

Announcer: Bulletproof Radio, a state of high performance.

Dave Asprey: Today's episode is pretty interesting. You're going to want to listen through to the end, because we talk about vibration, which is something that can be completely woo-woo. I definitely hold our guest on this episode accountable for what can we measure, what can we not measure. But we talk about a whole bunch of different things that can increase your energy in your life, however you decide to measure it. We get into some science here. We get into some best practices. I think you've got a lot to learn from this. Listen through to the end and let me know what you think by leaving a review on iTunes.

You're listening to Bulletproof Radio with Dave Asprey. Today's cool fact of the day is that scientists in Denmark recently published some new research that showed that certain bacteria in your gut play a much more decisive role in regulating your weight than we ever understood before, which means that something as simple as a little poop sample might be able to tell you what nutrition is going to work best for your body and your gut biome and what's going to change there. That can be profoundly interesting, especially when you consider that what you eat changes which bacteria are in your gut.

This new research just adds even more evidence to the fact that I'm really excited about Viome. You've heard the episode with Naveen Jain, who came on and talked about this new way to see what's going on inside your gut, including fungal things that aren't accounted for even in this research out of Denmark, as well as viruses and phages and all sorts of stuff. If you're interested in learning more about your gut, which definitely can influence weight loss and what you should be putting in your mouth, you can go to Viome, V-I-O-M-E, dot com. You can use the code Bulletproof and I do something nice for you. I think it might give you a copy of one of my books, or something. I'm not even sure. But, anyway.

Go to Viome if you're interested in getting a good picture of what's going on in your gut. I'm an advisor to the company. I haven't been this excited about a new diagnostic or a new kind of test, or just more information about this, than I have since the days of quantified self. This new research from Denmark just adds one more data point to that.

Before we get into today's show, something amazing is here. I'm just going to see if I can pick it up with one hand. It is the new Bulletproof Coffee Cold Brew Ready-to-Drink. In fact, I'm holding four of them. If you're watching on YouTube, you can go to [Bulletproof.com/YouTube](https://bulletproof.com/YouTube) if you want to get a link to the channel that has this show. But I'm holding these things up. These are shelf-stable, meaning you can keep them in your purse, in your briefcase, in your workout bag, in your car, wherever, and they will not spoil. They don't have to be

refrigerated, but they're good when they're chilled. We've got mocha. We've got original. We've got vanilla. We've got one with collagen.

If you don't have time to make Bulletproof (coffee) and you want to replace a snack with something that's going to leave you full for hours and feeling amazing, these taste really good and they've got only good stuff in them. That's Bulletproof Cold Brew Ready-to-Drink. You can pick them up on [Bulletproof.com](http://Bulletproof.com). We'll ship them to you. I believe there's free shipping right now. Double check on the site for that, depending on where you are in the world. You'll find that these are an amazing cold brew. They of course have the lab-tested beans, Brain Octane Oil, and grass-fed butter. [Bulletproof.com](http://Bulletproof.com) for the Bulletproof Cold Brew Ready-to-Drink.

Today's guest on the show is a former psychotherapist, a university professor, a successful author, and creator of the popular site [GreenSmoothieGirl.com](http://GreenSmoothieGirl.com). She's based in Utah, where she's a competitive tennis player. She just wrote a new book that I enjoyed that's called "Vibe: Unlock the Energetic Frequencies of Limitless Health, Love and Success." She's on the show today to talk about this notion of vibration, so we can see how much science is here, how much "let's-all-sing-kumbaya" is here, because there is real vibration that happens in our bodies. It's always a challenge to tie the scientific vibrations to behavioral vibrations, and what's an emotion or a sensation and what's not. Robyn Openshaw is here today to share her knowledge, and what she learned in her research over the last couple years writing this book. Robyn, welcome to the show.

Robyn Openshaw: Thanks, Dave. It's so nice to be here.

Dave Asprey: It's always a little bit risky for an author to go out there and write about vibrational frequencies, because you'll see people out there saying, "Look, if you wear my organic corn pendant your vibration's going to change." It can get really mushy really quickly. What led you from the field of nutrition into this idea of vibration? What's the definition of vibration the way you're using it in your book?

Robyn Openshaw: You know, years ago I tripped on this quote by Einstein that said, "Everything in life is vibration." Later, not much later, I ran into a quote by Nikola Tesla who ... I'm a bit of a Tesla geek. Tesla said, and I believe that the world wasn't ready to hear this at the time, when Einstein and Tesla were discovering these amazing things, and Tesla said, "If you want the secrets of the universe, think in terms of energy, frequency, and vibration." I put that next to the Einstein quote. Then I started looking at quantum physics, and how all of the quantum theory has bled into biology. There are fields that have completely changed as a result of discovering that, for instance, we are electron-exchanging, and right now you have influence over other people. It's really sobering to think about.

Think about how we're actually electron-exchanging across the planet. This has been super well-documented at this point. We can go two ways. We can go

woo-woo or we can stay just in the one woo. As committed to science as you are, Dave, I'll just stay in the one woo. We could talk about how ... I actually got that quote from Simon and Schuster when they signed on to publish my book. They said, "Now, keep it to one woo, okay?"

Dave Asprey:

That's the risk when you go into quantum physics, is that quantum biology is a real field that is studied in universities, and most people aren't even aware of it. But what's going on inside our mitochondria, the way they're making energy, they're using quantum effects. We finally figured that out. We figured out that mitochondria are semi-conductive and they do have these fields. But even when you say we're exchanging electrons with things across the planet, you kind of tricked my ... we exchange energy, but are we actually really trading electrons with other beings? How are we doing that?

Robyn Openshaw:

Yeah. That's a lot of what quantum physics actually discovered literally decades ago, is that ... and this is why we're so interconnected. It's one of the reasons why we've discovered how interconnected we are, is that things aren't as mechanistic as we thought. We know we have this atom and we have electrons and protons and a nucleus, but we didn't know as recently as 30 years ago how big that radius is of those electrons. We didn't understand how we need to discharge dirty energies. I loved your show with Joe Mercola talking about EMF, which is a big research subject and interest of mine. But we're exchanging energies in a lot of ways that we didn't understand when we were only looking at Newton's models.

