

Announcer: Bulletproof Radio, a state of high performance.

Dave: You're listening to Bulletproof Radio with Dave Asprey. Today's cool fact of the day is about water filtration. It turns out that some scientists at the University of Connecticut in Storrs just made a smooth version of a water filter that's forty times smoother than what we do today that promises to make desalination possible around the world in a way that isn't possible today. Right now, we use a synthetic polymer with tons of tiny pores that let water molecules come through but not sodium ions. The problem is that crap gets in those little pores. Things like calcium sulfate build up and then the pores don't work so it's been really expensive to desalinate water. So, now one small change in technology could radically open up our ability at fresh water out of the oceans. And what we don't see when we set and we do whatever we do for our living on a daily basis, we don't see stuff like this happening in University labs. But there's more of this happening now at a faster rate than any time in human history because of changes in our ability to communicate, changes in our ability to understand the very basic reactions happening inside our cells at the very subatomic levels. And it's probable the most exciting time ever to be alive.

So if you find yourself sitting there going, "It's so hopeless. There's so many bad things going on." You need to rewire that crap because we have more power, more control, more ability to make a difference in a very small amount of time than in any time in human history so things are looking pretty bright at least from where I'm sitting. And hopefully after hearing that, maybe from where you're sitting. Speaking of things looking pretty bright, we are about to cross an unparallel level of views and reviews on iTunes. If you have an extra ten seconds to say thanks for the show, if you go to [bulletproof.com/iTunes](http://bulletproof.com/iTunes) it'll take you straight to the iTunes page where you can leave a five star review that says this shows worth your time. I would love it if you did that. [Bulletproof.com/iTunes](http://bulletproof.com/iTunes) is a quick link to take you to where you can leave a review. Just let me know that I'm doing a good job for you. Thank you.

Today's guest is a guy I'm really excited to interview because he's a psychotherapist, a neuro therapist, New York Times best selling author of several different books. He's a well known expert in relationships, brain health, addiction, mental illness. He's on Dr. Oz's core team of experts. You might have seen him on TV shows on VH1, TLC, The Today Show, and on top of that, the other reason I'm kind of excited to talk to him, he's got a second doctorate in clinical sexology. And he has a post doctorate amount of training in psychopharmacology which is what I was going to study when I made six million dollars when I was 26 years old. Except I lost it, so I went to work for 20 more years and I never did study psychopharmacology, but this guy did. Full time licensed as a psychotherapist and a sex therapist and all sorts of other crazy stuff. In other words, total badass at multiple parts of what it takes to be a high performance, highly functional, happy human being. I'm telling you about none other than Dr. Mike Dow. Mike, welcome to the show.

Mike: Hey Dave, thanks so much for having me and for the kind introduction.

Dave: You know, I'm sort of annoyed. You and I spent four days together last week and I didn't interview you live because I didn't realize I was scheduled to interview you today, four

days after we hung out. But I saw you at JJ Virgin's event for health influencers. Had a good time partying there.

Mike: We sure did.

Dave: And now we get to talk about all the good stuff.

Mike: Yes.

Dave: You've been writing for a while. And you've progressed your work. In one of your early books in 2015, you talk about the brain fog fix on reclaiming focus, memory, and joy in three weeks. And then you moved on to healing your drained brain with anxiety and insomnia and balancing and now you're talking about the subconscious. What's the evolution in your thinking when you go from one book on the brain to another to another? What's changed?

Mike: Well, I think a lot has changed and I think you started this podcast talking about how things are getting better. And I think we as a society, we as a people are also getting better in terms of how much we know, how much we know about the brain, and also what we know about the natural solutions and the evidence based practices that work. Which is why I think all of your community and all of these people who want to hack their biology are so excited to read your books and my books. And I think we're starting to realize how profound small changes, every day changes have on the brain. I know you and I have both had our brains scanned. And we can actually see the brain. And we can see these changes happening on a neurochemical level. We can see the brainwaves changing and I think the biggest thing in terms of the way that most Americans are thinking is, "Wow, what I choose to do every single day has a profound effect on my brain." Not just my mind because the mind can change the brain, but on the brain itself. So that's kind of exciting.

Dave: I ran into that same mindset. I started out at 25 years ago. I'm going to take smart drugs because my brain isn't working. And after a lot of different avenues I realized oh if your biology isn't working at the level that your brain doesn't work, but even if you get your biology working if the voices in your head are mean little bastards, then it's going to affect your biology and then it won't work. So it's all just kind of tangled spaghetti ball of weirdness. You have an unusual amount of training in a diverse set of fields, though, which maybe makes you better suited to untangling what's really going on in there. I want to go back even further than your books. Why did you choose to study such an unusual collection of things. I mean sex therapist and psychologist. You could see those going together. What was your mindset in getting all this stuff?

