

Speaker 1: 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 that man-made insulin cells could one day actually treat diabetes, which would be kind of cool, given that, oh, 400 million people check their blood sugar and inject insulin several times a day. They've just developed some artificial cells that mimic how your natural beta cells sense blood sugar concentration and secrete the right amount of insulin. For now, only diabetic mice get those synthetic cells, but the researchers believe the therapies of the future will look like this. Frankly, I would rather, though, see the therapies of the future look at turning on your own insulin sensitivity, and just turning on your own beta cells and making them grow back. I'm a big fan of you don't need to upgrade your hardware until you've taken full advantage of the hardware you've got now, but I'm not opposed to upgrading my hardware. You know, give me an adamantium skeleton and some claws like that. I mean, who wouldn't want that?

Now, that voice is none other than Dawson Church, who is sitting across from me rather than at the end of a Skype connection, because we're here together at the Transformational Leadership Council in Hawaii, which is a group that Jack Canfield started in order to get leaders in personal development together so we could form a community, make friends, and talk about stuff that's cool. I had a bunch of people I wanted to talk to, but Dawson was at the top of the list, because I know him, and because he wrote a really cool book called *The Genie in Your Genes* that revolutionized our understanding of how your emotions affect your genetic expression.

For years, we believed that it was your genes sort of described what was going to happen, and it turns out that the genes are really blueprints, and what turns on a gene is what really matters, and the environment is a huge thing that turns your genes on and off. You've seen that in *Head Strong* and the *Bulletproof Diet*, but there's also a big element of mindset, like what you think, what you feel, because there is a connection there. Dawson and I are going to explore that in this interview. Dawson also is going to talk about his brand new book, called *Mind to Matter*, that's available for pre-order at the time we're publishing this episode. I've already read the first three chapters of the book, and I'm as equally excited about *Mind to Matter* as I am about *Genie in Your Genes*. So if you really want to know how much control you have over your own biology, this is groundbreaking stuff from a fascinating human. Dawson, welcome to the show.

Dawson: Dave, good to be here, and I know we'll have a fantastic time chatting together.

Dave: One of the things that you've written about a lot, Dawson, is something called the Emotional Freedom Technique, also known as tapping, and we've seen professional baseball players do it. I've seen CEOs do it. I've seen lots of people really get some benefits from something that looks, honestly, a little bit crazy. So if you're listening to this, and you've never heard of tapping, it's the idea that you can tap at a certain frequency on certain parts of your body, and that your body will somehow shift as a result of that. Sounds super crazy, except there's some science on this. Dawson, tell me what is tapping, and why does this have any effect? What would you use it for?

Dawson: Yeah. There's tons of science. There are over a hundred studies, outcome studies, randomized control trials, reviews in peer-reviewed journals, meta-analyses, all kinds of research on EFT, and it works not just well, it works super well for most kinds of stress-related issues. Even in physiological problems like pain, fibromyalgia, psoriasis, and other kinds of physical things, there's a big element of stress, and so there's a lot of evidence showing that it works, and how it works, why it works is simply is tapping is acupressure. Just like you go to an acupuncturist clinic, and you get needles put in these points, there are 300 plus of them all over the body. There are 14 meridians in which the energy moves, and when you get an acupuncture treatment, research shows that, for example, MRI research shows that people get much calmer, and the whole limbic system, the whole middle part of the brain, what you call the Doberman brain, the ... What do you, in your book ... The Labrador brain.

Dave: The Labrador brain, yeah.

Dawson: The Labrador brain in your book. See, Labrador brain-

Dave: I thought you said dopamine for a minute, like, "No."

Dawson: Which dog was it Dave used? The Labrador brain.

Dave: It's a Labrador brain, right.

Dawson: That brain just basically curls up by the fire with a big happy grin on his face and goes to sleep when you get acupuncture. So what EFT does is, rather than needles, uses tapping or pressure on those same points. People just get way, way, way calmer. Some of the really moving examples of this is we've done EFT with Rwandan refugees and people who survived the genocide in Rwanda, terribly traumatized people, and they get better. We've done it with Vietnam veterans, even World War II veterans, Korean War veterans, and their levels of PTSD go from the high clinical measurable level down to just normal levels. They're no longer having flashbacks, nightmares, hyper-reactivity to ordinary events, all of those symptoms just go away when they tap.

What it looks like in an MRI or an EEG is that when you remember the bad stuff in your life, when you think about the car crash, or the combat memory, or the bad childhood bullying, whatever it might be, that memory now is triggering your brain's limbic system, but when you then tap or get acupuncture, anything you do to stimulate the body, and you when you pair that traumatic cue with a soothing cue like acupressure, then that tells the limbic system that that memory is not a threat your survival in the here and now. Once you break that association between having the bad memory and going into fight-or-flight, once you break the association one time, it tends to stay broken.

So we'll work with a Vietnam veteran, for example. There's one guy who had a ... There was a mortar attack. I think it was his second day in Vietnam, and at 4:00 a.m. in the morning there was a mortar attack. He hid under his bed, under mattress at his deployment station, and so now 40 years since Vietnam, he's still waking up at 4:00 a.m. in the morning. He's having flashbacks and nightmares. We tapped with him one time

on the memory, and he said, "I got my first full night's sleep since Vietnam," and it never came back.

The brain's smart. It realizes, once you break that association one time, it stays broken forever. It's a very simple technique. It's been around for thousands of years. We know 5,000 years, for sure, it's been used for healing in various cultures. It's just a simple way of soothing yourself, so you can not have those memories be sidetracking, derailing what you're doing in your life right now.

