bulletproof Radio, sometimes I'll do a couple shows a day, two or three, because I have Brock and Elliott and a crew here so we can film this thing properly and just do a good job for you, get really good sound and all that. What happened that day though is that we were backed up, so I'm just going to do it. I drank some coffee, I was totally good to go, and then the next day I'm like, "Man, I'm really tired," and then I started getting weird headaches, and then I became a zombie. I mean, like really, serious problems with this, problems like playing Go Fish with the kids. I couldn't play Go Fish with a six-year-old because my working memory was gone. I literally just didn't know how to do it.

I felt kind of dumb, like literally addled, where I just, I don't know what's going on. It's hard to say. I just don't remember. What I did after another day or two is I realized, okay, I'm dealing with traumatic brain injury. My head fell three feet onto tile. It wasn't like it fell from flying through the air in high school football or something. Actually, I played soccer, but same difference, right? What I should have done, if I'd only known I had a traumatic brain injury is I should have rested on a day instead of recording five of these for you, and the reason I did that is I just didn't know.

First thing that I would recommend for you is if you think you might have traumatic brain injury, get more sleep and do less cognitively or physically demanding things. This means if you smacked your head over the weekend, maybe doing CrossFit on Monday morning isn't a good idea, even if CrossFit's normally a good idea for you. It's one of those things where a highly intense anything, with the intensity being psychological, emotional, cognitive or physical, doesn't really matter. You want to just chill, and probably in a room that's a little bit darker is a good idea.

I did get pretty darn light and sound sensitive for a while. Once I realized what this was, though, I went for some stuff that a lot of people don't know. You can use topical progesterone, and a lot of these things you can Google, and I'll write them up for you in this as well, so I'll give you all the explanations of the stuff. Progesterone used topically can be really, really helpful. The person who told me about this is JJ Virgin, who's a really good friend, another New York Times bestselling author. In fact, she's probably the reason I'm on the New York Times, because she knows what she's talking about and she coached me on a lot of this. JJ's son had a very, very major accident, so she went in, and in fact she's writing a book about this now, and did a lot of the research around what you can do.

Another thing that I did, aside from using topical progesterone, is used very high dose DHA, fish oil. In fact, I used krill oil and fish oil. I upped my dose pretty darn dramatically, which is something that is shown to help, and you want to do this not if you're at risk of bleeding. If there's blood happening, you have issues. Before I did any of the therapies that increase, or sorry, that decrease the thickness of your blood, and there's a lot of supplements that do that, most of the herbs do that as well, is I went to the hospital and I had them do an MRI to see if there was any bleeding in my brain, or more specifically, between the brain and the skull, because if there is, you need to change what you're doing. You don't want thin blood. In that case, you'll actually increase the risk of bleeding.

What I did was those things, and lo and behold, I live at Bulletproof Labs. That means here at the house, I have a giant facility full of crazy things that enhance brain performance, and I'm in the process of bringing all of those to you, which is remarkable, and that'll be happening soon enough in Santa Monica. One of the things that I have here is a hyperbaric oxygen chamber, so I spend some time there, and if you did get hit in the head, no matter where you live, there's probably hyperbaric oxygen within a half hour drive of where you are. It's absolutely worth doing it. The best hyperbaric oxygen is what they call a hard tank, where you sit down, and you're actually in a big metal, or potentially plastic or Plexiglas kind of thing, but it hold a couple atmospheres of pressure and you breathe oxygen in there. What I have at home is 1.4 atmospheres but it works just fine. I use that quite a bit.

When you increase the amount of oxygen that goes into the mitochondria in your brain, mitochondria are these little energy production cells in the brain, they actually make less reactive oxygen species. They actually work better when there's a little bit of pressure there. When that works, you have less inflammation in the brain, and it turns out inflammation is your enemy here, because inflammation reduces electron flow in the brain.

Another thing that I did is I used pulsed electromagnetic frequencies. You've heard a lot of people, including me, for years now talking about how electromagnetic frequencies affect your brain, affect your biology, they affect your cells, and there's all sorts of reasons for that to happen. The science troll perspective on that is “that can't happen because they don't heat the cells enough,” which contains the core assumption that the only effect from these things could be a heating effect. What we know now is that your mitochondria have basically femtosecond reactions that are superconductive or semiconductive. What that means is that they're doing stuff that is both chemical, but also magnetic, electrical and light-based all at the same time.