Mike: Well, when I was 15 years old my brother had a massive stroke that was caused by a rare brain disease. And my father was a forward thinking physician who at the time put my brother on massive doses of fish oil, of omega 3's when 20 years ago people thought that fish oil was snake oil. And that couldn't possibly have a profound affect on a brain that had a massive stroke, right? Well, we know that it absolutely does. That that is one of the many supplements that has a profound affect. And then when I really wanted to

help people and I wanted to help people in a way that was a little bit outside of the box. So my dad was a VA physician and it was a very in the box medicine. And I was sort of more excited about the way that things like hope and the way that every day... I was always obsessed with food. But I was obsessed with the chemical structure of food and I was obsessed with things that didn't really fit inside the box. And trust me, I heard medical school from the time I was, oh I don't know, four years old on up.

And I really did not want to go to medical school. But I knew I wanted to get a doctorate in psychology and when I started to treat people I realized the more I treated people, the more I realized I wanted to learn. I wanted to learn about neuro therapy and psychopharmacology and sex therapy because human beings we are so diverse. And we are so complicated and our brains are so complicated. So that's why I have so much training. And I'm just a nerd, right? I just want to know everything about everything. And I think a lot of people listening can.

Dave: Okay, but hypnosis? Okay, so some psychologists will use hypnosis. But you hypnotized Dr. Oz on stage or on camera, right?

Mike: I did. I did.

Dave: How often do you use hypnosis? And are you trying to do it to me right now?

Mike: Yeah, I am. And it's something that I am so fascinated by. I think hypnosis is actually the most powerful mind body medicine tool in my arsenal. So I know that you do a lot of meditation and neuro feedback. And what's so incredible about hypnosis is that it can target the brain in ways. And study after study when we use hypnosis and the subconscious brain to treat fibromyalgia, IBS, in study after study it works better than prescription drugs. So to me, that is mind boggling. And it can do things that the conscious brain can't. So there's just something incredible about the subconscious brain and when I hypnotized Dr. Oz, there was there moment on stage. So I'm putting him into a trance. And by the way, his entire studio audience, and he goes to commercial break and this woman sitting right next to us is sort of confused, astounded, and she turns to me and she was like, "Wow that was crazy." And you can tell that this is something that works in a way that for me, I like meditation. But I love hypnosis. So hypnosis, we know that from a brainwave point of view that hypnosis is usually mostly alpha waves.

But man, when I had my own brainwave scans, it just washes most of the brain in data waves which is slower and deeper than those alpha waves. And, man, you can feel it. You just fall so deep and it really is dream like. And you're sort of suspending yourself in that state of being awake and being asleep dreaming state. But unlike dreaming, where you don't have much control, you have control of what you're painting which I think is incredible which is why sometimes I can treat PTSD in one or two sessions which is just mind boggling to me. Because I used to treat it the old fashioned way. 20, 30 sessions, and people were just dropping out like flies. So I think it's quite frankly, it's brain magic.

Dave: It's funny because people say all sorts of stuff about Dr. Oz because people kept using his name online without his permission. And I interviewed him about that maybe 30, 40 episodes ago. And having been on his show, he is one incredibly smart, well-intentioned, really smart physician. Incredibly knowledgeable on a diverse range of things, pays exceptional attention to any claim you make on his show with a team of people in the room helping to vet everything ahead of time. It is a well run operation. He is one of the smartest, energetically focused, really good human beings I know. And there's this perception that you maybe need to be a little bit weak minded to be able to be hypnotized. And if anyone on earth is not weak minded who I know it's Dr. Oz. He's really solid. So can anyone be hypnotized? How does that work?

Mike: Yeah, so I would agree with you that everything you said about Dr. Oz. I agree with yo. But I would, in terms of being weak minded and hypnosis. So I would say that the opposite is true. So there is a lot of research that says that people who are highly intelligent, people who are highly creative, people who maybe create an empire and build multi-billion dollar companies like Dave Asprey are probably really great at becoming hypnotized. I have found I think hypnosis is also an art. So really learning to bob and weave. Some people are a little bit resistant at first. And a lot of that is sort of letting your guard down and once people feel safe, and they realize that I'm not going to try to make them bark like a dog or run around like a monkey and then forget about it. I think they actually allow themselves to let the brain magic work. And I think you can think, and by the way my brain scans of my own brain showed... I talked about these slow fade waves taking over most of the brain, but in the back of the brain, the occipital lobe which is that part of the brain that sees things, even when your eyes are closed. You can paint these pictures with your subconscious brain.

And my own brain scan showed, my EEG showed these high really fast beta brain waves in the back of my own brain. So you can actually paint these really vivid pictures as if something is happening in real time which is probably why it's so affective at treating PTSD. But even if you don't have PTSD, imagine if somebody was wanting to say start a company and it was called Bulletproof Coffee, or Bulletproof Empire, and I wanted to help you paint that picture of what that empire may look like and what the book may look like or what that Bulletproof lab in Santa Monica would actually visually look like. So it can help business people. It can help people with symptoms with mental illness. And I found it to be the most fascinating tool which is why I talked about it a little in my book, "Heal your drained brain." And I'm writing an entire book on it next year.