Dave: Some of the science in Head Strong, I talk about all the environmental things that affect mitochondrial function, the ability of your cells to make money. Mitochondria are ... To make money, to make energy. Mitochondria are incredibly sensitive to vibration, because they're ancient bacteria. The evidence we have for this is that when we're culturing cells in a dish, the vibration, or lack thereof, depending on what you're culturing, can determine whether or not cells actually grow. Whether they're human cells, whether they're stem cells, or whether they're bacteria, this is an important thing that matters. So how your body vibrates, how you move has a physiological, and therefore even a cognitive or a mental effect. You're introducing vibration, but what does vibration actually do on these tapping points?

Dawson: Well, in the new book, Mind to Matter, I came across a lot of obscure research, much of it done in Japan, China, Russia, the Ukraine, and so on, of these ... And these were electrical engineers. They weren't biologists, for the most part. They were simply parsing various frequencies through cell cultures. They were saying, "Gee, isn't it cool when I put the frequency of ... when I try a range of frequencies, look, a nine Hertz is doubling the amount of DNA repair going on."

Dave: These are electrical frequencies?

Dawson: These are electric frequencies going through these cell cultures, and they definitely are having a large effect, at the right frequency, on our cells, that the tapping, rhythmic tapping, usually at your own pace and your own pressure. There's no prescribed way of tapping. It's to tap how it feels good for you. People just calm down.

What happens is that it produces a kind of electricity called piezoelectricity, the same kind of electricity produced by, say, a gas grill. When you turn a gas grill into the light position it goes, click, click, click, click, click. That's the pressure of a metal element on a ceramic plate. That pressure produces electricity, a spark, and eventually ignites the gas. The same thing when you tap, tap, tap, tap, tap on these points. It sends a wave through the connective tissue of your body to the part of your body that's disturbed or that's experiencing any kind of energy blockage the way you would in acupuncture.

When you tap that way, and you're remembering the bad stuff, then you feel better. All kinds of chemical changes happen in your body. We're now doing things like looking at resting heart rate, immunoglobulin A, cortisol, other stress hormones, blood pressure, all these physiological measures, and they change a lot. In a study I've been doing recently with people at a one-week EFT retreat, their baseline resting cortisol is

dropping by over 40% in one week, their baseline of cortisol. This is their average cortisol level.

Dave: From tapping.

Dawson: From tapping, in one week, is dropping over 40%. So big shifts, big resets going on in the body's physiology when you tap.

Dave: Walk me through how to do tapping. Pretend like I've never done it before, and give me the instructions, and I'll do it right now.

Dawson: Have you ever done it before?

Dave: I've done tapping before.

Dawson: Okay. In the simplest form, it uses seven acupuncture points. We have people tap these in sequence while they remember a bad thing. There are three pieces to it. One is to remember the thing that's bothered you, so you think about a car crash, about a dog bite, about a terrible experience in school, being punished by a parent, by a bully. You may think about an adult tragedy, a childhood tragedy. You think about that thing.

Now, when you think about that bad thing, you start to get uncomfortable, and you feel subjectively uncomfortable. But if we translate that discomfort into a biological feeling, what's happening is that your serotonin and dopamine levels are getting dysregulated in your brain. Your cortisol is rising quite a bit. Your adrenaline is rising. All kinds of enzymes are shifting in your body. So we have you remember that bad thing.

Now, it feels bad to do that, and people don't want to feel bad, don't want to think about the bad stuff, but you think about the bad stuff, and while you're thinking about that, you also frame it in the context of self-acceptance. "Even though I had that terrible car crash, I accept myself and my life the way it is." That's a huge difference with EFT. It's not about positive thinking, not about placebo. It's not about trying to make you feel better. It's really letting you inhabit the space of all the grief and the loss you've never processed emotionally in your life before. So you think about those things but in that frame of self acceptance, and while you do that, you tap on these seven points.

The first point is on the side of your hand between your wrist and the joint that anchors your little finger. You just tap there with three or four fingers, and while you tap there, you just say very simply, "Even though this thing bothered me, I accept myself. I accept my life." So you frame that bad thing with acceptance while tapping on the side of your hand. Then, once you've done that a few times, usually two or three times you've done that, you may feel a little bit different after that. To initiate the process while we're talking about the bad thing, we have you score it numerically from zero to 10. So think about the car crash. How upset are you right now thinking about that, zero to 10? So you have to get your number. Dave, just think about something disturbing in the last couple of weeks.

Dave: All right. Sure.

Dawson: Okay. Don't tell me what it was, but give it a one-word name. If it was a movie, what would the title be?

Dave: Wow, that could be a long one. I'm just trying to think of what it would be.

Dawson: You get three words.

Dave: All right. Jeez. All right. Here we go, Less Than Zero. That was an old movie.

Dawson: Less Than Zero, okay. So tap over here, on the side of your hand point, and say out loud, even though I remember the Less Than Zero movie ...

Dave: Even though I remember the Less Than Zero movie.

Dawson: And do really remember it right now, just really focus, yeah.

Dave: Okay.

Dawson: I completely accept myself.

Dave: I completely accept myself.

Dawson: That was a long time ago.

Dave: That was a long time ago.

Dawson: I'm okay now.

Dave: I'm okay now.

Dawson: I am safe now.

Dave: I am safe now.

Dawson: And that Less Than Zero ...

Dave: And that Less Than Zero ...

Dawson: ... movie happened.

Dave: ... movie happened.

Dawson: Okay. Again, keep focused on the movie and then tap right where your eyebrow meets the bridge of your nose with two fingers lightly. Less Than Zero.

Dave: Less Than Zero.

Dawson: Again, vividly remember the Less Than Zero movie. Side of your eye, Less Than Zero. Under your pupil of your eye, Less Than Zero, and say it out loud.

Dave: Less Than Zero.