In the meantime, the science trolls have been saying it's not possible, a lot of other people, especially in Germany, have been making pulsed electromagnetic frequency devices that actually increase blood flow and increase speed of healing and stimulate stem cells. I put those on my head, actually on my whole body, and laid down with those. I'll have a couple links for you in the show notes about the specific stuff that I used. I don't know if those are a first-line therapy for traumatic brain injury, but I can tell you that I felt better after I did them.

I also used something that is profoundly effective for your brain. It also can be a little overloading for the brain. That is called low-level light therapy. I first discovered how profound this stuff was in about 1998, '97, somewhere around then. I had whiplash, which is also a form of traumatic brain injury, although it affects the body more. The brain basically sloshes around inside the head. I had this because I was go-karting on a track. Someone who didn't speak English well enough to read the signs that said, "When the yellow lights are on, slow down," hit me at 35 miles an hour when I was at a dead stop and completely just trashed my brain. This is the second time I had whiplash, so I called a naturopath friend of mine who was, this brand new device, it was a laser, and it was only approved for use on horses, but that didn't stop me.

If you want to know where the coolest biohackers are, you go to the special forces, and you go to the racehorses, because that's where, we have millions of dollars worth of training in both of those situations, and we have organizations who are like, how do we protect that investment,

how do we ensure the very, very highest levels of performance? What this laser did was, and I say laser, it didn't heat anything. It's a cold laser. It just looks like a blinking light, basically, and I put it on my upper back, and in about six minutes, all of the knotted muscles, all the pain from that just went away, and I've been using lasers over my brain for quite a while.

At the Bulletproof Conference, September 23rd through 25th in Pasadena, by the way, bulletproofconference.com, I'd love to see you there, it is going to be a lot of fun. I'm going to actually show you one of the first low level light devices ever that was available. A guy used it to turn his brain on so much that he ended up going to medical school and deleted all information about it, but I still have one, because I used this to recover a long time ago from the mold injuries. I used more modern versions of this today, or the last few months, in order to cause the mitochondria in my brain to work better.

I took a device like this, put it on my brain a few days after the concussion, and just three minutes here, you just kind of aim a light at the brain. Like, what the heck? Well, here's the deal. This is, this works. It's well known to work. It's infrared and red lasers, and LEDs actually are all that it takes in order to do that now.

I also use the infrared sauna that I have downstairs. I have a Sunlighten sauna. It's a low EMF sauna, but infrared. What it does, if you listened to the radio show with Gerald Pollack recently, Gerald Pollack is chief editor or editor-in-chief of a journal called Water, and he's at the University of Washington. He's one of these guys looking at something that we all tend to ignore in biology, which is water, and saying, "Wait a minute. There's something different about water in biology," and in that interview, he's like, "Look, infrared changes the structure of water so that it works better in your biology. Your cells can use water that's been treated that way," and I believe that's one of the reasons that infrared saunas can have such a profound effect when you get in them. It doesn't make sense that you would lose that much inflammation that quickly, but you do, so I use the infrared sauna.

The infrared was, I think, really, really helpful there, and what you should be hearing here is, okay, there's a bunch of supportive therapies, but the number one thing that I did is as soon as I knew this happened, especially leave it to me to go to the crazy biohacking stuff with the equipment first, was like, look, how do I support my mitochondria? Number one thing you can do right away when mitochondria are at risk, which is what happens with traumatic brain injury, you go into ketosis. Fortunately for me, it's pretty easy to go into ketosis, because I have Brain Octane oil floating around everywhere in my house, so I was already drinking Bulletproof Coffee, and I think that reduced the severity of my symptoms here, because there were ketones present, probably not when I was done flying, when I actually had the injury, but because I start every day with a dose of the Brain Octane that raises ketones, I certainly had some ketones floating around, and we know very well, this is a topic of my next book, when you have ketones present, it increases the amount of energy available for you electrons and it reduces the amount of oxidative stress. When you smack your head, you want the smallest amount of oxidative stress possible.