If we take a look at how quantum physics and biology have not yet come into the space of nutrition and wellness, and what my book, "Vibe," does is take a look at what we can do that's really practical, and takes a look at foods' energies that has nothing to do with calories. Calories is a construct that was discovered in 1848. It's pretty much outlived its usefulness in so many ways.

When I tripped on these two concepts, I wanted to know what the secrets of the universe were. When I read, "If you want the secrets of the universe, think in terms of energy, frequency, and vibration," I thought, "Why do I know so little about this?" We actually know more about it than we think. If you take a look at medicine, for instance, a lot of the diagnostics in medicine are using vibrational frequency. The EEG, the ECG, you can measure brainwaves. These are frequencies. I'm just putting some roots in the idea that energies, or understanding that everything is made up of energies - and that Newton's physics weren't wrong, they were just limited - actually has applications in medicine.

Your friend, Dr. Oz, I know you were just out there filming with him, has said that energy medicine is the next wave in Western medicine, and it's very, very infiltrated there. What I got frustrated with, because I've written all these nutrition books, and I'm always looking for what else don't I know, is that somehow we're still living in Newton's physics when it comes to nutrition. There is a vibrational frequency associated with every single food. I'm actually doing

some research with a PhD scientist named Beverly Rubik. I can talk to you if you want, about some of the ways that we measure vibrational frequency and what these energies are, and we could talk about some principles of quantum physics that have everything to do with whether we're healthy and whether we're happy, that can guide us in what foods that we eat. They'll be a lot more helpful than counting calories and worrying about grams of proteins, fats, and carbs - which is not necessarily serving Americans really well.

Let me tell you really fast about Heart Math Institute. Some things that they do that will give you a sense of how real this woo stuff is, is that you and I could be sitting in a room, Dave, with our backs to each other, so we're not looking at each other and we are not talking to each other. You're hooked up to an EEG and I'm hooked up to an ECG. You are instructed to think loving, kind, grateful thoughts, and that will actually register on my EEG without you saying a word or without us looking at each other. This makes intuition and a lot of these energy gifts that we talk about, that sound really squishy, like you said, quite quantifiable.

There's also some great research by Heart Math, where you are asked to sit and think about something that makes you angry, and they chart your brain waves. And then they have you think about things that you're grateful for, and they chart your brainwaves. What's really interesting is that those frequencies, as they register on paper, look like what they feel like. Which would you rather experience? Would you rather sit in anger or would you rather sit in gratitude and love?

Dave Asprey: It depends. Anger could be a source of energy, right?

Robyn Openshaw: Yeah. It can fuel you to action. We need it sometimes.

Dave Asprey: I was just saying that to try and make you mad, but it didn't work. I've been an advisor to the Heart Math Institute since 2008. I'm on their advisory board. I was just at Burning Man. They had a big installation there, where they would get eight people to sit in chairs. When they were all in this same state, that gratitude state you were talking about, they'd get a really strong feedback tone that would light up an art piece, which was kind of cool. There's definitely very provable science that says we can influence other people. I don't, to your original question, I don't think that we're actually trading electrons with them unless we're touching them, or kissing them, or something. Mucus membranes are good for electron exchange because they're wet.

But we are definitely exchanging field information with people. The Heart Math people talk about this Taurus-shaped, donut-shaped field around the heart, tipped at eight degrees to the left. Unquestionably, especially someone who's trained, like a meditator or just someone who's in touch with that stuff, can walk into a room and change the room. But likewise, someone who has a powerful field around their heart, but one that's chaotic because they're full of

old trauma or just they're pissed off, they can walk into a room and change the energy in the room for the negative.

That's one of the reasons that I just fundamentally believe that it's not okay to sit in a boardroom, or a PTA meeting, or at dinner with your family, and act one way and feel another way, because your internal state is projected and received by other things in the world around you. Whether or not you're smiling and saying the right things, people know that you're pissed off. We know it viscerally and deep down. That is a form of electromagnetic ... that's actually more magnetic vibration. There's definitely science, like you were talking about in your book, around that, around that very specifically.

Talk a little bit more about the quantum biology aspect of vibration. How would you measure vibration, say, of a food? Are you eating a food and seeing what it does on an EEG, or what it does to your heart rate variability? How do you know that a food's vibrating? Because when I eat them they're usually not, unless it's Jell-O.

Robyn Openshaw: There are energy fields in and around us. Like you were referring to, we have an energy field. It goes further than we thought. But you're talking about this energy field that's about eight feet around us, is our electromagnetic field.

But, there is a guy. He is deceased now. I'm going to take measuring electromagnetics further than he did. But his name's Bruce Tainio. He's out of University of Washington. The reason I talk about his research is that he measured a lot of common things, and because he measured it in hertz. Our electrical energies ... we are electrical beings. That's why when we go out in the sun, we feel amazing. We need to charge. We need to discharge and ground, and we feel better when we do, especially in this crazy world, where we're just surrounded by all these electronics like you talked about with Dr. Mercola.

But he measured things in electrical energy of hertz. We recognize that as a unit of measure. Bear with me. I'm going to share a couple of statistics from Tainio's research, where he measured in hertz, which we're familiar with if we had some basic high school science classes. Before I tell you this, if you're listening to this interview and you remember one thing, maybe a couple of things, this would be one of the ones to remember. This is a principle of quantum physics that's really simple and you can understand, and here it is: the substance of a higher frequency can cause a substance of a lower frequency to increase.

This is really powerful if we think about the fact that you, with your show ... and you've had something like 40-something-million downloads, you're impacting people's energies one direction or the other. Whether you're helping them into high vibrations or lower, you're absolutely impacting their energies, whether it's electron exchange, or if it's other forms of changing people's frequencies.

You know, if you take that principle of quantum physics, I'm going to say it again, a substance of a higher frequency can cause a substance of a lower frequency to increase, and then let's take a look at some ...

Dave Asprey: Isn't the opposite also true?

Robyn Openshaw: Yes. The corollary.

Dave Asprey: You take hot water and put it with cold water, the cold water gets warmer, the hot water gets colder. It's sort of like moving to the average.