Dawson: Really remember it, vividly, okay? Under your nose, Less Than Zero. Under your lower lip, Less Than Zero. Tap where your collarbone meets your breastbone. Make sure you're breathing. I can't really tell from here if you are.

Dave: I'm just kind of sitting funny. I'm breathing.

Dawson: Okay, good. Yeah. Recall that vividly. Say it out loud again.

Dave: Okay, Less Than Zero.

Dawson: Tap about four inches below your armpit, Less Than Zero.

Dave: Less Than Zero. Same side, different side, doesn't matter?

Dawson: Either side, doesn't matter. Back on this point over here, Less Than Zero.

Dave: Less Than Zero.

Dawson: Okay. Now, score it again. What was your first number? What's your number now, thinking about that old movie?

Dave: Like seven to four.

Dawson: Seven to four, okay. Let's take that four now, and let's say, say out loud, I'm still a four ...

Dave: I'm still a four ...

Dawson: ... on Less Than Zero ...

Dave: ... on Less Than Zero ...

Dawson: ... and I might never get below a four.

Dave: ... and I might never get below a four.

Dawson: I might go back to a seven.

Dave: I might go back to a seven.

Dawson: Might go to 10.

Dave: Might go to 10.

Dawson: Might go to a zero ...

Dave: Might go to zero ...

Dawson: ... or less than zero.

Dave: ... or less than zero. There you go.

Dawson: It might go up, it might go down.

Dave: It might go up, it might go down.

Dawson: Either way, I accept myself.

Dave: Either way, I accept myself.

Dawson: I might get worse.

Dave: I might get worse.

Dawson: I might get better.

Dave: I might get better.

Dawson: Either way, I'm okay.

Dave: Either way, I'm okay.

Dawson: I'm acceptable.

Dave: I'm acceptable.

Dawson: Either way, I'm acceptable.

Dave: Either way, I'm acceptable.

Dawson: I might heal.

Dave: I might heal.

Dawson: I might not heal.

Dave: I might not heal.

Dawson: I might get better.

Dave: I might get better.

Dawson: I might get worse.

Dave: I might get worse.

Dawson: And I will love myself ...

Dave: And I will love myself ...

Dawson: ... regardless of whether I get better or worse.

Dave: ... regardless of whether I get better or worse.

Dawson: Now just a little time out here. That's a critical thing to do, because so often, we delay loving ourselves until after we've made the extra \$10,000, or asked for the raise, or found the girlfriend, or moved to the perfect place to live, or got the perfect job, or whatever. We're always saying, "When I lose 25 pounds, then, I'll be acceptable. Then, my life will be fine." It's like the carrot and the stick. The carrot's always just out of our grasp. EFT is all about saying, "You know, my life is imperfect. Things have happened that didn't work out well for me, and I love and accept myself nonetheless."

For pain patients, it's powerful. For fibromyalgia patients, it's powerful. People with autoimmune diseases, people facing any kind of a physical challenge, it is so valuable to say, rather than, "Once this pain goes away, I'll be in much better shape," just love yourself, accept yourself the way you are, and tap while you say that, and that then breaks all the psychological tension in your mind between you having to be different and better before you're acceptable and lovable. So, you tap there. Yeah, so why you would do it that way. Tap over here again and say, Less Than Zero.

Dave: Less Than Zero.

Dawson: Side of your eye again, Less Than Zero.

Dave: Less Than Zero.

Dawson: Now, do your pupil again, Less Than Zero.

Dave: Less Than Zero.

Dawson: Under your nose, Less Than Zero.

Dave: Less Than Zero.

Dawson: Under your lower lip, Less Than Zero.

Dave: Less Than Zero.

Dawson: Where your collarbone meets your breastbone, Less Than Zero.

Dave: Less Than Zero.

Dawson: Under your arm, Less Than Zero.

Dave: Less Than Zero.

Dawson: The side of your head again, Less Than Zero.

Dave: Less Than Zero.

Dawson: Okay. Vividly remember that little movie, Less Than Zero. Now, take a deep breath. Stop tapping, and give yourself a new score when you remember it again.

Dave: Yeah. There's definitely less reactivity to it. It wasn't super high in the first place, but yeah, there's a relaxed element to it that wasn't there before.

Dawson: Yeah. Yeah, and that changes. It changes for, again, that Vietnam veteran who suffered the mortar attack, people who are really in a terrible condition. There's just been a huge viral video that's been seen by 20 plus million people of kids inspired by the Newtown, Connecticut school shootings five years ago, and a lot of those kids have learned tapping. Their parents have learned tapping. It has so shifted the trauma of the communities where it's been used. It's a powerful tool.

Dave: There is so much that old trauma does to us, and it's all invisible. You might feel something, and you'll tell yourself, "I feel that because something happened," but the feeling is very old, and most people who are exposed to that same situation wouldn't have that same reaction to it. I've gone through and kind of relentlessly looked for things that I know I'm reacting to. I do it with neurofeedback, the whole 40 Years of Zen Program, and heart rate variability training, and I've used tapping a few times. I think, for me, it works better when I'm doing it with someone who's guiding it, versus if I'm sort of doing the self-tapping.

But it is a meaningful thing, and what you're doing here, from at least my perspective on this ... I want to check in with you about whether it's accurate, is that there's all sorts of programming and reactivity in the body itself, not even in the mind necessarily, and that what's happening in the body rolls up into the mind, and that when you interrupt that via tapping, and you pair that tapping, saying, "Something's going on here that clearly isn't a threat. It's more of a distraction than a threat," that suddenly, the pairing, as you described it, it doesn't pair anymore, so the reactivity goes down. Is this something you recommend people do themselves? Is it something that you should learn from a practitioner, or a friend, or something like that? How would someone put this into action?