Dave: It's funny that the ability to see the future and to visualize it is important for entrepreneurs. One of the things that I've always done if you sort of visualize what things are going to be like and then you move in that direction. But if you don't visualize it first, it doesn't work. And we've actually brought that technique from Amazon into what I do at Bulletproof. And when we start a meeting on a new initiative, we actually start out with a press release that's written five years in the future that describes what people are saying, what it looks like, what it feels like, the impact it's had. And then we have an eight page write up about heres what we're actually going to do. Here's the plan. And then we make a decision as an executive team about what to do. But it starts with a really carefully thought out and visualized view of the future. And yes, I also hook electrodes to my head, put myself in altered states that let me visualize and just see

things happen better than I can if I'm in a normal operating mode Dave. And could hypnosis do that especially knowing that it's got some data brain waves involved? It seems to make sense.

Mike: Yeah, absolutely. You know what I love that you just said, Dave? Anybody who can see things in a visceral visual way and if you also allow yourself to sort of enter this dream like data brain wave state, where you're relaxed and you're comfortable. If you can sort of Jedi mind trick the brain into thinking that that press release is out and that you've created that, the brain thinks that that has actually happened. And then working in reverse, I mean, imagine how many goals anyone listening could create whether you want to go back to school, or you want to create an empire, or a business or you want to just start something small and you want to build a guest house. Imagine the things that you could create with your mind. I think in human behavior we get stuck because we can't get out of our current reality. But if we could get a little glimpse of the future and have a little crystal ball and kind of feel like something had already unfolded, then it allows us to sort of become excited about it and actually create the stepping stones along the way which is just for me, it helps me to create everything. And sit down and write a 100,000 page book.

So imagine what it could do for even smaller micro goals. Which then of course, become these larger global goals.

Dave: There are huge number of online hypnosis things and I've definitely over the course of years, especially as I was getting going with bio hacking I'd pretty much bought everything in order to give it all a try. And I could say some of the stuff was pretty crazy what your brain can do. Do you recommend people using hypnosis audio tracks or work with a clinical therapist who uses hypnosis as part of their tool set. How would someone listening get started with hypnosis?

Mike: So, this is sort of the wild, wild west. There are all sorts of... I trained with the American Society which they'll only train people with a license. And then there are all these other schools. So there's a little bit of controversy of what is the best way to use it. Now I think people, for a beginner, you have to realize that at a very fundamental level hypnosis is simply shifting you from a fight or flight mode to arrest and digest mode. So much like meditation, if you're somebody who just wants to find that little piece of zen, starting with an audio track in line. Or something you might download I think is a great way to start. If you're somebody who's experiencing symptoms and you want. I used it to really affectively treat PTSD, depression, and anxiety. I you're someone who wanted to treat something a little bit more intense in terms of symptoms or maybe it's a little bit more medical or psychological anything from IBS to migraines. Then you really want to look for somebody who had some advanced training and really understand what they're doing in the brain. Because some of these trainings are pretty intense and fascinating whenever you dip into the brain and you dip into Theta. With great power, comes great responsibility.

Dave: That was my next question there. You could if you are a hypnotists probably do bad things to people.

Mike: Yeah, you could.

Dave: So how would someone listening know if someone is trying to do things to them with hypnosis?

Mike: Yeah, I think you always have to, and by the way, I don't know if you remember this, but there were the memory wars a couple decades ago where people were laying down. By the way, licensed therapists, because there were all these sort of false claims of satanic child abuse and things like that. And we have to remember that the brain is very suggestible. Now I don't think that those therapists knew what was going on. So I think you have to start with is this person, does this person have my best intentions at heart. So I don't really think going up on a stage in Vegas is necessarily the best way to get started with hypnosis, but find somebody who is really skilled, who is really fantastic at this. And who really doesn't want any harm to come of you. And isn't going to lead you in the wrong direction. Because by the way, the mind is suggestible. So this isn't just a phenomenon of the subconscious. So just remember how suggestible the mind is and instead of using it against you, use that suggestibility to your benefit.

To help you to create whatever it is that you want.

Dave: So there isn't really a fire wall for hypnosis that I could install tomorrow?

Mike: Well, probably not although I will say that your willingness is required.

Dave: Got it.

Mike: So I have found that people who really don't want to be hypnotized, they're just not going to be hypnotized.

Dave: And I've heard that from other people in the field too. You have to be a willing participant. Look at this candle and suddenly you wake up as a chicken. That's in the movies. That now how it works.

Mike: Yeah, that's exactly right.

Dave: Okay. That makes good sense. In your work, and in your training, you also talk a lot about sex. And I've had a professional dominatrix on the show. I've had someone from One Taste, actually a couple of the guys from One Taste, talking about the power of orgasm. My new book called, Game Changers, that comes out in December, has some interesting stuff about sex. Why did you, or how do you incorporate sex with hypnosis with their clinical practice? And it's one of our core human drives, but what's broken in that in people and how can they use it to perform better?

Mike: Yeah, so relationships I think are fundamental. I think love is actually just sort of the thing we're all seeking at a very fundamental level. I think that I've never treated a patient who did not have some sort of issue, desire for good healthy relationships. And by the way, good healthy sex. It's one of the best natural cures that we have. So sort of

looking at the intersection between the subconscious and sex. Isn't it so interesting that a whole school, all this Freudian psychoanalysis, it was really based upon all these hidden desires and your repressed urges and a lot of that has been debunked, but there were a few things that Freud got right. And it's interesting when somebody has a subconscious desire, or a problem with sex or something that's unrealized so that a lot of times that will just be expressed in the subconscious.