Robyn Openshaw: Yes. The opposite, the corollary, is absolutely true too...is a substance of a lower frequency can cause a substance of a higher frequency to decrease. I'm going to talk about food for a minute. But just so we don't fail to bring this up, you mentioned how people have incongruent energies. What's coming out of their mouth is different than how they actually feel and think. We know it. We know it. Especially if you ... We have a quiz to tell you if you're an intuitive, an empath, a highly-sensitive person, an energy healer. We know it. We sense it. Our intuition tells us, this person is not connecting with us. You've probably walked into a room before. I know you to be an empath. I have seen you sense energies before.

We've all been, if we have developed our energy sensations, we've walked into a room, and there's two people in the room and they're not looking at each other or talking to each other, but we know that something really intense just happened between them. You can feel it. You can sense it. It's almost like there's a charge there. They might have just had a big fight. They might have just had sex. Those are two of the highest energy exchange forms that we have. But you may also ...

Dave Asprey: Is that why make up sex is so good?

Robyn Openshaw: Yes. It's part of it. You're resolving energies. You're joking, but I'm serious. I'm serious. It's shifting energies the other direction. We've probably also been at a conference or some networking or work event, where we meet someone and we can't get away from them fast enough. We almost rock back on our heels when we meet them. It's not that they're bad people. It's that there's a dissonant frequency there. Notes on the piano are sound frequencies, and if you play the black and white note that are right next to each other, we don't like that. No composer ends a piece on dissonant frequencies.

You've had the opposite experience, too, where you meet someone at an event of some kind, and maybe you've only interacted with them for 30 seconds, or maybe you haven't even interacted with them, and it's almost like they're pulling you across the room. You are seeking them out. You spend a minute with them, and you're figuring out when you can spend time with them again. Those are resonant frequencies. Those are just sympathetic frequencies. Let's talk about

food with regard to that very specific principle, which is a substance of a higher frequency can cause a substance of a lower frequency to increase

Dave Asprey: I totally get that point, but how do you measure frequency of a food?

Robyn Openshaw: Before I tell you a few measurements in hertz, including what healthy people are, I want you to know that I have just commissioned a study with Dr. Beverly Rubik, and we're going to be measuring people before and after they eat specific foods. Maybe we should get some Bulletproof Coffee for that, and also the foods themselves, with two different ways. One is with biophotonic emissions. You're actually measuring the weak light that emanates from living things, actually dead things too. If you take a tiny piece of chicken breast and put it under a high-power microscope, you don't see anything. You don't see no movement. It is in motion or otherwise it wouldn't decompose and become something else.

We're going to measure with biophotonic emissions. The reason I want to do that, rather than just measure everything in hertz, which there's actually data already out there about that ...

Dave Asprey: But hertz ...

Robyn Openshaw: Is that it makes pretty pictures and you can see it.

Dave Asprey: But hertz is basically number of times per second something happens. You can jump up and down three times a second, that's three hertz, which is different than a three-hertz sound wave. They're different things. It's just number of times per second. But what is it that's happening at X number of hertz times per second?

Robyn Openshaw: This is just one way to look at some of our energies, because we have electrical energies, we have magnetic energies, we have electromagnetic energies. We have energies that nobody has actually quantified yet, but we can measure the effects of those energies, but there's no names for it. It's an energetic world, and there's so much we don't know. But Beverly Rubik also has this really expensive Russian technology that uses gas chromatography. I want to do some research with that because, again, it becomes really visual. Those are some of the ways that you can measure energies, but I want to go back to hertz.

Dave Asprey: Let's touch briefly on the biophotonic stuff, because I think a lot of people listening probably don't know what a biophoton is. It's ridiculously cool that if you go back like 25, 30 years ago there's something called Kirlian photography, which people said, "Oh, that's a bunch of BS." Someone put their hand or a leaf on film for a long period of time and then you see a ghost image. They kind of said, "Oh that's all BS." Now, though, with new CCD cameras, the kind of cameras that we're actually using to record this, for instance, we actually have proven beyond the shadow of a doubt, published in biomedical journals of

substantial reputes, that your body and leaves and all sorts of things actually do put out photons.

This was a big shock. We know even DNA actually makes photons. Photons are individual particles of light. We know that your mitochondria make a lot more of this, and the bacteria in your gut make about 5,000 times more of what's essentially bioluminescence, these little glowing things. But it happens so infrequently and at such small doses that you don't see it, unless you have very advanced technology for it. There's good science that says you can measure that. In fact, you can even predict things like cancer by looking at biophoton emissions. Who would have ever thought that?

If that sounds like that's three levels of woo, actually no. That's established medical science, it's just stuff you haven't heard of. You don't believe me, go to PubMed. That stuff is legit. But let's get back to hertz, because I still want to know what are we measuring with hertz?

Robyn Openshaw: Tainio took a lot of different healthy people who didn't have any known disease states, and he measured them all between 62-68 hertz of energy. If you write another thing down or remember another thing that I tell you, remember that, is that a healthy human being ranged between 62 and 68 hertz of energy.

Dave Asprey: Was that brain waves, or was that a magnetic pulsation? Was that the sound of their voice? I'm still stuck on what is our hertz?

Robyn Openshaw: You could actually measure specific organs, as well. He measured genius human brains in the mid-80 hertz. I'm sure that you would have brain energy of 85 hertz.

Dave Asprey: That would be a high gamma state. Gamma is usually around 60. I'm still, I guess I'm wondering, is that the same hertz that we use with lettuce?

Robyn Openshaw: Tainio's dead now. If he were alive, I would have lots of questions for him about his research. There's so little. There's really so little done, but it's really well-documented that you can measure energies. I wish we had a FitBit. I want to eventually have a FitBit, so that we can all know what happens to our energies when we eat this, when we think this, when we don't metabolize a negative emotion, like fear or anger.

Dave Asprey: That I would agree. There's many different ways to measure energy. The people who do this best originally were out of Ayurveda and Tibetan medicine and Chinese medicine, or even some of the shamanic practices. They put their fingers on your pulse, and some of the qi gong practices. These are people who use their body and their developed nervous system to feel what's going on with someone else. Now we can measure those fields with a variety of equipment. You can do magnetic. You can do electrical.