Dawson: The easy things, you can do yourself. If you're dealing with patterns that you can change fairly easily without a coach, then ... There's a whole range of things you can use it for

yourself. There's also a very portable method, in a therapist's office or a coach's office, or part of a group call, a part of a group program, is just tap whenever you want to. But if you're facing like, for example, we have a weight loss program, and people who ... The average woman does 18 weight loss programs in her life. She loses her body weight and regains it 9.1 times over her lifetime.

Dave: I must be a woman.

Dawson: She spends an average of \$220,000 over her lifetime on various nostrums, and weight loss products, and so on. So she signs up for our weight loss program, so we know that people who do that, they have a persistent issue, and we don't think that just a little bit of self tapping's going to do it for them. They need a really serious, guided coach approach.

Dave: Sure.

Dawson: What we found is that people who do weight loss with EFT, they lose a little bit of weight, but what happens in the year after they learn EFT is, we've tracked them now long-term, and we've found that in various trials, their weight drops between 11 and 22 pounds in the year after they finish their EFT program. Unlike the usual pattern, which is regaining all your weight after you do a program ...

Dave: That happened to me so much when I weighed 300 pounds, my god. You'd lose 50, gain 60, every time.

Dawson: It is so disheartening. Yeah, and no one can see the 60 you've lost, or the 50 you've lost. All they see is what you have.

Dave: There's kind of two things going on with weight loss. There's clearly emotional eating, and then there's eating for entertainment and things like that, and then there's where your biology, at a lower level, you have insulin sensitivity issues, you're not sleeping, and there's stuff going on like that. How would someone listening to this sort of know, "All right, am I dealing with a biological issue or an emotional issue?"

Dawson: It's really important not to emotionalize biological issues. It's also important not to biologize emotional issues.

Dave: Exactly.

Dawson: Treat the emotional issues emotionally and the biological ones, as well. One of the cautions we found with people who learn EFT ... Research shows that when people do start doing EFT, their levels of anxiety, depression, all kinds of psychological issues just plummet really quickly. People doing, say a one-day class, the average reduction in anxiety and depression is 45%, and it often leads them to the erroneous conclusion that everything's emotional, and everything's not emotional. There may be things in your environment that are toxic, or to which you are sensitive.

Dave: Yeah. If you have a lot of mercury in your system, it's going to be really tough to tap that out.

Dawson: I know. Yeah. Yeah.

Dave: That said, though, I've worked with people where they do emotional release work, and then they're able to chelate their mercury very effectively. The issues are holding onto things. It will not respond to chemicals that cause mercury to go out. They do something, tapping, holotropic breathing, personal development work, whatever it is, and suddenly, they're able to detox way more effectively. What's going on with that?

Dawson: They're able to usually make use of all the information they have, as well, much more effectively. Also, they learn about diet, nutrition, and so on. They'll be able to do it if they no longer have the emotional reactivity around ...

Dave: The self-sabotage stuff.

Dawson: Self-sabotage, yeah, isn't there anymore. There's that there. Also, usually, acupuncture, you don't need needles in all 300 plus points in your body. A good acupuncturist will find the five points, the two points, the seven points that are like breaking the logjam in the ... There's a huge number of logs in a logjam, but pull out two or three key logs, and you've found the linchpin. Then, the whole dam starts to disintegrate. The same thing with our bodies, they're stuck in this low level of homeostasis, where they're just barely functioning. But then, you give them the little bit of input that helps them get a little bit better, and suddenly, the whole logjam often breaks apart.

People, for example, who are doing our weight loss program, they often say, "My relationship with my husband improved dramatically. My skin cleared up. I have way more energy," all these other good things are happening in their bodies. Once you deal with the emotional stuff, then ... Also, once that's down to a low level, once your emotional reactivity isn't there, then you can use other means for what still remains, whatever it might be.

Pain is a good example. The average reduction in pain in EFT studies is about two-thirds. You sit down, start tapping, whether it's a sprained ankle, whether it's cancer treatment, whether it's a fracture, people's average level of pain drops by about two-thirds in just treatments of tapping. But then, the remaining one third is actual medicine something that you have to pay attention to. You need the best of both worlds. The corollary also applies that you don't want to go, if you have pain, and go see a doctor, and then pretend that all the pain is physical, and then try and medicate that two-thirds that's often emotional. You need the best of both worlds. You have proper care for the part that's physical, and then take care of the emotional part emotionally.

Dave: That's, I think, a lot of the challenge we all deal with there, is sorting out which is emotional and which is physical, because of that inconvenient thing that's in both of your books, that sometimes, the physical comes from emotional, and sometimes, the emotional comes from physical. Sorting that out can be challenging, but given that EFT is

essentially free, you can do it yourself, it's definitely an easy way to say, "Well, maybe I can turn down the portion of whatever's holding me back that's emotional and then deal with what's going on." I don't think you can do the EFT donut diet and lose weight. Likewise, though, if you're dealing with a lot of trauma and emotional stuff, even if you manage to, for a brief period, adhere to any diet, whether it's keto or Zone, whatever, it doesn't really matter, it's probably going to work, either, if the emotional stuff's in the way.

I have found that when people address the physical, so you set the bone that's broken, you eat food that gives you enough energy that's stable, that it's much easier to do emotional level work, just because you have more stable energy, or because the bone is knitting instead of grinding, or whatever the problem is, that suddenly, it's like you have more energy to put into the change that comes from EFT. I've talked with a bunch of people who've used EFT, and sometimes, they get profoundly tired after they do a session, like way more than logic would dictate. What's happening there?