I would argue that every athlete everywhere who's at risk of head injury ought to be in ketosis prophylactically, which means basically before you go on the field, have some Brain Octane, or

you could potentially be in a state of nutritional ketosis. I don't really care. There are also keto salts, although you may get a lot of salt there. You should listen to my interview, actually there's a couple interviews you'd care about there, with Dr. Veech and Dominic D'Agostino, two different interviews. I'll include links to those in the show notes for you, but both of them have really cool perspectives on this, but you could actually use some salts, or coming down the pipe there will be ketone esters out there.

Ketone esters are something that I first synthesized three years ago in the labs here at Bulletproof. The only problem was this is not Bulletproof Labs where I hacked myself. This is the nutritional supplement labs. The only problem with those, they were $30,000 a kilo. That's a little too expensive for anyone that I know of, so I tried a tiny vial of them. I was like, "This is cool," and that was that. I know a bunch of projects around the globe where people are looking at making these commercially viable, so I would expect within a year or so, we have ways to increase ketones like that. If I'd had access to those, I would have taken that as well. My Bulletproof Coffee made a big difference for me.

I also started pounding the Upgraded Aging, which is a Bulletproof supplement, and the Unfair Advantage. These are supplements that do something really sexy. It changes the ratio of NAD+ to NADH. Now, you might be going, "What the heck?" When you read my next book, you'll learn more about this, but the basic thing your mitochondria are doing is they are getting electrons from your food, and the measure of NAD+ to NADH is a measure of how many electrons are there, so it's basically taking NAD+s and making NADHs, and that's the little thing that makes energy. That's our little battery process, kind of like a fuel cell.

One of my favorite scenes in a movie is in The Matrix, because come on, I'm a biohacker. How could that not be the best movie of all time? What's, favorite scene in there, it wasn't when he stopped the bullets, although I thought that was cool. It was something you might have not even seen. Neo hops into a car, and some other character, I don't remember who, like the blonde, short-haired woman, looks at him and basically calls him a coppertop. She calls him a battery, and that was absolutely so accurate, because literally, we are little tiny batteries making and storing energy all day long, and what I did with supplements was I took a lot of these supplements to reduce oxidative stress and to increase the efficiency of mitochondria. As they become more efficient, they make less oxidative stress. I already had enough oxidative stress going on in my brain.

I also pounded the glutathione, yeah I manufacture glutathione as well, called Glutathione Force. I also went and got intravenous glutathione, which is a very, very powerful thing to do at a time like that. I increased my intake of turmeric quite a bit, which is really important, green tea, polyphenols as well, and all of that stuff, when you stack it up, seems to be a good idea.

I'm shining lights on my head, I'm increasing my mitochondria, I'm increasing my oxygen levels in hyperbaric oxygen, and then also I did an EEG brain scan. Most of the time, you probably don't have one of these at home. I know this isn't a fashion device, but it should be. This is one of those times when you want to be seeing this on YouTube, but if you're listening in your car like a lot of people do, or you're at work and you don't want your boss to see you watching the video, what I'm holding is a 24-channel wireless EEG that looks like a giant octopus spider that

goes on your head, and you basically wear this thing, and you look like your mom in curlers kind of, but I just put it on, and now I look super badass. I think I should wear this on Halloween.

Anyway, what this thing done is it does a clinical-grade QEEG scan, and we got a picture of my brain and definitely saw there was some TBI going on from an intellectual perspective, and then, this is where it gets really cool. I had some custom protocols developed that would allow my brain to focus on the areas of injury so I could train them back. It took me about, I'd say four or five weeks to really feel like I had all of my mental abilities back, and I haven't done a follow-up SPECT scan to confirm that, because one of the risks here is you feel like you're back, but you're not. The people who are going to know best if you have TBI are actually your closest friend or your spouse or significant other. They'll see changes in you. After a little while, it becomes normal.

For instance, you wouldn't know this unless you're into weird neuroscience, but you have a hole in the middle of each visual field, like right in the middle of each eye, and it's totally invisible to you, and you're like, "What? How could this be?" There are ways of testing, in fact, it's a great test to see how healthy your nervous system is, to see the shape and size of the hole in the middle. The only way you're going to see it is if you're looking at a regular pattern of little lights, and you realize some of the lights in the middle are starting to disappear, and you're like, "Wait, I can see it," otherwise, totally just part of it. The reason for this is your brain routes around problems like this. It literally edits out things that aren't useful in your image. You'll, once you get used to feeling like someone with traumatic brain injury, it just feels normal.