And isn't it fascinating that dreams are sort of the subconscious is where the subconscious comes to play. And it's where the subconscious is sort of untangled and all the changes are set loose. So for me, I can treat all sorts of disorders with it. So it's sort of the little blue pill by used the power of your mind for people who are struggling with impotence. It can be short of help you to have a better relationship, to call in the person that you are meant to be with. So it's a really powerful tool because I believe that for a lot of us, especially us Americans, so many of our sexual desires are sort of pressed and repressed down to the level of the subconscious. So if you can sort of bring those up, you can discover what it is that you really want to manifest with your love like and also your sex life.

Dave: For someone listening today, what's the one thing they could do to have a better sex life now?

Mike: If there's a theme that's coming to you in your subconscious, find a way that into your conscious relationship. So whether that's power or freedom, or virility, find a way that you could insert that into your real everyday waking sex life.

Dave: So what you're saying there is if there's stuff that you really really want to do, you ought to find a way to do it in your sex life.

Mike: Yeah. In a safe, sane, and consensual way, yes.

Dave: I'm happy you said that. That's definitely one of the themes in game changers coming up here because I've just heard this over and over. Dinner conversations where people don't admit stuff on the air. But even amongst really powerful and successful people, they can be just deeply unsatisfied even if they have a somewhat satisfying marriage. And it's those things that you don't talk about in public but you talk about with your friends. And it seems like it's an ongoing theme. And you would of course hear it as a therapist all the time.

Mike: Well, and I think we have to remember that sex is the way adults play. And I think a little bit of playing is really fantastic for the brain. So if you could figure out the weigh that you like to play, and do it in a way that makes sense for you., you're going to be a little bit happier and probably a lot more productive also.

Dave: I haven't ever heard it put that way before. Sex is the way adults play. Tell me more about that.

Mike: In so many ways, play is essential for human beings. So as children, play helps the brain to develop. So we know that children who don't play are not happy, healthy individuals. And just because we stop being children doesn't mean that we lose that desire to play. So think about all those things that we used to do. And by the way, beta, the dominant brain wave of a child. So that's why children can have imaginary friends and role play and oh I'm going to do this. And let's have some tea. And as a child you're playing in that child like fantasy way. And by the way, that's because beta is that dominant brainwave frequency at that age. Then we become adults and our brainwaves tend to be more dominated by beta and alpha and faster brainwaves. A lot of adults just say, "Oh, well, I'm an adult now so I don't need to play anymore."

When we lose our playfulness, when we lose that space, that time to play, I think really bad things happen. I think human beings get very anxious. I think they lose their sense of creativity. So when you look at all of these movies and you see that there's this, and by the way I've treated many patients with stories like these, when you see the high powered attorney who figures out that he just really loves to play in a certain way with a dominatrix in sort of this role play, it's wow he gets to play pretend in a lot of ways. He's like the grown up version of the kid who come to my magical fortress and have some tea with me and I'm a dragon and you're a princess. But he's doing it in a different way.

So in a lot of ways sex and sort of... and it doesn't have to be that extreme, but I think if we can find those little ways that we play in our sex lives, I think we'll all be happier and healthier.

Dave: What are some of the other ways that adults play that maybe aren't sex?

Mike: I think playfulness should be incorporated into our business lives which is why I love hypnosis. I love when people can paint pictures of what they see and then manifest them. Because when you lose... I was just doing a session today with somebody and we were just talking about this huge, you know I treat a lot here in Los Angeles, I treat a lot of attorneys and celebrities, and CEOs and sometimes with these high level performers and people at a certain level, we lose that thing, that joy, that little spark of creativity. And if we can connect with that and bring the playfulness back, sometimes our businesses are better. So it doesn't matter how successful you become. Injecting a little bit of playfulness and keeping it in your work life which is why you and I were having so much fun in San Diego last weekend is finding a way where you don't lose that inner joy in work is absolutely vital.

Dave: I'm actually going to talk a little bit about what we did this past weekend. JJ Virgin who's been on the show a couple times, and is a New York Times best selling author and nutritionist who healed her sons traumatic brain injury that almost killed him and has talked about that stuff at length. She puts on a meeting for 500 authors and health influencers and doctors. And she has a costume party which is not what you do at a health conference. They don't do that at any of these conferences. I mean I've been on key note stages for 20 years in technology and the number of times has been a costume party is zero. And so here we have a bunch of these doctors and people dressed as super heroes and all sorts of crazy stuff. One of our friends who's been on the show, who shall remain nameless, came as Borat, mankini and all. The theme of this party was

dress as a rockstar or a legend. And when my costume didn't arrive in time, I was going to be Steve Jobs, pretty easy, right?

Well, I went to Nordstrom rack and there was no costume here so I picked up a dress that JJ would wear for 35 bucks and I showed up wearing a pink dress. And I'm like, "Well, they said dress like a rockstar." I dressed like the rockstar in the room and turns out I wasn't the only one. There were like three or four other JJs in the room. But I could tell you, I have never actually worn a dress to a costume party with a last minute thing. I just showed up wearing my toe shoes and that. But it was actually hilarious and it was very much a night of just playing. And everyone had a great time. Just showing up not as a white lab coat or a business suit and all that sort of thing. And I think that she does that in part because that need to play is something that people who are in the public eye or are just always writing, always seeing patients, always working, working, there's just never an excuse to do it. So building it into a conference I thought was very unusual and also a lot of fun. And I have no idea how women wear dressed, good God.