Dawson: Often, people are resetting after a session, and they may go through a profound shift in a session, and it takes a while for the body to restore its equilibrium. For example, one of the things you have to train people in, who are becoming certified in EFT, is that it can be very disorienting to suddenly have some big plank of your personality just collapse. Maybe, for example, you've had this belief about the world that's been dysfunctional, and you've had it for 70 years, and it just collapses in the course of a session. You're just really disoriented, so we train our therapists and coaches to watch for those signs in people, that they're disoriented, that they're tired, and then there are ways of having them integrate and reset. Like any big change, if you get acupuncture, if you have any kind of a major healing event, you get a good massage, you might want to just lay down and take a nap afterwards. It may take a while to integrate that into your body.

Also, if you look at the energy body, what's happening at the level of the EEG ... I've just become a huge fan, over the last few years, just studying EEGs and seeing the shifts in people happen. When somebody tells me they feel better, I love hearing that, but that's a subjective report. When I look at their brainwaves, and I see the ratio of beta, which is basically our anxiety brainwave, changing to delta or theta, that's objective measure. When I see their cortisol level dropping, their immunoglobulin level rising, then those are all objective biological changes.

When you say you feel good, what's happening is all that biology's changing in your body. It's fascinating to look at the biology. Then, that's a numerical measure you can make to see how much people are changing. Yeah. When people have big shifts, they often do feel really ... They're different. They may have just shifted some huge part of who they are, and when you do that, that's disorienting, maybe exhausting, and may take a while to integrate that back into the new you. Usually, the new you that emerges, though, will be much stronger, much healthier, much wiser, much less stressed than the old you that was holding you all together before that point.

Dave: What are the times where EFT just doesn't work?

Dawson: There are things which it has limited effect on. Tinnitus, for example, I've talked to many people with tinnitus, and very few report any ...

Dave: With ringing ears, yeah.

Dawson: Ringing in your ears. It's basically neurological damage from listening to loud sounds. When problems are purely physical like that, often, I think EFT is of limited value. If it's a purely physical issue, then EFT tends to be less effective, although I've had so many cases ... Whenever I do workshops, I ask of people, I say, "Any of you here in the audience, if you have a purely physical issue, that's not psychological, at all, let's just work on it and see."

People will come up with pain. One woman was in her late 70s, and she said, "I had a rotator cuff surgery three years ago, and my biceps ... They shortened the tendon too much. My biceps hurt ever since the day of the operation." Again, it's a purely physical issue. It has a start date that she can tag, the operation, and so in my mind, I'm thinking, "Well, I don't think EFT will work for this." I love to do at least one demonstration where I'm pretty convinced EFT won't work, just so I can show people it's not a panacea.

Well, I had talked to this lady about her life, her shoulder, while we tapped, and I said, "You know, why don't you give that biceps pain in your shoulder, give it a name?" She said, "Fred." I thought, "Okay. That sounds a little bit emotional. Did you have a Fred in your life?" She said, "Yeah, my ex-husband, his name was Fred." So we tapped on her ex-husband, and her biceps pain, which had been there ever since the operation several years before, went from a seven to a zero.

Dave: Wow.

Dawson: I'm amazed that, even in cases where I personally don't think EFT will work, maybe I'm working with somebody else who also doesn't think EFT will work, it often does work, and there's more stress than you would think of. Our bodies often release pains and symptoms. They're like little kids waving their hands and saying, "Hey, I need some help here. I have an owie. I need a bandaid. I need a hug. I need some love here." We want those pains to go away. We try and medicate them away, but we train people to perceive them as signals from their body and say, "What is my body trying to share with me here? How can I hear what my body's trying to tell me with this pain, with this symptom?" Love it. Accept it. Again, I love and accept myself with this pain, not try to make this kid shut up, you know? Then, often, those things do away.

Dave: It makes sense on one level. The more I learned about mitochondrial biology and the fact that these ancient bacteria in your cells, they still have a bacteria's level of awareness. They're not us. They're part of our system. But they form little networks, so there's a part of your knee that knows where your knee is in space, and we tie it into our nervous system through something called proprioception and all of that, but there is a consciousness in the knee, which is stupid. It is not a consciousness like you or I, but it's actually localized in the body, and it works with all the tendons and all the essentially organ-level, very low-level consciousness things. If one of them has identified there's a

threat, or there's a pain, and it's not healing when you've done the appropriate things ... Well, okay, maybe there really still is some damage, like it might not be healing because of a physical thing, but if it's not, it's because that part of the body can be convinced that it's safer not to heal. This has nothing to do with our brain whatsoever. It's a localized phenomenon.

But then, you heal it, whether it's through tapping, or running an electrocurrent or whatever, and people start crying. They have all sorts of weird emotions that come out and things like that, that just, in my path, I've seen too many emotions hiding localized in places on the body, that when you let them go, for no reason whatsoever, you start crying, you feel huge amounts of fear, and things like this. But then, the healing can happen.

Dawson: Yes.

Dave: It feels like you're tapping into that.

Dawson: Yeah. We did a clinical trial. It was a randomized control trial published in an American Psychological Association journal. We randomized people into three groups. One of them got EFT. One of them got nothing. One of them got diaphragmatic breathing. We were measuring frozen shoulder and range of motion. It was clinically verified frozen shoulder. We were measuring the range of motion in several different dimensions, and we found with the EFT group that their range of motion improved a lot with tapping, more so than the other two groups, and their psychological wellbeing improved dramatically, as well. Their pain levels dropped a lot more, as well.

We found that there was almost always some way in which the pain they experienced with the frozen shoulder thought it was helping them, was helping them avoid injury or more pain. We actually had to tap on the protective function of pain. Your body is stopping you from moving in this dimension fully, because it thinks if you move too far, you'll injure yourself. So there's almost always some ... Again, you're right, it's not cognitive wisdom. It's not smart wisdom, but it's the body doing the best it can.

Dave: And it doesn't appear to be resident in the brain, even.