The other symptom I had that's really, really important to understand is, I swore a lot for about two weeks, like way more than I normally do. I don't have a problem with occasionally swearing, but I'm not like a pottymouth, and it was really weird. I was just dropping F-bombs left and right, and I recognized this is out of character for me, like way out of character, and I've done my 40 Years of Zen neurofeedback training over and over. I know my neurology really well. This is a marked change, so if you notice something like that after you've smacked yourself in the head, that's worth understanding. I definitely yelled at my kids and I was more short-tempered with my wife, Dr. Lana, than I'd like to be, and once I recognized what was going on, I was like, "All right guys, here's the deal," and especially with the kids. I'm just not going to deal with the same level of bickering or whatever else that little kids do that's irritating. I need peace and quiet here, so I'm going to go to the other room if you guys keep smacking each other or doing whatever kids do that's irritating to adults even though it's just natural and normal for kids.

Knowing these things, though, means that it went from being, wow, I'm a bad parent, it's a moral failing, to it's a biochemical, biological, bioelectrical phenomenon, and I explained that to the kids, and had lots of family support for that sort of thing. What I did is I used neurofeedback both to see the parts of the brain that were overfiring there, and then to make the brain see that that was going on so that I could recover from it, and I'm not short-tempered like that anymore, which is cool. It was a short, transient phenomenon.

If you watch the movie Concussion with Will Smith, which is a really good movie, much better than I thought it would be actually, they show some professional football players who got injured over and over. By the way, having a traumatic brain injury is bad. Having another one on

top of it in short order, like the old high school "walk it off," like "Oh, you got hit in the head. Just walk around for a few minutes until you're okay and get back in the game." That is a recipe for permanent brain damage. It's way worse. You need to be fully healed before you go out and put your brain at risk again. In that movie, one of the, at the very beginning of Concussion, one of the guys playing, a football star, is living in a van with broken windows and basically acting crazy, and they find several other people who've had 20 or 30 concussions who have this sort of thing going on, because they're getting concussions on top of concussions on top of concussions. I've also met with some really famous Hollywood actors and stuntmen who are dealing with the same problem.

There's two things going on here. One is what do you do after a concussion to recover from it, and what do you do when you have long-term issues from concussions? Part of the answer is always the same. It's neurofeedback, showing the brain where it's broken. The brain is amazingly plastic.

One of the things I've also done, and I'd show you guys this, it's about a $40,000 neurofeedback device. The reason I have $40,000 neurofeedback devices at home is that I'm just opening the new 40 Years of Zen facility in Seattle. You've heard me talk about this if you're a longtime listener. So often where I've spent 10 weeks of my life with electrons stuck to my head, well I just radically upgraded the program. It's in a new $2.5 million facility, and I'm making it much more accessible than it's ever been before. It'll be, it's outside Seattle, and we actually use this device as part of, it was one of several devices we use, to give you a one-week brain upgrade. I was fortunate to have this stuff here at my house so I could sit down every night and plug this thing in and show my brain, you're injured, dude. Go fix yourself. That made a difference.

I'm all the way back, and I've been all the way back for a long time. My one, probably my biggest regret is that I didn't realize I had this going on for a couple days until I was really slowed down by this. Just remember, if you get smacked in the head, you might not feel it for several days, but if you wake up and you're just not yourself, and you fell off your bike, or even just in soccer, taking a nice header can do that. In fact, I'll tell you straight up. If you play soccer, especially if your kids play soccer, you should never head the soccer ball. With the amount of the impact on the brain, it's been shown it causes mild TBI over and over. That's just not a good move. I would recommend that instead, catch it with your chest, and if you need to score a goal, all right, fine, that's one thing, but to just do it as a general way of handling the ball, bad idea.