But that idea that we could build that into some of our events where people dress up as whatever rockstar, legend that they decide to do. How would you advise people to go about adding playfulness so that their brains work better say on a weekly basis? I mean okay, great you're in a relationship. You might play in the bedroom, but outside of that, are there adults activities? I mean bouncy castles. I have no idea. But what do you see works with patients so that we can systematically build a habit of play into our lives as adults?

Mike:

I think we have to really look at the way the brain needs to sort of have little... when we talk about learning, we have to chunk out time. And our brain needs these times to really be productive and then stop. Or to learn and then stop learning so that it can integrate this information. And I think that if we give our brains these little periods of rest, and then ask yourself, "What is that one activity that makes me laugh or that I'm just so interested in?" Is it cars? Is it planes? Is it dressing up like a rockstar? Is it dressing up like a pony and have some dominatrix? What is that thing that just brings you so much joy? I don't have one answer. I feel like in treating, I don't know, thousands and thousands of patients at this point, the answer that I hear... I've heard every and especially now as a sex therapist, I've heard everything under the sun. So it's what makes you laugh spontaneously the most. And then find the way that that thing. And I think my best answer to that question is how do you find little mini ways to inject that, not into your life, "Oh one day I'm going to go to the aerospace museum and I'm going to save up for this big trip and that's going to be really fun for me."

Or, "Once a year, we'll go to this costume party." No, it's finding those little mini injections of fun and something that makes you laugh and that makes your soul light on a weekly or maybe even a daily basis. So, I know that for me, laughing, my partner is an ER doctor who works all nights and when we don't laugh it's not good. I just turned in my next book. I was writing 16 hours a day. He was working 12 hour overnights. And when we don't laugh, we cry. So I think the fun that we have together is part of the magic. And we can go to a bootcamp class and do some high intensity interval training together and end up laughing a lot. And I think that's part of what keeps our magic alive. And I think that for all of us we have to find those ways that we don't take ourselves so

seriously. And I think if you're a CEO or a doctor, or if you just live in Los Angeles where everyone seems to take themselves really seriously, don't forget to laugh and not take yourself too seriously. So maybe you should dress up like Borat or our friend JJ. It could help a lot.

Dave: Well, I'm going to Burning Man so I'm just hoping to fit an entire years worth of playing into five days. We'll see.

Mike: Yeah, that's a fantastic way to play.

Dave: All right. I'm not sure that there's a big take away for people listening there other than find whatever makes you laugh and do more of that. And what I find is it's really hard as a parent and as a CEO and author and all the other stuff, it's hard to carve out time on the calendar. I don't know how to put an hour, Friday at 3 o'clock. This is play time. What are you going to do? And so I've been working on that too because having fun is important. But figuring out how to make sure you have time to have fun when you have 5,000 demands is something I think all of us are dealing with on some level.

Mike: Yeah, that's why I love our dogs are great. I think there are certain things in this world where we have two little rescue pups. And if we play ball with them for ten minutes, and the voices we use with them, it's like oh, well, we're children again.

Dave: I'd like to swap gears. So let's assume we're all having a little bit more fun, maybe just listening to podcasts is all the fun you need. But you wrote a fascinating book with your brother about stroke recovery and what I found from starting 40 Years of Zen, the nerve feedback company for executives that I got off the ground and designed the curriculum for. Something like 90% of the people that come through there have electrical evidence of having a hit to the head, probably when they were kids. Oh yeah, I forgot when I was 12 I fell off my bike kind of thing. But you can still see it in their brain electrical signals. So it seems like traumatic brain injuries are actually the rule. They're the norm not the exception.

Mike: That's absolutely true.

Dave: Okay, so you wrote a book called Healing the Broken Brain where you ask a hundred people how to recover from strokes. But a stroke is one of the many kinds of brain injury you need to recover from. I took a knee to the head a couple years ago that had me, the next day I was light sensitive, sound sensitive, couldn't play go fish with my kids, my working merit was shot. And I'm grateful I know all this stuff. I took all the high dose fish oil. I took all the mitochondrial enhancers. Gee, I manufacture them. So I have them on tap. And a bunch of other stuff. And even then I kind of came back after two, three weeks, but I had to sit down with neurofeedback and get things put back together again. Otherwise, I was swearing a lot. I was super cranky. Sent some emails I probably shouldn't have sent. And you don't even know that you're doing that. You're kind of looking for stuff that is out of norm for you but it feels very justified at the time.

How big of an issue are these traumatic brain injuries, these little hits to the head? Just in society at large.