Dawson: No.

Dave: One of the things that I do, I have this unusual piece of electrical stimulation gear, and you can put more load on a joint or on a muscle than it believes it's capable of doing. You make yourself move under that load, and you feel like you're going to die. As soon as you finish the motion, it doesn't hurt, at all. You're like, "Oh, I guess I was wrong." You're basically just showing that part of the body, without incorporating the brain, it's a local thing, that it can do that without dying. Your pain threshold goes up, and up, and up.

I actually did this on a Army Special Forces guy who'd had a shoulder problem for nine months. We were just kind of playing around. I said, "All right, we can do this for you."

Finally, he gets to a level where he actually screams as he's doing this, and when he's done, he's just covered in sweat, and he goes, "But I can move my shoulder again. I've got my motion back." Then, he looked at me, and he said, "I've been waterboarded before, and it didn't make me scream. I've been tortured." He said, "Nothing has ever made me scream but that damn machine." What it was doing, his body was protecting his shoulder against death, is what his shoulder thought. I mean, this is one of the toughest guys out there, right? We can have this, and if you don't recognize that there's an independent thing going on in the body, it's hard to accept that any of this stuff might be possible, but it is possible, and it works. You've got a hundred studies out here.

Dawson: It is possible, and Dave, one of the things that just drives me is hearing people's stories of limitation in their bodies, in their movement, in their pain, in their emotional bodies, what they think they deserve in relationships, in love, love with their buddies, love for life, passionate life, all of these things. We live in a tiny range of possibilities, and what this new book, *Mind to Matter*, has convinced me of is that for most of us, it's a set of conditioned responses that are just not true. We are capable of far more emotionally, mentally, physically. We can think. We can create. We can be.

My wife is an art teacher and teaches kids six, seven, eight years old to do art. It's just amazing to watch the kids flood into her classroom. They grab the watercolors or clay, whatever she's teaching. They'll just make this amazing art. They'll fling themselves into it. They'll just do art. You just can't stop them. We went to an adult class about three years ago on drawing a mandala. We signed up for this class to draw the mandala. We walked into the class, listened to the lecture, a great lecture on how to do the mandala, got all the materials together, all people in their 50s, 60s, our age, and it was time, finally, after the instructional part to start doing your mandala. We listened to people around the table, and they would say things like, "I don't think I can do this, because I just can't draw the way the teacher did." "I don't have any ideas." "You know, we only have three hours. I can never finish this in three hours."

We listened, my wife and I listened, to all of the self talk that people had, the self criticism, and the way they made themselves wrong and small. It just hurt our hearts to hear this. I mean, we didn't have that in our own experience. We just threw ourselves into it, like the six-year-olds. But I thought, "What happened to you poor people between the age of six and 60 to convince you that you're this small, shriveled subset of the potential you were born with? When you were a kid, you didn't have all those filters and all that self talk."

A large part of the new book is just telling people, hey, question all of your beliefs. Tap on those things. You're going to find that that limited range of motion you thought you had, maybe it's just not there, that pain you had, that ability to receive love. People give tiny amounts of love, and especially receive only small [inaudible 00:37:18] of the love they really could receive. Fling yourself into love. Fling yourself into life as a passionate creator every day. You will make some mistakes. Everything won't go well. You will have an absolutely grand time with it. I see people living their whole lives in this kind of little, tiny prison in the basement of their palace of possibilities. I'm less and less patient as I get older with seeing people just be that way, and then die at 70, or 80, or 90, with half of their potential, or maybe most of it, still unexpressed.

Dave: It's wasteful.

Dawson: It's wasteful, yeah. Yeah. We are grand beings meant to have grand lives, and so much of our tapping, meditation, all the things, all these transformational tools, help us challenge our notions of limitation, to claim that inner six-year-old, that just exuberant being that we came here to be.

Dave: That all rings true to me. Everyone at every level still has another level. I've had the honor of working with phenomenally successful people sometimes, and always, there's whole levels of, "Oh, I didn't know I could do that." It feels good to watch people tap into that. That's one of the reasons I've done coaching and things like that, both I have coaches, and I work ... At least, I have worked as a coach. I'm not doing much coaching right now, because being a CEO is enough of that. When people are looking to access, to tap into all those untapped potentials, we can say EFT is clearly a tool to do that. What are some of the other tools that come to mind for you as being really powerful?

Dawson: I do a lot of keynote speeches every year, and so for a recent one that I'm doing around the new book, I made a list of them. The basic one I recommend, even more than tapping, is meditation. I think that meditation gives you a baseline of sane function in your life, and also, attunement with universal cycles.

I also go global at the end of the new book, where I'm looking at things like there are these huge geomagnetic fields around the earth, and what happens ... I won't go into detail about this, because it's like four hours worth of science here, but there are these huge global cycles, which we can measure, in the earth's frequency ranges, and the harmonics of certain ranges that the earth produces naturally. We have the same frequencies in our cells, and people ... I have a graph in the book showing somebody, an experienced meditator, and their heart coherence for 30 days, and having that graph for a month. Then, I've got these global, they're called field line resonances, these huge geomagnetic spectrum frequencies measured by geologists. I've got the two overlaid, and that large frequency of the earth's field and that individual heart coherence frequency look as though they're in exactly the same pattern for a whole 30 days, so we're coherent.

When you get coherent, when you meditate, when you breathe, when you tune in, when you attune to these universal cycles, especially in the morning, you then have this baseline of functioning that's not fearful, that's wise, that's connected, and that is then in tune with these cosmic cycles. You begin your day that way. Meditation is the foundation, I believe, of a successful life.