One of the things that stands out in my memory, almost 20 years ago I went to this coffee shop in Mountain View, California, called Red Rock Coffee, that I used to frequent when I lived down there. I met with the guy who holds the first patent on 80211B, which is basically the first Wi-Fi on the planet. This guy already back then was the grizzled engineer sort of look. He said, "Dave." This was maybe, I don't know, five, 10 years after the stuff was released, so he had become wealthy. He said "Dave, I've been using the million-dollar test equipment we use to monitor Wi-Fi networks and I turned it around on my body." He turns his laptop around and he goes, "Look at all this data that's coming off my body. I think we can use this to diagnose disease. Look at these." It was actually a map of the chakras he had mapped using gear for Wi-Fi.

This stuff is real. There's an \$800 book from the former president of the Karolinska Institute in Stockholm, which is one of the top-10 medical schools out there, was published in 1983, that basically said everything in the body is electrical, which means therefore you can measure the frequency of electricity in a variety of ways. Basically, after he published this book with extreme detail, it was a full-on medical textbook. I had a hard time with parts of it, because it just went so far into cellular biology, especially when I read this stuff a few years ago. I was like, "Wow."

He actually lost his position at the Karolinska Institute for saying this. He wrote the book at the end of his career because he knew it would happen. He goes, "Hey, I've been doing this for a long time. Here's what's going on." When he lost his position he was like, "I was going to retire anyway." He's like, "Here you go. Now it's out there." I just want people listening to understand, there's a lot going on that we've known in small pockets for thousands of years, or for decades, or especially in the last 10 years. I think you've pulled a lot of it together in your book, which is kind of cool, but also just making it actionable, because knowing this is happening versus knowing what to do with it ...

Everyone listening knows today I have a lot more energy than I had before. How you measure that energy, there's dozens of ways. But the Russians and the former East Germans, and not just Germany in general, have been the leaders in a lot of these weird things where you bring it to us like, "What?" You hold copper coils? But they're getting a signal. There is a signal there. The question is, what do we do with it?

I want to know, in your work, about looking at all these different frequencies and just ways to measure and improve energy in the body. I want more energy. What do I do?

Robyn Openshaw:

There are so many things. As a former therapist, I feel like, just like nutrition is missing studies of quantum theory. So has therapy, so has psychotherapy, so has psychology and psychiatry. How we are dealing with our negative emotions is part of it. We could talk about that. We could talk about foods. Let me tell you, 62-68 hertz was a healthy human being. Tainio measured people with a massive candida overgrowth, where there's just a ton of yeast in the body that

is getting a lot of the attention of the energy systems, would be in the low 50s. That's how much lower a human being can go.

Dave Asprey: Sorry to interrupt there, Robyn. I'm guessing that what he was doing there is he was looking at the micro current across the skin. This is probably a galvanic skin response? Like copper coil sorts of things. Because that would make sense, then.

Robyn Openshaw: Yeah. He called it the BT3 scanning system. It was definitely looking at the whole organism's energies. That's probably some kind of aggregate of all of our energies, because he could tell you ... he could also ascertain the level of energy of your liver. You can imagine how, if you build your liver out of higher-vibration materials, since the liver serves you in over 500 different ways, what would that do for how you look and how you feel? He measured people with Epstein Barr in the 50s, 50s hertz. Remember, a healthy human is 62-68. He measured end-stage, very-near-death cancer patients at 25 hertz. Clearly there's some kind of correlation there between specific high-frequency states and health, and the opposite of that is the sicker we get the lower we get.

He discovered that plant foods, and I'm not here to ... You know I don't really like to talk about vegetarian, vegan, or any of the -isms or diets. But he discovered that plants raise our vibration, because they are of higher vibrational frequencies, many of them, than a human being is. Processed foods, this won't surprise you, are extremely low-frequency foods.

Then there's the fact that we can measure what happens to a person when, like I said, they are in the high-vibration emotions. That sounds like what all the woo-woo people talk about. It sounds like ... People talk about high vibes, and we roll our eyes, and we think that they're just channeling the Beach Boys, or they don't know what they're talking about. It's just like this kind of cool, new-agey talk. But it's actually real. We can't measure a thought and we can't measure a feeling, because it only exists if we're feeling it. But when gratitude is the highest-measured frequency in terms of what happens to you when you are sitting in gratitude, thinking about your kids, thinking about your partner, thinking about people you love, thinking about the things in your life you're grateful for. Nothing touches it.

I think that's really exciting, because we can choose that. We can choose to spend 10 seconds in gratitude. That's an actionable. That's something that we take people through in the book. There's a quiz to identify all of the high-vibration states, how much are you actually experiencing those in your daily life. Here are the low vibration states: feeling frustrated and stuck, angry, anxiety, rage, anger, rage. We know this innately. We know these are low-vibration emotions.

Then I take people through a 90-second process where, instead of getting stuck in anger, frustration, resentments, lack of forgiveness. You, at 40 years of Zen, I'm going to be there at 40 years of Zen in December. Super excited about that.

The lack of forgiveness is about as low-vibration as you can get. That's an energy that people tend to get stuck.

It's really exciting to think that we can alter our energies. Those are some of the things that we work on, is those emotional energies, and staying in the higher ones more often. We should be outside in contact with earth every day. We're literally dropping millions of electrons onto the earth and picking up antioxidants. The earth itself has been measured at 528 hertz, the core of the earth. There are people like ... These are pretty woo, pretty triple-woo here, but Leonard Horowitz measures vibrations of a lot of different things to help us achieve them. That's the point, is so that we achieve more of them.

Dave Asprey: Got it. I just looked at the BT3 patent, because maybe I'm stuck on this, because I'm a computer science engineering guy. What we're talking about is measuring the phase and oscillation of the electromagnetic frequency from the body, or from a biological material. If people are saying, "Well, there's no science. Whatever. It's woo." No. There's a patent. It's an old one, but you can look it up on Google Patent Search, which I just did.

Robyn Openshaw: I love that you looked that up.

Dave Asprey: Hey. I am nothing if not a geek.

Robyn Openshaw: It's called the BT3 monitoring system.

Dave Asprey: It's actually patented. What they were looking to do is what a lot of the tech out of Germany and Russia does, which is, "Okay, what electromagnetics are coming off the body?" When we look at electromagnetic frequencies that come off ... very subtle ones, but ones that are real, that come off of foods, especially living foods or fresh foods. They can be cooked and still have an electromagnetic frequency. Then look at what the interaction interplay between those is. That's pretty cool.