Mike: It's crazy that as you said, most people don't even realize that they are survivors of a traumatic brain injury. And I'm just going to reframe it in this way, Dave. Because when I wrote this book about stroke recovery with my brother there were a couple take aways. Let's just say that because we are all aging, unless you take all of the supplements that Dave manufactures that are going to help you to not. All of our brains are shrinking just a little bit every year. And especially B vitamins and hopefully methyl versions of B vitamins and fish oils can help prevent a little bit of that brain shrinkage. But we all sort of have brains that are aging and shrinking all the time. And some of them are just more pronounced than others. So yeah, I think that traumatic brain injuries, falling off your bike, things that you don't even remember that show up in some of these tests are actually the norm rather than the exception. And I think the lesson that stood out, even though this was a book on stroke, and it is when it comes to the brain, use it or lose it.

But I think even more so than that, it's use it and improve it. So if there is something in your brain and maybe acute EEG shows a weakness or traumatic brain injury or speck or FMRI and we see something, but you don't even need this advanced brain imaging. If your brain is not working in a way. You're anxious or irritable or you just don't feel like your optimal self. I say to my patients all the time, feelings are information. So your feeling is information that your brain is not working in the best way possible. And if that is true, in some way you have a brain injury because there's something that's a little bit off. And we have to remember, use it and improve it. So maybe it's your pre frontal cortex and you could thicken that with meditation. Or maybe it's another part of your brain that you could strengthen with hypnosis. Or maybe it's fish oil that could prevent some of the shrinking in your brain. Or maybe it's aerobic exercise so that you could expand and grow the hippocampus in the brain. But no matter what, use it or lose it and use it and improve it.

So no matter what you do, it's leaning in to the experiences that are challenging, not finding the things that are easy for us. Because when my brother had a massive stroke, he couldn't use his right side at all. Guess what happens if you just use the left side of the body? The working side of his brain dies. And if you're impatient and you don't develop that as a skill, you are just going to continue to be impatient. So leaning into the experiences that teach you to be patient and doing the thing that is the hardest for you is a way that we could all rewire and grow our brains. And that's why I get so excited about the brain because we have the power to change it every single day.

Dave: Is there something we should be doing say okay maybe have a mini stroke, or maybe just whacked your head really hard, is there something that you'd recommend everyone do after interviewing a hundred experts on this stuff, what should you do right away? Okay, you fell, you hit your hit, you're water skiing, you took a bad fall, you stood up and hit the cabinet, I mean stuff happens all the time. My wife got a real TBI from standing up and hitting her head on the cabinet. Which was totally annoying. At least if you're the cabinet. Anyway, what should people do right after it happens? What would the first thing to do be?

Mike: Well, if it's something major, you should go to the hospital if it's something major. But if it's something more minor, I think you should really be on the look out for symptoms and you should really, so many of us walk around with these brains that aren't working in some area or the other, and we just sort of shrug it off and we say, "Oh well." But I think so many of us have an opportunity to actually optimize the brain with omega 3's, with methyl versions of B vitamins, with neuro feedback, and all of these things Hbot and Hyperbaric and all of these things that actually can help to grow the brain. And a lot of people just sort of accept traumatic brain injury as sort of the par for the course when really there's so much that we can do to fix the broken brain.

Dave: It's important to go to the hospital. It's also important just to tell the people around you what's going on. When I hit my head, I went to the hospital and it helps my wife as an ER doctor. So she said, let's go. And they did some sort of imaging of my brain, I don't remember because I have amnesia from that time. And the doctor looked at me and said, "Oh you have mild bleeding in your brain." Which if you have a lot of it can sort of kill you and then they have to do all sort of surgeries and whatever. But, you need to not travel for a little while. You just take it easy, rest, recover. And I don't remember this, but apparently this happened, I looked at the guy and I said, "Great, so everything's fine. I'm going to be on this trip tomorrow." Everything I said just did not even land in my brain. And my wife, Lana, she just looks at the doctor and said, "Oh, don't worry I've got this. I've seen it before." But you literally don't process reality the right way after you've hit your head. And it doesn't have to be that big of a hit in order for this to happen.

But if people know that's what's going on, you get a sort of get out of jail free card. Because I have other friends who shared they took a hit to the head and they almost lost their marriage over it. Because they suddenly turned into a jerk. And so this is happening but I think it's largely invisible. It's not a part of our national conversation and you think it's something that maybe happens after a big car accident. But it can happen from a smaller thing and if your brain is well taken care of before hand, if you're taking the right supplements, you'll probably take less of a hit. And if you take the right stuff afterwards, you're probably going to like how you feel much more quickly than otherwise.

Mike: I find that relationships are the one area where TBIs surface the most, some of the minor ones. So it's fascinating when I do couples therapy and one or sometimes both of the people have a TBI, and the way that that is the person who actually sees the TBI in action. Irritability, mood swings, and that person can kind of put on a mask in the outside world, but the person who is that person's partner really sees the TBI in action. So if you're feeling that way, remember that there are so many things that can help.