Then, stuff happens. You get to the office. You get a terrible email. There's a car crash. There's all just random stuff happens, and they make you feel bad. You then tap to release those transient stresses. Then, you get in the habit of feeling much better. You have the stress release mechanism. Now, suddenly, the whole level at which you are in homeostasis up-levels dramatically, because you're setting this good baseline of meditation every morning. When these transient stresses knock you off your game during the day, you're returning back to that good baseline very, very quickly. Now, your body gets used to a much healthier ratio of serotonin and dopamine. Your cortisol is

enough to make you function well, not too high to corrode your cells and organs, your hippocampus. Your adrenaline levels are appropriate. All these biological changes happen, and you get really used to feeling really good. Feeling good becomes your new baseline. Those are the two fundamental ones, is meditation and tapping. Do those two and everything starts to shift.

What you can then do is do more. Exercise, is you've got to move, just absolutely have to move, not just going to the gym, but just move throughout the day. Time in nature, when you ground, when you stand barefoot on the earth, the earth is full of electrons. Those electrons flood up through your body and neutralize free radicals, so powerful tool. Walk on wet grass. Just take a shower. Be in nature. Immerse yourself in beauty. Take breaks. Take a break. If you look at the ancient acupuncture clock, it shows that ... It divides the 24 hour day into two-hour segments. It turns out that our ultradian rhythms ... Within our circadian rhythms daily, there are two-hour ultradian rhythms. Taking a break every two hours is crucial to peak function. Taking regular breaks is important.

Dave: How long of a break for every two hours do you recommend?

Dawson: For me, five, 10 minutes is enough, just enough to break your focus, regulate your physiology, and then return to the task, so not a long break, but you'll do better. Then, you take one hour and a half break during the middle of the day, as well. We find that people are much more focused for the afternoon after they do that. Time in nature. Community. Hugs. Touches. Being with people. If you're with somebody you love, touch them. Watch primates. Monkeys are touching themselves all the time. I watched some finches in the tree yesterday, and they were just pecking each other and rubbing each other. They're sitting next to each other, and they're touching. Animals touch constantly. Watch parents in Aboriginal cultures. They're holding and touching their babies all the time. So touch is really important. So time in nature, touch.

A spiritual practice. A sense of social connection with other people. Spend time with other people, even people maybe you don't have that close of a connection with. Expose yourself to new ideas. Challenge your mind. Go find the political party that you're most opposed to and go read their propaganda, and see if you can see things from their standpoint. Stretch your mind. Do things that challenge you. Take up hobbies that challenge you. I try learning something new every few years. I know right now, I'm learning stand-up paddleboarding. I'm not a great paddleboarder, but I'm really enjoying it. Every year, I'll just try something new. Challenge that middle part of your brain, the hippocampus, those learning and memory circuits, and help them transfer short-term into long-term memories.

In one case history I have in Mind to Matter, we talk about this one guy who was just a total nonbeliever in all this sort of touchy feely mindfulness, meditation, tapping stuff, and these neuroscientists put him on an eight-week mindfulness program. They measured his brain volume before and after in an MRI. In eight weeks of mindfulness, the part of his brain responsible for emotional regulation grew. It's called the dentate gyrus, part of the hippocampus, the dentate gyrus. His dentate gyrus grew 23% in eight weeks.

Dave: Wow.

Dawson: That's how quickly your brain is reformatting itself as you do all these positive practices. You aren't just having a better feeling life. You're literally rewiring the hardware inside your head. You're using the software of mind, the software of belief, of good practices, to literally change the hardware inside your body. You may look the same after five years, but you've got a whole different brain after you've done that repeatedly, not just for eight weeks, like this guy did, but for eight months, eight years, and constantly. Surround yourself with positive, peaceful, kind, loving experiences, and then your whole life starts to be infinitely more pleasurable and more satisfying. I think meditation's the first one. Tapping's the second one. All of those others are going to help you have a good life.

Dave: So your top three recommendations would be meditation, tapping, and then basically community and other things that build positivity in your life.

Dawson: And time in nature.

Dave: And time in nature, of course. That's a very big one, right? Well, these are a fantastically long list. It takes a little bit of work to build those into your life, but people say, "Dave, why do you live on Vancouver Island?" I'm like, "Well, I'm on a 32 acre organic farm that costs less than an apartment in Palo Alto, and bald eagles nest in the backyard, and I get access to sockeye salmon, and clean air, and clean water." But I fly more because I do that, right? I'm not living in a city center. But it is possible to work on these things, and like you said earlier during the tapping, you can accept yourself with whatever of those you're doing, but if you do the, "I'll be happy when ..." with that long list, good luck with that. That might take a long time.

Dawson: Well, say you're living in New York City. New York City has tons of little neighborhood parks. There are beautiful spots you can go, take off your ... In our workshops there, we have people do this. They happen at the New York Urban Center, and when, in the middle, we take our breaks, we walk to a little church called The Little Church Around the Corner, and we take off our shoes and stand there on the wet grass. You can do that when you have 10 minutes to spare.

Dave: You can build this into your life, even if you're not making the big changes. I found that there are people who get sort of overwhelmed with this long list of things I can do to be a better person, and the bottom line is, you can pick, you know, "I'm going to work on these three." I ask everyone who comes on Bulletproof Radio the question, top three most important things like that, because they're different for different people, but when you understand that out of 500 people, most of them said these top 10, maybe those are the areas where you might want to invest something, versus saying, "Oh, this one expert says this is most important." Well, you're not that expert, so what's most important for person A might not be in the top list for person B, but there are patterns that we can discern from this, and it's really cool, because you've got a fantastic list there. You said that list is actually in Mind to Matter, the new book?

Dawson: Yeah.