Undoubtedly, and I know this because we see it on EEG signals all the time at 40 years of Zen, the food you put in your body, the supplements you put in your body, can change your brain states. They can change the electromagnetic frequencies. We use pulse2 electromagnetic frequencies to change the brain, and certainly the brain can make its own pulse2. Actually, more the heart than the brain, but they can both make PEMF that changes your biology, as well as that of things around you.

There's definitely legitimacy to this kind of stuff. When someone goes through and changes and forgives something, or changes the way their body unconsciously resonates in response to an environmental stimuli, if you believe what's in your book and you believe what we're talking about right now, which is that it's plausible that the stuff going on below your consciousness in your body can have an impact on the world around you. If you don't believe that, we

can show you with an electromagnetic meter. If you don't believe that, it's because you're a skeptic, and you need to do some forgiveness or something. Someone tried to trick you in third grade, and you're still stuck on that. Deal with it. Don't be a science troll.

Then, after that, is it conceivable that when you change the way your visceral tissues respond to an environmental stimulus that it would change the signal that comes off your body? What you've written in your book is that, while that's actually what happens, and I think it's fair to say that we don't necessarily know the mechanisms between forgiveness, between forgiveness or letting go of an old trauma or healing something. Every step between that and things changing, I don't think we know all that. But we can say your heart rate variability will change, and we can measure that on the skin or away from the body. We can also show your brain waves change. Then, an inner thought pattern changes a vibrational pattern, and the vibrational pattern changes the way you interact with the world around you.

But the flip side of that, which is where we're going, is if you believe that there's a frequency in food, and if you don't believe that, look at the pattern for the BT3. There's a whole bunch of other work around that sort of stuff. Yeah, some of it is in the woo spectrum. All new inventions are always woo, until they become self-evident to everyone, and then, "Oh look, no I invented that." "I thought last month you didn't like that?" Anyway, what happens there is there's some interaction going on. Your book is one of the early books looking at what do you do about that.

Now, you talk about these foods that are higher-vibration foods. Certainly if you ask someone from any of the systems of acupuncture or Ayurveda or Chinese medicine, they would already tell you, "Yeah, some foods have different vibrations." Heck, I've had a doctor in LA tell me, "Dave, you need to eat chicken, but it can only be black chicken." I'm like, "What?" He goes, "Yeah. There's black-skinned chickens. You need to eat a male black-skinned chicken. It has a different vibration." I actually never found a male black-skinned chicken. Maybe he was just completely full of crap, but I think he was going on thousands of years of what they've noticed.

I'm not going to say we know everything. I doubt you or I collectively, if we stuck our brains together, knew everything. But we do know enough to say there's steps you can take now that can increase your vibration. I'm sure by now people are going, "Maybe this is BS. Maybe not." I'll tell you, I don't think it is. But, what are the foods or other things, forgiveness you mentioned, we both agree on that, but especially foods that could increase the body's vibration?

Robyn Openshaw: Do you want to know what the class of foods is that has the highest vibration?

Dave Asprey: We all know it's bacon. Come on.

Robyn Openshaw: You'll be surprised. Yeah. We want it to be butter and bacon? Is fruit. Fruit actually is the highest vibration. That was a surprise to me. I thought it would be greens, but greens are the second highest.

Dave Asprey: It makes sense, because if you are going to have babies you look at, in humans, what humans have the highest vibration is babies. It's because fruit is plant babies. That doesn't mean that they don't have other things, like tons of sugar and other things in them that are interesting. I'm definitely interested in where you're going with that. Any kind of fruit more impactful than others?

Robyn Openshaw: I actually am going to take this into my research with Dr. Rubik, because I don't have enough data on enough foods. But there's definitely some inferences you can make about classes of foods. But, even if we did stay back in the old calorie way of looking at things, and counting grams of macronutrients, there's a lot of alignment there. We know we feel good when we eat more whole foods. I think we can all agree on that.

Dave Asprey: No. Serious?

Robyn Openshaw: You would eat more processed food?

Dave Asprey: Are you stuck on the whole grain thing?

Robyn Openshaw: No.

Dave Asprey: If you eat a whole food, I'm counting on you to eat the shell of the walnut, the shell of the egg. I mean, what the hell is a whole food anyway, Robyn? I got to ask you.

Robyn Openshaw: Let's say, less is added to it, less is done to it, less is stripped out of it. That makes it more whole. You're exactly right. It's not like we get almonds out of the tree and eat them with those hard shells on the outside.

Dave Asprey: Like cashews. The outside of a cashew is caustic to your skin. You have to boil it before you can get to the middle to eat it. When someone says "whole foods," I'm like, right. That's just like a calorie. It's a meaningless term. I didn't actually hold John Mackey to that standard, because he's a friend and also he just wrote a whole book about it, when I interviewed him. But, in a great respect for the idea that nutrients matter, and they do, I'm a little skeptical when someone says whole foods have more vibration. It doesn't mean that you want to eat the whole food. You don't eat the tree either. You don't eat the stalk behind everything.

What's going on is we're selectively choosing the parts of foods that we want to eat. We always have. I think that there's room for maximizing what we get out of foods. But that doesn't mean that you want to take it, boil it down into one component in the food, and then mix it with MSG and margarine and then call it

a meal, because we all clearly know that there's nothing left in there that we want to eat.

Robyn Openshaw: Micronutrients are gone. Fiber is gone. But, for some reason, when a plant food, whether it's an almond or a piece of kale or whatever it is, is not too disturbed, and it came recently from the ground where it's drawing up all this nutrition, it has high vibrational energy, as well as more fiber. It hasn't been sitting in the supply chain.

Part of the problem of processed foods is ... We make consumable products, as does Bulletproof. It's been really interesting to learn that, if you get a raw material right before its expiration date, as long as you get it in your finished product it sort of starts over. We could put dried carrot powder into a product that now has a two-year shelf life, but that carrot powder has been in the supply chain for two years. By the time somebody eats it, it might literally have been sitting there for four years. This has got to have an effect on energies.