Dave: It's probably outside the scope of this interview to get through how do you fix a broken brain, but I mean Mark Hyman did a broken brains docuseries. You've got your Heal your Broken Brain book, Daniel Aman who's been on the show a couple times has done profound work in the space and so there's a bunch of people working on this and I would just encourage people listening if you hit your head and you're acting different or you haven't felt the same since, even if it was a couple of years ago, you can reverse that stuff. Listen to the interview with Dr. Paul Harch, the guy who wrote the book on oxygen in the brain and uses hyperbaric. Look at what key tones do. There's just all

these tool sets and funny enough, every one of those things increases your cognitive performance if you didn't hit your head anyway. So those belong in your tool set, and that's one of the reasons I put a lot of that stuff at Bulletproof Labs in Santa Monica. Where we want you to have the things that make your brain stronger, regardless of whether it's starting from an old injury or whether you just want it to work better now. And I am really hopeful that we'll have a renaissance in just making the brain work better because it feels like there's a lot of low hanging fruit.

Mike: I think all of us in this country with our smart phones coming at us 24, 7, with some of the stress that we don't know how to sort of reframe in the correct way are dealing with these brains that are sort of at a 50% charge level. And so we have to figure out ways to really optimize these.. and by the way most of us are walking around with a brain that could be optimized in some ways. So in a lot of ways, most of us are walking around with a broken brain.

Dave: It's sadly the case. So I think things are going to get better there. And one of the things that helps in any of those situations is perseverance or grit, whatever you want to call it. I mean you practice psychology. You work with patients and all. What's the role of perseverance and effort and will power in having a better brain or maybe even healing a broken brain.

Mike: Hope and your willingness to get better is always paramount. So I think somebody who doesn't have hope and somebody who can't see the light at the end of the tunnel isn't going to persevere. So if you can identify with that spark that gives you hope, that keeps you going, you hear all these stories of people who just lost the will to live. And they don't live. And then you hear people who, like my brother, who say you know what I'm going to not only live, I'm going to do way better than the doctors tell me that is my potential. And that's exactly what my brother did. And so if you could identify with that spark within you, I think that gives all of us the ability to persevere. And that I think in a lot of ways life is not a sprint. Life is a marathon for all of us. And that's especially true when it comes to any sort of recovery process. So if you can identify that and remember that everyday it really gives you, it puts the fuel in your tank so you can go the distance.

Dave: Willpower's one of the mushy areas where I feel like it's partly biological and it's partly your picture of the future. And if you know that's how it's going to be, you can get there. So I feel like tools like hypnosis, and visualization and meditation all do increase willpower just because the body listens to stuff that doesn't always make sense.

Mike: There are some crazy things, Dave, that come up in my sessions with patients and the things and the images and the energies, I'll call them, that come up for people and some of the things that they report in on and some of them are, I'm not telling people what they should believe in. Oh I saw my grandmother, or an angel or I saw this light within my, my drive, and I saw it as this ball of fire. The stuff that comes up for people, I think it really helps people to keep going. So if you could just maybe do a mini hypnosis session and close your eyes and go down an elevator and find whatever that image is for you. And remember the subconscious really loves images and energies and it doesn't really like sort of this left hemisphere logic and thinking and words and sentences. Sometimes it can really help people to keep going.

Dave: Are all those things real? Energies, whatever angels, all the stuff you listed there, the inner fire? Are those things that exist? Or are those things we're making up in our head?

Mike: Well, I will say this, they say that beta is where the angels and the demons would live if you believe in angels and demons. So I will say that. But I also will say in terms of these energies, and maybe moving away from sort of spiritual, religious, mystical and moving towards energies. I will say that some of these tracks that help people to visualize concrete goals and metaphors like taking something like pain and seeing it in a ball and giving that ball a color and then when we research that and we put it in clinical trials or randomized study up against a prescription drug, these audio tracks that use these metaphors of energies and colors tend to work better than prescription drugs. So for a lot of disorders. There is something about this sort of metaphysical way of speaking especially when it comes to the subconscious brain that actually really works. And if you look at some of these mainstream journals, that it's outperforming prescription drugs and just these studies are blowing my mind. Especially when we're dealing with difficult to treat illusive conditions like chronic fatigue or fibromyalgia or IBS or these things that more and more Americans or autoimmune conditions, that more and more Americans are suffering with.

And it's talking about your disease as a ball of energy that I'm going to help you to visualize that. That helps to relieve your pain or that somehow tapped into the mitochondria and your cells and woke them back up. What? Well, yeah, that's what we're finding. And a lot of it is sort of well, we don't know why that works. We can tell you sort of the theories and we can look at the brain scans and I have a hypothesis of why that works. But we know that in these studies that it does work. So yeah, I think there is something to it.

Dave: It's a bit of a trick question. I asked Jack Canfield the same thing when I interviewed him. It was fascinating because he just kind of sat back and was like, "Well, of course. I don't know what you want to call them, but of course that stuff is real because all of my clients who kick the most ass," he didn't say it in exactly those words. "They all have something like that." This is just how it is. And was just super open. It was fascinating. And then I have neuroscientists looking at brain states and yes we can train theta and we know what happens in theta and I can pick out the brainwaves of people who are more likely to say, "Oh yeah, I perceive that energy as this kind of thing or another." And some brains are wired to see things better than others. And no that isn't taught in clinical text books. That's just what you see when you look at a lot of brain waves. And that's something in my own 20 years of doing neuro feedback, I've tripped balls way more from neurofeedback in certain states, theta states in particular or alpha theta borders in specific regions of the brain than I have from any lowaska things with shamans in Peru.