Dave: Okay, cool. Well, I have got the first three chapters, because ... Well, you gave me the first three chapters, but I don't have the rest of them, and I'm very eager to read them, because *A Genie in Your Genes* is a fantastic book, and you are one of the guys who really goes into the science behind this stuff. There's a lot of very well-educated physicians, and engineers, and people who listen to *Bulletproof Radio*, and millions of other people who are not necessarily that cognitively biased towards skepticism, and we're all interested in these things, but it makes everyone feel better, whether they have a science background or not a science background, just to understand that there's real research that went into this.

There's a feeling of uncertainty that comes from saying, "I'm going to try this, but I just have no idea." The bottom line is, we might not know all the reasons this works, whether piezoelectricity is really the main effect. Piezoelectricity is real. I cited three studies in it in *Head Strong*, but is that really why? We think we know, but maybe there's something else in there. But can we say, if we do X, we get these results more often than we should, if X didn't do something? There is enough of that, and you write about that in a really eloquent way that says, "Look, if you're only looking at your hardware, and you haven't looked at the thought processes, and beliefs, and emotions that are tied to it, you're not going to get the results you're looking for. I would encourage people who are reading, or who are listening to this, to read *Mind to Matter* when it comes out, because it's worth it.

Dawson: One of the problems with the whole transformational movement is there is so much fluffy stuff there. I'll give you an example. My editor from Hay House for *Mind to Matter* wrote me and said, "You used this number in the book, that we have 4,000 thoughts a day." She said, "Well, I've edited many other Hay House books, and all these other transformational leaders are saying we have 60,000 thoughts a day, but you're saying we have 4,000 thoughts a day." I just emailed her back and said, "You know, they're just writing books. They can say whatever number they want. I actually have to prove everything with science." What I do with all of my work is I say, "What does the science tell us? What does science tell us, where is it ambiguous, and what does it tell us is really not happening?"

I'll give you an example from my own weight loss journey. I tried, Dave, and I know you tried different things, as well, but I was a classic yo-yo dieter. I was on *Jenny Craig*. I did *Weight Watchers*. I did *Zone diet*. I met *Barry Sears*. I mean, I did all these things, and I always lost weight. It was great. But then, like the meta-analyses tell us, two years later, I wound up weighing 10, 15 pounds more. It wasn't sustainable until I found tapping and meditation. I began to apply those. I lost 50 pounds, and I've now kept it off for eight and a half years. It's been so powerful to do that, but I looked at the science, and what I found was that almost everything I'd been taught about weight loss was wrong.

Dave: Yes.

Dawson: I was so angry at all the fatuous advice I'd received over the years, and I'd taken it all. You're just hopeful. You parent out, what does science tell you? That's what I love about your work.

Dave: Thanks.

Dawson: You are looking at, what's the fact here? You do that. Another thing that Tim Ferriss talks about is the minimum effective dose. Do what you need to do to get your goals met, and don't do a whole bunch of stuff that you don't need to do, that's superfluous to that. Really drill down, narrow it down, what'll make me happy and healthy? What will boost my longevity, and what will not? Will more of the same ... How much do I need to do before it's just superfluous? Science gives us those answers, and that's why it's so useful to go to the science, get the answers from that, and then make those lifestyle choices in a way that's scientifically informed. I read self-help book. They're well-intentioned, but ... Yeah, and this is all about Mind to Matter and what the science tells us we can do to change our bodies and our lives, that's credible, that will make a difference.

Dave: Well, it's a good read so far. I can't wait to get the rest of it. You'll send me an advanced copy before it comes out, right?

Dawson: Sure.

Dave: All right. See, that's the benefit of being the host of Bulletproof Radio is I get to read it before you guys get to read it. On that note, Dawson, thank you for being on Bulletproof Radio. We talked about the name of your book. What URL can people go to, to learn more about tapping or more about your work?

Dawson: The place you go to, to get all of it, you get the EFT mini manual download, you get meditations, you get all kinds of other goodies, is Dawson, my name, D-A-W-S-O-N, Dawsongift.com.

Dave: Dawsongift.com.

Dawson: One place you can go that also has a link to the Veterans Stress Project, where we've now treated over 20,000 veterans free of charge who have PTSD, we're doing all kinds of charitable work, all of those links are accessible from Dawsongift.com.

Dave: Beautiful. Thanks, Dawson.

Dawson: Thank you for your wonderful work, and it's a pleasure.

Dave: If you enjoyed today's episode, you know what to do. This time, I'd say head on over to Amazon and pick up a pre-order of Mind to Matter, because for me, it's relaxing to actually understand, yeah, there's science behind this stuff. Some of the things I've done in my own path, when the things that were supposed to work didn't work, is yeah, I'll go to Tibet, and I'll learn meditation from the masters, and I'll try this crazy thing, partly

just out of frustration, and also out of the idea that says, "Well, it probably shouldn't work, but for some reason, people have been doing it for thousands of years, so I'll just give it a shot, and I'll see what my results are."

There's a level of relaxing that comes from being like, "Oh, wait. There actually is science. People have studied this," and the odds of you seeing these studies put together this way are relatively small, because well, A, we're producing more studies now than we ever have in all of history, and we're able to access them all. The signal to noise ratio just isn't there for you, and when you read a book like *Mind to Matter*, you can actually say, "All right, here's the relevant things out here that say all right, here's the level of control I have."

This is a book that should be in your library, and I hope that you'll check it out and order it. It's on Amazon.com. It's called *Mind to Matter*. If you like the book, the one thing that you've got to do is leave a review. Authors like Dawson, and like me, we actually track our success. Yeah, we like to get people to read the book, but if you read the book, and you liked it, and you take 30 seconds to tell other people that it was worth your time, we actually notice, and it matters. So thank you for taking the time to leave reviews for authors who take their time to be on the show and things like that. Thanks, Dawson.

Dawson: Pleasure. Thank you.