To me, it's not ... I don't think we have the data right now to nail down every single food. I want to be part of bringing more research to it. But what's interesting is, what we already know is good for us is also good for our electromagnetic frequencies. Remember that movie like 10 years ago, I was a big eye-roller, you know how you were talking about it a minute ago that we're skeptics all the way until we aren't, and then sometimes, especially at your age and mine, things we were skeptical of 10 years ago, maybe now with more data, more knowledge, and more experience, we come around on. I saw that movie ... Did you see the movie *The Secret* and roll your eyes at it?

Dave Asprey: Yeah. Of course.

Robyn Openshaw: I didn't love how little evidence there was. It would just talk about how you drive into the Walmart parking lot and think good intentions and the front row parking spot would come available. Because I was like, "Well, what about all the other people who drove into the parking lot and they had the intention that they wanted a front-row spot?" I got all mixed up about it in my head.

But the part that's interesting about it, is there's all this talk for the last 10 years about law of attraction, and it kind of was too many woos for me. But, here's the thing. What we're finding is that when you are a higher-vibration person, when you are oscillating at higher frequencies, you're actually attracting more flow. You're capable of more creativity. You're capable of more focus. You are attracting higher levels of opportunity. You find yourself, when you're living in high vibrations, that things are just easier. You're choosing between two good things instead of being homeless under a bridge, super low vibration, eating nothing but crap, can't scrape together two nickels.

That's where, to me, my work has been trying to understand - how does the law of attraction come together with all these energies that we're in a quantum

phase of discovery in the world? Like you said, Russia and Europe, they're way ahead of us in understanding energies. Over 8,000 studies now on the negative effects on the human organism and other living organisms of chaotic frequencies, or electromagnetic frequencies, whereas the United States is just pretending it's not even a problem. Our government isn't protecting us from it. The 5G network is coming out, and there's a lot of scary intel about that.

The point is, we can control our energies far more than we ... and we can be attracting individuals. We're always attracting and repelling something. It might be disturbing to think, "I don't want to be repelling people and things." Yeah, you do. You do. You want to be repelling. Like we were talking about the resonant frequencies, Tesla came to the Americas, he was 20 years old, and he had literally been having dreams at night about Niagara Falls. He wanted to come to America and channel the energy of Niagara Falls, because the entire sonic spectrum is said to reside in that natural wonder. He came here, and he actually did that as part of his many accomplishments. He accumulated 300 worldwide patents before he died.

The point is, when it comes to us individually, is that we can channel a lot more positive frequencies. It really comes down to some really simple, small, actionable things that we do every day. What I would like is for people to just be more aware that we are electrical beings, that they are electromagnetic. Of course if we're magnetic beings we're attracting and repelling.

Dave Asprey: At that point, if you've had a chance to read Headstrong, I'm more talking to listeners. I think you've read it, Robyn.

Robyn Openshaw: Mm hmm (affirmative).

Dave Asprey: There's just abundant evidence that your cells run on semiconductors called mitochondria, and that you do not have a thought, you do not feel an emotion, and you do not make a move, take a breath, have a heartbeat without electrons. The same kind of electrons that power your iPhone. They're literally made from food and air and sunlight and water. That's just how it works. Sunlight and water are lesser issues there. You get not that much. You can't live on sunlight alone. At least, all the people who say they do usually get caught at 7-Eleven eating hotdogs. I'm a little skeptical of the Breatharian sun eaters.

Robyn Openshaw: Me too.

Dave Asprey: There might have been a couple of people who hit that in remote parts of India that are relatively well-documented, but not in the modern world anyway. If you just accept that we're electrical, and so that system ought to be able to be higher-level energy or lower-level energy.

It's been my experience, especially doing deep work with neurofeedback, when you can turn up the amount of energy in the cells, people are able to do more.

Doesn't that just make sense? If your car has more horsepower, it can do more. If your body does, it can. We were talking about food there, and you mentioned the value of fresh food for energy. Most people, unless you're fortunate to live near a farmer's market or have your own garden, you don't know what it feels like to eat a meal out of fresh food or to eat a meal out of fresh food for a week in a row.

One of the reasons I live where I live is I live on an organic farm. When I'm home, we eat almost all food that came from our own family and came from our own environment. The Tibetans, when you look at the Tibetan medical traditions, they actually tell you, minimize the number of people who touch your food before you eat it because it affects the food's energy. Some of the stuff, you're like, "Well, why? What's the evidence? What's the mechanism?" The answer there is, we kind of know that it works, which is a great part of science. It's called observation. Then we can form a hypothesis.

One hypothesis is that it's because there's invisible unicorns that make it happen. That's probably hard to prove, but it's a hypothesis. Until it's disproven, it's a hypothesis. But then we can have other ones that say it has to do with mitochondrial things. It has to do with energy exchange and resonant frequencies and the entire spectrum in between.

But what I think is getting to be very well understood is that it matters and it behooves us as scientists and as humans to understand why, because if we understand the mechanisms of it, it's entirely possible that the 7G network we deploy will completely upgrade the energy in your body instead of disrupting it. But if we deny that there's an effect, which is an anti-science thing to do ... "There's an effect, but I didn't like it, therefore the effect didn't happen," which is what a skeptic will do. Then there's the woo-woo person that says, "Oh, there's an effect. It's totally the unicorns." Either one of those, you're on the wrong side of the spectrum. You need to be nonreactive to a new idea and go, "Is it plausible? I don't see how that could work. Is there enough evidence that it works?" Versus becoming openly hostile to evidence that doesn't meet the hypothesis that you've religiously attached yourself to.

As I've aged and as I've become able to take this level of control of my own biology, I was an extreme skeptic, very much a reductionist when I was really, really sick. In order to get well and to lose the 100 pounds, and then to go way beyond that, I just realized, "Look, I'm going to go with what works. If I don't know why it works, I'm okay with that. I'm just going to measure that it worked. It's possible, if I'm doing three things at once, only one or two of them worked and the other one might have been a waste of time, but I'm okay with that. Did I get what I wanted?"

That perspective I think is missing from a lot of science here, where it's like it has to be one thing. I hate to tell you this, every science experiment, including the double-blind studies like that, they don't control for almost every variable that matters. Show me a normal study done on mice or on humans that control



for atmospheric pressure. They don't even report on that. Yet, it's a known variable that changes your biology.