Which is pretty amazing. So there's a lot of interesting stuff going on in there but we don't see it most of the time. And different people see different things. I have no idea what you want to call it, some people give it religious names, people give it spiritual names, some people call it, I don't really care. But there's something valuable in there that you can use to turn on your energy. And what those clinical studies you were saying and talk about it there, the clinical studies on neurofeedback, on hypnotism, there's

good data that even if we don't have a good explanation that we're 100% sure of for why it works. We can tell you if you do A, you usually get B. The science may take 1,000 years or five years to figure out all the little things between A and B. In the meantime, I'll take B. I like the outcome. And I'll do whatever it is. And if it turns out that there's actually an army of little smurfs that are invisible. I don't care, man. Go to work, smurf. It doesn't matter. I want the results.

Mike: I'm with you, Dave. And man, does it feel good. So now, all the studies aside, I like you feel like I tripped balls the first time I did alpha theta training with neurofeedback and the first time I had to be the patient in my clinical hypnosis training. And of course alpha theta neurofeedback and hypnosis are both really suspending the brain in theta. And I would call both experiences, they're very similar in what they're doing in terms of brain waves. And I feel like I sometimes trip balls on it. And I feel like I feel high. I feel really good. And my basil ganglia, so that same part of the brain that lights up with cocaine, in a speck scan, that was lighting up like a fire cracker for me under hypnosis. So yeah.

Dave: Exactly. So these are states that people can get from deep breathing, from hypnosis, we've got a virtual float tank. I have one here at my house. We have it at Bulletproof Labs. Those light sound goggles and you're laying on your back in this thing that spins like a record player to turn off parts of your nervous system like a float tank does. And all these things are out there if people have never experienced any of that stuff because they don't play, they don't have that as part of healthcare. There's huge untapped performance from just letting that part of the brain do it's thing. And in my own life, I've repressed my theta brainwaves enormously because to graduate from high school, I would go with fluorescent lights for a lot of kids, but especially for me after a while they put you in a theta state. Just a disordered, numb state. So I just cranked down on that so I could at least fall asleep only half way through class from crappy lighting. So for me to be able to train that was a huge amount of work so I can go into that creative intuitive state.

And I've literally written the outline for my first book, it was after a very deep neurofeedback session. I kind of came out of this bizarre altered state, picked up a pen and wrote down the entire outline for my fertility book. And had a book agent two weeks later and a book deal a month later. I don't know where that came from. That wasn't my conscious thinking. I wrote the book with my conscious thinking but I envisioned the book in a dream state induced in electrodes and no one talks about that stuff. But that's where a lot of the world's greatest sparks come from right when you wake up in the morning, right when you're in the shower, and so I feel like bringing that into the world as something that high performing people do, not just dreamers, might be of benefit. Do you agree?

Mike: It's how Thomas Edison invented the light bulb. And he was sort of suspending himself in theta and that's when he was at his most creative. So we could say that yes, thanks to theta Thomas Edison gave us electricity and the light bulb that lights our world with electricity. So yes, I would agree and my best ideas have come to me through subconscious base practices. The light bulbs for me just ping, ping, ping all the time. And they don't feel deliberate. The subconscious is effortless and the conscious has to

painstakingly weigh things and create in a very diligent way. The subconscious is easy and effortless.

Dave: One more question for you, Mike. If someone came to you tomorrow, and they said, Mike, "I want to perform better at everything I do as a human being." What are your three most important pieces of advice? Just three. What would you offer them?

Mike: Love, who is the person that really fills your heart with love and spend time around that person or those people or those animals because without love I think everything else is just meaningless, right? So even the great ideas and the light bulbs and the books and the businesses without love, I think everything else is meaningless. So number one, love.

Number two, it really is making room for the creative subconscious based juices to flow. So if giving yourself space, whether you find it in a float tank or a deprivation state, or breathing or kundalini yoga, or neuro feedback or hypnosis. If you give yourself that state, something is going to come through that is probably going to be a purpose driven, passion driven way for you to live your life and have fun.

So, number three, don't forget to laugh. We talked a lot about play today. Don't forget to laugh. Don't take yourself too seriously. It doesn't matter if you're making \$50,000 or \$50 million a year. If you take yourself too seriously, I think really bad things happen. And if you can remember the playfulness and the fun and the joy and the light in everything you do, you're going to have a really good time on the face of this planet in this life.

Dave: Beautiful advice. We've been listening to Dr. Mike Dow. Funny enough his website is Dr.MikeDow.com. We talked about a couple books. Heal Your Drained Brain is one of the books. And Heal Your Broken Brain is another one. And you've got a very unique take on things and I would encourage people who have been listening and liked what you had to say to check out one of your books. Definitely worth reading. Mike, thanks for being on the show.

Mike: Thanks so much for having me, Dave.

Dave: If you liked today's episode, you know what to do. Head on over to [Bulletproof.com/iTunes](http://Bulletproof.com/iTunes) and leave that review I asked you to do earlier or maybe go to Amazon and review one of my books and while you're at it order one of Mike's books. A little bit of reading, a little bit of letting people know what's worth your time to listen to and read to is always a good way to be grateful. Thank you.