If you play high school football, I think that we're on the cusp of high school football being changed forever, because when you're a kid, your brain isn't done cooking. In fact, till you're about 24 or 25, your prefrontal cortex isn't all the way wired in. Do not do things that get you hit in the head when you're a kid. It's just not worth it, because there's so much potential in your brain that gets wasted, and if you do get hit in the head, fish oil, progesterone, things that increase mitochondrial function, things that reduce oxidative stress. Oh, I forgot, I took masses of vitamin C as well, which reduced oxidative stress. That was another one of the things that I did. Progesterone would be really good to do.

The final thing that I did that is not well known, but a couple high-end experts recommended this to me. They said, "Dave, short order, relatively high dose growth hormone for the first week

or two after a brain injury radically reduces the size and scope of the injury." I don't have good research on that for you, but I'm very lucky that I have lots of good physician friends who could easily hook me up with stuff like that, so I did a very short course of higher dose growth hormone in order to help my brain as much as I could. If you are in, and growth hormone is, I want to say it's like 3 or $400 a vial, depending on the brand and all those kind of stuff, and here, they were talking, I believe it was 80 cc, I don't remember the density of it off the top of my head. I just don't remember. I would do that once a day. I did it at night, and did that for, geez, ten days or two weeks or something like that.

I think that's everything. I'm just kind of going through my list of all the stuff I did to recover. Lots of extra sleep, meditating was good, but neurofeedback was better. I also wore dark sunglasses indoors when I had light sensitivity, and I used noise cancelling headphones when I needed to. The reason for this is that light and sound are stressful on the brain, and if you're already stressed because you're injured, just take it easy. It's part of resting and recovering. I minimized my flights, because you get less oxygen when you're flying. I've kind of exhausted all the things that I did for that.

I hope this is a cool podcast for you. What I'd like you to do now is a couple things. One, if you are doing things to get you smacked in the head, go and download the transcript for this. Look at the blogpost for this, and I'll link to all the stuff I talked about so you can have a list of what to do if you get a concussion. I'll add a few other things in the write-up that I probably didn't tell you right now, because I'm just doing this from memory. I didn't write down all the stuff ahead of time. Then I'd really appreciate it if you went to Facebook and just said, "Hey Dave, I want more of these one-on-one discussions with you," or, "I want more interviews." If you want interviews, tell me who I should interview. I love finding people who are performing at really high levels and talking with them. I also love finding scientists like Gerald Pollack who are out there discovering things about water that we never knew.

I'm still fascinated that we're 70 to 90% water, probably closer to 70, but it depends on who you are, I guess. Having that much water in your body, the first thing we do in science is we ignore the water weight. Well, it turns out that maybe that mattered. Every time we ignore something in the body, it seems like it's there for a reason.

I love interviewing guys like that. I also love interviewing people who are putting these principles to work in real life, Olympic champions, professional athletes, people who are just doing stuff that you wouldn't imagine, and that's, it's hard to imagine, but everyone wants to hear those conversations too, and that's why Bulletproof Radio does what it does. I'm grateful for your time.

The final thing that I want you to do, if you're interested in this super high-end neurofeedback experience I talked about, the 40 Years of Zen, just go to 40yearsofzen.com and you can apply for it. I'm setting it up as a Mastermind. It is expensive. There's a full-time neuroscience team and a dedicated facility for a reason. This is the most radical brain upgrade I know how to create after almost 20 years of doing this kind of thing for myself. Just be warned, it's pricey, and we don't accept everyone who applies. You need to be ready for an upgrade, and it's not about fixing a traumatized and a broken brain. There are ways to do that, and maybe, certainly

neurofeedback can help with that, but the intent of 40 Years of Zen is to take your brain to a whole 'nother level, so definitely check that out. While you're at it, get yourself some more Brain Octane and some more Bulletproof Coffee. There's two new roasts out there, the Mentalist is my new favorite roast. I think I like it a little bit more than original, which I never thought was possible. That's like a medium dark, and we have French Kick which is a darker but not black, disgusting roast, and that one is amazing in espresso. In fact, I'm having some right now.

Enjoy your day. Let me know, how'd this work out for you?

Thanks for watching. Don't miss out. To keep getting great videos like this to help you kick more ass at life, subscribe to the Bulletproof YouTube channel at bulletproofexec.com/youtube. Thanks for watching, and stay Bulletproof.