Do they report on ... now I'll get crazy. Do they report on space weather? Well, no. I've got gear right over there that uses subtle pulse2 electromagnetic frequencies to change your brain states, and they warn you in the instruction manual, "You need to go to the NASA website." Not woo-woo-woo.com, but the NASA website and look at the space weather, because we have found that this kind of frequencies, they don't work well if there's a big storm in space or if it's too calm. If you want to get the results, this is an important variable. How many mouse studies looking at what corn nuts do to mice controlled for the type of lighting and the electromagnetic environment? They don't do it, yet they publish these things and say, "We know what's going on."

I have a high degree of questioning when I look at these things, because they say, "I controlled for all the variables." No. You controlled for about 0.1% of the variables or maybe even 0.001%. It's those other variables that you and I are talking about and what you talk about in your book, and they matter. That's why I have fresh food from my garden, because it feels better. Why? Someone show me. Then I can put it in a bottle. That sounds great. But until we recognize it and measure it, I think we have problems here.

You do, though. You do recommend some foods in the stuff that comes with your book and with your ... I think in the book itself. Give me some foods that are higher vibration the way you're measuring vibration.

Robyn Openshaw: It's going to sound self-serving if I say that you can put a lot of them in a green smoothie, but the superfoods, and they tend to line up ... this is purely observational. I don't have this research. But they tend to line up with the high micronutrient foods. The foods that are high in vibrational energy are also the ones that are high in micronutrients.

Dave Asprey: Are you saying eat more veggies?

Robyn Openshaw: You know, I know it's so boring.

Dave Asprey: Oh jeez.

Robyn Openshaw: Did we just listen to an hour interview for her to say "eat more vegetables"?

Dave Asprey: But it turns out it's more than that, because, and this is something that is really important, all vegetables are not created equal. You can get an organic vegetable that was grown in depleted soil that sat for a month before you got it, that was picked when it was unripe, and it's fresh. It might even have a nice sticker that says ripe right on there to tell you it's ripe. That's different than if you pick it and eat it. There's just a fundamental difference there.

This is not just about eating more vegetables. It's about eating higher-quality vegetables, and I would say even higher-quality meat. The difference in frequency or nutrient availability or how you feel when you're done between an animal that was raised properly on its natural food, ethically raised, ethically slaughtered, and carefully butchered by an artisan, and then delivered to you, is fundamentally different than an animal that died, that lived in pain, died horribly while watching its other animals die, and then packaged by a robot or a child prison laborer in another country. You feel different when you eat those things. You might say, "Dave. That's BS. There's no reason you feel different." I don't care. Pick a reason. It goes back to unicorns. You feel different. Try it.

Robyn Openshaw: Exactly. If you think about the fact that the state of fear, fear and anger, is such low vibration, when you think about an animal raised in those conditions ... Tainio did some research on this, that when you have caged chicken that are mistreated their entire lives, they're low-frequency to the point of two hertz, two hertz, when we have these animals raised in very, very poor conditions. We are eating those energies.

Dave Asprey: I'm not.

Robyn Openshaw: You're not. You're not.

Dave Asprey: It's unethical and bad for you to eat that kind of stuff. It's not food. I wouldn't want to do that to the animal and I wouldn't want to do it to my own meat. I'm happy to be a vegetarian at a restaurant that doesn't have grass-fed meat or wild-caught meat. Otherwise, it's just not worth it. You don't have to have meat at every meal in order to thrive and feel good. That's something I would encourage people listening to do. Look, eat the good stuff, don't eat the bad stuff. Avoiding the bad stuff, what you would term low-vibration foods, it's actually more important than eating food. It's better to fast than it is to eat crap.

Robyn Openshaw: Absolutely true. Absolutely true. You are getting some really good ... those eat-the-sun, you don't need any food if you're out in the sun and you're picking up all the good energy exchange from the sun. I don't really understand that whole thing, and I'll be hungry after two meals and I'll just throw in the towel, I'm sure. But we are getting charge from the sun, and there is something to that. It doesn't mean that it rules out that we need food.

Dave Asprey: There's two things that happen from the sun. The red light from the sun adds electrons to the electron chain transport the same way that food does. The infrared light from the sun changes water in your cells the same way that your mitochondria do. If the first step of making energy is your mitochondria take food and they use it to make 1200 nanometer light, which is infrared, and they use that to change the structure of water. If you have sunlight with infrared hitting your skin, the water has changed already, so the energy that would have gone into changing water can go into folding proteins or cleaning up the body or into your will power, into your brain. Those are the two main sunlight

mechanisms. There's some other ultraviolet things happening, but that's another frequency.

When we're talking about frequencies, you can measure almost anything in frequencies. What's your frequency of eating? Two times a day, or three times a day. You could even measure that in hertz. How many times do you eat a day? It's 0.3 hertz, or something, if you average the meals per over some period of time. But we do know light frequencies matter.

What's really confusing is that, if you take that sunlight or say a healing laser, you can measure the frequency of the light, but then you turn the light on and off at another frequency, which is another hertz. Light that blinks 40 times a second, for instance, reverses Alzheimer's disease in studies. There's a new startup based on that. I spent an hour with a Harvard-trained neuroscientist who discovered this. I'm like, "Why would it matter if the lights flash a certain amount of times?" God knows, but there's something going on. Our bodies are listening to light. That's another one of these vibrational things where, wait, food gives off light. Gut bacteria give off light. Mitochondria are sensitive to light. That's a part of the frequency thing, but it's an interesting one.

Robyn Openshaw: That reminds me of EMDR in psychotherapy. There's now just hundreds of published studies on how powerful it is. It's using frequencies, and that's all really. My colleagues ... I'm not a practicing therapist anymore, but my colleagues are in love with it. They're all getting trained in it. It's because it's the most research-based, efficacious treatment right now out there. My old models, when I was in grad school studying Freudian and behaviorism and Gestalt and all these different modalities, all of them, when you put them to the test, a third of people in therapy get better, a third of people in therapy get worse, and a third of people in therapy stay the same. Guess what the statistics are for people in traditional therapy or who aren't in any therapy?

Dave Asprey: They're exactly the same.

Robyn Openshaw: They're exactly the same.

Dave Asprey: But they're wealthier. EMDR is profoundly effective. It involves moving your eyes back and forth at a certain frequency. What I believe is going on here, Robyn, is that our brains understand things that happen over a series of time. They don't understand anything that happens over a static period, because anything that's more than a microsecond. This is born by research on how the prefrontal cortex works. We have to have time as part of what we do to experience the world. If you have time, you have frequency, by definition. That's just a fundamental part of how our consciousness works, which is kind of cool.

Now, we're coming up on the end of the show. We haven't talked a lot about dirty electricity. This is something that I know that you're spending a lot of your energy on right now, and it's something that I'm keenly aware of and something

that I control for something I've talked about for years. How much of that are you talking about in the book? We mentioned earlier 5G and Wi-Fi and things like that. This definitely has an energetic impact on us if you accept the fact that we're electromagnetic beings. What's your take on that?

Robyn Openshaw:

We do talk about it in the book. We recommend people do a detox, and by detox I mean an EMF detox. Here in the United States we refer to it as ... if we refer to it at all, if we even acknowledge that it exists, electromagnetic frequencies, these are these chaotic radiations or radiation or broken frequencies. They're competing with our own flow, our own ability to focus, our own energies that this was never a problem until recently.

In Europe, I take some of my followers to a clinic of biological medicine in Switzerland every year. It's an EMF-free zone. You can't bring your cellphone, any device, in the treatment rooms, in the lunch area. There are actual EMF refugees there. In Europe there are EMF refugees. In Europe, they mostly call it electro-smog, which is an interesting term. We do talk about that in the book. We cover everything that I know of that's quantifiable that'll actually help you stay in the high, smooth frequencies, in the grounded frequencies. That's one of them, is that we really can't ignore the negative frequencies that we're allowing into our space.

One subject is all the electronics. There's actually energies bleeding from your electrical outlets. When I did a detox here, in my office, that you're seeing here in the background if you're watching. It was over 400, whereas below 50, whatever the unit of measure is, is safe. We had to address that. Probably one of the worst offenders was my son's Xbox. I didn't realize he actually had two. I don't know if he got one from a friend, or what, but somehow he bought himself a second one. It literally fritzed out the meter when it wasn't on, just by being plugged in. That was one of the things that we found to be a significant issue. We don't have a smart meter on the house, luckily. You can tag your smart meter and say do not install smart meter in ... They might do it anyway.

These are just some examples. We tested my Tesla versus one of my employees' Hyundai's. My Tesla was not terrible. Really, you would think, since it's a computer-driven car or run car that would have been terrible, but actually it wasn't terrible, but that's because I don't use the Wi-Fi in my Tesla. If you're driving a battery-powered car, consider keeping the Wi-Fi off. Don't sit in your parked car and text. You're just a sitting antenna. Don't wear metal while texting in your parked car. Lots of things like that.

There's some things that we cover in the book. You know what else is try not to be around people who suck your energy, talking about negative things all the time. I'm not a Pollyanna. I don't talk about all happy all the time. But if I'm going to talk about the negatives in my life, I'm generally going to do it with a purpose. There's a purpose there to extract meaning from it. I think we can absolutely talk about the negatives in our lives and the hard things that we've

been through. You do this too. You do it too. You and I have in common that we used to be obese. I talk about it often.

It's kind of humiliating to talk about being 206 pounds and having 21 diseases, but I love talking about it because then I can talk about the journey. That's where I think we have an impact. This is where you and I have a clear goal. I want us to all have the languaging of it. I want people to start talking about vibration. I want them to know what it is. I want them to start noticing the impact. But when I'm around you, Dave, you inspire me.

Dave Asprey: Thanks.

Robyn Openshaw: You make me think in higher-frequency thoughts. You are totally relentless in helping me clear negative vibrations. I'm super excited about doing 40 years of Zen with you. But, you know what? We have so much impact on our own energies, and then it gets really exciting when we start to think about our influence, which is massive. Even if people aren't an influencer and have 40-something-million downloads of your show, you are energy-exchanging when you're on the phone, on the Internet. The average person these days has so much ability to impact the vibrations of the whole community and even planet. We're putting good stuff out there. We're putting back stuff out there every single day. We have a choice about that.

Dave Asprey: Beautiful. Robyn, I've got one final question for you. I know we're running over on our time here. If someone came to you tomorrow and said, "Look, I want to perform better at every single thing I do as a human being," what are the three most important pieces of advice you have for me? What would you tell them?

Robyn Openshaw: I love that question, because this gets really concrete and it's not very hard. Number one, make sure that you're eating more real food. Make your own dang food. The deeper in the supply chain, if you got it in a drive-through ... I know that you teach your audience this very well, but eat better food that you make yourself as much as possible.

Number two, hang out with people, spend time with people who inspire you. They are either bringing you up or they're bringing you down. There is no flat line. We never stay the same. If we're flat-lined, we know what flat-line is. We've seen ER and Grey's Anatomy. We are constantly in flux. Hold people who keep you in those smooth vibrations, those peaceful, loving, generous, compassionate vibrations.

Third, clean up the chaotic frequencies in your environment. Don't think just because you can't see them that they don't matter. I would say the most important thing is control the Wi-Fi. Turn it off on your phone. Don't be in a room where Wi-Fi is radiating you all day, every day.

Dave Asprey: Beautiful. Robyn, thanks for being on Bulletproof Radio. Where can people find out more about your new book?

Robyn Openshaw: New book is called Vibe. You can get it anywhere books are sold. It releases on October 31st of this year. You can check us out at [greensmoothiegirl.com](http://greensmoothiegirl.com) and Green Smoothie Girl on Facebook.

Dave Asprey: Awesome. Thanks for being on Bulletproof Radio.

Robyn Openshaw: My pleasure.

Dave Asprey: If you liked today's episode, you know what to do. Head on over to your favorite bookseller and pick up a copy of the book. While you're at it, log onto Amazon and leave a review, because when you leave reviews for authors like Robyn or me, we notice. It's one of the easiest things you can do to say thanks. It takes a few seconds of your time. It really, really helps us to know what we're doing that works, what doesn't work, and it lets other people find our work that has thousands and thousands of hours of thinking and work behind it. If you enjoy it and if you enjoy the show, you can leave a review for the show. That really matters. Thank you.